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SECTION 1201 ROUNDTABLE

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THURSDAY
APRIL 12, 2018

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The Section 1201 Roundtable met in the Mumford Room, James Madison Building, 101 Independence Avenue, SE, Washington, District of Columbia, at 9:00 a.m., Regan Smith, Deputy General Counsel of the U.S. Copyright Office, presiding.

PRESENT

REGAN SMITH, Deputy General Counsel of the U.S.
Copyright Office
KEVIN AMER, U.S. Copyright Office
ANNA CHAUVET, U.S. Copyright Office
STACY CHENEY, National Telecommunications and
Information Administration
JOHN RILEY, U.S. Copyright Office
JULIE SALTMAN, U.S. Copyright Office
JASON SLOAN, U.S. Copyright Office

ALSO PRESENT

KENDRA ALBERT, Software Preservation Network
JONATHAN BAND, Library Copyright Alliance
BRANDON BUTLER, University of Virginia Library
SHANNON COWLING, Association of Transcribers &
Speech-to-text Providers and Kent State
University
DERRICK DODSON, American Sign Language
interpreter
JAY FREEMAN, SaurikIT

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SOPHIA GALLEHER, Samuelson-Glushko Technology
Law and Policy Clinic
DAVID HUGHES, Recording Industry Association of
America
HENRY LOWOOD
LAURA MERRILL, American Sign Language
interpreter
LYNDSEY JANE MOULDS, Rhizome at the New Museum
JESSICA MEYERSON, Software Preservation Network
CHRIS MOHR, Software & Information Industry
Association
BLAKE REID, Samuelson-Glushko Technology Law and
Policy Clinic
JOHN SCHOPPERT, Samuelson-Glushko Technology Law
and Policy Clinic
MITCHELL STOLTZ, Electronic Frontier Foundation
DAVID J. TAYLOR, DVD CCA, AACSLA
CHRISTIAN TRONCOSO, BSA | The Software Alliance
J. MATTHEW WILLIAMS, Joint Creators II
JONATHAN ZUCK, ACT | The App Association

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(9:02 a.m.)

MS. SMITH: Okay, everyone ready? Great. So, good morning everyone, welcome. This is the next hearing for the section 1201 anti-circumvention rulemaking. This is Class 2, which concerns audiovisual works and accessibility.

We are trying, as with every hearing, to just sort of build out the record and ask probative questions. And for those who are new to participating in the panel, I will say a couple rules of the road.

First is, use the microphone when you are speaking. If you would like to speak, just tip your placard up and we'll call on you.

And we have a court reporter as well as an interpreter so if either of them need any more information or would like us to do something different, we will follow their lead.

So, I think to start out, we will go around and just introduce all of ourselves and then we'll start with the video. So, my name is Regan Smith, I'm Deputy General Counsel of the Copyright Office. And maybe start with Julie.

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1 MS. SALTMAN: I'm Julie Saltman,
2 Assistant General Counsel at the Copyright Office.

3 MR. AMER: Kevin Amer, Senior Counsel in
4 the Office of Policy and International Affairs at
5 the Copyright Office.

6 MS. CHAUVET: Anna Chauvet, Assistant
7 General Counsel at the Copyright Office.

8 MR. SLOAN: Jason Sloan,
9 Attorney-Advisor in the General Counsel's Office
10 at the Copyright Office.

11 MR. CHENEY: Stacy Cheney, Senior
12 Attorney-Advisor at NTIA, National
13 Telecommunications and Information
14 Administration.

15 MS. SMITH: If you could like to start,
16 Mr. Schoppert.

17 MR. SCHOPPERT: Yes. My name is John
18 Schoppert, I am a student attorney at the Colorado
19 Law TLPC. And I represent the Association of
20 Transcribers & Speech-to-text Providers.

21 MR. REID: Blake Reid at the TLPC. And
22 I can ask for 30 seconds of the Office's indulgences?

23 I just wanted to, in my capacity on the
24 e-book accessibility exemption, I wanted to
25 acknowledge and thank the Office for its conditional

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1 recommendation to renew that, but also for the work
2 that you did to do the streamline process that
3 avoided us having to rebuild the record from
4 scratch. That was a major reduction in burden on
5 some organizations that needed it.

6 We wanted to acknowledge and appreciate
7 that, as well as the provision of the live stream
8 with captions. Thank you.

9 MS. SMITH: Great, that's good to hear.

10 MS. COWLING: Good morning. I'm
11 Shannon Cowling and past president, current board
12 member of the Association of Transcribers &
13 Speech-to-text Providers.

14 MS. GALLEHER: Sophia Galleher and I am
15 also with the Colorado Technology Law and Policy
16 Clinic, also representing the Association of
17 Transcribers & Speech-to-text Providers.

18 MR. BAND: I'm Jonathan Band for the
19 Library Copyright Alliance.

20 MS. SMITH: All right, thanks. So two
21 issues I forgot to remember to say is, if you can
22 keep a phone away from the microphone it will prevent
23 issues which we were having yesterday.

24 And also, if you were called upon to
25 speak, if you can just repeat your name, I think

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1 that is helpful to the court reporter.

2 So I think now we will start with a
3 demonstrative video which we have labeled Exhibit
4 2-A.

5 (Whereupon, the above-referred to
6 document was marked as Exhibit No. 2-A for
7 identification.)

8 (Video played.)

9 MS. COWLING: This tutorial will
10 provide a quick overall on creating and adding
11 captions to a video. There are a variety of
12 programs used in caption videos but for the purposes
13 of this demonstration I'm going to go ahead and use
14 MovieCaptioner.

15 So you need to load your MP4 file video
16 into the container. And MovieCaptioner doesn't
17 like that there is a space in my title so I'll remove
18 that space, save it to the desktop.

19 And over here you can see that the
20 commercial has been loaded. Down here you can
21 change some of the elements.

22 I'm going to change the font size of the
23 captions to be 15. Then here it tells you that when
24 you start to type into the program you can listen
25 to it, type. And then the video will repeat in about

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1 a four-second interval.

2 Since I'm a TypeWell Transcriber, I went
3 ahead and created a verbatim transcript ahead of
4 time. I like to do that and then import the
5 transcript.

6 So here you can see that the captions
7 will appear below the video. Some of these
8 sentences are too long. They don't meet standards.
9 So I am going to break them up a bit here.

10 Do the same with this line. And do that
11 here. I think the rest of these will be okay. I'll
12 fix this one. Okay, looks good.

13 Now we're ready to do the
14 synchronization of the time text, align to the audio
15 and video portion. And we'll do that by setting
16 time codes.

17 So, when I hear the last word of the
18 sentence, I'm going to hit the return key on the
19 Mac so it will start to sync.

20 MALE VOICE: We're going to use an
21 ordinary garden variety peach with its short close
22 fuzz and tender skin and a regular regimental
23 hairbrush with its rough, tough bristles to prove
24 to you that the man-sized Remington electric shaver
25 will give you a close comfortable shave, no matter

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1 how tender your skin, no matter how tough your beard.

2 Look at this amazing demonstration, the
3 Remington is so gentle that it can shave the short
4 close fuzz off a peach without harming its tender
5 skin. And, the Remington is so powerful that it can
6 shave the bristles off a brush. Bristles tougher
7 than any beard.

8 Remember the amazing demonstration of
9 the peach and brush for the close, comfortable shave
10 you've always wanted, reach for the --

11 MS. COWLING: Okay, you can preview the
12 video to make sure that that worked.

13 MALE VOICE: We're going to use an
14 ordinary garden variety peach with its short close
15 fuzz and tender skin and a regular regimental
16 hairbrush with its rough, tough bristles --

17 MS. COWLING: So that looks good. Now
18 we're going to export the time text file, the
19 captioning file. And you can see that there are so
20 many different types of files you can use, depending
21 on what player you're going to house the captioning
22 video in.

23 So, I usually work in SRT files. So I'm
24 going to export that to my desktop in the same format
25 that I used for the video, save that and open up

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1 my VLC player.

2 MALE VOICE: We're going to use an
3 ordinary --

4 MS. COWLING: And expand this here so
5 you can see it. So here's my VLC player. You go
6 over here to subtitles. I'm going to add the
7 subtitle file. So now you can see the subtitle file
8 has been added.

9 So when I play the video --

10 MALE VOICE: We're going to use an
11 ordinary garden variety peach with its short --

12 MS. COWLING: So you can see the
13 subtitles are added. Now, this is a very quick and
14 concise demonstration of adding captions to a video.

15 You can imagine the time it takes to
16 create a transcript to go through, set the time codes
17 and then preview the video. And this was just a
18 minute long.

19 This tutorial will provide a quick
20 overall on creating and adding captions to a video.

21 (Video stopped.)

22 MS. CHAUVET: Okay, great. I think one
23 thing I'll quickly preface is to say just how, raise
24 how we're going to be trying to build out the record
25 today. Just as with other panels, asking questions

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1 kind of in buckets, by different topics.

2 But because of this demonstration
3 video, I think we have a few questions about just
4 the mechanics of how that works. So my first
5 question is, I guess, presumably circumvention was
6 done before or how, I guess, does circumvention --
7 like what part of the process are we seeing in this
8 video?

9 MR. REID: I'm pleased to tell you that
10 we selected a public domain video. Not under
11 copyright, not encumbered with any digital rights
12 management or technological protection measures.

13 So this is a simulation of what it would
14 look like to add captions once digital rights
15 management would be removed from a video.

16 Everything that you saw in this video
17 would not be possible with a video that was
18 encumbered with digital rights management. It
19 would have broken at the, the process would have
20 basically broken at the first step, if that makes
21 sense.

22 MS. CHAUVET: Got it. So, for purposes
23 of the exemption, you would, if we were to go ahead
24 and grant the exemption, circumvent and then use
25 that MP3 file, or whatever it would be, to be loaded

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1 in to use this software?

2 MR. REID: That's correct.

3 MS. CHAUVET: Okay. So, the text files
4 that we saw, were those like hand typed, are those
5 generated by the software, like how are those
6 created?

7 MS. COWLING: So these are hand typed by
8 humans. The program will allow you to type into the
9 program while you are listening to the audio and
10 it will loop so that you are able to capture the
11 verbatim.

12 Because I'm a transcriber, I choose to
13 do a transcript prior because the work flow is just
14 more efficient for me.

15 MS. CHAUVET: And are there any soft --
16 is software available on the market that could help
17 with, transcription services that you could use in
18 conjunction with the software like this so, I guess?
19 I don't know if this software is indicative of all
20 software that you would use, if it requires actually
21 manually typing things out before using software
22 such as this.

23 MS. COWLING: In most circumstances
24 yes, someone has to create the transcript, type the
25 words, listen to the audio.

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1 MS. CHAUVET: And I think YouTube has
2 like captioning services, is that something that,
3 I just, if it can be used in some way to develop
4 a transcript like this?

5 MR. REID: So, YouTube has captioning
6 services that can be invoked by the owner of a video
7 that is posted on YouTube. They include the
8 ability, and you can actually use this program to
9 create transcripts for a YouTube video.

10 The rub is that, in general, the owner
11 has to approve the captions being included in the
12 file.

13 So the trick is, there's a lot of
14 different ways to input and create the file that
15 you saw, the trick is that there has to be player
16 that allows you to drop that file in and synchronize
17 it with a video. So in YouTube, that's generally
18 speaking, not possible without the owner's
19 permission.

20 On a streaming service, like take
21 Netflix or Hulu, you've obviously, Netflix doesn't
22 have an upload captions button, there is no way to
23 make that work. With a DVD or a Blu-ray disc, there
24 is, again, no way to get that file into the player.

25 So the process here is, you circumvent

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1 the video and get an un-digital rights management
2 encumbered version of it and then you can
3 synchronize a new time text file with the player.

4 And there is a few other methods of doing
5 that, but that's the basic idea.

6 MS. CHAUVET: And then just like when we
7 were talking about synchronization, so you're
8 setting the time codes and that's something that,
9 again, always has to be done manually or is that
10 just with this particular software?

11 MS. COWLING: I would say manually.
12 You have to set the time codes. With whatever
13 captioning program that you're using, you have to
14 go through the video again to set the time codes.

15 MR. REID: And it's worth
16 acknowledging, there are some experimental
17 technologies out there and I'm not sure if YouTube
18 is added to their latest version -- that look for
19 silences and gaps in the dialogue and try to sort
20 of intelligently assign time codes.

21 I think those services are in the process
22 of improving. But, in general, the most accurate
23 way is to have someone sit there and synchronize
24 the time codes.

25 MS. CHAUVET: Have you used like

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1 Apple's, I guess it has Final Cut Pro X, which is
2 a professional video editing software which you can
3 use to add captioning. Is that something that you
4 have used before?

5 MS. COWLING: I have not. I'm familiar
6 with the program but there is still, you still need
7 to have the container and then you need to have a
8 captioning file that you attach.

9 MS. SMITH: Can you remind me, what was
10 the name of the, this program on the demonstration?

11 MS. COWLING: Sure. This was
12 MovieCaptioner.

13 MS. SMITH: Okay. So when you use --

14 MR. REID: I apologize, can I speak
15 quickly --

16 MS. SMITH: Sure.

17 MR. REID: -- to the Final Cut Pro issue?
18 So, Apple just released an update last week, as I'm
19 aware, that added a captioning workflow. It's
20 actually fairly similar to this, it's just the
21 preview of the video, the captioning workflow that
22 you saw in MovieCaptioner.

23 Final Cut Pro would be an alternative
24 to what you saw here. It doesn't bear on the
25 question on circumvention or anything, but it would

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1 potentially be, and again, it was just released last
2 week so I don't think anyone has had the chance to
3 really kick the tires on it, but it could potentially
4 be used for this sort of thing.

5 MS. SMITH: So after using
6 MovieCaptioner, when you are exporting the file to
7 whatever format you're going to play it in, does
8 it go, can you remove the captioning to basically
9 get a version as if you had not done the captioning
10 or is it layered together?

11 MR. REID: I will look to Shannon to
12 correct me if I'm wrong here but I think the idea
13 is that in most cases other than -- there are a couple
14 methods where -- so, an MP4 file is actually a
15 container that contains a video stream and an audio
16 stream. There are one or two methods out there
17 where you can actually insert the captions into that
18 container.

19 But in general, the usual methodology,
20 at least as we understand it, is what you saw here.
21 Which is that the video file and the captioning file
22 are separate files that are then combined in the
23 player.

24 So when, say a student tees up the
25 player, the player knows that the caption file and

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1 the video file are there and have a relationship
2 to each other, and basically, multiplexes them on
3 screen, if that makes sense.

4 MS. SMITH: Okay, so would it be fair to
5 say if you take a non-accessible advertisement or
6 a motion picture, you add the captioning features
7 when it goes to the player, through the output, what
8 you will have is simple the accessible version, I
9 guess?

10 MR. REID: That's right.

11 MS. SMITH: Okay.

12 MS. CHAUVET: And when you basically
13 have the end product, which is the accessible
14 format, are any technological protection measures
15 added to prevent someone else from kind of using
16 it for maybe non-infringing purposes?

17 MR. REID: So, that's up to the user to
18 do that. I'll defer to Shannon, you can speak to
19 some examples of how this might be used.

20 Different stories and different
21 universities as to how this works out are different
22 libraries as to how that works out. But in general,
23 the idea is to use a private distribution channel
24 that is locked down so only the student who needs
25 to have access to the video can see it.

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1 Usually password protected, that sort
2 of thing. So this isn't generally a situation, the
3 video doesn't go back on YouTube with captions, that
4 kind of thing.

5 MS. SMITH: Right. It would go into
6 Kaltura or Canopy. Are those the types of private
7 distribution networks you're talking about?

8 MS. COWLING: Sure. So at Kent State
9 University we use Kaltura, K-A-L-T-U-R-A. And that
10 program will allow you to add a time text to
11 captioning file.

12 So you have the video player in Kaltura
13 and then you add that captioning file. And then we
14 import into the courses via Blackboard Learn. So
15 everything is password protected, including
16 Kaltura.

17 MS. SMITH: While we're sticking on the
18 technology, I don't know, Ms. Cowling, if you're
19 the one who would know, but how does this process
20 differ from the audio description process, are you
21 using the same programs, are there similar programs,
22 what programs are you using if they're different?

23 MR. REID: The process overall is
24 similar and the difference is that rather than
25 sitting there and creating a transcription, you're

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1 sitting there and creating basically an audio file
2 that is then, as I understand it, added into the
3 container. So you actually would add a separate
4 audio file into the MP4 container and then the user
5 and the player can basically select, in the same
6 way if you use it on your television, the Spanish
7 language button or if you see the SAP button, you
8 see a secondary audio channel or in various digital
9 formats it might have the English soundtrack or the
10 French soundtrack or whatever -- there's going to
11 be another soundtrack that's going to pop up that
12 is the audio described soundtrack, and it will
13 overlay the audio description over the top.

14 But the process of generating it is
15 relatively similar with the obvious differences
16 that you have to sit there and create a script and
17 describe what's happening on the screen. So you're
18 not sitting there in verbatim transcribing what's
19 happening.

20 A picture is worth a thousand words, you
21 got to make some more choices. But the process is
22 more or less similar.

23 MS. SMITH: Okay, thanks. And then
24 going back to my question earlier, if for the
25 captioning version you go from basically a

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1 non-accessible to an accessible version, that the
2 player is going to automatically meld the files
3 together and play it, and it sounds like in audio
4 description you can choose accessible or
5 non-accessible or you can choose Spanish or so
6 forth, in terms of the output?

7 MS. COWLING: Correct. And then also
8 with a program like Kaltura, you can turn the
9 captions on and off, similar that you can do when
10 you're at home watching TV.

11 MR. REID: And we should also add, there
12 are FCC regulations that require all of these
13 players to have the capability of both turning the
14 captions on and off, turning the audio description
15 on and off, as well as being able to adjust the size,
16 the font, the color, the opacity, and various other
17 features of the captions.

18 There are some situations when it makes
19 sense, as we did on the video today, to enable open
20 captions where everyone sees the captions that are
21 essentially burned into the video. So that's the
22 demonstration that you guys have today.

23 We actually created captions for that
24 and burned them onto the video.

25 But in general, we want to include a text

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1 file with the video so that folks who are deaf, blind
2 or have some sort of vision impairment or color
3 blindness or something along those lines, can adjust
4 how the captions are presented. So most of the
5 players will have a little kind of Microsoft
6 Word-style interface where you can change the font,
7 change the color, change all the stuff.

8 MS. CHAUVET: So, just a quick follow-up
9 question about Kaltura, because you said you can
10 turn the captioning off.

11 So hypothetically, if a student,
12 obviously you say it has to have the password to
13 be able to access the video, but hypothetically
14 someone could access it with a password, turn the
15 captioning off and then you're really just showing
16 the original film in its original medium, I guess,
17 right?

18 MS. COWLING: That's correct. So, what
19 we're doing is essentially going in and providing
20 the accessible time text captioning file for those
21 that need it.

22 MR. REID: And just to underscore, I
23 think -- it's probably the legal premise for that
24 question. These are generally an educational
25 context where we are making the assumption that a

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1 professor, for example, showing a video in class
2 has the legal ability to demonstrate that video.

3 So there is actually probably a whole
4 bunch of other students in the class who are watching
5 the video. Perhaps on Kaltura, perhaps on another
6 source. Let's say the video is originally on
7 Netflix, originally on a DVD, whatever the case may
8 be.

9 Other students in the class are going
10 to be watching the video without the accessibility
11 features necessarily enabled. But we are operating
12 under the presumption that these are situations
13 where that's going to be a non-infringing use,
14 either because of the fair use or subject to the
15 provisions of section 110 or whatever the case may
16 be.

17 And I think the opponents raised some
18 concern in their comment about, well, what if the
19 professor is infringing in their distribution of
20 the video. And that's, I think, we can discuss that
21 scenario, but we are primarily concerned with
22 scenarios where there is an otherwise
23 non-infringing educational or related to something
24 that's happening in a library use.

25 So, if that is helpful.

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1 MS. CHAUVET: Okay, thanks, that's
2 actually very helpful. So just to clarify, so the
3 end user, presumably, could be the student?

4 You're making it available to the
5 student or would you also make it available to a
6 faculty member so that if the class is all watching
7 a movie together that the, say someone who is hard
8 of hearing can still watch along with the other
9 members of the class?

10 MS. COWLING: That's correct.

11 MS. CHAUVET: And then one, we're going
12 to talk a lot more about dissemination, but just
13 since you talked about how basically Kaltura is used
14 for people to access it, so I guess my question is,
15 is it essentially like a library being created
16 within Kaltura so if one, if you go to the trouble
17 of creating captioning for one motion picture, is
18 that kind of stored in case some other student in
19 the future needs that same film?

20 Like, maybe we can get a little bit more
21 into that later, but I think it would just be good
22 to hear a little bit about it now.

23 MS. COWLING: That's a great question,
24 and that's actually what disability specialists are
25 grappling with. We have this captioning content

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1 and there's research out there that captions benefit
2 everyone, even our ESL learners.

3 So it's really a discussion to be had
4 on who stores that, who owns that. Currently at
5 Kent State University, the caption versions are in
6 my Kaltura account. But these are the things that
7 we grapple with.

8 MS. SMITH: Would you say that's done on
9 an institution-by-institution basis, they have
10 their own guidelines, is it typical to have, for
11 -- in guidelines as to distribution or storage of
12 these versions?

13 MS. COWLING: Yes.

14 MR. REID: And I just add there, this is
15 a conversation that disability services folks are
16 having with general counsel and assessing the fair
17 use questions around. It would make sense if there
18 is a curriculum that's being deployed at multiple
19 schools and there is videos associated with it.

20 It would make a lot of sense when you're
21 thinking about the edicts of the ADA, which are to
22 provide accessibility but being mindful of the cost
23 of doing that, that it doesn't really serve
24 anybody's interest to recreate the caption file or
25 redo the description.

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1 It would be nice to make those portable
2 and accessible. But that's a decision that is a
3 university-by-university sort of decision.

4 MS. SMITH: Would you say that -- sort
5 of beyond the request for this exemption -- in that
6 I saw, like Joint Creators suggested, they said this
7 is going to be a publicly accessible database, and
8 in terms of whether or not there's a database of
9 the titles that are made accessible where this, to
10 be granted?

11 I think a separate question -- you're
12 not seeking to sort of put all of this publicly
13 available, it would be sort of cabined by the
14 disability services through fulfilling their legal
15 duties?

16 I don't know if that is sort of a vague
17 question but maybe you can speak to what would happen
18 after.

19 MR. REID: So I think the answer to that,
20 at this point is, that that public database
21 certainly doesn't exist. I think it's not going to
22 exist tomorrow.

23 Disability services folks, again,
24 that's a conversation that folks are talking about.
25 It would be nice to head in that direction.

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1 I'm not sure that this proceeding is the
2 right context in which to flush all of those issues
3 out. It would be nice --

4 MS. SMITH: Well, what I am trying to
5 flush out --

6 MR. REID: Sorry.

7 MS. SMITH: -- as you've said, if this
8 were granted, the accessible version would be sort
9 of conveyed along a private distribution network
10 and that seems at tension with a public database.
11 I'm not sure what we're meaning when we're saying
12 public database, that's just what I'm trying to
13 understand.

14 MR. REID: So let me try and draw some
15 contours. The one thing that absolutely nobody is
16 going to be doing is distributing the video itself,
17 right?

18 So, I imagine there's a concern that one
19 university gets a video and then distributes the
20 video across the country to every other university
21 that wants to use it in a class. That's certainly
22 not what's being contemplated.

23 The question is about whether the time
24 text file for captions is an audio description file
25 for audio descriptions that might be separately

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1 distributed.

2 I don't think we have the record to say
3 that technology is in the pipe end ready to go and
4 but for this exemption we are ready to roll that
5 out.

6 On the other hand, it would be nice if
7 the Office were inclined to grant some breathing
8 space in an exemption by not imposing super strict
9 dictates on the dissemination of the caption file
10 or the audio description file, that might allow
11 disability services offices to experiment with what
12 that would look like.

13 And we can talk about what the
14 limitations you might put on that are, that sort
15 of thing.

16 So, I think it's something that folks
17 are interested in exploring, but I, you know --
18 obviously just the basic issue of being able to
19 circumvent, disseminate to students within the
20 context of a single university, a single library,
21 that's where we're at now, that's where the problem
22 is now. So that's obviously the first priority and
23 kind of what brought us in the door today.

24 MS. CHAUVET: So, a quick question about
25 that. Because the comments do reference litigation

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1 involving universities like Harvard, MIT. Those
2 cases involved information being given to the
3 general public, not just necessarily to students.

4 So just for clarification purposes,
5 would it be reasonable for this exemption to really
6 be focused on providing educational services for
7 the students enrolled in a university, not
8 necessarily anything to the public that the
9 university might otherwise make available?

10 MR. REID: So, let me try and tease that
11 one apart a little bit because there is a few pieces.
12 One, I want to make sure you give an opening for
13 Mr. Band to talk about this in the context of
14 libraries.

15 Two, I think we've talked about faculty
16 members, other employees of the universities. So
17 there are other internal context, a university in
18 which the disability service office might be
19 leveraged to make content accessible.

20 In terms of the public facing materials
21 that are on the universities website, which are
22 often the subject of these lawsuits so that might
23 be live streams of conferences, along the lines of
24 what we're doing today. It might be promotional
25 videos, that kind of thing.

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1 It's, to the best of my understanding,
2 most of those videos are the university's
3 intellectual property or a faculty member's
4 intellectual property. So it's a fairly uncommon
5 circumstance that the university is putting videos
6 up on its site that are someone else's intellectual
7 property, there are some, obviously some other just
8 sort of baseline 106 issues around that.

9 I suppose we can talk about massively
10 open online courses and that sort of situation.
11 That might be where these things intersect.

12 But in general, the internal to the
13 university situation is the primary context we're
14 worried about. Now, again, might go a little bit
15 broader than students. It might be faculty
16 members, it might be employees.

17 And I think libraries are perhaps a
18 different situation. But I think internal to the
19 university is the primary concern.

20 MS. CHAUVET: Yes, Mr. Band.

21 MR. BAND: So, I what I just wanted to
22 add is that we have to remember that the kind of
23 content that we're typically talking about here is
24 not, you know, Wonder Woman or Black Panther.

25 I mean, a lot, you know, new content that

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1 is being released typically has the closed captions
2 and all that kind of stuff. What we're talking
3 about is the stuff that doesn't have that, okay.

4 And so that's not the current releases
5 of studio, we're talking about older, older films,
6 foreign films, some of these independent films.
7 It's a very different universe so that the -- or
8 documentaries, again, or older documentaries that
9 are specialized and are not sort of current releases
10 that have all of these features built into them.

11 Because as you can see, it's a lot of
12 work. I mean, our, from a library perspective, and
13 I'm sure from a disabilities services perspective,
14 if it's available out there, if someone else has
15 done it, that's, especially the producer, that's
16 what you want. I mean, you don't want to have to
17 go to that effort.

18 MS. SMITH: So, that raises a question
19 I think we had, and I could see that the answer may
20 have different perspectives depending upon whether
21 you're representing a library interest or an
22 educational interest, but would it be reasonable
23 to have some sort of a requirement to do a market
24 check to see whether an accessible version is
25 available before engaging in circumvention?

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1 That's similar to 108(c), so maybe
2 starting from, Mr. Band, if you had thoughts on that?

3 MR. BAND: I would image -- I'm not sure
4 it's necessary to build that into the statute, or
5 into the exemption, because, again, as a practical
6 matter you're going to be doing what is most
7 efficient. But sometimes the market searches, if
8 we're talking about just going on Amazon that's one
9 thing, but if we're talking about something more
10 --

11 MS. SMITH: Well, I think I'm
12 envisioning it similar to 108(c) as it already
13 exists. I mean, it's a concept that has the
14 advantage of already being a statutory concept for
15 libraries.

16 MR. BAND: This is where, as a practical
17 matter, will probably be not that burdensome, but
18 it's more of a philosophical matter. And it's also
19 the matter, you know, and it's a cost issue.

20 Meaning, if we already have a video
21 that's one thing, and then this would be requiring
22 us to buy it again. Now, again, if it's at the right
23 price, that's fine.

24 Because it would be so much cheaper to
25 buy it if it's available than to have to do this

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1 whole process. On the other hand, it could be that
2 the price that's being charged is a high price and
3 so forth.

4 So that's why the preference would be
5 not to start putting more burdens into the exemption
6 and sort of trust us to do what makes the most sense
7 because we're not going to be running hog wild.

8 MS. CHAUVET: So, just to follow-up on
9 your concern about it being like too expensive if
10 you go out into the marketplace to actually find
11 an accessible version. So, section 108 already has
12 -- it has to be a fair price. The burden is not to
13 go find it at any cost.

14 So, would it be reasonable then to have
15 some type -- if libraries are already under the
16 obligation to at least make a reasonable effort to
17 find an alternative useable version at a fair price
18 -- why would it not be reasonable to have that same
19 expectation in this context?

20 MR. BAND: Well --

21 MS. GALLEHER: I think that we need to
22 keep in mind, especially in Disability Service
23 Offices in the educational context, their capacity
24 and their staff is already pretty limited. And I
25 think to impose an additional obligation on those

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1 offices to essentially become experts in sourcing
2 is not necessarily granting them the discretion or
3 really within their scope of work that they should
4 be doing.

5 As the video demonstrated, this is
6 already a very time-consuming process and to put
7 that additional burden is an unnecessary extra cost.

8 Disability service offices, in general,
9 and I think this is to follow-up what Jonathan Band
10 was saying, they're going to be making the most
11 economic decision. They'll be doing the decision
12 that's the most cost effective.

13 And if that is captioning, then it will
14 be captioning. If it's finding a video that's easy
15 on the market to find, then that's what they're do.

16 But one thing to put into perspective
17 is that in university libraries, in just a few my
18 co-counsel and I went into just the CU Library, and
19 within like 30 minutes we could pull off like 40
20 videos that were not accessible. And that cost to
21 go and resource those could be potentially
22 tremendous.

23 MR. BAND: And just one other point to
24 quickly add. There's also a timing issue, which is
25 that sometimes you need it the next day and --

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1 MS. SMITH: Well, that was part of --

2 MR. BAND: -- and would you be able to

3 --

4 MS. SMITH: -- of why I wonder if the
5 library need is different from the educational need
6 based off --

7 MR. BAND: No, no. But I think the
8 education need, I mean, the student might come in
9 and say, or the faculty member might say, we need
10 this, I'm showing this tomorrow and we need to, you
11 know, and so depending, you might be able, in theory,
12 to get it from somewhere on the market but it might
13 take, that's why just added burdens, added hoops
14 to jump through, as a practical matter, could just
15 put unnecessary burdens.

16 We're going to always be doing what makes
17 the most sense under the circumstances, and often
18 that will be to buy, to go out and buy it on the
19 market. But sometimes, for whatever reason, that
20 might not be a viable alternative in the short.

21 And so that's why our preference would
22 be not to have additional regulatory burdens but
23 I --

24 MS. SMITH: I guess before, Mr. Reid, I
25 wonder if you could comment on that, but perhaps

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1 in your answer if you could think about how the case
2 law has also treated the fair use provisions?

3 I think the House Report talks about the
4 lack of an established market for accessible
5 versions. In talking about this, *HathiTrust* relies
6 on that a bit in its decision. And I think that's
7 why we're probing around that, plus with 108,
8 whether the non-infringing basis is affected by the
9 available of the fair and readily-accessible
10 version.

11 MR. REID: So, I would if it's okay,
12 sorry, this is Blake Reid. I'd like to comment at
13 this point but we'd love to spend some time on the
14 fair use point. And I know Mr. Schoppert has got
15 something to add here as well.

16 I think for both the library and
17 educational context we need to step back a second
18 and think about the record of what we're talking
19 about.

20 The scenario is there is an accessible
21 version of a work and an inaccessible version of
22 that same work. And the institution has the
23 inaccessible one.

24 As a practical matter, that first cut
25 is going to filter out almost every video in the

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1 market. Either there's going to be an accessible
2 version or it isn't.

3 The scenario is where something is
4 created without captions or especially without
5 descriptions, in the first instance, and then later,
6 for some reason, somebody has the legal mandate to
7 come in and add captions or add descriptions to it.
8 The number of works on the market that qualify for
9 that are minuscule.

10 So that's, I think it's important to
11 understand that we're talking about a very, very
12 hypothetical scenario.

13 Then within that very hypothetical
14 scenario we are talking about a situation where the
15 library or the professor comes to the disability
16 services, or whatever the scenario is, has the
17 inaccessible version and not the accessible
18 version.

19 So we're talking about a very tiny little
20 fraction of situations where this is actually going
21 to apply.

22 So I think you have to think about that
23 burden of saving, okay, in the hypothetical
24 situation, and I don't think there is anything in
25 opponents' comments that suggest a particular

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1 example where this is the case.

2 The hypothetical scenario where this
3 might occur, we are going to force an
4 under-resourced disability services office or an
5 under resourced library, to go through and do a
6 market search for something that is, in all
7 likelihood, not going to be there. That's the kind
8 of burden that we're worried about.

9 It's not just that going and doing that
10 search is burdensome, but it's almost always going
11 to fail. There is almost always not going to be
12 anything out here.

13 Here's another important wrinkle for
14 you to think about. Getting back to the question
15 of dissemination, which is -- so now when we think
16 about the market search, what about situations where
17 another university has captioned the video, does
18 that need to become part of the ambit of the search?
19 Are universities then allowed to disseminate the
20 video?

21 So, I think you have to think about where
22 you might have other universities captioning an old
23 video, does that suddenly need to become part of
24 the ambit of the search. And then I think you need
25 to think about how that factors into limitations

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1 that you place on dissemination.

2 So in other words, does Ms. Cowling have
3 to go to other universities and say, hey, has anybody
4 else captioned this already, do you have an
5 accessible version of this?

6 So, you might drive this exemption in
7 a way that would actually require her to go get it
8 from them. I'm not sure that is what you want to
9 come up with.

10 So, I think the hypothetical scenarios
11 are way pretty strongly in favor of not including
12 any kind of commercial availability search in this
13 context. And I think Mr. Schoppert has one more
14 thing to add on that.

15 MR. SCHOPPERT: Yes. In addition to my
16 colleague's concerns about costs, I think it's
17 important to kind of practically think about how
18 these would play out in the classroom.

19 If you put yourself in a position of
20 somebody who is deaf or hard of hearing, it's going
21 to take longer for the disability services offices
22 to go and get an accessible version.

23 This could be days or weeks of them not
24 being able to participate in class, whereas under
25 this exemption, disability services professionals

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1 would be able to timely circumvent and make that
2 version accessible. Which is really what we're
3 concerned with.

4 MR. REID: And I guess I, please
5 interrupt if this isn't where you want us to go,
6 but I'm happy to tee into the market issues, if
7 that's helpful?

8 MS. SMITH: Sure, go ahead.

9 MR. REID: So, obviously *HathiTrust*
10 created sort of a new branch of the first factor
11 analysis, and that's worth talking about as well.
12 But the keystone of the analysis, and also of the
13 legislative history of the '76 Act, and as
14 referenced in *Sony*, focuses on the market harm.

15 And in this accessibility context, and
16 actually commend your attention to the legislative
17 history, the '96 Telecom Act, and other places where
18 Congress has explicitly acknowledged there is a
19 market failure in the provision of accessible
20 services.

21 So, that's an important backdrop to all
22 of this. And this is an exemption unlike some of
23 the others that you have heard this week, where we
24 would love to see a market for this stuff.

25 And I think I said to the panel last time

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1 around, when we did the e-book accessibility
2 exemption, we would love to not come back in three
3 years because it turns out that all of this stuff
4 is being provided with captions and description.

5 Ms. Cowling and her colleagues are very
6 busy and have lots of other challenges to deal with,
7 and if that is obviated by the copyright holders
8 and providers of these videos inherently, that's
9 a win. That is a copyright exemption and the
10 ability to circumvent are not necessarily the only
11 way to solve this problem.

12 We are here because that is the least
13 worst solution to deal with the way things are now.
14 And this is not a hypothetical problem. So I think
15 we'd reference in our comments, there are disability
16 services providers with dozens or hundreds of
17 requests a semester in this regard. And so,
18 whatever the market should be doing, ought to be
19 doing, the reality is that it's not.

20 And on a regular basis, a video shows
21 up in a disability services office and somebody has
22 to deal with captioning it to make sure that a
23 student with a disability is afforded their equal
24 rights to it.

25 So I think this is an area where there

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1 is just not any real dispute that the market is
2 serving that function.

3 And again, I think to the point about
4 commercial availability, if a commercially
5 available work is out there, the likelihood is that
6 the professor finds it, the library finds it and
7 already has that and it never shows up in the
8 disability services office in the first place.

9 MS. CHAUVET: Yeah, I think we're just
10 still trying to balance, because as Mr. Band said,
11 you're really going after the ones that are
12 inaccessible format, there is no accessible format
13 available.

14 But I think we're also mindful, just what
15 we were talking about, *HathiTrust* was dealing with
16 a situation where there was not a market.

17 But it sounds like, at least for
18 captioning, and to some extent audio description,
19 there is a little bit of a market. Maybe not the
20 huge market that you want.

21 And, how do we balance where there are,
22 for television, the FCC has certain rules, like any
23 television program, most of the time has to be
24 captioned. There are some exceptions. It's
25 usually like English and Spanish you know. If it's

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1 in Korean, maybe it's not.

2 But, so when you have rules like that
3 or you see Netflix was sued, is now providing
4 captioning, it now provides audio description,
5 maybe not for all of its offerings but for a lot.
6 And perhaps Hulu will after we'll see how the case
7 settles out with Hulu.

8 So what are we to do in a situation where,
9 to kind of carve out here, well maybe it's not
10 imposing on a burden to go look in the marketplace
11 but then how do we balance that with the content
12 providers where they have made a market of providing
13 accessible formats, but those are not being used
14 for the purposes that you seek here?

15 MR. REID: So I dispute the
16 characterization of the captions and descriptions
17 that are created for compliance with the FCC's rules
18 as a market. That is a -- I understand a market to
19 be economic activity that occurs absent government
20 intervention.

21 And it's well-documented. There is a
22 great book about this by a woman named Karen Strauss,
23 that does a historical documentation of captioning
24 up until the 1990s when Congress started to
25 intervene. And it's basically non-existent.

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1 And this is all technology that is not
2 that complicated and has been around in principle
3 since the 1930s and 1940s.

4 MS. CHAUVET: Well, what about, would
5 the FCC authorize if it was captioned on television
6 in the initial broadcast, but if it's re-streamed
7 like on the internet that it also has to include
8 the captioning?

9 So when we're seeing like reruns of
10 shows, so like isn't there a market for internet
11 streaming services for that --

12 MR. REID: Sure.

13 MS. CHAUVET: -- aside from when it was
14 initially broadcast?

15 MR. REID: Yes. I mean, trying to cut
16 to the chase here which is, we tried to focus this
17 exemption, and in our initial comments, and I'm
18 happy to elaborate here, on areas where the FCC's
19 rules don't cover.

20 So if the FCC's rules lead to a program
21 being captioned, and they do in a lot of cases,
22 that's not the kind of thing that we're talking about
23 within the ambit of this exemption.

24 So if it's helpful to note that in the
25 exemption, for example, that it doesn't cover

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1 situations where the program is already captioned
2 or the program is already described, nobody in a
3 Disability Services Office is particularly
4 interested in re-captioning or re-describing a
5 program. That's never a scenario for someone --

6 MS. CHAUVET: Sure. But we've also
7 had, you know, I've heard it said today that we don't
8 want to have -- or I should say you have mentioned,
9 not wanting to have some type of obligation to go
10 look in the marketplace to see if it's accessible
11 or not.

12 So I'm trying to understand where we can
13 kind of draw the line where if you, I don't know,
14 if you know that it's captioned, do you have to go
15 and look --

16 MR. REID: Well --

17 MS. CHAUVET: -- how do we balance that?

18
19 MR. REID: So what I'm trying to get
20 across is you're envisioning a scenario where there
21 is a video that's sitting in a library or somehow
22 gets in the door at a Disability Services Office
23 and it doesn't have captions, and there's another
24 version out on the marketplace that does have
25 captions. And there is very little reason for that

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1 ever to happen.

2 The scenarios where that happen are
3 entirely hypothetical and frankly kind of hard to
4 envision and not documented anywhere in the record.

5 And, again, the point is what do you want
6 people to go look for? If a video comes in on DVD,
7 where do they have to go scour to look for the
8 captions, do they have to scour all of the streaming
9 services?

10 The likelihood if it's not captioned on
11 DVD that it's going to be captioned on some streaming
12 service, pretty low. It's not going to be there.
13 Yeah.

14 MS. SMITH: I have a slightly related
15 question to that. So in the example you gave, some
16 inaccessible version comes in the door to the
17 disability services organization and the current
18 e-books accessibility version requires that a copy
19 is lawfully obtained by --

20 MR. REID: Sure.

21 MS. SMITH: -- the circumventing
22 activity, is that a requirement that you think would
23 be appropriate to build into this exemption?

24 So maybe you obtained the inaccessible
25 version, this is why you need to circumvent it --

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1 MR. REID: So I'm guessing Mr. Band
2 would like to get in on this point as well. Again,
3 to the point I raised at the beginning, we are
4 presuming this is a scenario where a professor or
5 a faculty member, employee of the university,
6 someone has lawful access to this work. Now, they
7 may not have lawfully obtained a copy, they may have
8 access through a streaming service or something like
9 that, but the point is there is a scenario where
10 a university employee or a student at the university
11 has a lawful opportunity to be showing this video
12 for a lawful purpose.

13 So I'm a little anxious about the idea
14 --

15 MS. SMITH: Sure.

16 MR. REID: -- of lawfully obtaining a
17 copy but --

18 MS. SMITH: You don't stream an e-book
19 so that may be part of why the language is different
20 in that exemption.

21 MR. REID: But in principle I think a
22 limitation that says, the intake and the output from
23 the disability services office all has to be
24 non-infringing, has to be lawful.

25 I don't think we're envisioning any

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1 scenarios where this is, well, in fact, I can promise
2 you we are not envisioning any scenarios where this
3 is a back door for piracy or whatever else the
4 opponents might be concerned about. If there is
5 anything we can do to ameliorate that concern I'm
6 happy to do it.

7 MS. CHAUVET: No, I think that's what
8 Ms. Smith was referring to is just wanting to make
9 sure we're not talking about a university getting
10 a bootlegged version and then doing it. So I think
11 with, when we're talking about putting the lawfully
12 acquired language, it would speak to situations to
13 prevent that from specific scenario.

14 MR. REID: And the only other thing I'd
15 add is, the educational fair use context and the
16 intake of videos from professors, students, et
17 cetera, is fairly complicated, right, and there are
18 some fairly complicated questions. I'd urge the
19 Office to avoid importing that entire mess of law
20 into this exemption.

21 The situation when a disability
22 services office gets a request is they might need
23 to put this together in very short order, like
24 tomorrow or the next day, to make sure that a student
25 can get access for it.

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1 So I wouldn't want to put the burden on
2 a Disability Services Office to do a lengthy
3 upstream inquiry about the acquisition of the video.
4 I think --

5 MS. SMITH: No, I think we're just
6 saying you've got the copy that's -- in the same
7 way, in a non-accessible version, you've gotten the
8 copy through authorization or streamed it with
9 permission, it comes in legitimate the same way it
10 would come in in a non-accessible way, legitimate.

11 MR. REID: And this is not an effort to
12 expand the scope of permissible uses or permissible
13 --

14 MS. SMITH: Right.

15 MR. REID: -- circumvention of folks
16 upstream from a Disability Services Office. That's
17 obviously a different discussion that you guys had
18 yesterday.

19 MS. SMITH: Mr. Band.

20 MR. BAND: Yes. I just wanted to add
21 that in the existing, the chapeau as it were, of
22 the existing regulation for exemptions, it
23 basically says, shall not apply, you know, the
24 prohibition shall not apply to people who engage
25 in non-infringing uses of the following classes of

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1 work. So that's always there.

2 That's always there as a backstop. And
3 even in the context of the market and the possibility
4 of a market, well, the truth is, is that if somehow
5 one of these uses is harming the market for a work,
6 again, in that highly unlikely hypothetical
7 situation, well, it might not be a fair use, right?

8 In that case, if I do decide that I am
9 going to close caption Wonder Woman, I don't know
10 why, but if I decide to and that somehow harms the
11 market, well, then it's not a fair use and, you know,
12 I'm an infringer.

13 But all of this goes to what we were
14 talking about yesterday. Our goal is to sort of
15 keep the exemption as simple as possible, as
16 streamlined as possible so that people out in the
17 field can say, yes, okay, I can use this, and not
18 have 14 steps and they say, well, do I meet this
19 one, do I meet this one, do I meet this one. That's
20 the point, is to really make sure that the students
21 who need the help get it.

22 MR. REID: And I know we don't want to
23 belabor the market point, but I just wanted to throw
24 in one more point. Universities are actively
25 engaged in trying to encourage a market for these

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1 works.

2 So for example, the University of
3 Colorado, where I'm on the faculty, is in a
4 settlement with the Department of Justice about
5 inaccessible versions of its video materials, among
6 other things, and has a working group across campus
7 that tries to promote the acquisition of accessible
8 materials and highlight publishers that make, for
9 example, textbooks available accessibly.

10 So this is an effort for universities
11 because it's consistent with their educational
12 mission, it's consistent with their efforts to lower
13 tuition, to make the process streamlined for
14 everyone.

15 So where the market can step in, we are
16 all about that, and we are excited about that. We
17 are here because we're not there, if that makes any
18 sense.

19 MR. CHENEY: If I can ask a question, if
20 I might. Just to follow up a little bit on what we're
21 talking about.

22 If a student were to come into the
23 disability rights office and they said, I have a
24 video for this, I would like you to make it
25 accessible, is that something that you would do?

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1 That seems to be a lawfully acquired
2 copy, would you do it just for personal use for a
3 student?

4 MS. COWLING: So the way that our office
5 works, that if we have met with the student and we
6 determine their accommodations using an
7 interactive case-by-case process and we discover
8 that they are eligible for the closed captioning,
9 if it's a content that they need for their course,
10 then we would go ahead and caption that.

11 MR. REID: But to more pointedly answer
12 your question, if a student says I bought this video
13 and I want to go watch it this weekend with my
14 buddies, that's not something a disability services
15 office is ever going to do. This is in an
16 educational context.

17 MR. CHENEY: So that's one of the
18 caveats here. And to follow up, the same with the
19 professor.

20 If the professor comes in and said, I
21 would like to review this, I may or may not use it
22 in a course, is that one of the things you would
23 ask as well, if you intend to use it in a course.

24 That limits what we're going to do if
25 you're going to use it for personal use, then you

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1 wouldn't allow it, is that correct?

2 MS. COWLING: That's correct.

3 MR. REID: And I think moreover, someone
4 that works at a state university, if we were faculty
5 members who are showing up disability services
6 office asking for the service, we would get a lot
7 of questions about abuse of public funding and that
8 sort of thing.

9 So I think the punch line is, is if the
10 Office is so inclined to put some limitation in the
11 exemption that scopes it to educational purposes
12 or purposes related to the functioning of a library
13 in a way that's brought enough as to not generate
14 a lot of ambiguities, I don't think we would have
15 a problem with that.

16 MS. SMITH: Here's another question
17 related to that. So the language you've suggested
18 is, and I think then we want to go into the types
19 of institutions that might be able to make use of
20 an exemption, but you've listed, you know, x types
21 of institutions who have legal and ethical
22 obligations to make works accessible.

23 Would another way of sort of closing that
24 loop just say, the circumvention is allowed in
25 fulfillment of those legal and ethical obligations?

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1 MR. REID: Yes. And just on having not
2 thought hard about that formulation, I think that
3 makes sense.

4 And I don't think we're contemplating
5 scenarios where, well, here is, I think the one rub
6 with that is, if a university is choosing to go above
7 and beyond its obligations under the ADA, that might
8 be a scenario where we would still want to be able
9 to circumvent. And I think the case law is
10 developing in the ADA context, so we wouldn't want
11 to foreclose that line of inquiry.

12 So I think talking about, for
13 accessibility purposes in an educational or library
14 context, probably a safer formulation from our
15 perspective, but I'm having a little bit of trouble
16 identifying an example of the difference between
17 that and what you just suggested, so.

18 MS. SMITH: Okay. I appreciate that
19 because I listened to Mr. Band, and I'm not trying
20 to create a 14 point checklist but just thinking
21 if that's what you've tied it to originally maybe
22 that just sort of says, for the purposes of why
23 you've gotten in the door in the first place.

24 MR. CHENEY: And if I could probe a
25 little bit --

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1 MS. SMITH: And if educational uses you
2 think, or library uses would do the same, that would
3 be good to understand, too.

4 MR. REID: I mean, one other thing I
5 might throw in for your consideration is that
6 universities have, there are some universities that
7 have raised the presence of copyright law as a
8 barrier to their compliance with ADA, so we probably
9 would like to avoid a circularity where we say, is
10 the university obliged, well, that depends on
11 copyright law. Copyright law asked whether the
12 university is obliged and then we don't have a way
13 to break that circularity.

14 We're obviously of the position that
15 universities ought to be doing this and that it ought
16 to be consistent with copyright law. So I might
17 ponder that circularity a little bit.

18 MR. CHENEY: If I could probe a little
19 bit more. Some of the universities now are
20 expanding their reach. Not just on campus use or
21 students that are local but are remote or online
22 classes.

23 Can you speak a little bit about how this
24 exemption might work there for students that might
25 come to the disability rights office and ask for

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1 accessibility of videos that might be included in
2 a remote or online course?

3 MS. COWLING: Sure, that's a great
4 question and something else that we're grappling
5 with for online course development.

6 So we have a -- Kent State University
7 implemented an EIT policy that asks that we have
8 --

9 MS. CHAUVET: What's EIT?

10 MS. COWLING: I'm sorry, electronic
11 information technology. So we are trying to do
12 proactive accessibility more in a universal design
13 approach so that when a student registers in August
14 for courses and is taking an online course, the
15 course is ready to go and it is captioned.

16 MR. CHENEY: And in those cases, would
17 it often include some of the content that we're
18 talking about today, either in clips or in full,
19 larger versions of the video or other type content?
20 Is that included in those online videos?

21 MS. COWLING: Lawfully obtained videos.

22 MR. CHENEY: And the online content that
23 you're offering in courses?

24 MS. COWLING: Correct. So not all of
25 the -- currently, just the example again at Kent

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1 State University -- not all video content is being
2 captioned, but there is a push to be ready to have
3 that proactive accessible content ready to go.
4 Should someone needing that accommodation sign up
5 for online courses, it would accessible.

6 MR. REID: And if I could just, again,
7 encourage punting the contours of the complexities
8 of distance education and MOOCs and all of that sort
9 of stuff to the other context where this Office and
10 courts have been considering those issues and not
11 importing that into making a disability services
12 office make a determination about whether the
13 subsequent use of the video itself or the intake
14 of the video is lawful.

15 Again, we understand that there are
16 limitations on what's acceptable in that context,
17 but we don't want the disability services folks to
18 have to be in the business of redoing that analysis,
19 if that makes any sense.

20 MS. CHAUVET: I think that that's all
21 really helpful. I think we're going to turn a
22 little bit to kind of just defining the class of
23 users.

24 So the examples that are in the record
25 are typically examples of students at universities

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1 seeking accessible formats, so when you list out
2 the different kinds of potential users you have
3 disability services offices, organizations that
4 support people with disabilities, libraries and
5 other units at educational institutions.

6 So are we really just talking about
7 entities within a university? So we're not talking
8 about like libraries outside of universities I guess
9 is what -- I kind of want to focus on what we're
10 really trying to do here.

11 MR. BAND: But I'm looking to Carrie
12 Russell from ALA to, if I could -- if we could --
13 let me consult with her and then we can, if we can
14 come back to that?

15 MS. CHAUVET: Okay.

16 MR. REID: If you want to do that, I can
17 respond to one piece of that question, which is
18 within the university the reason we try to draw that
19 formulation in a fairly broad way is because
20 different universities have different
21 configurations of where the locus of disability
22 services is.

23 So, for example, there are some
24 universities with a fairly elaborate quote unquote
25 disability services office, and other

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1 universities, like the University of Colorado,
2 we've got a disabilities services office that is
3 responsible with coordinating with the main
4 campus's information technology department and
5 some academic units for the rendering of disability
6 services.

7 So we wanted to make sure that we didn't
8 draw the exemption in a way where some university
9 has to look at it and say are we a quote unquote
10 disability services office or do we have some
11 configuration that's not permitted.

12 MS. CHAUVET: Okay, understood, just
13 the upshot though is that ultimately what you hope
14 to get out of this exemption is that students at
15 universities are able to, regardless of where they
16 get it within the university, wherever they get the
17 accessible format, but they are really the ultimate,
18 I don't want to say end-user, but they are the
19 ultimate beneficiary of this exemption.

20 MR. REID: I think that's right, and it
21 is also worth emphasizing we drew the exemption,
22 or at least the proposed language, in a broad enough
23 way that it might encompass K-12 institutions.

24 We obviously didn't have significant
25 support on the record for that. We are hearing

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1 rumblings that that is of interest, that the need
2 to caption videos in K-12 institutions is
3 additionally coming up, so I might throw that out
4 there as well.

5 But to your formulation about the
6 university I think from our perspective that is
7 correct, but Mr. Band may have more to say.

8 MR. BAND: Right. So I just clarified,
9 and thanks for indulging me, so, you know, obviously
10 in a perfect world, you know, the exemption would
11 apply to libraries making it for any library user
12 who needs it.

13 But as a practical matter the real need
14 is in the educational context, but not only in higher
15 ed, also K-12. So the K-12 libraries need to
16 support students who have hearing disabilities so
17 they have that need as well.

18 Now, again, it's a smaller universe, you
19 don't have the diversity of content and so forth,
20 but it does happen in the K-12 context too, but,
21 again, it really is all about education at this
22 point. That is the highest priority and, you know,
23 a good place to start.

24 MS. SMITH: So it would be fair to say
25 units at non-profit educational institutions? I

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1 sort of added the word non-profit which is in the
2 Chafee Amendment as a good analogy, but just to
3 understand based on what you have submitted that
4 we understand where --

5 MR. BAND: Now that Trump University is
6 closed, I suppose, yes, we could do that.

7 MR. REID: I will let that one lie. We
8 might mention that limitation, the limitation of
9 the Chafee Amendment is not necessarily a limitation
10 of federal accessibility law.

11 So for-profit colleges, for example,
12 that take federal funding are going to be subject
13 to these same obligations under the Rehab Act, so
14 I might be a little anxious about adding that
15 non-profit qualifier. There may be context in
16 which a for-profit college needs to do it.

17 One other very minor clarification
18 since we are talking about entities and scope, just
19 to make sure, there are some scenarios where a
20 disability services office is going to be doing the
21 captioning in-house. There are other situations
22 where they are going to be working with a captioning
23 vendor and contractual privity and basically
24 saying, here, you caption this video and bring it
25 back.

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1 So there are going to be strong
2 contractual ties between the disability services
3 office and the vendor, but we just wanted to make
4 sure that that's part of the record here that that's
5 also a scenario that unfolds.

6 And just to assuage any concerns that
7 might come up about that, these are the same
8 captioning vendors that the movie studios and
9 television broadcasters and everybody else hires,
10 and they have very strict confidentiality
11 agreements, and they don't disseminate videos and
12 all of that sort of stuff, but that's a pretty
13 regular part of this universe, and I think the same
14 goes true for the description part of the world as
15 well.

16 MS. CHAUVET: So the language Ms. Smith
17 was talking about, either like a non-profit
18 organization or a government agency, that is taken
19 from section 121 of the Copyright Act which has been
20 incorporated into the existing temporary exemption
21 for assistive technologies and e-books.

22 So if we are not going to use that because
23 you don't feel comfortable that it would include
24 for-profit universities, so rather than kind of
25 listing out -- I just don't know if listing out,

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1 I mean especially when you say other units at
2 educational institutions, that might -- I think --
3 or the opponents thought that was a little bit too
4 broad.

5 So do you have perhaps a better way of
6 maybe more broadly collapsing these different kind
7 of units or different entities within an
8 organization, or within in a university?

9 MR. REID: Am I to take from the question
10 that units within an educational institution is an
11 overly broad construction from the Office's
12 perspective?

13 MS. CHAUVET: I mean that could include
14 the cafeteria. I mean I don't know what a unit at
15 a university means, and maybe that's something we
16 can talk about more in like post-hearing discussions
17 because that's going more towards regulatory
18 language, but just because the opponents are not
19 here today, one of their concerns was that they felt
20 that the list of proposed users was overly broad.

21 So I just wanted to address that concern
22 to see if you had thought of a different way or a
23 narrower way to define those users.

24 MS. SMITH: And maybe another way is, it
25 started off saying disability services offices and

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1 then started to be maybe a catch-all in case
2 something does not technically qualify, but if that
3 might be a way the Office could clarify in guidance
4 that it is something like a disability services
5 office.

6 MR. REID: I mean I think you might,
7 maybe you could qualify it by the activity or purpose
8 of the unit, so disability services office or other
9 unit engaged in the provision of accessibility
10 services within the university, or something like
11 that, and I think we would be happy to stipulate
12 that in most cases a cafeteria is not included in
13 that list.

14 MS. GALLEHER: I think one of the things
15 that we were grappling with during our research is
16 in talking to several universities and disability
17 services offices at universities around the
18 country, every university has a very specific and
19 individual chain of distribution on how they handle
20 these things.

21 So we have been very reluctant to narrow
22 this exemption in a way that where some universities
23 can't benefit, and I think this goes back to our
24 initial conversation we were having about market
25 and sourcing and legally acquired, we want to

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1 minimize the burden on disability services offices.

2 Really we want them to be able to do their
3 job in the most efficient and effective way possible
4 and to try and make them consider are we, like where
5 do we fit, do we fit under this exemption, is
6 something that we want to avoid.

7 MS. CHAUVET: No, understood. And I
8 just wanted to turn back to something Mr. Band had
9 acknowledged -- K-12 this could be, obviously,
10 making accessible formats doesn't apply just to
11 universities, but then Mr. Reid also acknowledged
12 that at least for the record for the purposes of
13 this rulemaking that the examples are limited
14 basically to the university context.

15 So because we have to rely on concrete
16 examples in evaluating whether or not an exemption
17 should be recommended, would it be reasonable then
18 to just look at the university context since that
19 is the record at hand?

20 MR. REID: So I mean we've urged the
21 Office in the past, and this may be a losing battle
22 so I won't belabor it, we think section 1201 doesn't
23 ask the Office to set up proponents and opponents.

24 It delegates to you the obligation to
25 do a rulemaking into which you ought to do some sua

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1 sponte investigation of that question. So in other
2 words, I don't like the idea that the Office says
3 we haven't had anyone show up to ask for this in
4 very specific terms so, therefore, there is no
5 adverse effect.

6 We would encourage you to investigate
7 that question, but the scope of resources that we
8 had to dedicate to this was primarily focused on
9 universities, and that's what we were able to come
10 up with.

11 MS. SMITH: And we also encourage you to
12 support the Copyright Office having adequate
13 resources to serve this rulemaking as well as its
14 other functions.

15 I mean we are dependent upon
16 participants in the rulemaking in large part to
17 provide us with information as well as a matter of
18 sort of fairness so that everyone can understand
19 the issues to be aired for that.

20 MR. BAND: But I would just amplify
21 Blake's point about, you know, what is, and I know
22 this is, you know, we have had this conversation
23 about what is it, you know, what is the nature of
24 this proceeding, is it a -- but it is a rulemaking,
25 it's not an adjudication.

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1 MS. SMITH: Correct.

2 MR. BAND: Right. It doesn't -- and,
3 you know, there is nowhere in here, in the statute
4 it doesn't talk about evidence, but, you know,
5 obviously a rulemaking has to be based on a record,
6 and, you know, there is certainly the concrete
7 examples have been given in the higher ed context,
8 but there are the same issues existing in the K-12
9 context and, you know, I am presenting right now
10 evidence to that effect.

11 I can't give you specific titles, but
12 it is clear that the K-12 institutions have an
13 obligation under the ADA to make this stuff
14 available and that is, you know, obviously part of
15 the record, too.

16 And so, you know, it certainly seems to
17 me that it is well within your, the scope of your
18 authority to say that the exemption can apply to
19 educational institutions at any level that need to
20 provide access to their students.

21 MR. CHENEY: If I can ask a question
22 there just to probe a little bit on this, and I know
23 you probably didn't ask, but do K-12 schools
24 frequently come for this sort of service either to
25 a university for assistance or to one of these

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1 captioning companies to ask for the captioning
2 services for titles that they may have, do you know
3 of any that have had done that?

4 MS. COWLING: So the university
5 wouldn't be equipped to caption videos for a K-12
6 setting. There are times where I am called upon to
7 consult with to ask what business we use, we
8 outsource a lot of our video because in the video
9 that I showed today, it was just one minute long,
10 so the rate out there for an hour video it takes
11 roughly seven hours of labor, so we do a lot of
12 outsourcing.

13 So I am consulted with in public schools.
14 I have also worked for public schools before as a
15 sign language interpreter where there are videos
16 shown, and we would expect that the deaf and
17 hard-of-hearing students are attending K-12 before
18 they even are able to see us at the university
19 setting, so long as teachers are using video it would
20 need to be captioned.

21 MR. SLOAN: So in the K-12 setting
22 though, how would teachers accomplish that without
23 the resources that exist at the university that have
24 this separate office to deal with these things?

25 MS. COWLING: So the K-12 setting would

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1 need to abide by the IDA and their students are also
2 on IEPs, so they would use their resources similar
3 to the universities use our resources in order to
4 provide accommodations, including the captioning
5 content.

6 MR. REID: And I think it's probably
7 worth underscoring, too, here saying why have we
8 not surfaced these issues before. We are seeing
9 convergence of a few things.

10 One is the increased use of video content
11 in classrooms. I don't know if folks saw the Apple
12 education event a couple of weeks ago, I think it
13 was a fairly good demonstration of the expectation
14 that a modern student, even in a K-12 context, is
15 going to be engaging with multimedia content in a
16 way that even ten years ago wasn't the case.

17 I think you are also seeing an increased
18 amount of litigation in the disability rights side
19 of things to actually vindicate these rights that
20 have been sitting in the IDEA and the ADA and the
21 Rehab Act.

22 So the question is do all K-12 schools
23 have the resources to support that? The answer is
24 not yet, but it's a big question in disability policy
25 not -- the answer is not like, well, too bad, the

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1 students in those situations are out of luck.

2 Folks are increasingly trying to think
3 about how do we get around that, how do we find the
4 resources to support that, and what we are trying
5 to get at here is we don't want for the next three
6 years the DMCA to be lurking out there as a like,
7 oh, we got to wait another three years to fix this
8 if we figure out a way to bend the cost curves and
9 make it right, and that would be a shame to make
10 that a barrier for K-12 schools.

11 MS. CHAUVET: Just in the interest --
12 or, Ms. Cowling, do you have anything specific to
13 add to that or --

14 MS. COWLING: I just would like to add
15 that in the K-12 setting you are dealing with deaf
16 education teachers and also special ed teachers,
17 so they are the stop gap.

18 They are able to look for and provide
19 accessible content, but in the higher ed setting,
20 the faculty, their expertise is not necessarily in
21 disability. It is our responsibility to be able to
22 provide that accommodation.

23 MR. CHENEY: Just to follow up on that
24 just a touch if I might, in a school system, might
25 be not in a school, is there not pooling of

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1 resources?

2 In other words, in the school system
3 within a district, don't they often have a pool of
4 individuals that can help with those sorts of plans
5 for individuals that have specific learning plans
6 in the schools and then to bring in somebody to
7 assist with the disability learning? Is that, do
8 you know if that's --

9 MR. BAND: Absolutely. I mean so in
10 Montgomery County here in Maryland you would, you
11 know, as Ms. Cowling said, I mean you would certainly
12 -- first in the school you would have specialists,
13 and that sort of is different from the higher ed
14 context, but then you also have, you know, a
15 district-wide office, a disability services
16 office, and that you do have the pooling of
17 resources, and I imagine to the extent that there
18 needs to be a video captioned that it would sort
19 of go through the people in that office.

20 It probably wouldn't be done on the
21 individual elementary school level, but it would
22 be done on a county-wide basis because they would
23 typically have a county-wide curriculum, but there
24 would be that kind of pooling of resources.

25 MS. CHAUVET: Thank you, that is very

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1 helpful. Just in the interest of time I wanted to
2 move just a little bit, in the proposed regulatory
3 language there is the term people with disabilities,
4 would it be reasonable to use the Department of
5 Education's regulations implementing the IDEA as
6 a guide to define that term?

7 MR. REID: I believe IDEA is K-12 so that
8 might not be the ideal --

9 MS. CHAUVET: Okay. So like is there
10 maybe like a specific -- just like, for example,
11 you have the e-books exemption with assistive
12 services, it really goes back to section 121, but
13 that only covers people with relating to -- it
14 doesn't include people with hearing impairments,
15 which, obviously, you would want to be included.

16 So I think -- and, again, if you don't
17 have it now, but just thinking how should we -- what
18 should we use as a guide to define that term.

19 MR. REID: I think the ADA is probably
20 the right place to pull that term, but we would
21 welcome the opportunity to follow up with some
22 specific briefing on this point if it's of interest
23 to the Office just to make sure we cite you the right
24 chapter and verse of the right law.

25 I think there is probably a construction

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1 in either the Department of Justice's regulations
2 or the ADA itself that is the broader version of
3 what you are looking for from the Chafee Amendment,
4 but I don't have that right at hand and I don't want
5 to tell you the wrong thing, so we would welcome
6 the opportunity to follow up on that.

7 MS. CHAUVET: Okay. So we've talked a
8 little bit about like circumvention methods so when
9 you are out, because you also talk about obviously
10 we have a demonstration, if you are doing it
11 yourselves, but if you outsource it and you have
12 a third party, so I guess vendors do both audio
13 description and captioning?

14 MR. REID: Correct.

15 MS. CHAUVET: Okay. And then what
16 format is it typically received in from the vendor?

17 MS. COWLING: Yes, so that would be the
18 same format in the demonstration, so typically MP4
19 format or audio MP3.

20 MS. CHAUVET: Okay. And does the
21 vendor place any TPMs on the accessible version
22 before it's sent to you?

23 MR. REID: No, I don't think that's
24 generally the case. So, again, as I mentioned the
25 contractual arrangements with vendors are usually,

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1 again, because they work with copyright holders and
2 studios and other, you know, television studios on
3 this kind of work, they are generally contractually
4 prohibited from doing anything that would use their
5 possession of a video as piracy, and you can imagine
6 they do TV shows that are coming out live, they do
7 movies that are going to be in theaters and all of
8 that kind of stuff, so these guys are pros at that.

9 MS. CHAUVET: And then when you are
10 using outsource, when you are outsourcing to outside
11 vendors are you typically going to like DVDs and
12 Blu-ray and circumventing that and then sending them
13 the MP3 files for those types of -- or are we also
14 talking about going to like an internet streaming
15 service and having them -- I guess I am just trying
16 to understand when are they used versus what you
17 guys do yourselves?

18 MR. REID: Let me make clear that this
19 is prospective in nature, but ideally I think what
20 would happen under the proposed exemption would be
21 that the disability services office would be able
22 to do the circumvention, so I don't think we need
23 to get down the rabbit hole of can the third party
24 do the circumvention?

25 I think the idea is the disability

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1 services office would be doing that. Is that fair?

2 MS. SMITH: Thank you, that's helpful.

3 MS. CHAUVET: So just a little bit more
4 about the dissemination of the work, so we talked
5 a little about that. In the reply comments it
6 states so once the media is captioned or audio
7 described, disability services professionals then
8 deliver the newly accessible media to the requesting
9 student in the same way that content is distributed
10 to non-disabled students. So what specifically
11 does that mean?

12 MS. COWLING: Sure. So this speaks to
13 if the course is online and the video content is
14 already being housed in, for this example,
15 Blackboard Learn. So the video that is in Kaltura,
16 now the time text file, the captioning file was added
17 in Kaltura and that link or embed code is in
18 Blackboard.

19 MS. CHAUVET: That's very helpful. So
20 what if a DVD is used in the class? So we're kind
21 of out of the Kaltura context, so would a student
22 who needs an accessible format would they be given
23 a DVD containing the accessible format if that's
24 what is used in the classroom?

25 MS. COWLING: We would like that the

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1 students with that accommodation are able to view
2 in the same way that a student without an
3 accommodation.

4 So if the class is watching the DVD in
5 the classroom and it's using a projector with
6 whatever DVD or MP4 file, as we showed today, we
7 were able to download MP4, that the student would
8 watch it in the same manner at the same time to have
9 that equal access.

10 MR. REID: So just to clarify, I think
11 the Kaltura and Blackboard situation is a situation
12 where it might be homework assigned for a student
13 to watch as a, you know, thinking about a flipped
14 classroom situation where students kind of watch
15 a video.

16 Obviously in a classroom situation
17 there might not be a need to distribute it, and it
18 might be burned onto a DVD or something along those
19 lines.

20 MS. CHAUVET: But if the DVD is maybe not
21 being shown in class, if it's you just go out and
22 watch this, like is the -- I guess I just, I am
23 clarifying to know is the accessible version, would
24 that be given to the student on a DVD or is it pretty
25 much controlled like only from the university?

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1 MS. COWLING: Sure. So we -- I can't
2 think in all of my years of working in higher ed
3 that I have distributed a DVD to a student. It would
4 be password protected within Kaltura streamed.

5 MS. SMITH: So I think one related issue
6 is thinking about this in a parallel to the current
7 e-books exemption which says the use will be I guess
8 in accordance or pursuant to 121 which has
9 restrictions on the further distribution of copies
10 and also thinking about, there has been a bill
11 introduced to implement the Marrakesh Treaty which
12 would have a number of practices the authorizing
13 entity or the circumventing entity by way of
14 parallel, would it be reasonable to have them follow
15 a series of practices to prevent further
16 reproduction or distribution beyond the scope of
17 the use that is intended?

18 MR. REID: I mean I think Mr. Band
19 probably has something to say on this front as well.
20 I think in this context you have got the backdrop
21 of we've got to have non-infringing uses, and there
22 is nothing concrete on the record to suggest that
23 there are any serious concerns about
24 redistribution.

25 I think we've tried to reassure you in

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1 our comments and today that that is not the purpose
2 of this exemption, and the copyright holders, if
3 someone were to try to leverage this exemption in
4 some untoward way, have got numerous sorts of
5 backdrops, not limited to all of their section 106
6 rights that are potentially being infringed.

7 So I think the expectation, again, is
8 that this exemption is not being used in the
9 situation that is contemplated in Marrakesh in 121,
10 in particular because the -- and Marrakesh in 121
11 there is a new copy being created of the work that
12 is going, potentially going with the person, right.

13 It might be a large format book, it might
14 be a Braille version of a book, and something, you
15 know, there is something to sort of grapple with
16 there that is not, is I don't think the case in this
17 situation.

18 MR. BAND: I'll just add that in the
19 Marrakesh context certainly with the proposed
20 121(a) we're talking about international
21 distribution, and that's why you have the additional
22 safeguards.

23 I mean this is not what we are talking
24 about here. And, also, and even in terms of the
25 exemptions you have granted in the past, the MOOC

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1 exemption, again, is contemplating broad, much
2 broader dissemination than what we are talking
3 about.

4 We are talking about, sort of, students
5 within the campus. We're not talking about
6 reaching across the country, or again, with MOOCs
7 around the world, that's not what we are looking
8 for.

9 And so because of that, again,
10 additional restrictions and requirements, you
11 know, maybe it will be Items 9 through 14 on the
12 checklist, I mean just not, it's not necessary, and
13 it just would deter use of the exemption, and that's,
14 again, the goal was to help the students as much
15 as possible and to make it as easy as possible to
16 do that.

17 MS. CHAUVET: Just to follow up on your
18 reference to international versus domestic
19 dissemination, so you do have section 110(2), which
20 granted, it is for distance education which may or
21 may or not apply to the circumstances of this
22 exemption, but it definitely deals with domestic
23 distribution.

24 It's like talking about any kind of
25 dissemination, and Congress wanted that to

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1 basically reduce the likelihood of downstream
2 piracy, so there is some evidence at least in the
3 educational context for Congress wanting to put some
4 type of safeguard in.

5 So I think our question is would that
6 be reasonable to do that here if it's done in other
7 educational contexts?

8 MR. BAND: Well, again, a lot of it --
9 I guess it all depends on, and I know this is an
10 issue that is ongoing, you know, what is distance
11 ed, when is something 110(1) or 110(2), and I think
12 certainly my understanding is that many
13 universities sort of in their minds, I mean distance
14 ed is when it's entirely a distance ed class whereas
15 you now have more and more blended classes or where
16 it's basically an in -- you know, face-to-face
17 instruction but that you have certain aspects of
18 it that do occur online, and much of it is streaming
19 of material or it could be chats and so forth.

20 That is seen typically as all 110(1) as
21 opposed to 110(1) and 110(2). I mean that's, I
22 think as a practical matter, how people are treating
23 it.

24 MS. CHAUVET: Sure. I think it was more
25 just the acknowledgment that Congress has shown some

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1 inclination to add safeguards in a domestic context
2 for further dissemination.

3 So I guess would it be reasonable so that
4 the reproduction or distribution under the proposed
5 exemption would be exclusively for use by a person
6 with disabilities if we are not going to maybe put
7 all this in kind of the safeguards of like, for
8 example, section 110(2) protections, would it at
9 least be reasonable to cap it with like this has
10 to be for, you know, exclusive use for people with
11 disabilities?

12 MR. BAND: Right. Well, the only
13 problem I could see with that, and I imagine the
14 people who really know it would add to that is that
15 I can imagine a situation where the professor might
16 say, okay, we're going to add the closed captioning
17 for, you know, one student but, you know, and we're
18 going to show the clip in the classroom, it's going
19 to be seen by all students.

20 I mean the caption is there really for
21 one, but it's, you know, it's not like they are going
22 to have two split screens, right, where, you know,
23 everyone is looking in this direction but the
24 hard-of-hearing student is looking in that
25 direction.

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1 MS. CHAUVET: Sure. Well I guess --

2 MR. BAND: It's not going to work that
3 way.

4 MS. CHAUVET: Understood and
5 appreciated. I think but the circumvention would
6 be done exclusively for the purposes of people with
7 a --

8 MR. BAND: Right, the circumvention is
9 done --

10 MS. CHAUVET: Right, so --

11 MR. BAND: -- but the -- it will be
12 conceivably made available --

13 MS. CHAUVET: Because you're talking
14 about the performance, like the performance is not
15 just for --

16 MR. BAND: Yes, the performance, right.

17 MS. CHAUVET: -- individuals with
18 disabilities, but I guess would it be reasonable
19 to limit the circumvention for purposes of providing
20 access for people with disabilities, somehow kind
21 of clean that --

22 MR. BAND: Right, but I think it would
23 just need to be worded carefully so that it doesn't
24 inadvertently end up in a situation where, you know,
25 a professor cannot show it to the entire class and

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1 thereby, you know, basically, again, make the
2 students feel excluded, and the whole idea here is
3 to make everyone be included.

4 MR. REID: And I'd just add the comment
5 that I added I think in the two earlier hearings
6 this week which was keeping these exemptions simple
7 and avoiding using this exemption process as a means
8 to impose a complicated regulatory regime on the
9 use of circumvented video.

10 Obviously, Congress saw fit to do that
11 in section 110 with the benefit of a lot further
12 deliberation. This is not something that is
13 present in the record.

14 So, again, if the Office is inclined to
15 go down this road in a very steep way we would welcome
16 the opportunity to comment further. Just to
17 preserve that.

18 MR. CHENEY: If I could follow up a
19 little bit, too. It seems that we have another
20 category here. We've talked about libraries,
21 libraries tend to serve individuals that come in.

22 We've been talking about sort of
23 university libraries, but are we including public
24 libraries in that category, and they seem to have
25 a different clientele, right.

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1 I can imagine, I haven't seen it, but
2 a section of the library wall that includes DVDs
3 to be checked out that would be a distribution
4 problem in some ways if somebody were to take that
5 DVD home and then, you know, further distribute it
6 from their home.

7 Is that an issue in this particular
8 process as well?

9 MR. BAND: Well as I mentioned before,
10 at this point, I mean maybe next time, but at this
11 point we are not looking for an exemption for public
12 libraries to, you know, to make accessible copies
13 for, you know, the hearing disabled people who are
14 just coming in to, you know, want to check something
15 out for their own pleasure.

16 I mean that at this point we're, it's
17 entirely looking at the educational context. But
18 let me just add that I know we've been talking about
19 just education, I imagine it probably, you know,
20 should maybe, you know, we should think about making
21 it research and education because I would imagine
22 conceivably you might have to have, I mean it just
23 occurred to me but there might be a hard-of-hearing
24 professor who is doing research and would want that,
25 but I'm not --

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1 MR. REID: And I think the way to deal
2 with that is we talked earlier about scoping the
3 entities that are involved in that, and that's why
4 we are talking about within the context of an
5 educational institution as being kind of the right
6 locus.

7 MS. SMITH: All right. Well thank you
8 very much. We appreciate all of your comments, and
9 we are going to look at them carefully. I don't
10 think that we have any more questions, so we will
11 do something unique and wrap up a little bit early
12 and come back at 11:30 to discuss jailbreaking.
13 Thank you.

14 (Whereupon, the above-entitled matter
15 went off the record at 10:34 a.m. and resumed at
16 11:33 a.m.)

17 MS. SMITH: All right, everyone, I think
18 we're about to get started. This is the section
19 1201 rulemaking; we're having a hearing on class
20 6 which is computer program/jailbreaking. In this
21 discussion the Register of Copyrights has already
22 determined that she may tentatively recommended
23 renewal of the existing exemptions for
24 jailbreaking, and so we're really focusing on the
25 legal and evidentiary basis for whether or not to

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1 expand this exemption to voice assistant devices.

2 I think I see some repeat players and
3 some new participants. So, to explain our process,
4 if you want to speak, just tip your placard up, the
5 microphone if you can turn it off after you're done
6 speaking to prevent feedback, and also remove your
7 phone from being too close to the microphones to
8 reduce feedback. And we have a couple of exhibits
9 -- I'm aware of at least two, and so if you're
10 intending to refer to demonstrative or other
11 materials, just sort of say that in your speech so
12 when we read along in the transcript later, we'll
13 understand how to tie that together.

14 So we'll start with introductions. My
15 name is Regan Smith. I'm Deputy General Counsel of
16 the Copyright Office.

17 MS. SALTMAN: Julie Saltman, Assistant
18 General Counsel of the Copyright Office.

19 MR. AMER: Kevin Amer, Senior Counsel in
20 the Office of Policy and International Affairs of
21 the Copyright Office.

22 MS. CHAUVET: Anna Chauvet, Assistant
23 General Counsel at the Copyright Office.

24 MR. RILEY: John Riley,

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1 Attorney-Advisor at the Copyright Office.

2 MR. CHENEY: Stacy Cheney, Senior
3 Attorney-Advisor at NTIA, National
4 Telecommunications and Information
5 Administration.

6 MS. SMITH: And if the participants
7 wanted to state their name and any institution or
8 organization they're affiliated with, starting
9 with Mr. Freeman.

10 MR. FREEMAN: Jay Freeman, SaurikIT,
11 developer of Cydia, an alternative to App Store for
12 jailbroken iPhones, member of Exploiters, a group
13 which jailbroke the Amazon Tap, although I did not
14 personally work on that project.

15 MR. STOLTZ: Mitch Stoltz, I'm a senior
16 staff attorney with the Electronic Frontier
17 Foundation.

18 MR. WILLIAMS: I'm Matt Williams from
19 Mitchell Silberberg and Knupp; I'm here for AAP,
20 ESA, MPAA and RIAA.

21 MR. HUGHES: I'm David Hughes, I'm the
22 Chief Technology Officer of the Recording Industry
23 Association.

24 MR. ZUCK: Jonathan Zuck from the

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1 Innovators Network Foundation speaking on behalf
2 of ACT, the App Association, because every time I
3 think I'm out, they pull me back in.

4 MS. SMITH: Thank you all for being
5 here.

6 MR. AMER: So I think to get started, it
7 would be helpful for us to hear first from the
8 proponents about -- essentially to elaborate on some
9 of the evidence that you provided in your
10 submission. Just by way of background, as I think
11 we indicated, there is an existing exemption for
12 jailbreaking which applies to smartphones and
13 portable mobile computing devices. The request
14 here is to expand the exemption to encompass voice
15 assistant devices.

16 And so I think to start, Mr. Stoltz and
17 Mr. Freeman, it would be helpful for us just if you
18 could kind of elaborate on the evidence that you
19 submitted. I know you submitted two statements
20 from people indicating the need that they have --
21 for jailbreaking voice assistant devices in
22 particular -- the types of activities that they
23 would like to engage in, if you could talk a little
24 bit about that, that would be helpful.

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1 MR. STOLTZ: Thank you. Yes, by and
2 large many of the reasons why people are looking
3 to jailbreak voice assistant devices are the same
4 reasons that they would do so for smartphones,
5 tablets and other mobile devices. There is an
6 additional element when we're talking about voice
7 assistant devices in terms of fine-grain control
8 over privacy, which is really a major impact with
9 these devices, simply because they are
10 fundamentally always on microphone in the home.
11 And because they're used to control other devices
12 in the home, thermostats, home security,
13 appliances, light; they're potentially connected
14 to those things. And the stock voice assistant
15 device will have certain functions and capabilities
16 with respect to those devices.

17 For the most part it's collecting --
18 everything adheres and storing it, everything at
19 least temporarily, and then when requests are made
20 sending -- and potentially at other times sending
21 -- voice information from the home back to the
22 manufacturer's servers, which is both powerful and
23 a bit scary, the ability to jailbreak creates the
24 ability to be more selective.

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1 For example, limiting the range of the
2 microphone to a smaller radius near the device,
3 limiting it to certain hours of the day, limiting
4 the time and scope of control over other appliances,
5 and auditing what gets communicated to the server
6 on an ongoing basis; those are all reasons that
7 people would need a jailbreak voice assistant
8 device.

9 MS. SMITH: Can you elaborate on that in
10 terms of the current exemption for jailbreaking
11 which is to jailbreak a certain category of devices
12 for purposes of either adding -- making software
13 that is interoperable with the smartphone, for
14 example, or removing software when you're talking
15 about these privacy concerns. I'm wondering from
16 like a software perspective or an application
17 perspective, what is actually happening when you're
18 jailbreaking this voice assistant device for that
19 purpose?

20 MR. STOLTZ: That would likely be
21 something like a network firewall or an application
22 that overlays the applications already installed
23 on the device, and limits their use selectively.

24 MR. AMER: So -- and just sort of picking

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1 up on that -- so, is the process of jailbreaking
2 a voice assistant device different somehow than the
3 process of jailbreaking the device that's covered
4 by the existing exemption? Is it fundamentally
5 sort of the same thing or is the process somehow
6 different with respect to voice assistant devices?

7 MR. STOLTZ: So, the hardware is a bit
8 different, although there's some similarities.
9 The Apple HomePod, I understand, is an iOS device
10 very much like an iPad or so on as far as its
11 architecture. The Google/Amazon devices are
12 similar in certain respects, but the -- and the
13 overall process is similar which is to say you need
14 to take advantage of some security vulnerability
15 on the device to cause it to give super user or root
16 privileges to the owner, which would normally be
17 withheld. You know, in that sense, it's the same.
18 It's going to involve usually either installing some
19 external software on the device or making small
20 modification to the software on the device that will
21 then cause the user to get root privileges.
22 Actually, Mr. Freeman has actually done -- been
23 through that process and probably can talk about
24 it in more detail.

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1 MS. SMITH: Maybe, Mr. Freeman, when you
2 talk about it, you can consider in your answer
3 focusing on what are the actual acts of
4 circumvention; perhaps this is circumventing some
5 user restriction to be a super user, as Mr. Stoltz
6 said, but explaining it from a technological
7 perspective with that in mind. Thank you.

8 MR. FREEMAN: So the general process on
9 these devices, both the ones we have existing
10 exemptions for and for these smart speakers, is that
11 there's a secure boot process which is designed to
12 verify that the operating system and the software
13 often that is installed with that operating system
14 has come from the original device manufacturer.
15 And in order to -- and nothing has been added,
16 nothing has been removed -- and in order to make
17 such modifications, by adding, disabling,
18 removing, overlaying, et cetera, requires finding
19 a vulnerability or some kind of bypass to that
20 signature verification scheme.

21 In some cases this is a matter of finding
22 a bug, so there might be in the certificate, the
23 things checking the certificates, a mistake in how
24 it is reading the certificates, that you can take

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1 advantage of by putting in a slightly malformed
2 certificate, or in some cases it requires making
3 even a hardware modification momentarily. So in the
4 case of the -- and that is actually one place where
5 I think there's a little bit of, almost more extreme
6 work that is done with the smart speakers, is that
7 some of them don't have any USB ports. And so often
8 times it requires soldering something to the board
9 or a custom, makeshift cable for a port that wasn't
10 really a port.

11 MS. SMITH: Is that circumvention of a
12 technological protection measure?

13 MR. FREEMAN: So, yes. So actually, if
14 I continue this -- so on Amazon Tap, the way that
15 the exploit worked is you have the secure boot
16 process, as I was just describing, and then it loads
17 into its memory area all the information about those
18 certificates. If you essentially short out the
19 device at the moment that it is loading all those
20 variables, you can cause it to not load those
21 variables correctly. And so there's this
22 technological measure which is that signature
23 verification process, and then there's a bypass of
24 it that we're performing by doing this hardware

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1 manipulation, that then allows us to get into the
2 system, which then also further will require you
3 having a way of communicating with it, which then
4 requires us to have a cable plugged into it in order
5 to do this. So.

6 MR. AMER: Now, one thing that's new
7 about this request in addition to extending the
8 exemption to voice assistant devices is the language
9 that would allow people to circumvent for purposes
10 to enable or disable hardware features of the
11 smartphone or device. Could you talk a bit about
12 the rationale for that? Does that -- and I know in
13 one of your papers you indicated that your
14 understanding is that's sort of implied in the term
15 jailbreak generally. So was this primarily just
16 for sort of clarification to make that explicit,
17 or is there a particular, additional reason may be
18 related to the privacy issue you talked about before
19 that would warrant this expansion?

20 MR. STOLTZ: You're correct, that is --
21 we put that in not to expand the exemption but to
22 clarify it. The ability to install software of
23 one's choice, install or remove software of one's
24 choice from a device necessarily implies the ability

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1 to enable or disable hardware features. The reason
2 we added that was to emphasize that, for example,
3 the examples I mentioned just now, things like
4 limiting the range of the speaker or turning it off
5 at certain hours, or causing it to potentially only
6 respond to certain voices, or to turn off particular
7 wireless interfaces; all of those things are
8 important and should be sort of made clear that those
9 are encompassed in the exemption.

10 MR. AMER: Now, to the extent that, you
11 know, your concern is disabling the data collection
12 and transmission feature, I mean, is that -- would
13 that aspect be covered by 1201(i), the current
14 personally identifiable information? I understand
15 that what you're seeking is to do more than that; you
16 want to install apps and so forth, but I just wonder
17 if you've considered the extent to which 1201(i)
18 might be relevant to the privacy issue?

19 MR. STOLTZ: It might in some
20 circumstances, but not in all the circumstances
21 we've discussed in our paper.

22 MS. SMITH: So I appreciate that you're
23 raising privacy controls as a reason why someone
24 may want to jailbreak these types of devices. I'm

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1 wondering would your petition also allow for
2 jailbreaking to install applications for increased
3 surveillance? And if so, how -- what would -- do
4 you think the legal basis for that exemption is
5 non-infringing and justifications for that would
6 be the same or different?

7 MR. STOLTZ: So by the term increased
8 surveillance -- I'm not quite sure what you mean?

9 MS. SMITH: Well, I agree that it's
10 broad, but I think you can sort of guess that, right?
11 If you have Amazon Echo or something right now, the
12 relationship is between the user and perhaps Amazon.
13 Could you install a device that would go to a third
14 party or to another app? I mean, just if you think
15 no categorically, maybe explain why. And trying to
16 restrict the scope of the device to minimize the
17 impact on privacy, it also implies you might loosen
18 up restrictions.

19 MR. STOLTZ: So we're talking here about
20 a device that a person owns and modifies for their
21 own use, and you could imagine a scenario where you
22 want, for example, wanted to turn a voice assistant
23 device into an audio security device or perhaps a
24 baby monitor, in -- with features that are not

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1 available from the manufacturer. Those would be,
2 in a sense, modifying it for increased surveillance,
3 but, you know, with the -- you know, on the
4 initiative of the owner of the device. I'm not
5 clear on why that would change the infringement
6 analysis. I also think it's important to point out
7 that those same concerns would apply to a smartphone
8 and they have not been raised in this proceeding
9 or previous proceedings.

10 MR. AMER: Thank you. So I wanted to ask
11 the opponents specifically about the request to add
12 this new language about allowing circumvention to
13 enable or disable hardware features of the
14 smartphone or device, I just would like your views
15 on that specifically. We'll get to other
16 objections you may have to other parts of the
17 request, but do you have an objection specifically
18 related to the addition of that language?

19 MR. WILLIAMS: I think, like you, I'm
20 not entirely clear on everything that it covers,
21 which makes me nervous. I don't think in and of
22 itself that we're objecting to that, but we are
23 objecting generally to the expansion to additional
24 devices.

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1 MR. AMER: Mr. Zuck?

2 MR. ZUCK: Thanks. And I apologize in
3 advance for not being a copyright attorney, and so
4 I don't know always what's relevant and not
5 relevant. But I guess my concern about this
6 expansion to hardware features is related to
7 something we raised in our testimony about
8 alternatives that exist to create alternative
9 hardware to get to these services, and so at some
10 point I'll be talking about that. But I guess I
11 wanted to create a placeholder here, that the more
12 that you're trying to modify the functioning of the
13 device, the more it suggests the creation of a
14 competitive device with similar underlying
15 features that is a better alternative than creating
16 all the attack vectors and things like that, that
17 jailbreaking these devices would encourage,
18 whether it's copyright infringement or not.

19 MR. AMER: Well, that leads us into --
20 oh, I'm sorry, Mr. Hughes?

21 MR. HUGHES: Thank you, Mr. Amer. Yes,
22 and I'd like to come back to my point a little bit
23 later as well, but Mr. Stoltz made the comment that
24 one reason to jailbreak these voice assistant

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1 devices is to turn off hardware features, and I just
2 want to stress that those hardware features in some
3 cases are an integral part of the security that is
4 provided by the device on behalf -- I suppose if
5 you think of it in terms of contractual relationship
6 -- on behalf of the service, that is distributing
7 the music of other companies.

8 MS. SMITH: Could you provide more
9 specifics, if you know the specific hardware
10 features, or also discuss whether this may be of
11 particular concern in the context of voice assistant
12 devices?

13 MR. HUGHES: Yes, so as the gentlemen
14 have mentioned, each one of these devices is built
15 differently, they're built on slightly different
16 platforms and so on. But let's focus on the Amazon
17 Echo device, it's the one I'm most familiar with,
18 it is also the most dedicated device. And, you
19 know, it's a \$50 device. It is not a
20 multi-functional general purpose computing
21 platform that can do all kinds of things.

22 I'll give you one example and then come
23 back to your question. When you're on a personal
24 computer, for example, and you introduce secure

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1 media, let's say, in my personal experience at Sony
2 Music, we worked on DVD audio and Blu-Ray audio,
3 things like that. There's a combination of the
4 hardware and software that, for example, turns off
5 the unsecure digital outputs that protects our
6 music.

7 In these devices, it sounds to me that
8 if one of their purposes is to start to turn off
9 hardware features, then my concern would be that
10 there's going to be some unintended consequence
11 whereby suddenly music that was licensed for an
12 end-to-end secure distribution is no longer secure.
13 And I can come back in more detail later if you
14 choose.

15 MR. AMER: Let me -- I have one follow-up
16 to that. So this is getting us into the sort of --

17 MR. HUGHES: That's why I wanted to put
18 a placeholder with this.

19 MR. AMER: Yes, the kind of heart of the
20 matter, I suppose, which goes to the piracy risk.
21 I guess just one follow-up, Mr. Hughes, to your
22 point; I mean, is that concern something that exists
23 in a more significant way with respect to voice
24 assistant devices than it does with respect to other

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1 types of devices which are already covered by the
2 exemption?

3 MR. HUGHES: I think it does, and the
4 example I give is that the manufacturers of these
5 devices are trying to minimize their cost; they're
6 trying to sell, in the case of the Amazon Dot here,
7 a \$50 device. They're not incorporating the kind
8 of hardware and software complexity that was in a
9 personal computer, for example. So the options for
10 security are quite limited, and once you take away
11 that basic security, that was the assumption that
12 my companies had when they did a deal with a digital
13 service provider who did a deal with these services.
14 There's not a lot to fall back on, and that is our
15 concern that there will be un -- I guess, just
16 unintended consequences.

17 MR. AMER: So the cost of the device is
18 --?

19 MR. HUGHES: The simplicity of the
20 device might be a better way than focusing on cost.

21 MR. AMER: Okay. I'm going to let Mr.
22 Zuck make his point and then give Mr. Stoltz and
23 Mr. Freeman a chance to respond. We may be getting
24 into the piracy issue, which is fine.

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1 MR. ZUCK: It may be that as well, but
2 Dave's point sort of reminded me of another point
3 which had to do with analog versus digital, and that
4 the absence of ports in these devices makes it
5 difficult to make high fidelity copies of content,
6 et cetera, that are coming off the machine, but the
7 insertion of additional hardware and creating a
8 hardware connection to the device in the form of
9 a port, which the purpose of which is to add things
10 to the device, could also be used as a way to
11 digitally remove things from the device or copy
12 things from the device in much higher fidelity than
13 would be possible in getting something off of a
14 speaker.

15 MR. AMER: Thank you. Now, Mr. Hughes,
16 I do want to follow up on a point that you made about
17 the contractual relationships because I think
18 that's important here because we're talking about,
19 you know, who the owner is of the TPM. I mean, our
20 job is to consider whether circumvention of that
21 TPM is going to have an adverse impact, and the use
22 of the copyrighted work that that is protecting,
23 is non-infringing. As I understand it, I mean,
24 you're saying that you have contractual

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1 relationships with service providers, Spotify,
2 Pandora, et cetera, and I can understand in sort
3 of forming those contractual relationships it would
4 be important for you as the content owner to ensure
5 that those services have adequate access controls
6 preventing unauthorized access to your work.

7 But this is then going a step further,
8 and I don't understand -- I haven't seen any
9 indication that as part of your negotiations -- you
10 can correct me if I'm wrong -- that you then dictate
11 or you expect the services to provide requirements
12 as to the types of access controls that the device
13 has with respect to its firmware. It seems a little
14 bit attenuated from the sort of normal process that
15 we consider.

16 MR. HUGHES: So the deals historically
17 that I was involved with when I was previously with
18 Sony Music, for example, we did a lot of due
19 diligence and we specified very precisely what kind
20 of security measures we intended to have in place
21 for sometimes called end-to-end or link, or whatever
22 term you want to use, to protect the music.

23 And those are articulated, and I cannot
24 get into the details of the contracts between the

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1 member companies and the services, but it is
2 reasonable to assume that those are in all of those
3 contracts. And that if those services then do a
4 deal, for example, to enable access to Spotify from
5 a voice assistant device, then Spotify understands
6 that they have an obligation based on their
7 relationship.

8 So I understand that it is not a direct
9 relationship, but it is the basis of a business
10 negotiation and the business of the business
11 offering. There's an assumption that the music
12 will be kept secure. That if it's not a
13 subscription service, the viability of the business
14 service is threatened, is it not, if people can get
15 access to Spotify for free, for example.

16 MR. AMER: But in EFF's papers they made
17 the point that Spotify does -- you don't prevent
18 Spotify from streaming to personal computers, for
19 example, which at least according to -- and you can
20 correct me if I'm wrong -- but according to EFF's
21 experts typically don't prevent users from having
22 root privileges, so there isn't the same type of
23 restriction that would prevent the installation of
24 apps.

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1 MR. HUGHES: I'll give one example, and
2 experts can correct me if I'm wrong. Even if I have
3 root privileges, for example, on a personal
4 computer, it does not mean that I can then get a
5 clear high resolution digital output of the secure
6 media that I put into my Blu-Ray disc, for example.

7 MS. SMITH: And your concern is that
8 case of the Amazon Echo, for example, having root
9 privileges would enable that access on that device
10 as compared to --?

11 MR. HUGHES: I think it is reasonable to
12 assume that the level of complexity of the
13 hardware/software combination is not there to
14 provide the kind of security you'd find on a general
15 purpose computing device. For example, the ability
16 to extract the music data from the buffer and offload
17 it to a hard drive, for example. I can imagine --
18 I have no personal experience researching this in
19 detail, but I can imagine that on a device that that
20 would not be particularly difficult to do. Now,
21 please feel free to ask these experts as well.

22 MR. AMER: Well, thank you. So Mr.
23 Stoltz and Mr. Freeman were next and then I'll come
24 back to you, Mr. Williams. Mr. Stoltz?

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1 MR. STOLTZ: Thank you. So, responding
2 to a couple of things here. On the point about
3 whether voice assistants are general purpose
4 computing devices, I'm reading here from the printed
5 booklet that came with an Amazon Echo Dot device
6 and it lists -- it's got five panels. Let's say
7 Alexa --

8 MS. SMITH: Is this something you'll be
9 able to share with us after so we have a record of
10 it?

11 MR. STOLTZ: I'd be happy to. I
12 apologize, I only made one copy, but I'd be happy
13 to submit this by email or make photocopies.

14 MS. SMITH: If it's possible after the
15 hearing if you can leave that copy with us, we'll
16 mark it as Exhibit 6C, I guess, if you're
17 comfortable. I think that would be useful so we
18 know what we have is exactly what you're reading.

19 (Whereupon, the above-referred to
20 document was marked as Exhibit 6C for
21 identification.)

22 MR. STOLTZ: Absolutely.

23 MS. SMITH: Okay, thank you.

24 MR. STOLTZ: Yes. It has various

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1 panels that describe what it does; it says Alexa
2 Skills, Voice Shopping, Fun and Games, and Music
3 Unlimited, that's the last panel on there. The
4 point being, music is one of many functions of this
5 device, with skills in particular, there are
6 thousands of them. Although, for reasons I can get
7 into, they -- what can be done with skills, there
8 are limits imposed on what can be done with skills,
9 absent jailbreaking. But these -- all of these
10 devices run some variation of Linux or iOS, or
11 potentially Android, variations on the same
12 operating system that runs a smartphone or tablet.
13 They have varying degrees of memory and storage on
14 them, and I think this is a very important point;
15 they are designed, marketed, advertised, primarily
16 used -- like I said, there's a quote in our
17 first-round comments about the reasons why people
18 use voice assistants, and it is for all of those
19 purposes -- it's for communication, it's for simply
20 accessing information on the internet of all sorts,
21 it's for again, home control. So I guess I take
22 issue with this idea that because the device is
23 cheaper and perhaps smaller, that it's not a general
24 purpose device. Again, that's how it's designed,

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1 that's how it's marketed, and that's how it's used.

2 MR. AMER: Well, so could you respond to
3 Mr. Hughes' argument, as I understand it, that it
4 is -- and correct me if I'm mischaracterizing what
5 you said -- but that it's easier to capture without
6 authorization a high-quality copy of a work from
7 a streaming service that is streamed to a jailbroken
8 voice assistant device than it would be streamed
9 to a personal computer, for example.

10 MR. STOLTZ: So no, I think it's no
11 easier. The point that I think that we may be kind
12 of missing is soldering a new port onto the main
13 board of a device may or may not be a circumvention,
14 probably in many circumstances it will not be. It
15 could be in some circumstances, but that's something
16 you can do on any sort of device. As for whether
17 that's sort of physically easier or not on a voice
18 assistant versus, say, a smartphone, again for
19 example, the Apple HomePod is, as I understand it,
20 essentially the same hardware as a phone or tablet
21 as far as its computing capability; both run the
22 iOS operating system. With other devices, you
23 know, we are into the realm of pure speculation here
24 which is not a basis for --

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1 MS. SMITH: Right. But, I mean, but
2 you're asking for the exemption and we would prefer
3 it to not be in the realm of pure speculation. If
4 there's a way to understand what technology is at
5 issue, I think I appreciate you making a functional
6 argument and how these devices may be used, but in
7 the past the Copyright Office has looked at this
8 from a technology and what TPMs are in place when
9 considering whether or not to extend an exemption
10 to video game consoles, which was denied in part
11 because, I think, out of a similar scenario to what
12 Mr. Hughes is saying.

13 And on the other hand, there is the smart
14 television exemption which is coded separately in
15 the CFR, and the record for that the last cycle
16 determined, I guess, that there were separate TPMs
17 that were protecting the entertainment content, so
18 that it would be appropriate to grant an exemption
19 to the smart television circumstance.

20 So I think that's why we're trying to
21 understand whether Mr. Hughes' concern has --
22 whether the basis weighs out in how the technologies
23 work.

24 MR. STOLTZ: Sure. There's -- there

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1 are TPMs that apply specifically to entertainment
2 content and they are -- while I don't know which
3 devices use which ones, they are available to voice
4 assistant devices; they certainly have the
5 computing power and the technical ability to use
6 the same sorts of TPMs that protect streaming to
7 other devices.

8 And there are additional TPMs -- I should
9 add, those TPMs are not covered by our exemption.
10 They may be covered by others. And there are also
11 TPMs that exist on the server side. Most of the sort
12 of speculative, sort of doomsday scenarios in the
13 opposition comments, for example, accessing music
14 streaming service on multiple devices when one is
15 not authorized to, that's instantly detectable on
16 the service side, which is out of reach of both the
17 customer and this exemption.

18 MR. AMER: Mr. Freeman?

19 MR. FREEMAN: Yes, I mean, personally on
20 this topic I'll bring up a statement that on desktop
21 computers that having root access is not sufficient
22 in order to be able to get access to the digital
23 information that is being transferred. And
24 generally with a general purpose computer like that,

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1 the information is being decoded and then being sent
2 to the display output. It is going through regions
3 of the computer that are accessible either to the
4 root user or are truly replaceable by the person
5 who is owning the computer.

6 But then as Mitch is saying, there are
7 cases where on an embedded device you can add
8 essentially an additional level of technological
9 protection measure which is typically very separate
10 from the general purpose computer parts of the
11 system, the type of sections that might be running
12 the voice assistant software. And as Mitch is
13 saying, that you can essentially have a
14 circumvention that circumvents those general
15 purpose computer mechanisms that don't circumvent
16 that extra level of media protection. But that is
17 not really the case on general purpose computers
18 as far as I've seen myself.

19 I also wanted to comment on this, kind
20 of follow up a little bit on this idea of these
21 devices being used almost entirely for music. I
22 mean, I know many people who have them and they don't
23 seem to be using them for music; they actually are
24 using them for, what I've actually always myself

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1 thought one of their primary features which was
2 these voice assistant softwares, the ability to ask
3 questions and get interesting answers. My friends
4 have controlled their entire apartment using one
5 of these voice assistants, and so they essentially
6 just, okay, Google. Turn on my lights, rather than
7 having to bother going and getting up and actually
8 moving the switches.

9 As far as hardware features disabled,
10 we have some concrete examples that might be a little
11 bit -- that you can conceptualize. On the Google
12 home device there is a touchpad which can be used
13 in order to enable the voice recognition components
14 and start sending information to Google. When that
15 device was shipped to users, that touchpad was
16 actually faulty and there was no good way for Google
17 to fix the touchpad. And so what was happening is
18 that it was activating even when no one was talking
19 to it, even when no one was touching it, and it took
20 a while for Google to be able to release software
21 updates that would disable all of that. But that's
22 the kind of thing where users who have that device
23 would like to be able to disable faulty mechanisms
24 on the device.

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1 MS. SMITH: Do you think that would be
2 covered by 1201(i)?

3 MR. FREEMAN: No, actually I do not
4 believe it would be covered by 1201(i) because the
5 modification -- so the definition of 1201(i) -- I'm
6 trying to -- here we go -- specifically states that
7 the act of circumvention has the sole effect of
8 identifying and disabling the capabilities
9 described in sub-paragraph a and has no other effect
10 on the ability of any person to gain access to any
11 work, while the mechanism that you have to modify
12 in this case would be the protections on the general
13 purpose parts of the computer, which often times
14 will be used for copyrighted works. While there is
15 the possibility that a device can have an additional
16 mechanism to protect certain kinds of classes of
17 work, that -- it's almost essentially never going
18 to be the case that all classes of work are going
19 to go through that system, and many devices won't
20 have that extra separation anyway.

21 And the final thing I wanted to kind of
22 re-emphasize was something that was brought up by
23 Mr. Stoltz, which is that Amazon Echo, is -- it's
24 a device, as he states, has -- it's built in the

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1 manner of a general purpose computing device, but
2 it has 256 megabytes of memory, 4 gigabytes of flash
3 storage; it's a little smaller than the smallest
4 iPod as far as the amount of storage and memory it
5 has, but it's not a magnitude smaller or anything,
6 it is in the same realm as an iPod. And in fact,
7 the system on a chip that is used on these devices
8 is the same system on a chip that is typically used
9 for smaller tablet computers.

10 This is a device that's running a general
11 purpose operating system, it is a device that's
12 using general purpose hardware to run that general
13 purpose operating system. It has simply been
14 configured into a form factor that happens to not
15 have a port on it, and it's configured with a
16 lock-down software mechanism similar to the
17 signature-based verification that is used on these
18 other devices that we have succeeded in getting
19 exemptions for.

20 MR. AMER: Thank you. Mr. Williams?

21 MR. WILLIAMS: Thank you. I have a few
22 points, since a lot has been said. I've got kind
23 of a legal point, a factual point, and then point
24 about how the record's been characterized. So, we

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1 had a similar conversation a couple days ago on Class
2 7 about who owns the TPMs, and I just think that's
3 the wrong question to be asking. I don't think
4 there's anything in section 1201 that instructs you
5 to be looking at who owns the TPMs.

6 There's a number of reasons why I say
7 that. So, number one, under section 1203, it's not
8 the owner of the TPM exclusively who can bring a
9 civil action. The copyright owner who is protected
10 in this case from what we've been talking about,
11 the record labels, could bring an action, regardless
12 of who owns the TPM if they're harmed. Another
13 thing is if you look at the factors that you're
14 instructed to apply in 1201, it talks about looking
15 at the availability of works for use, and it talks
16 about harm to the copyright owners of works
17 generally, not just of the owner of the TPM, not
18 just the owner of the software that is accessed
19 without authorization, but any downstream harms are
20 also supposed to be considered.

21 And I don't think, at least from the
22 copyright owner's point of view who are represented
23 here today, that access control on the firmware is
24 just something incidental. I think it's wrong to

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1 assume that they don't take it into account when
2 they're entering licensing agreements, and I think
3 we have testimony that says they do. That gets me
4 to the point about the record. Mr. Shultz --

5 MR. AMER: Mr. Williams, can I interrupt
6 you?

7 MR. WILLIAMS: Sure.

8 MR. AMER: That's helpful. I went back
9 and I was looking at the legislative history. I
10 mean, there's a line in the Senate Report, Judiciary
11 Committee Report, page 28, it's talking about
12 section 1201(a); it says, section 1201(a) applies
13 when a person has not obtained authorized access
14 to a copy or phonorecord of a work that is protected
15 under the Copyright Act, and for which the copyright
16 owner has put in place a technological measure that
17 effectively controls access to his or her work. I
18 mean, doesn't that suggest that what we're talking
19 about here is the effect on the possible
20 infringement of a work for which the copyright owner
21 itself has put in place an access control?

22 MR. WILLIAMS: I'd have to look back at
23 the context of that. I do have the legislative
24 history with me, but I won't be able to pull it up

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1 quickly enough. I don't think that that's accurate
2 -- and I'm sorry, and which version of the report
3 did you say it was in?

4 MR. AMER: This is the Senate Report,
5 Senate Judiciary Committee Report.

6 MR. WILLIAMS: Okay, so I'd also have to
7 look back at, of course the language changed over
8 time going through the conference. And so I'm not
9 sure -- again, I'd have to look at the context. But
10 I think if you just look at the statute, it's clear
11 the copyright owner can bring an action regardless
12 of whose TPM is at issue. And even the language you
13 read, I think there's going to be very few
14 circumstances where it's only the copyright owner
15 alone that's involved in placing a TPM onto a work.

16 I mean, if you think about it, a
17 songwriter who owns the rights to a musical
18 composition that's distributed through a streaming
19 service isn't going to be involved in the technical
20 process of putting it on there. What they might be
21 involved in doing is negotiating for protections
22 through the distribution system as best they can,
23 given the leverage that they have in any given
24 negotiation. And so I think to say that because of

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1 device manufacturer or a service provider whose
2 license is the one who technically implements the
3 measure that the copyright owner has no recourse
4 or isn't the intended person whose being protected
5 is just -- I think that's completely wrong when you
6 look at the statute.

7 MR. AMER: Okay, but I interrupted you.
8 So you have another --

9 MR. WILLIAMS: No, thanks for that and
10 I'll try to take a look at the legislative history
11 when I have a chance, and I'm happy to follow up
12 in a letter as well.

13 Mr. Stoltz had said that it's just pure
14 speculation in the record, but we've got two
15 technologists, we've got the statement from Chris
16 Bell, we've got Mr. Hughes here today; they're
17 testifying as to their best understanding of how
18 these technologies work and the risks that are
19 presented by the circumvention. So to call that
20 pure speculation I think is just incorrect.

21 When you talk about the record last time
22 and smart TV expansion -- and I'll take the blame
23 for this -- we didn't have that kind of direct
24 testimony from technologists in the record. I

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1 think we did have a lot of evidence of the harm that
2 could be caused by jailbreaking smart TVs, but it
3 was determined that it wasn't enough, and so that
4 was granted. But we did not have the types of
5 witnesses we've had providing testimony this time.

6 That brings me to one of the arguments
7 that EFF made in its reply and that I've heard again
8 today, which is that, "well, we have to show some
9 harm caused by the existing exemptions or else you
10 should assume that no harm will be caused by
11 expansion." And I think that's wrong on multiple
12 points. First, procedurally, this is a new issue
13 and they have a burden to meet. But more
14 importantly, we have shown harm, I think, in every
15 single cycle from the jailbreaking exemptions that
16 exist. The Office has concluded that it wasn't
17 enough to stop issuance of the exemptions. But we
18 opposed it in the beginning, we opposed it for
19 multiple cycles. The Office decided to grant the
20 exemption ultimately to expand it and we did not
21 fight renewal this time because we respect your
22 decision-making processes, but that doesn't mean
23 that we don't see harm in the market.

24 And the exhibit that we submitted today

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1 shows you extensive harm that's being caused by
2 jailbreaking, especially through the Cydia
3 platform that Mr. Freeman has made available to
4 everyone. There's -- in the exhibits, documents
5 showing things like Spotify Plus that basically
6 enable you, without paying, to get all the features
7 of the premium Spotify account, similar apps
8 available through Cydia for Pandora, for YouTube
9 Red, for installing Popcorn Time which we were
10 talked about when we were talking about smart TVs
11 in a manner that you wouldn't otherwise be able to
12 install it to get access to unlawful copies of
13 movies.

14 If you just Google around a little bit
15 about Cydia, you will see extensive evidence of harm
16 to my clients. And so the fact that we haven't
17 fought renewal this time is not an admission at all
18 that there's no harm being caused, and the fact that
19 that harm has already been caused and that to some
20 degree those exemptions are water under the bridge
21 is not a good reason to make the same mistake twice.
22 We're here to put evidence in that shows that there
23 should not be an expansion to this new model of
24 dissemination.

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1 MR. AMER: Thank you. So you -- but are
2 you saying that the harm is greater in the context
3 of voice assistant devices than it is with respect
4 to other devices? And I take your point about not
5 wanting to sort of re-litigate these issues, but
6 you didn't oppose the renewal of the existing
7 exemption, you're opposing the expansion. So, you
8 know, I think we'd be interested in knowing if the
9 harm that you're talking about is greater than the
10 context of voice assistant devices.

11 MR. WILLIAMS: Sure, and just two things
12 on that; I mean, one, we tried to be as cooperative
13 as we could during the study process that resulted
14 in the more streamlined renewals, and we accepted
15 the definition of meaningful opposition, and that
16 required us to either show a change in the law or
17 a change in the facts. We feel like we put evidence
18 in before about the facts that piracy was being
19 enabled, and we at that time did not see a change
20 in the law. Had the Oracle decision, which I hope
21 we discussed at some point today, come down before
22 renewals had to be opposed, we might have made a
23 different decision on that, because I think the law
24 is clarified by that decision at the very least.

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1 But getting to your question, I think
2 Mr. Hughes can speak to it, and he did a little bit
3 already. The concern is that this is a really
4 important platform going forward for my clients;
5 people are going to be using these types of devices
6 in the home around the clock to enjoy entertainment
7 content. And as Mr. Hughes was saying, to some
8 extent they're simpler devices, cheaper devices
9 than a personal computer. There's not as many ways
10 to protect the content, and so removing any one piece
11 of what he described as the end-to-end system of
12 protection on these exposes the works, we believe,
13 to more threat than perhaps on some of these other
14 devices.

15 But that said, there is threat on the
16 other devices as well, and I don't think we have
17 a burden to show that the harm here is going to be
18 greater than the harm on these other devices. I
19 think they have the burden to show that the
20 availability for use of works and the value of
21 copyrighted works will not be harmed by the
22 expansion, and I think we've got enough in the record
23 to show that those two factors favor our side.

24 MS. SMITH: So, just to make sure I

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1 understand, Cydia, which is your Exhibit 6A, this
2 can be installed on both the all-purpose devices,
3 things for which there is an exemption as well as
4 voice assistant devices?

5 MR. WILLIAMS: So -- and Mr. Hughes may
6 have something to say about this, and I'm sure Mr.
7 Freeman can speak to it -- I don't understand all
8 of the technical aspects of Cydia, but my kind of
9 layman's understanding of it is, when you jailbreak
10 your mobile device, you install Cydia's so that you
11 can essentially get access to a huge variety of
12 applications, many of which are of the sort that
13 you have there in the exhibits and that enable
14 unauthorized access to works.

15 MS. SMITH: Mr. Freeman, do you want to
16 answer that question, too?

17 MR. FREEMAN: So to describe maybe a
18 little bit more simply as far as what -- so Cydia
19 is kind of like the Apple app store, it's a project
20 where you can scroll through and see things that
21 you can install on your phone. As described, it is
22 typically installed with a jailbreaking
23 application on something that's designed to bypass
24 the restrictions on the phone's ability to have

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1 added or removed software, but it is not itself a
2 circumvention mechanism, it is something that can
3 be installed by a user on that device.

4 MS. SMITH: So if I want to use Cydia --

5 MR. FREEMAN: Yes.

6 MS. SMITH: -- and you've helped make
7 Cydia, right, you install something to do the
8 jailbreaking, then you install Cydia which is like
9 an app store, and once you get on to Cydia, Mr.
10 Williams has suggested it offers a variety of
11 unlicensed --?

12 MR. FREEMAN: Yes, so -- sorry.

13 MS. SMITH: Okay.

14 MR. FREEMAN: So Cydia then itself works
15 in some ways I would similarly to a web browser.
16 It does not -- Cydia is not a centralized managed
17 store. So I am not in charge of determining what
18 is or is not available via Cydia, in the same way
19 that the people at Mozilla are not in charge of what
20 is available via Firefox on the internet. Some of
21 this commentary here about how if you just Google
22 around you'll find extensive evidence of people
23 being able to do things with Cydia, it's like you
24 just Google around and you'll see people talking

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1 about all sorts of things you can do with the
2 internet.

3 I then think it's actually worthwhile
4 pointing out this pile of paper, this very first
5 thing here where it says Cydia iOS7, if you go a
6 few pages in, it actually states, "Disclaimer:
7 cydiaios7.com is not owned by, is not licensed by,
8 nor is a subsidiary of Apple, Inc. and SaurikIT."
9 Cydia is owned by Saurik; iOS7 is a trademark of
10 Apple, Inc. And this is actually -- this is not
11 Cydia; this has got a bootleg, slash like, modified
12 icon that's designed to look like Cydia. This is
13 a third-party website service that is providing some
14 similar looking functionality to Cydia. And some
15 of these services actually don't even require
16 jailbroken phones.

17 And so from that point I will then bring
18 up this functionality that's being described. For
19 example, Spotify++ and the ability to essentially
20 have modified versions of these applications,
21 that's something that's available to people who do
22 not have a jailbroken phone. What -- on these
23 devices, you have the ability as the developer to
24 install software yourself, and what these services

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1 are now doing is they're simply taking the Spotify
2 application, adding those functions -- mixing in
3 those modifications to add these services, and are
4 then offering them via app stores.

5 It's sadly, to me -- use my brand, and
6 I often times am trying to figure out ways of suing
7 them to stop them from doing this and confusing it
8 with the jailbreak issue, but this is actually
9 something that's available to non-tampered,
10 non-circumvented, non-jailbroken devices. And I
11 kind of think that in many ways and a lot of this
12 information is irrelevant to our discussion today.

13 MR. AMER: Could I just jump back in?
14 And Mr. Zuck, you've been really patient, so I'm
15 going to get to you, but I just want to raise this
16 to sort of, I think try to focus the issue. So Mr.
17 Williams, you mentioned that we have sort of
18 competing experts here; we have your expert, Mr.
19 Bell, so I wanted to give you all a chance to respond
20 to Mr. Shone's statement that was attached in the
21 EFF reply. He seems to be suggesting that there are
22 a couple of layers of TPMs that would be relevant
23 here. I don't know if -- I'd be interested in your
24 perspective on that. If you look at paragraph 6,

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1 I mean, he talks about how industry has arranged
2 for these devices to access media, but then he says,
3 "the device owner's root privileges typically are
4 not sufficient to give the owner unrestricted access
5 to those media, because the application software
6 used to decrypt and view those media, enforces other
7 restrictions or contains other technical measures
8 that do not depend on controls in the operating
9 system." So he seems to be saying that, as I
10 understand it, if you jailbreak a voice assistant
11 device, there is another layer of TPMs that
12 typically exist in the device that prevent you from
13 gaining access to media. And then he says, "in
14 addition to that, streaming media services can also
15 use a variety of measures on the server side," which
16 is kind of what Mr. Freeman alluded to, to enforce
17 policies about unauthorized access to media.

18 We have no way of knowing whether that's
19 true or what your views are on it, but they seem
20 to be saying -- to jailbreak the device does not
21 necessarily -- that there is an additional layer
22 of TPMs within the device in addition to any TPMs
23 that exist on the streaming service side. Mr. Zuck?

24 MR. ZUCK: Thanks. Sometimes it's --

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1 you get all revved up to give a comment, and then
2 you ask a more specific question, and then you have
3 to reformulate.

4 MR. AMER: Sorry about that. You've
5 been waiting a long time.

6 MR. ZUCK: No, no. The truth of the
7 matter is, is that it isn't about services like Cydia
8 or a copy of Cydia taking responsibility for this;
9 it's about the fact that what you're doing in this
10 context with a jailbroken device is providing an
11 alternate vector to get software onto a device,
12 right, and that can be a good thing. There might
13 be availability of some software that wouldn't
14 otherwise be available, but it can also be a bad
15 thing because while imperfect, these stores provide
16 some curation and some protection, take-downs, you
17 can escalate something if there's a problem. So if
18 counterfeit software appears on the store, I can
19 get it taken down more easily than I can on a
20 browser-like service that's been described. So for
21 example, things like the Zisser Emrat virus that
22 has affected so many Android and iOS devices, is
23 -- comes in a lot more through jailbroken phones
24 than it does through regulars. That doesn't mean

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1 that unjailbroken devices are perfect; they're not,
2 right. But the jailbroken devices create a much
3 more welcoming vector for these kinds of malware
4 that come in the form of counterfeit software, then
5 do things like monitoring and things like that, that
6 -- keystroke logging and things. And because
7 somebody thinks they're installing a piece of
8 software that they would otherwise have to pay for
9 on the iTunes store but this version is free, why
10 not use the free version. And so then now that
11 creates a reputational damage to the software
12 developer of the real piece of software, et cetera.

13 So as Matthew said, these things are
14 happening now today on devices that are a part of
15 the exemption, and I guess I would suggest that
16 similar to the points raised by the proponents at
17 EFF and elsewhere about the types of devices, I would
18 say the stakes are risen for counterfeit software
19 as well. In other words, the fact that I'm giving
20 these devices control of my thermostat and other
21 security measures in my home, et cetera, suggests
22 that the introduction of malware is even a more
23 serious threat in the context of these devices than
24 it is in a smartphone. So that might be a little

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1 bit convoluted and only touch a little bit on what
2 you were trying to say -- you were trying to get
3 at via the specific argument, but there is a vector
4 that's in place, it has been used to introduce
5 counterfeit software that then has malware attached
6 to it. And I just wanted to make that point, thanks.

7 MR. AMER: Thank you. Mr. Hughes?

8 MR. HUGHES: Yes, so I wanted to come
9 back to your point, that Mr. Shone had addressed.
10 So yes, while it's true that there are certain things
11 you can do from the server to secure the distribution
12 -- in this case music -- to the device, when it gets
13 to the device, the device itself has control over
14 what happens at that point. And to quote Mr.
15 Stoltz, one of the reasons to jailbreak is to turn
16 off hardware features. Well, to me I don't know
17 exactly what that means, but if you're turning off
18 hardware features, then things like preventing
19 somebody from sucking all the music off the buffer
20 and filling up a hard drive with thousands of hours
21 of music could happen. And I just -- you know, my
22 reason for appearing today is just to have everybody
23 consider the unintended consequences, and as I think
24 Mr. Williams pointed out, in the past the unintended

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1 consequences, well perhaps not 100 percent
2 well-articulated in advance, we're seeing them now
3 in the marketplace. Streaming of music is now
4 two-thirds of our business and growing, and the
5 voice access to these services is the fastest
6 growing part of that service. So we see this as a
7 part of -- an important part of the future of our
8 business and we take any negative impact on that
9 business very seriously and we would like you too
10 as well.

11 MS. SMITH: So how would the streaming
12 market, what do you think would be the likely, you
13 know, bad case scenario for you -- and we talked
14 about exceeding subscriptions on the one hand, but
15 that goes back to something that is maybe happening
16 -- I don't know if that's the example with once it's
17 already on your device, you can't control it. How
18 exactly would the risk to the streaming market work
19 with this exemption?

20 MR. HUGHES: Well, I don't want to
21 contradict the EFF folks too much, but I suspect
22 that it is possible if you have jailbroken a device
23 that you could spoof IP addresses potentially, and
24 if this device were in dormitories, in colleges

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1 across the country, that single accounts could be
2 providing music to multiple listeners and so on.
3 And of course on the service side there are ways
4 to detect this as well, but there's -- what is
5 happening is that the business model was created
6 based on certain assumptions of what security would
7 be in place, and if those are taken away, the
8 business will then have to respond. And that will
9 either mean the services on the service side and/or
10 in collaboration with the device manufacturers are
11 going to have to, you know, reinvent the security
12 that's being taken away, and that's not a good thing
13 either. Does that address a little bit of what you
14 --

15 MS. SMITH: Yes, I think that's helpful.
16 Yes, thank you.

17 MR. AMER: Let's go to Mr. Williams
18 because I'd be interested in whatever information
19 you may have about my question about the nature of
20 the TPMS to the extent you have it.

21 MR. WILLIAMS: Sure, and David's the
22 technologist here, I'm just the lawyer, so I'll do
23 my best to address it. But I think that the heart
24 of your question as a legal issue is if there's any

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1 possible way that everyone involved in the
2 dissemination ecosystem could redesign how the TPM
3 scheme works that would enable jailbreaking while
4 still protecting the content securely, then it's
5 on us to redesign it that way, and I just don't think
6 that that's a fair way to read the statute. I think
7 could it all be redesigned, I'm not so sure that
8 it could in a way that would completely protect the
9 content and allow for jailbreaking, but yes I think
10 there are things that the services already do on
11 the server side to try to prevent some of this. Mr.
12 Stoltz was referring to if someone does what Mr.
13 Bell's statements says they can do and spoofs the
14 device, then the server will automatically
15 recognize that. From talking to Mr. Bell, that's
16 not my understanding. Yes, it's true that if you
17 try to geographically distribute that all over the
18 country, yes I think the server would pick up on
19 that, but if you were doing it, say, in a college
20 dorm in a number of different rooms in the same
21 location, that my understanding is maybe that
22 wouldn't be so easy to recognize. Again, I'm not
23 a technologist, but that's my understanding. And
24 so I do think that the record has identified some

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1 threats that just removing the firmware would
2 enable. With respect to the redesign, my
3 understanding is also that to the extent you
4 increase the number of device side TPMs that are
5 necessary, the cost of the devices would likely have
6 to increase over time, that a general purpose
7 laptop, as Mr. Hughes was saying, has more
8 capabilities than a \$49 voice assistant device.
9 And so I think there's a number of different things
10 to consider.

11 I did want to mention, while I have a
12 chance, that I wasn't trying to say that Mr. Freeman
13 himself is directly the one who's developing all
14 of these apps that enable unauthorized access, but
15 if you go through the exhibits, I think you'll see
16 that in almost every instance as they're providing
17 the instructions they say; number one, jailbreak
18 your phone; number two, install Cydia; number three,
19 here's how to get our app and here's how to start
20 getting all the benefits of a premium service
21 without paying for them. There's one in there --
22 Mr. Freeman was saying while some of these you might
23 not actually have to jailbreak the phone, and I've
24 seen some things online that says that's the case,

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1 but there's one in the set of exhibits that says,
2 well, don't believe anyone who tells you you don't
3 need to jailbreak your phone, because if you don't,
4 then every week or so Apple's going to cause these
5 apps to stop working. And so as a technical matter,
6 can I say whether you have to engage in circumvention
7 to install all of these apps or not, I can't, but
8 I know from looking at the description from the
9 people who are encouraging everyone to install them,
10 that they almost always say you need to jailbreak
11 in order to do this.

12 The other thing is, if I understand the
13 process that Mr. Freeman is referring to, there's
14 an app or platform that I believe he was involved
15 in disseminating, that I think is called Cydia
16 Impactor and that this somehow allows you to what
17 they call sideload some of these apps onto an iPhone
18 even if you haven't technically jailbroken the
19 iPhone. Now, it seems to me that that involves an
20 intentional effort to get around some measure that
21 is otherwise preventing the installation of these
22 apps, and so whether that's circumvention or not
23 at a technical level, I couldn't speak to, but it
24 sounds a lot like circumvention to me. And so

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1 whether you call it jailbreaking or you just call
2 it circumvention, I think that's still something
3 that you'd have to look at very carefully to decide
4 that it's actually lawful.

5 MR. AMER: Okay, I'm going to give you,
6 Mr. Freeman, a chance to respond to that. But I --
7 in addition -- this is for you, too, Mr. Stoltz --
8 I mean, in your answers if you could address Mr.
9 Hughes' point that these contracts between content
10 owners and service providers are negotiated against
11 this back-drop of expectations about the level of
12 TPMs that exist throughout the ecosystem, and to
13 remove one of those legs is going to be detrimental.
14 That would be helpful for us.

15
16 MR. FREEMAN: All right, I have an
17 answer for that, too, so I'm excited. All right,
18 so first of all, it was mentioned as you go through
19 here there's a lot of mentions of jailbreaking;
20 there's also a lot of old information that's in
21 there. So the mechanisms that were provided for
22 allowing arbitrary apps installation on a
23 non-jailbroken device are, in the grand scheme of
24 things is relatively recent. So information from

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1 2012, information from 2000 and even 2014 or 2015
2 sometimes is not relevant in that way. The fact
3 currently is that you can install without having
4 to pay Apple any extra money, any application that
5 you would like onto your device for -- and this is
6 key to respond to the comment that made it sound
7 like Apple was shutting these things down -- you
8 can install it for up to one week. And that's not
9 that Apple is figuring it out and shutting it down
10 or whatever, it's just that you can install anything
11 you want, it runs for a week, and then you can install
12 it again and it runs for a week; it can be a little
13 bit inconvenient that every week you have to
14 reinstall it, but it tends to not be a very -- and
15 you plug it back into your computer and there are
16 tools that will automatically reinstall all the
17 things you had. You just have to have access to a
18 computer for 30 seconds once a week.

19 The software that often is used to do
20 these sorts of installations was mentioned,
21 something called Cydia Impactor, that allows you
22 to sideload these things. This is absolutely not
23 a circumvention mechanism; this is an officially
24 published mechanism from Apple, I just built

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1 software that made it a little bit easier to use.
2 But you can download software directly from Apple
3 that does the same functionality as the Impactor,
4 just requires many more steps. And specifically if
5 you were to download their XCode Development
6 Environment, you can install anything you like by
7 having XCode install it. So now there's question
8 of how these licenses and other forms of contracts
9 are negotiated, and one thing that I think is
10 worthwhile pointing out, is that all of these
11 services are available on all devices -- I mean,
12 you're seeing, for example, Spotify we referenced
13 here on the iPhone, it's also available on Android.
14 You can take these services and run them in emulators
15 and copy off all the information, and part of the
16 reason why is that contrary to what has been, from
17 my standpoint weirdly stated over and over again,
18 general purpose desktop systems have much less
19 ability to protect content than even the most
20 general purpose small device. And the reason why
21 typically is that the people who make things like
22 the iPhone, Amazon Echo Dot, they're building the
23 hardware and the software together and they are
24 building it with some of these ideas of what they're

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1 trying -- of what they might want to do in mind,
2 and so they can for example have an encrypted audio
3 buffer, trivially, it's very cheap for them to do
4 that; whereas on a computer if you were to try to
5 have these specific business model enabling
6 functionality with upgrades from operating system
7 vendor that often times is not the same company,
8 even Apple trying to maintain over the course of
9 a seven-year lifespan of major functionality
10 modifications, they're relying on having much
11 cleaner interface separation between all these
12 different layers.

13 So I mean, we definitely have seen much
14 more interesting and much more cheaply built and
15 much more effective technological protective
16 mechanisms on the smaller classes of device than
17 on these general purpose computers. And yet the
18 services like Spotify, the services that are doing
19 music streaming are available on all of these
20 devices, and yet despite the fact that it is so easy
21 for people to, for example, install something like
22 an Android emulator on their desktop computer and
23 then run Spotify and copy off the exact digital
24 information of all the music that is going through,

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1 Spotify has not stopped, has decided they're only
2 going to provide their service to companies that
3 are making TPM-protected devices that are actually
4 relatively more affected than the other ones. I
5 find this idea that the services are only available
6 because of these TPMs to be very confusing since
7 these services are clearly available on devices that
8 do not have regular TPMs.

9 MS. SMITH: So all these designed TPMs
10 on the visual assistant devices, are you looking
11 to circumvent all of them or can you divide it up
12 between just somehow the firmware, the enhanced
13 audio buffer or the other ones you're talking about?

14 MR. FREEMAN: We were talking about
15 today specifically the ability to make
16 modifications to general purpose computing
17 elements on these devices to the extent to which
18 there is a specific TPM that is designed for
19 protecting the digital music content or other media
20 content that is flowing through the device, that
21 is not what we're specifically asking about today.

22 MS. SMITH: Do you know would that be
23 implicated, though, if you were allowed to do what
24 you're seeking to do?

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1 MR. FREEMAN: As far as I know, no. If
2 you were to have these separate TPM systems, for
3 example, what you would do very simply is you would
4 have encrypted information come from the service
5 and then you would pass that to the encrypted audio
6 buffer -- sorry, the audio buffer decrypter -- very
7 weird term there -- but essentially it's a very,
8 very small circuit, very cheap circuit that would
9 just be doing hardware decryption on the device as
10 it goes from the device accessible memory to the
11 actual audio unit. And that would be essentially
12 an entirely separate TPM that is not the same as
13 this general purpose computing parts.

14 MR. AMER: Mr. Stoltz, and then we'll go
15 to Mr. Hughes.

16 MR. STOLTZ: Thank you. There's a
17 number of points I'd like to respond to, including
18 Mr. Amer's question. I think it's important to look
19 at a bit of history here because we now have almost
20 a decade of experience with jailbreaking
21 smartphones, lawfully jailbreaking smartphones.
22 And it goes without saying that over that period
23 the proliferation of smartphones, the
24 proliferation of smartphone operating systems and

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1 the proliferation of apps and of music video and
2 other entertainment content on smartphones have all
3 skyrocketed. That is the history against which
4 we're sort of discussing today.

5 So this argument that jailbreaking
6 makes infringement or unauthorized access somewhat
7 easier is an argument that Apple and Mr. Williams'
8 clients raised in 2009. Mr. Williams' clients
9 raised it again in 2012. I believe it was BSA raised
10 it in 2015 and again in the renewal phase of this
11 rulemaking, so that's four rulemaking cycles in nine
12 years. And they've never presented evidence,
13 including in this cycle, that shows a significant
14 impact on the markets for any of those types of
15 creative works. They've shown -- they've presented
16 evidence, they have presented evidence that
17 essentially, look, here's how one might engage in
18 piracy, or here's how one might engage in
19 unauthorized access. We can -- and we can sit here
20 and spin scenarios about how the ability to get root
21 privileges on voice assistant makes it in some
22 circumstances marginally easier to exfiltrate
23 music or other content from that device. But what
24 we need to do is weigh that against this history,

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1 which shows that while yes there may be a marginal
2 impact, while you may not be able to, in Mr.
3 Williams' words, completely protect the content,
4 there remains enough protection from the TPMs that
5 exist that are not part of the access controls on
6 the -- that involve installing software or
7 installing and removing software, that that impact
8 should not be considered sufficient to deny an
9 exemption; it wasn't for smartphones which are still
10 in much larger market worldwide than voice
11 assistants.

12 Against that, so -- and against that,
13 they really provided very little evidence that voice
14 assistants are significantly different, while Mr.
15 Williams' clients might -- while they're free to
16 say we'll accept the jailbreaking smartphones but
17 we are drawing the line at voice assistants, what
18 they haven't shown is a significant factual
19 difference, particularly weighed against this
20 ten-year history, that could be a basis for a
21 decision by the Office, you know, on a basis other
22 than the preferences of these companies.

23 So on this question of whether voice
24 assistants are different from smartphones and

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1 tablets, I think the key point was really already
2 made by Mr. Freeman and I won't belabor it, but in
3 terms of hardware and software architecture they're
4 -- they are quite similar. And against that, I
5 simply note that Mr. Bell in his declaration said
6 that he was not familiar with a specific TPM in use
7 on those devices. And the opponents have not
8 responded to this question of there being similar
9 architecture.

10 Finally, just to answer Mr. Amer's
11 question about contracts; I think it's important
12 to note that the customer, the person who is the
13 owner of the hardware is not a party to contracts
14 between the record labels and music streaming
15 services. And again, we don't know what's in those
16 contracts. We could conceive of a contract that
17 says, you must, you know, build the highest wall
18 you can possibly build on this device and oppose
19 any attempt to breach it. But that, in itself, does
20 not show a diminishment of the availability of
21 copyrighted works for use. It merely shows a
22 preference created in a private agreement between
23 two companies. And frankly, if that were enough to
24 defeat an exemption, if there were language in those

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1 contracts that would defeat an exemption, then we
2 should probably just all go home because they will
3 use that language in those contracts.

4 The people who --

5 MR. AMER: Just quickly --

6 MR. STOLTZ: I'll wrap this up quickly,
7 I promise. The key data is, as Mr. Freeman said,
8 all of these forms of copyrighted content continue
9 to be available on platforms with very many
10 different degrees of locked-downness, if you will,
11 and they continue to exist on smartphones and
12 tablets to a vast degree. That has not changed and
13 that should be powerful evidence here.

14 MR. AMER: Thank you. Mr. Hughes?

15 MR. HUGHES: So I guess two wrongs don't
16 make a right, might be one of my comments here --
17 but I wanted to go back just very quickly to Mr.
18 Freeman's software of the Cydia Impactor; I'm not
19 sure he characterized it quite accurately, in that
20 Cydia Impactor, while it does do what the XCode which
21 is what Apple provides for developers, it takes
22 advantage of that and what it does it says if you
23 pretend to be a developer, you can then use Cydia
24 apps to download free music. To me that is

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1 description of -- that wasn't quite accurate.

2 MS. SMITH: Is that something you wanted
3 to submit as an exhibit, what you just held up?

4 MR. HUGHES: I'll be happy to send a copy
5 of this.

6 MS. SMITH: Yes, I think if you're
7 asking us to consider something, it'd be helpful
8 to have it and to let them see it also.

9 MR. WILLIAMS: Maybe what I gave you.

10 MR. HUGHES: I'm not sure that one is,
11 but the other comment I wanted to make, going back
12 to I believe Mr. Amer's comment, was that while the
13 end consumer does not have any contractual
14 relationship with the label, they do have it in terms
15 of service in a sense. They have a contract with
16 Spotify, for example, and part of that Terms of
17 Service, I believe, says I'm not going to steal the
18 music if you give me a subscription. So that might
19 be considered as part of the overall legal framework
20 that's constructed for the distribution to
21 introduce it to the end consumer.

22 MR. STOLTZ: And the remedy for breach
23 of that would be terminating the service and
24 potentially breach of contract suit.

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1 MR. AMER: Mr. Williams?

2 MR. WILLIAMS: Thank you. So I just
3 wanted to speak about a couple of things. Mr.
4 Stoltz said there's a lot of focus on what kind of
5 evidence can we present of harm from jailbreaking,
6 and as with a lot of these exemptions, it's very
7 difficult, if not impossible to collect one-to-one
8 evidence showing that this individual person
9 jailbroke their phone, installed this app and then
10 downloaded our music. We did submit an IFPI music
11 report as one of the exhibits referenced in our
12 initial comments that shows that globally 40 percent
13 of consumers have been found through surveys to have
14 unauthorized access to music; a significant portion
15 of that, I suspect, is through jailbroken phones.
16 Can I tell you the exact percentage, no. And can
17 I tell you the number of dollars exactly each of
18 the record companies and motion picture studios lost
19 as a result of jailbreaking, I can't. But I think
20 it's safe to say that there were dollars lost and
21 that as a result there were fewer dollars invested
22 in the creation of new content. One of the things
23 you're supposed to look at is the overall impact
24 of the 1201 system on spurring creative activity,

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1 and when you can see that jailbreaking is leading
2 to a lot of unauthorized access, I do think that
3 in itself is evidence that there's harm being done
4 to creative expression and its output in
5 dissemination.

6 Mr. Stoltz was emphasizing --

7 MS. CHAUVET: Can I just ask one quick
8 question, please, about the surveys? So when you
9 say 40 percent were found to have unauthorized
10 music, do you know how they reached that conclusion?
11 Like, is it just I'm going to tell you I have --
12 or anonymously that I have this -- or how did they
13 actually reach that conclusion? And I apologize
14 for interrupting, but I figured you could answer
15 that and then move onto your other points.

16 MR. WILLIAMS: Sure. So this is -- and
17 I'll give you the full title so you can take a look
18 at it -- it is one of the things we linked to in
19 our comments -- it's the IFPI Connecting with Music
20 Consumer Insight Report from September 2017 -- and
21 I can't tell you that I know all of the ins and outs
22 of the research project that they did in order to
23 reach these numbers, but if you look at page 19 of
24 that report, it details that their conclusion was

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1 that 40 percent of consumer's access unlicensed
2 music, and it talks about a variety of ways that
3 they do that. So I may be able to get you more
4 information about the actual methodologies that
5 they used if you wanted to send me a follow-up
6 request for that. It's not technically a RIAA
7 report, it's a global music industry report, but
8 the notion to me that music is still available on
9 mobile devices and therefore you should just keep
10 expanding these jailbreaking exemptions because
11 music will still be available, I just don't see that
12 as a very credible argument, because the fact that
13 all the record companies and streaming services
14 haven't taken their marbles and gone home doesn't
15 mean that they aren't being harmed and that they
16 aren't losing money as a result of unauthorized
17 access.

18 And so if that's the standard that well,
19 we haven't shown that there's no more music
20 available on mobile devices and therefore you should
21 be able to jailbreak anything you want, we're never
22 going to be able to meet that standard. But I do
23 think that you can infer from all of these types
24 of apps that we submitted evidence of and there's

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1 many, many more of them, that harm is occurring and
2 the underlying economic theory of copyright is that
3 you need to recoup your investment and then you make
4 a profit and then you reinvest that back into the
5 system and that leads to more output. And so, I
6 think if we believe in that economic model that we've
7 got plenty of evidence that there's been harm done.

8 MR. AMER: Okay, thank you. We are
9 bumping up against the hour, and not just any hour,
10 the lunch hour. So I'm going to quickly -- I believe
11 you had a question on a different topic and I'm going
12 to invite my colleagues to, you know, consider if
13 they have any questions, too. I have one question
14 myself, so we're going to try to fit this all in
15 quickly.

16 MS. SMITH: Okay, so we'll keep our
17 questions snappy and if we can keep the responses
18 snappy too. We appreciate this productive
19 discussion.

20 So this I guess a question for both sides
21 because I -- listening to Mr. Stoltz talk about the
22 past ten years and with jailbreaking, one thing I
23 will say is that for smartphones there seem to be
24 a good record of not infringing or licensed or

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1 otherwise permissible uses, specifically in terms
2 of software programs that could not be installed
3 or used on a smartphone; that was also something
4 we looked at seriously and carefully with the smart
5 televisions. There were a lot of other programs and
6 I'm wondering on the one hand do we have a similar
7 record of programs that you can download onto the
8 voice assistant devices that are non-infringing or
9 licensed or otherwise, you know, I guess would be
10 facilitated by granting this exemption. And on the
11 flip side we have got this packet of information
12 of programs you can actually download via Cydia,
13 can you use the many which seem to be sort of
14 facilitating unauthorized access to copyrighted
15 works? Are those equally available in the voice
16 assistant device context?

17 MR. STOLTZ: So voice assistants are
18 fairly new category of devices. There's not going
19 to be as large of a catalog of sort of prominent
20 applications, if you will, or lawful -- applications
21 with lawful uses. Now, jailbreaking --

22 MS. SMITH: Is there --?

23 MR. STOLTZ: Now, if I may -- I'm sorry,
24 please.

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1 MS. SMITH: Well, I'm just wondering
2 what specifically you can point to in the record,
3 for example, of what applications have been made
4 or maybe made that we can look at to say, okay this
5 is what someone wants to do if an exemption were
6 granted for voice assistant devices.

7 MR. STOLTZ: Essentially they are
8 expansions on Amazon Skills, so there are tens of
9 thousands of Amazon Skills which are comparable to
10 apps. The problem -- the limitation on those is
11 that they run in silos created by the APIs that
12 Amazon exposes. And we had a couple of examples in
13 the statements attached to our initial comments that
14 describe some of those limitations. So for
15 example, a skill that provides a meditation app or
16 inspirational quotes who couldn't slow down the
17 speed at which the Alexa voice reads them which was
18 pretty key to that application. That was an example
19 of that. But more broadly, jailbreaks are both, at
20 this point, more difficult on those devices because
21 they are new and there's no exemption for it, so
22 we're absolutely not going to see as many prominent
23 examples, but examples do exist.

24 MS. SMITH: Okay, Mr. Freeman?

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1 MR. FREEMAN: Yes, I mean, one thing
2 that happened, of course, with the iPhone before
3 the smartphone exemption was put into place was we
4 simply were bold and went ahead. And so that was
5 where it was very easy for us to demonstrate all
6 sorts of interesting jailbreak-specific
7 functionality back even in 2009 for the smartphone
8 exemption; whereas in this case, due to the
9 complexity of these jailbreaks sometimes requiring
10 hardware access as I mentioned earlier, it's very
11 difficult to show demonstrations of people who are
12 doing things on the jailbroken device already. But
13 there are examples of -- because there are some of
14 the similar kinds of software that is available on
15 these devices, and I mentioned things like e-book
16 readers that read aloud e-book software, that we
17 can see the same kinds of modifications that you
18 would want to have elsewhere now existing on these
19 devices.

20 The -- a quick comment to just mention,
21 the Cydia Impactor as far as developers, in claiming
22 to be developer, if you're allowed to download the
23 software and compile it, I don't think that that's
24 -- you're not really necessarily pretending to be

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1 anything, that's just part of the functionality of
2 the service. We mentioned downloading
3 applications and tools -- you just mentioned that
4 again -- once again, re-emphasize that essentially
5 all this functionality is available on
6 non-jailbroken iPhones, as well as on desktop
7 computers. I mean, I just quickly --

8 MS. SMITH: Again, I'm concerned about
9 the availability for a voice assistance device.

10 MR. FREEMAN: Yes, from that
11 perspective none of this software is certainly
12 available on voice assistance because it's all
13 designed for either running on an iPhone or running
14 on a desktop computer. Similar software could be
15 constructed by someone I'm sure, but then again,
16 I will actually say that similar software could be
17 constructed as an Amazon Skill if you simply were
18 to just take the existing SDK as a developer and
19 then just build something that said hey, I would
20 like you to go download something from Spotify, you
21 would be able to download that because Spotify's
22 available on all platforms.

23 MS. SMITH: I guess the theory is that
24 Amazon would curate it, is what Mr. Zuck said in

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1 a more careful manner.

2 MR. FREEMAN: So that was the theory;
3 however, you can develop for these devices as any
4 user. And so in the same way on an iPhone that you
5 can install as a user whatever software you'd like
6 on the device, that's the same thing -- I speak at
7 Hackathons constantly, these 36-hour college
8 events where students come and get together in
9 groups of three, and by the end of the weekend
10 they've put together software that runs on their
11 Amazon Alexa. Amazon didn't curate that. They can
12 then publish that software for other people to
13 utilize. Amazon's isn't curating that.

14 MS. SMITH: Will that curate the
15 publication of it?

16 MR. FREEMAN: Well, so if you were just
17 publishing it on GitHub, you're publishing it on
18 your website, if you would like to have access to
19 it from the Amazon store, if you'd like to have
20 access to it, you essentially ask Alexa to install
21 it for you, then that's an opportunity for Amazon
22 to curate it. But the existence of that software
23 and the ability for people to download it with their
24 computers, the ability for people to reference it

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1 on their devices, that's not something that's up
2 for Amazon to be able to curate.

3 MS. SMITH: Okay, got it. Mr. Zuck, if
4 you had a demonstration you wanted to show us, now
5 is probably a good time to do so.

6 MR. ZUCK: Yes, so I was looking for the
7 opportunity. There was a discussion we raised in
8 our initial testimony about an alternative whereby
9 you create your own device rather than hacking an
10 existing device in order to get the functionality
11 that you want, and we raised the technology called
12 Raspberry Pi, which is this open-source board. And
13 EFF responded saying that that's like saying you
14 have an engine and that's the equivalent of having
15 a car. And so what I brought in these pictures is
16 just some examples of kits that are available. The
17 most commonly used VR headset right now is made of
18 cardboard and they're originally shipped -- Google
19 Cardboard -- they came in the New York Times, and
20 so similar kits are available to create an Amazon
21 Alexa-type device or a Google Voice-type device.
22 So as long as I'm talking about breaking open a piece
23 of hardware and soldering a new port to it or
24 something like that, I'm more than able to get one

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1 of these devices for cheaper than I'm going to get
2 something from Amazon, and make use of the Amazon
3 API to go on and replicate that functionality or
4 add any functionality that I want to create.

5 So my understanding is that while it's
6 not the copyright owner's burden to show harm but
7 instead to show -- it's the burden of the proponents
8 to show that they have the means to allow for
9 non-infringing uses, there are means to do so, and
10 people are very creative in providing easy-to-use
11 jumpstarts into creating devices that would allow
12 for additional functionality while providing,
13 preserving some of the existing functionality the
14 devices have. So that's what these are is, you can
15 just sort of see, it's a pretty simple process to
16 put these things together, it's no more difficult
17 than what they're suggesting in terms of hacking
18 an existing device. I'd be happy to answer
19 questions about this, but I know time is limited.

20 MS. SMITH: Maybe we can just, in the
21 interest of time, we'll get to everyone again, but
22 go to Mr. Williams next. You had something you
23 mentioned about Oracle, maybe you can say that now
24 too.

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1 MR. WILLIAMS: Okay, sure. There's a
2 lot in the opinion and I think we're going to Class
3 7 again when we're in Los Angeles and it's relevant
4 to both, so we can talk about it some there. But
5 I just quickly want to say first that I think the
6 ability to develop Amazon skills is an alternative,
7 Google has a similar process with constructions on
8 how to do it on the Web. The record is pretty small
9 with respect to the types of things that people are
10 not able to do within those environments. I mean,
11 to me there wasn't much there compared to potential
12 threats involved, so I do think you're right to point
13 out that there was a more robust record previously
14 when different devices were covered by the
15 exemption.

16 With respect to Oracle, the Federal
17 Circuit was applying 9th Circuit law, the basis for
18 these exemptions has been historically that the
19 Office read some 9th Circuit cases quite broadly
20 in the interoperability area, and by reading them
21 broadly decided that an exemption was justified.
22 What the Federal Circuit does is go back to Connectix
23 and those older cases in the video game space and
24 say, well, look; the 9th Circuit took a look at what

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1 they were doing there and said this is only modestly
2 transformative. And the reason that it ended up
3 being transformative at all was that what was being
4 done was they were opening up the software just to
5 look at how it worked, and then they were developing
6 entirely new products that didn't use any of the
7 expressive elements of that software and putting
8 them into the marketplace. That's not what is done
9 when a device is jailbroken; the firmware, at least
10 based on what the proponents have described, is
11 essentially just copied after it's hacked with a
12 very minor adaptation and then re-used to do what
13 it is that they want to do, and so that copying --

14 MS. SMITH: Well, it's jailbroken for
15 the purposes, I guess, of enabling
16 interoperability, and I think maybe also considered
17 1201(f) and the purposes behind that. I'm not sure
18 how -- I'm not quite following how that reverses
19 the Office's previous interpretation.

20 MR. WILLIAMS: So in the Sega case what
21 was at issue was developing a competing platform
22 on which to play independent games or to play the
23 Sega games, and that's not what the issue here is;
24 it's just taking the same copyrighted software and

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1 using it to basically achieve the same purpose with
2 slightly different objectives. And so that copying
3 under the Oracle decision, I think it's a stretch
4 to say that it's a fair use, and that's been the
5 basis for the reasoning, and it has not been section
6 117 because there's all kinds of other questions
7 that have to be answered there. And the other thing
8 about Oracle is it really disposes of the notion
9 that just because software has a lot of
10 functionality that it needs to be treated
11 differently than other types of works. And I'm not
12 saying that it's never treated somewhat
13 differently, but I mean if you look at the opinion,
14 they're citing other cases in all kinds of other
15 areas of copyright that aren't just about functional
16 software, and so I really think the opinion speaks
17 to the fact that software is not a second-class
18 citizen, that it gets the full protection of the
19 Copyright Act. And I do think it impacts some of
20 the prior reasoning, but I submit that to you to
21 decide.

22 The only other thing I would mention is
23 I think you were right to raise 1201(i); I think
24 the fact that it may not fit perfectly what the

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1 proponents want to do doesn't mean that it's
2 irrelevant, it just means Congress decided to do
3 this differently, and one thing that Congress didn't
4 want to happen was that other types of infringement
5 or unauthorized access results from the fix of this
6 privacy issue.

7 MS. SMITH: Do you think 1201(f) already
8 enables them to do what they would like to do?

9 MR. WILLIAMS: I don't. 1201(f), I
10 think, is based on these cases I was discussing which
11 is involving just getting at the copyrighted work
12 so you can analyze it and then you go and create
13 your own work that achieves a similar purpose or
14 that interoperates with it. So you don't take the
15 work that you're analyzing and copy it, and you don't
16 take the work that you're analyzing and create
17 derivative work from it. That's not what was at
18 issue in those cases, and I think that's why 1201(f)
19 is written the way it's written, because it
20 basically says you're allowed to circumvent to get
21 access to the software, study the software, but
22 you're not allowed to get access to it for the
23 purpose of creative a derivative work to do what
24 you want to do.

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1 MS. SMITH: Mr. Shultz?

2 MR. SHULTZ: Yes, so a few points and I
3 will try to be quick because I know we're all hungry.
4 First of all, going -- responding to Mr. Zuck's
5 points about, I guess, malware; jailbreaking is for
6 power users. It -- in general, it renders -- is a
7 somewhat more risky activity than using a device
8 precisely in the ways that the manufacturer
9 intended. It is no less important, and it is
10 widespread; there are millions of those power users.
11 So the owner of a device might choose to make
12 themselves more vulnerable to malware, they will,
13 A, probably be more sophisticated and able to avoid
14 malware, but also they are taking that risk
15 voluntarily in return for expanding the
16 functionality of the hardware that they own.

17 Let's see -- this -- responding to Mr.
18 Zuck's demonstratives -- there is no device that
19 you can build from parts that replaces the
20 functionality of an Amazon Echo or Google Home. At
21 best they can do a few things, perhaps turn on a
22 light with voice control. They certainly won't be
23 able to access Amazon Alexa, for example, and expand
24 the capabilities of Amazon Alexa. So building

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1 one's own device from parts is not a real alternative
2 here; moreover, it's not an alternative for devices
3 that are already existing and already in people's
4 homes. Part of the value of jailbreaking is the
5 ability to keep a device working after the
6 manufacturer cuts off support to install security
7 fixes before the manufacturer does. Building your
8 own is not a fix for the device that you already
9 own.

10 And then to respond to a couple of Mr.
11 Williams' points about Oracle. Oracle was wrongly
12 decided in many different ways and completely
13 misread the 9th Circuit precedent; it is not binding
14 on the 9th Circuit or on any court in this country,
15 except under the odd circumstances at which it
16 reached the Federal Circuit. And I think that Mr.
17 Williams mischaracterized the Sega and Sony cases
18 out of the 9th Circuit somewhat. And this
19 distinction is important; copies were made in those
20 cases, the defendants made copies of software but
21 they did not proliferate copies. The Copyright
22 Office and the register's recommendations from the
23 last four cycles has always said they don't find
24 jailbreaking to be transformative because it's

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1 using the firmware for essentially the same purpose.
2 We don't entirely agree with that, but be that as
3 it may, the Office has always said it's nonetheless
4 a fair use; and that fair use is actually very close
5 to the facts of the Sony and Sega cases. One of
6 those, I believe it was Sony, involved copying to
7 enable writing new games for an existing platform;
8 the other one was copying to enable writing a new
9 platform for existing games. Both of those
10 contribute to the creation of new work and so does
11 jailbreaking. That logic has been -- and the
12 Copyright Office has maintained that over the last
13 four cycles -- the Oracle decision as wrong as it
14 is, doesn't change any of that and doesn't really
15 apply here.

16 MR. AMER: Thank you. We'll go to Mr.
17 Freeman and then --

18 MR. ZUCK: I'm sorry; I just wanted to
19 clarify that both of these devices, these kits that
20 we're talking about, are specifically designed to
21 talk to published APIs at Google and Amazon; they're
22 not just devices that you would create for your own
23 purpose; they are specifically designed to be
24 alternative hardware for the services provided by

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1 Google and Amazon.

2 MR. AMER: Okay, thank you.

3 MR. STOLTZ: I hope we can see that and
4 get details on that.

5 MR. FREEMAN: I can actually respond to
6 that point; so in the past I've actually worked on
7 building a voice assistance system. One of the
8 things that's really complicated is to be able to
9 in a room talk to the device and it can actually
10 hear you. It's the kind of thing where you start
11 to try to find like wall-mounted microphones, you
12 try to find -- if you just take a typical microphone
13 like this one, it's not going to hear somebody on
14 the other side of the room, certainly not the kind
15 of microphones that are available even like the one
16 that's on my iPhone is not really designed for
17 somebody across the room, and it's got a lot of
18 advanced hardware. These voice assistants are
19 designed with six, seven, eight microphone arrays
20 that are carefully calibrated against each other
21 in order to do noise cancellation. There's
22 advanced firmware that's on these devices in order
23 to figure out the echoing that's within a room.
24 Building a voice assistant from a Raspberry Pi to

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1 me honestly just seems a little bit absurd. It just
2 would not function anywhere near, but really would
3 not even provide even a partial bit of the
4 functionality you would get on these devices, even
5 if you can talk the same APIs.

6 To respond to the comment earlier about
7 the continual -- but just on the malware; malware
8 on a lot of these devices is due to the devices being
9 jailbreakable, not due to the device being
10 jailbroken. So the fact that the device has a
11 vulnerability in it that can be exploited and that
12 there is a mistake in it allows people to, for
13 example, download apps from all sorts of different
14 places, and then it can take control of your phone.
15 The ability for people to send you a text message
16 that then has you go to a Web page that takes control
17 of your phone, that's because your phone is
18 jailbreakable, not because the user -- it was
19 jailbroken. This is a very slippery, confusing
20 thing that often times ends up occurring where
21 people blame the jailbreaks and they blame the
22 circumvention mechanisms, as opposed to blaming the
23 bugs in the original software that was being -- that
24 was allowing the circumvention. Even if people

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1 were not allowed to do the circumvention -- well,
2 certainly people weren't allowed to hack into your
3 phone either, and they're doing that anyway.

4 As far as skills being an alternative,
5 skills are definitely an alternative to
6 infringement, but they're not an alternative to the
7 work that we want to be able to do. Skills are not
8 something that allow you to disable the touchpad
9 on a device that's accidentally uploading your
10 information. Skills are not something that you can
11 use in order to determine and disable software
12 that's running in the background in order to
13 determine -- in order to essentially be providing
14 more information to Amazon and Google. What the
15 skills are able to do is they're able to demonstrate
16 that the circumvention has nothing to do with the
17 infringement. You can build a skill that just is
18 able to use that same speaker in order to play music
19 that was incorrectly, improperly, illegally
20 downloaded from these various services.

21 And finally --

22 MR. AMER: If you could just wrap up
23 quickly.

24 MR. FREEMAN: Yes, one last point and

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1 then I'll be done. To mention on the Oracle thing,
2 the Oracle result was about actual copying, and I
3 just want to provide from the 2010 Federal Register,
4 a Notice of the Library of Congress Final Ruling;
5 the amount of the copyrighted work modified in a
6 typical jailbreaking scenario is fewer than 50 bytes
7 of code out of more than 8 million bytes, or
8 approximately 1/160 thousandth of the copyrighted
9 work as a whole, where the alleged infringement
10 consists of the making of an unauthorized derivative
11 work and the only modifications are de minimis, the
12 fact that iPhone users are using almost the entire
13 iPhone firmware for the purpose for which it was
14 provided to them by Apple undermines the
15 significance of this factor, and again there was
16 no copy.

17 MS. SMITH: So iPhone, do you think the
18 same thing, the same logic would apply to the voice
19 assistant?

20 MR. FREEMAN: The exact same logic
21 applies to voice assistance. We are not copying the
22 firmware, we're not modifying, distributing the
23 firmware; we're instead running the firmware on the
24 device, we are making modifications in memory

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1 momentarily of, as we're seeing here, fewer than
2 50 bytes out of, you know, 8 million bytes. This
3 is a de minimis modification in memory, and the
4 previous cases that had determined the case law,
5 and for example on Nintendo vs. Galoob and things
6 related to the Game Genie, apply in this case.

7 MR. AMER: Thank you all very much.

8 MS. SMITH: I think that's it. We'll be
9 back in a few.

10 (Whereupon, the above-entitled matter
11 went off the record at 1:20 p.m. and resumed at 2:03
12 p.m.)

13 MS. SMITH: All right, thank you,
14 everyone. This is our next panel for the section
15 1201 rulemaking. This is Class 9 software
16 programs, software preservation, our computer
17 program software preservation, and I think again
18 I see a lot of people who have participated in the
19 past.

20 If you would like to speak to a question,
21 tip your placard up and we'll call on you. Try to
22 keep your remarks snappy because we have been having
23 an issue of running a little bit longer.

24 It's helpful to try to foment discussion

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1 that builds upon the written comments as opposed
2 to reiterating them, and to the extent you can, you
3 know, kind of engage with what each other are saying,
4 I know it's a little bit difficult on this panel
5 format, but we have found that to be the most useful.

6 So my name is Regan Smith. I'm Deputy
7 General Counsel at the Copyright Office and I think
8 we'll introduce ourselves on this side and then you
9 can on that side, and then we'll just dive right
10 in. Thank you.

11 MS. SALTMAN: Julie Saltman, Assistant
12 General Counsel at the Copyright Office.

13 MR. AMER: Kevin Amer, Senior Counsel in
14 the Office of Policy and International Affairs,
15 Copyright Office.

16 MS. CHAUVET: Anna Chauvet, Assistant
17 General Counsel at the Copyright Office.

18 MR. RILEY: John Riley,
19 Attorney-Advisor, Copyright Office.

20 MR. CHENEY: Stacy Cheney, Senior
21 Attorney-Advisor at NTIA, National
22 Telecommunications and Information
23 Administration.

24 MS. SMITH: Mr. Lowood, if you would

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1 like to introduce yourself and any affiliation you
2 may have?

3 MR. LOWOOD: My name is Henry Lowood.
4 I'm the Curator for History of Science and
5 Technology Collections and Film and Media
6 Collections at Stanford University in California.

7 MR. FREEMAN: Jay Freeman, SaurikIT.

8 MS. MEYERSON: Jessica Meyerson,
9 Educopia Institute and Software Preservation
10 Network.

11 MX. ALBERT: Kendra Albert, I'm a
12 Clinical Instructional Fellow at the Cyberlaw
13 Clinic at Harvard and I'm here representing the
14 Software Preservation Network.

15 MR. BAND: Jonathan Band for the Library
16 Copyright Alliance.

17 MR. ZUCK: Jonathan Zuck with the
18 Innovators Network Foundation, speaking on behalf
19 of ACT The App Association.

20 MS. MOULDS: My name is Lyndsey Moulds
21 and I am the Software Curator at Rhizome.

22 MR. WILLIAMS: Matt Williams, for
23 Mitchell Silberberg & Knupp. I'm here for AAP, ESA,
24 MPAA, and RIAA.

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1 MR. MOHR: Chris Mohr, Software &
2 Information Industry Association.

3 MR. TRONCOSO: Christian Troncoso with
4 BSA, The Software Alliance.

5 MR. TAYLOR: David Taylor, Counsel to
6 DVD CCA and AACCS LA.

7 MS. SMITH: Okay.

8 MR. AMER: Good afternoon, again. So I
9 think to start things off, we -- I'd like to ask
10 the proponents in particular if you can provide some
11 sort of high level overview of, you know, touching
12 on the various types of circumvention and
13 preservation activities you would like to engage
14 in.

15 You've provided obviously a lot of
16 examples in your papers, but I think it would be
17 helpful for us just to get sort of a high level
18 overview of some of the need for circumvention and
19 the types of activities that you're prevented from
20 doing as a result of access controls. Ms. Meyerson?

21 MS. MEYERSON: Yes, hi, so as
22 representative of the Software Preservation
23 Network, I can sort of provide a more general comment
24 on scale.

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1 So we have about 81 institutions
2 represented within the Software Preservation
3 Network. These are all libraries, archives,
4 museums, or institutions of sort of -- that are
5 focused on cultural heritage preservation.

6 And within that group that began back
7 in 2016, there was a survey that we completed as
8 part of a grant project which led to a forum on open
9 call, and that resulted in a community road map and
10 the sort of, like, legal barriers surrounding
11 software preservation which is closely coupled --
12 preservation and access being closely coupled --
13 that all of those institutions agree that that's
14 one of the leading barriers, that the technical
15 barriers for doing some of this work are less of
16 an issue, but this is still a major challenge that
17 we all face in order to fulfill our professional
18 mission of preservation and access to the cultural
19 record.

20 MR. AMER: Thank you, and Mr. Lowood, I
21 would just ask, so specifically as I understand it,
22 you know, we're primarily talking about software
23 that is no longer commercially available, correct,
24 and if you could talk about sort of the types of

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1 TPMs that are involved.

2 I understood from your papers that in
3 many cases they involve hardware checks, you know,
4 where something was on an obsolete format, but it
5 might not be limited to that in all cases, so if
6 you could elaborate?

7 MR. LOWOOD: Well, the two, I guess,
8 main categories of work that we find are blocked
9 by TPM are our efforts to migrate software from older
10 media to more robust forms of media that we feel
11 will work in a preservation environment.

12 That's one thing, and then of course
13 another is research access to those disk images that
14 we might create and that often require the
15 researcher then to -- will then involve the
16 researcher encountering some form of TPM when they
17 try to access those disk images that we've saved.

18 Now, the kinds of things that we'll
19 encounter in situations like that, the hardware
20 blocks are one sort of thing. Copy protection
21 mechanisms would be another.

22 There were also certain platforms like
23 the omega that had specific mechanisms that could
24 be used in different ways by software publishers

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1 that would affect our ability then to remove data
2 from the data formats that we have in our collection.
3 Those are just a few examples of the kinds of things
4 that we encounter.

5 MR. AMER: Mx. Albert?

6 MX. ALBERT: Sure, so I think I just want
7 to expand upon what Mr. Lowood said and just note,
8 you know, I don't want to repeat our papers, but,
9 you know, we do lay out a number of specific
10 technological protection mechanisms, and one thing
11 that's become clear, you know, often when you're
12 preserving a collection of software, it doesn't get
13 sorted by TPM when it comes in.

14 Often, any or all of the different
15 technological protection mechanisms laid out in the
16 original papers can apply to specific forms of
17 software, so anything from product keys to, you
18 know, bad sector copy protection or other sort of,
19 like, physical ways of reading a disk, to hardware
20 checks, all of those are potential options for
21 different sort of software produced in different
22 periods.

23 MS. SMITH: So you think that we're in
24 agreement that if the format -- if the operating

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1 system or the hardware is obsolete, that that itself
2 is not a TPM? That's what the Office said in 2006,
3 and I want to make sure that we sort of have a base
4 layer of that not being in contention now.

5 MX. ALBERT: I'm sorry, I'm a little
6 confused, which in 2006?

7 MS. SMITH: So in 2006, we said that
8 formats that require obsolete operating systems or
9 obsolete hardware as a condition of access, that
10 exemption was not -- that part of that exemption
11 in 2006 was not recommended because the Copyright
12 Office concluded there were no access controls
13 implicated, and therefore no exemption was needed,
14 so it was, you know, go at it for preservation
15 purposes, but there was no circumvention and so 1201
16 is not implicated.

17 MX. ALBERT: I wasn't aware. I don't
18 know if you want to -- Mr. Band, I don't know if
19 you want to chime in?

20 MS. SMITH: I guess -- actually, Ms.
21 Moulds has been waiting for a while, so, but if you
22 don't want to speak to that, that's okay, but -

23 MS. MOULDS: I didn't want to speak to
24 that specific point that you just brought up, but

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1 I did want to just introduce what Rhizome and what
2 a lot of other cultural institutions and
3 particularly museums struggle with at this point
4 is that when we have digital art pieces or other
5 interactive media that is given to us, you know,
6 on indefinite loan or we have the full rights from
7 an artist to display it, a lot of times we find that
8 there is sort of obsolete support media that's
9 needed, or there are software dependencies that are
10 no longer commercially available, or that we have
11 licenses to, but can no longer legally activate
12 based on TPM, and so that's sort of the specific
13 problem that we face as institutions who are working
14 with digital artifacts is that even if we have the
15 base software itself, we have these dependencies
16 where we can't circumvent the DRM in order to support
17 the software.

18 MS. SMITH: Right, Mr. Troncoso, do you
19 want to answer that question? I think what Ms.
20 Moulds, you listed three things, and the first one,
21 I wasn't actually sure if a technological protection
22 measure was implicated. I think that's part of what
23 I'm trying to sort out in terms of what -- the ground
24 we're trying to cover here in this potential

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1 exemption.

2 MR. TRONCOSO: So I think that you've
3 put your finger on something that I think I realized
4 earlier today as I was looking back at the docket
5 and the submissions so far.

6 I want to start out by saying that with
7 software preservation networks, you know,
8 narrowing of the class to works that are no longer
9 commercially available, we're completely
10 comfortable with the activity that they're seeking
11 to engage in, and so I think from our perspective,
12 I can't speak for the other witnesses, we would be
13 comfortable with an exemption that covers that.

14 However, I do wonder whether what's at
15 issue has more to do with obsolete TPMs than sort
16 of how this has been framed so far, and that gets
17 to your question about whether an outdated operating
18 system itself can be -- is a TPM, but I think that's
19 where I think the issue is.

20 What we -- I guess what I don't
21 understand fully is why an exemption that allows
22 for circumvention of obsolete TPMs on computer
23 programs, whether that would get the proponents all
24 the way to sort of what they need in order to cover

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1 the activity that they're interested in doing.

2 MS. SMITH: This seems somewhat
3 definitional of what is an obsolete TPM or what is
4 a TPM that might itself be working. It's not like
5 a broken dongle or something like that, but the
6 format --

7 MR. TRONCOSO: Yeah, so the question is
8 if they have a lawfully acquired copy of software,
9 unless the TPM is no longer working, it's also a
10 bit unclear to me what is preventing them -- prevents
11 the preservation activity. I feel like I'm losing
12 you on that.

13 MS. SMITH: Maybe you have that right.

14 MR. TRONCOSO: What's that?

15 MS. SMITH: Yeah, can you --

16 MR. TRONCOSO: So if they have a
17 lawfully acquired copy of software and the TPM is
18 functioning as usual, the only thing that could
19 really be a hindrance to the preservation activity
20 is I think if the operating system is outdated or
21 if the sort of computer programs that they're
22 seeking to access in a new sort of -- that they're
23 porting over from either old media or if it was --
24 I guess I'm struggling to understand what exactly

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1 the activity is that they need the specific
2 exemption for.

3 MS. SMITH: Well, I think they've given
4 some examples, right, where there's like a date and
5 the date is in the past, and so it is hard to access
6 something, or maybe the server check doesn't work
7 anymore, so.

8 MR. TRONCOSO: Wouldn't that be an
9 example then of an obsolete technological
10 protection measure? It's no longer functioning as
11 --

12 MS. SMITH: I don't know if a date-based
13 TPM would be no longer functioning. It's just the
14 problem is we're now in the future as it were, right?

15 MR. TRONCOSO: Okay.

16 MS. SMITH: I mean, I don't know.

17 MR. TRONCOSO: Again, like I said, all
18 of the activity that they're seeking to engage in
19 on works that are no longer -- computer programs
20 that are no longer commercially available, we're
21 pretty comfortable with it, and from my perspective,
22 it's about just rightsizing the rules so that it's,
23 you know, contained to that activity.

24 MR. AMER: So here's how I understood it

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1 from your papers, and obviously you can - I'm
2 probably wildly oversimplifying it, but I mean, as
3 I understood it, you have cases where, you know,
4 you have a program on a floppy disk for example.

5 You need to -- for preservation
6 purposes, you need to migrate it over to a modern
7 system, but in order to open the program, there might
8 be a hardware check that requires the original
9 floppy disk which you don't -- is not being used
10 anymore because you've migrated it over, or is that
11 -- or you might have a server check after, you know,
12 in which the server authentication has been
13 discontinued. Are there other kind of, you know,
14 paradigm examples of the types of things you're
15 trying to do?

16 MR. BAND: Well, I'm not a technologist,
17 so I can't speak to paradigms, and hopefully other
18 people here can, but I think one way to look at it
19 is to some extent, you know, the software industry
20 is a history of failures, right? You have so many
21 companies that have been trying to do different
22 things over the past 30 or 40 years.

23 Some of them are successful and they end
24 up becoming members of BSA, but the vast majority

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1 aren't, and they have -- and the number of companies,
2 it's just a vast ocean of software with all kinds
3 of technological protection measures.

4 Some of them may have been developed by
5 that company for itself. Some of it might have been
6 standard at the time, but are no longer available.
7 Some of it might be something that is some kind of
8 technological protection that is still available
9 from someone, but again, not, but it's, you know,
10 not available to the library that's trying to
11 preserve it, and so that's why it's important to
12 try to come up with an exemption that is as broad
13 as possible to address all of these circumstances.

14 I certainly agree that simply by virtue
15 of the fact that the operating system is obsolete
16 and not commercially available, I mean, that by
17 itself is not a TPM, but that's not what we're
18 worried about. We're worried about sort of, you
19 know, all of these myriad possibilities that people
20 do encounter.

21 And, you know, again, you know, so much,
22 there's so much software out there for companies
23 that are long out of business, but have all kinds
24 of important value, that it's, you know, that it's

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1 important for people to be able to access and learn
2 from, and sort of avoid, you know, reinventing the
3 wheel over and over again, as well as all kinds of
4 other works that are dependent on that, you know,
5 whether it's, you know, architectural, you know,
6 blueprints, or artistic works, or so forth.

7 And so, you know, we just need to make
8 sure that that isn't getting lost, and, you know,
9 the longer we wait, the more will get lost because
10 more is getting created, and so again, the plea is
11 to have the exemption as broad as possible, as
12 user-friendly as possible because again, you know,
13 the goal is to get to this, you know, the
14 non-commercially available material in a way that,
15 you know, certainly won't hurt any of the existing
16 companies that are succeeding in the marketplace
17 now.

18 MR. AMER: Thank you. So if you all
19 could provide any additional detail about Mr.
20 Troncoso's question and sort of the process and then
21 I'm going to come back to the opponents to ask.

22 Because you, Mr. Troncoso, indicated
23 that there is some, you know, there is some level
24 of agreement here, I think, but I want to make sure

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1 that there isn't - at least with respect to the
2 notion that we're not talking about currently
3 commercially available software, but I want to make
4 sure that we highlight any points of difference in
5 terms of how that's defined. I think Mr. Freeman
6 was next.

7 MR. FREEMAN: So I think there is some
8 subtlety involved with that question about
9 operating systems and outdated, and the computers
10 and operating systems.

11 So when a museum is trying to preserve
12 a work, it essentially is going to have to preserve
13 the entire apparatus of the work in a way. It's not
14 sufficient to just know that the information is
15 theoretically there. It has to be something that
16 you can see, you can execute.

17 I have a friend who does interactive
18 digital art who one of his pieces was recently
19 acquired by the San Francisco Museum of Modern Art,
20 and it's something that was designed to run on an
21 iPad.

22 And the scenario there is that if you
23 upgrade the software on that iPad to a newer version
24 of the operating system, it is going to break the

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1 software that he gave to the San Francisco museum,
2 and so part of the process is to disable the
3 automatic update checks, and to try to figure out
4 how they could essentially keep these older iPads
5 running moving forward.

6 This is a TPM check that is not in my
7 friend's software. These are checks that are in the
8 software that is on the operating system software
9 with the iPad. If any damage occurs to that iPad,
10 they might be able to get a replacement iPad, but
11 it will be running a new version of the operating
12 system, and in order to install that old version,
13 it requires circumventing that TPM.

14 MS. SMITH: Okay.

15 MR. FREEMAN: And so --

16 MS. SMITH: I think the question was
17 whether there is a TPM at all, and in the case where
18 there is no TPM, the operating itself would not
19 constitute a TPM, so I think we're all on the same
20 page about that.

21 MR. FREEMAN: Okay, in this case, there
22 is no TPM in the - I just want to be clear. There
23 is no TPM in the software that was arguably being
24 preserved, but you have to preserve the iPad and

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1 the operating systems that it is running on to get
2 at the point that was brought up earlier by Mx.
3 Albert about dependencies that you have to track.

4 MS. SMITH: Right, so to preserve that
5 though, you'd be circumventing a TPM on a computer
6 program, right?

7 MR. FREEMAN: I'm sorry, can you please
8 repeat that?

9 MS. SMITH: You would be circumventing
10 a TPM on a computer program?

11 MR. FREEMAN: On a computer program, but
12 not on the -- yeah.

13 MS. SMITH: It would cover within the
14 scope of the exemption.

15 MR. FREEMAN: Okay, great.

16 MS. SMITH: Okay, Mx. Albert?

17 MX. ALBERT: I just wanted to chime in
18 to respond to your question about the 2006
19 exemption. So I think that the 2006 exemption it
20 sounds like focused specifically on sort of like
21 what wasn't meant -- it was never meant to be a TPM,
22 but the software was meant to run on particular
23 hardware.

24 That was, you know, it sounded like they

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1 were not granting was that, and I think we're talking
2 about, as Mr. Freeman said and as Mr. Lowood had
3 said, something pretty different, and as Ms. Moulds
4 said, something pretty different where we're
5 actually talking about literal TPMs that are
6 intended to function as TPMs, but are now, you know,
7 protecting, you know, protecting works that are no
8 longer commercially available.

9 MS. SMITH: Okay, so that, so in 2006,
10 there were three exemptions or three parts of it,
11 two granted and then just one that we're talking
12 about which the Office concluded was unnecessary.

13 So it also would be helpful to understand
14 what the difference, expansion, contraction, you
15 know, things that were not -- different from the
16 request now from 2003 or 2006. I don't necessarily
17 mean to put you on the spotlight to answer that,
18 but if someone else wanted to, that would be
19 appreciated.

20 MX. ALBERT: So, I mean, we would be
21 happy to get back to you about that. I admit I have
22 not, you know, memorized the 2006 exemptions --
23 which is perhaps my bad -- but I'm happy to sort
24 of come up with a more conclusive answer about how

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1 our exemption fits into that framework.

2 MS. SMITH: Maybe Mr. Williams might
3 have memory or?

4 MR. WILLIAMS: Yes, I recall what you're
5 referring to where an operating system by itself
6 is the reason that someone can't get to the work,
7 that that's not the fault of an access control.

8 There were a few other points I wanted
9 to touch on based on what's been said and Mr. Amer's
10 question about, you know, kind of how the various
11 opponents are feeling about the narrowing that's
12 been done.

13 We really appreciate that the
14 proponents here actually did make some significant
15 efforts to redesign the proposal, and to try to make
16 it narrower and keep it a little bit closer to the
17 statute and also what's been done in the past.

18 We still have a number of concerns with
19 it, even despite those attempts to narrow it, but
20 we do appreciate that they really did make some real
21 effort to narrow it.

22 One of our primary concerns is that
23 although they say that their intent is not to
24 circumvent to access what they refer to as

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1 "dependent materials," I don't think the drafting
2 that they put in their reply comments achieves that,
3 and I don't think that there's any reason to actually
4 refer to dependent materials at all in any exemption
5 if what you're trying to circumvent to gain access
6 to is only a piece of software that then gives you
7 lawful access to another type of work without
8 circumvention of any additional TPM.

9 So that's one of our primary concerns,
10 and then a piece of that which is very, very
11 important is that we do not believe that video games
12 should be treated as part of the same class as what's
13 being proposed here.

14 We think that you should deal with those
15 issues by considering the record that's being built
16 on Class 8, and there's a number of reasons for that.

17 MS. SMITH: Can we just put a pin in the
18 video games because I think we will get to that?

19 MR. WILLIAMS: Sure.

20 MS. SMITH: That's sort of moving onto
21 the next topic, and I wonder if we can stick with
22 the first point you raised --

23 MR. WILLIAMS: So -

24 MS. SMITH: -- now and get some

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1 responses perhaps?

2 MR. AMER: Well, I would, so, and I'm
3 going to talk about the program dependent materials
4 issue. I think that's really important. First, I
5 did want to ask your views about the narrowing with
6 respect to the obsolescence, for lack of a better
7 word --

8 MR. WILLIAMS: Yes.

9 MR. AMER: -- issue. So as you know, the
10 original proposal was not limited to obsolete
11 software. You raised objections. The proponents
12 came back with a definition that defines - it doesn't
13 use the word "obsolete," but it's limited to
14 computer programs which are no longer reasonably
15 available in the commercial marketplace.

16 So this is broader than 108(c) for
17 example which is talking about formats that are no
18 longer available. So I would be interested in your
19 view as to whether this current proposal is
20 acceptable to you?

21 MR. WILLIAMS: Sure, so you put it
22 exactly right. It is different than what's in the
23 statute. It is an improvement over what was in the
24 initial request. I'm still not content with the

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1 narrowing for a couple of reasons.

2 One is we generally think that at a very
3 high level, there's a number of ongoing processes
4 related to defining what is lawful preservation,
5 including section 108 reform.

6 We think this is a premature proposal,
7 and trying to change what's in section 108 now in
8 an exemption kind of jumps the gun and could have
9 a strange impact on that process in a way that I
10 don't think would be helpful, so we do think sticking
11 to what's in 108 is -- makes a lot more sense.

12 The other issue is this question of
13 what's commercially available, and I think they
14 define it to mean that the publisher has to be
15 actively marketing new copies in the marketplace,
16 whereas the statute refers to if you can get new
17 copies secondhand, that that should be sufficient.

18 MS. SMITH: Are you looking at 108 for
19 that?

20 MR. WILLIAMS: Excuse me?

21 MS. SMITH: You were pointing to 108?

22 MR. WILLIAMS: Yes, 108 and the Office's
23 prior decisions.

24 MR. AMER: Thank you. Mr. Zuck, can I

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1 go to you because I believe your organization was
2 initially -- was opposed to the initial proposal,
3 but now you are -- am I correct about that, but now
4 you're supporting the current language?

5 MR. ZUCK: Yeah, we are -- I think we
6 still find the language of obsolescence appealing
7 in some respects, and the reason is that in the
8 software industry, TPMs are only going to be used
9 by multiple software packages, and so unfortunately
10 this is about the creation of tools for
11 circumvention.

12 And so if a particular piece of software
13 is taken off the market and that's used, you know,
14 and it's one of 20 applications that are produced
15 by a particular vendor, and that tool is then used
16 for circumvention of the other 19 pieces of
17 software, it seems like there's a substantial method
18 for infringing use of the tool that gets created
19 for circumvention just because one piece of software
20 is no longer available on the market.

21 So, I mean, I think the language of
22 obsolescence is something that we still find more
23 appealing than just no longer sold.

24 MS. SMITH: I think the obsolescence is

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1 tied to no longer commercially available or no
2 longer manufactured. Is that what you're picking
3 up on from 108?

4 MR. ZUCK: That's right, but I guess
5 it's things like the floppy disk example more so
6 than simply that I'm no longer commercially able
7 to buy new copies of a particular piece of software
8 simply because TPMs are used across multiple
9 programs, multiple pieces of software.

10 MR. AMER: So --

11 MR. ZUCK: I mean, we generally support
12 it. I want to be supportive of the intention here,
13 right, but I guess creating tools for circumvention
14 based on the obsolescence of a particular piece of
15 software could still be the creation of tools for
16 infringing activities on the remaining software
17 that comes from the same vendor or uses the same
18 commercially available TPM.

19 MS. SMITH: How is that necessarily
20 different from any other regulatory exemption,
21 where you might be able to circumvent software for
22 a particular purpose such as cell phone unlocking
23 or jailbreaking, and as long as it's for that
24 purpose, you can do it and you can use your tool

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1 for that, and otherwise you cannot?

2 MR. ZUCK: I'm not a lawyer, so I may
3 misstep here, but I guess it has to do with the
4 substantial use, right? In other words, if it's the
5 principal use for that tool is for a non-infringing
6 purpose, it's different than if I use the hook of
7 a particular software package going off the market
8 to create a tool that then becomes available for
9 people to use to unlock multiple other packages.
10 It then becomes not -- the substantial use of that
11 tool becomes infringing rather than
12 non-infringing.

13 MR. AMER: So just to sort of drill down
14 on this, so, I mean, the difference as I understand
15 between your current proposal and 108(c) is that,
16 so for example, if you have something on a CD which
17 is not an obsolete format, CD-ROM or a DVD, but it's
18 no longer produced anymore, it's not commercially
19 available, you wouldn't be able to copy it under
20 108(c) for purposes of replacement, but under your
21 proposal, you would.

22 So I guess the question is, you know,
23 what is the need for that sort of expansion, and
24 I think related to that, you know, would we be sort

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1 of breaking new legal ground by sort of ruling that
2 that type of activity is going to be categorically
3 fair use?

4 MR. BAND: Well, let me -- I'm sure Mr.
5 Lo will be able to go into some of the more technical
6 details about what it is that, you know, a library
7 is going to be specifically be needing to do, but
8 let me just respond to that and also to Mr. Zuck.

9 I mean, certainly with respect to the
10 tools, I completely agree with Ms. Smith. I mean,
11 you know, that in theory is a problem with almost
12 any exemption that, you know, the person creates
13 the tool for purpose A and conceivably could use
14 it for purpose B, but if they were to do that, then
15 they would be violating the anti-trafficking
16 provision and they would -- if they were engaging
17 in infringing activity, they would engage in
18 infringement.

19 And so, you know, and again, we're given
20 that this is an exemption that's aimed at sort of
21 these cultural heritage institutions, I mean, the
22 likelihood of -- yes, there's always a possibility
23 of someone misusing the tool, but I think the
24 likelihood is very small.

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1 And then going to the issue of, the
2 specific issue that Mr. Amer is asking about, the
3 software deteriorates, and so even if the format,
4 it's not an obsolete format, it's still -- the
5 problem is that the, you know, the software is
6 deteriorating, and software deteriorates, it turns
7 out, far more quickly than we thought it was.

8 I mean, these digital materials, you
9 know, you sort of have this image that somehow it's
10 preserved forever, but that's not how it works, and
11 so that's why even if it's on a CD or if it's on
12 some other medium, the medium might not be obsolete,
13 but you still need to engage in the preservation
14 activity.

15 MR. AMER: But, yeah, and so -- but it's
16 not deteriorating for purposes of 108(c)
17 necessarily, is it? I mean, because then you'd have
18 to kind of say, "Well, everything deteriorates."

19 MR. BAND: Well, right, no, but that --
20 and that to some extent is the problem with 108(c),
21 that it is too narrow, but I think, you know --

22 MS. SMITH: I think he's looking for you
23 to articulate the non-infringing basis then
24 otherwise.

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1 MR. BAND: Well, then if it's not within
2 108(c), it would have to be fair use.

3 MR. AMER: So is there any -- so that's
4 the question. So can you kind of help us in terms
5 of, you know, do you have a best case for kind of
6 why this would be fair use?

7 MR. BAND: Well, I would suggest that
8 certainly, you know, looking at the *HathiTrust* case
9 and the *Authors Guild v. Google* case, that sort of
10 the notion of creating, you know, this digital, a
11 database that you, that no one sees the contents
12 of, but then the act of sort of preserving it for
13 other purposes is viewed as a fair use in those
14 cases, and so much so that even like in the *TVEyes*
15 case, Fox didn't even challenge the District Court's
16 holding that the creation of the database was
17 non-infringing.

18 I mean, they brought their challenge to
19 the Second Circuit, and the reversal at the Second
20 Circuit was all about the fact that, you know, you
21 could access 10 minutes of it in a commercial
22 context.

23 And so it seems that if you look at that
24 body of case law and sort of what's going on, you

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1 know, happening in the field and so forth is that
2 the basic notion of making the preservation copy
3 is fair use.

4 The real question or the problem is: what
5 kind of access do you have after the fact, but the
6 sort of like behind the scenes copying and whether
7 it's, you know, *Sega v. Accolade* or *Kelly v.* -- all
8 of these cases, the basic notion is like the act
9 of the copying or the doing -- the preserving, that's
10 fair use, and then where the rubber meets the road
11 from a fair use perspective is what kind of access
12 is provided to that content.

13 MS. SMITH: And is that what you're
14 seeking in this exemption which is almost like, to
15 me, it sounds like 108(b), except it doesn't need
16 to be unpublished? You can get access to make a
17 preservation copy regardless of publication as what
18 you said for *HathiTrust*. No one sees it behind, but
19 not necessarily to go further and use it as the
20 replacement copy concept in 108(c).

21 MR. BAND: I would certainly envision it
22 that way. I mean, and then to the extent that then
23 what's being done with it after the fact once it's
24 preserved, I mean, then that becomes, you know, if

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1 what's being done is beyond the scope of what would
2 be fair use, then that's an infringement, but the
3 basic notion of the preservation should be
4 permissible.

5 MR. AMER: Thank you. Mx. Albert?

6 MX. ALBERT: Yeah, so I think I might,
7 like, disagree a little bit with my colleague, Mr.
8 Band, or just, like, have a different take on it
9 which is to say that I think that, you know, it's
10 important not to just think of it as, like, oh, we're
11 making a copy to replace the one that, you know,
12 might someday no longer be readable on a floppy disk,
13 but also that the way software is preserved is by
14 making it runnable for people who need to access
15 it for scholarly use and for, you know, other
16 purposes, and I think that's a core part of what
17 SPN does and what's important to the Stanford
18 Library. So I apologize to Mr. Lowood for jumping
19 on the point he was about to make.

20 I'll also say with regards to
21 specifically the fair use question, I think, you
22 know, in Authors Guild v. Google, they suggested
23 that making copies of out of print books to save
24 them is of significant public benefit, and I think,

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1 like, in that, you know, especially if we consider
2 factor four of the effect on the market, one of the
3 reasons we believe that once the software is no
4 longer commercially available, it's fair use, is
5 because once the software is no longer being
6 marketed, making an available, a copy, preserving
7 a copy and potentially making it available for
8 library use, like, is no longer affecting the market
9 for that software.

10 MS. SMITH: But I do think you might be
11 obscuring the difference between -- under -- you
12 have the right as a copyright owner to pull something
13 out of market, sit on it, and then maybe reintroduce
14 it, right?

15 So a preservation copy might be one
16 piece, which we're happy to discuss too, but to go
17 to the next step and say just because it's not
18 commercially available, where do you impose the
19 limits, as Mr. Band said, where the rubber meets
20 the road?

21 MX. ALBERT: So I'll also let Mr. Lowood
22 address this a little bit, but I think one important
23 part that I've seen in SPN's work and additionally
24 in the work of other preservationists is that even

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1 if a work is, a software work is later reissued or,
2 like, another copy goes on the market, that
3 preserving and allowing access to the original copy
4 actually provides really significant cultural
5 benefits because that's how we study software is
6 by looking at multiple copies, right?

7 So just because Word, you know, 2016 is
8 still on the market, you know, the availability of
9 accessing Word 2003 is incredibly important to
10 cultural work, but I feel like I'm stepping on Mr.
11 Lowood's potential options.

12 MR. AMER: Mr. Lowood?

13 MR. LOWOOD: Okay, just a few just
14 practical points, not legal points, first, just very
15 quickly, the idea about the tools being used for
16 one title and then being possibly applied to other
17 titles where it might be infringing, we manage
18 intellectual property issues for all kinds of
19 materials.

20 We would not use a tool in that way ever.
21 We would consider if a use of a tool would be
22 infringing, we wouldn't, we just wouldn't do it,
23 at least a library, I think most libraries would
24 operate in that fashion.

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1 Secondly, about access and
2 preservation, it doesn't really work to consider
3 preservation in isolation. Preservation is part of
4 a whole work flow beginning with the decision to
5 acquire, you know, describe what's there, process
6 what's there, develop the technology and the
7 infrastructure for the long-term storage of the
8 data, and then of course the thing that drives all
9 of this, the mission of an institution like a library
10 or museum is to provide research access at the end
11 of that.

12 So as I mentioned earlier, in some cases,
13 that research access will itself involve some sort
14 of circumvention of a technological prevention
15 measure because our disk image has not changed the
16 presence of that in the software, so that's one thing
17 we have to consider.

18 But another thing just to keep in mind
19 is that all of the resources that have to be expended
20 to do those other activities that I described are
21 depending on a result that is we will be able to
22 provide research access to those materials.

23 And so we just won't make the investment
24 in doing all of those other things if the research

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1 access is not going to be part of what we can assure
2 at the end of this.

3 The last thing I'll mention is about the
4 original version versus, you know, subsequent
5 versions that might be reworked for sale and so on.

6 For research use, the original version
7 is just a different thing from a subsequent version
8 that might be upgraded in various ways as is
9 typically done, you know, high-definition graphics
10 and things like that that are changes to the original
11 in many ways.

12 So I think we shouldn't really think of
13 it as something like a reprint of a book or something
14 that is an exact, perhaps an exact replica of the
15 words that were in that book. It's actually a
16 rather different thing from a historical
17 perspective.

18 There's less - no researcher would
19 consider the current version of some game, or piece
20 of software, or whatever it is to be the equivalent
21 of a historical version of that software.

22 They're just completely different
23 things, so there isn't really any confusion between
24 those two versions that would be caused by

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1 preserving the original.

2 MR. AMER: Thank you. So I'd like to go
3 to Ms. Moulds and then just in the interest of time,
4 I'd like to go to the opponents to get their view
5 on the first, on the fair use question.

6 MS. MOULDS: Okay, yeah, I'm sort of
7 working backwards, so apologies for skipping around
8 a little bit.

9 Just to speak to what Mr. Lowood said
10 also regarding the sort of old and updated versions,
11 in the case of Rhizome and many other, like, cultural
12 heritage institutions that work specifically with
13 digital files and their dependencies, it's not just
14 sort of like different from a research perspective.
15 It's very different functionally.

16 So it may be that an artist comes to us
17 with something that's a Flash piece, something that
18 ends in a .flv file extension, and Adobe currently
19 owns the rights to Flash software, but it sort of
20 used to be Macromedia and there were sort of three
21 different versions of this sort of director
22 authoring programs that were made.

23 So even though they subsequently
24 released these different versions, it may be that

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1 this modern file we have, even though the rights
2 have been transferred many times and there still
3 may be a functional equivalent of this that's
4 legally, like, and commercially available is not
5 going to be equivalent to what we actually need to
6 open the file because of backwards compatibility
7 reasons.

8 So there are ways in which it's difficult
9 to even see it as anything equivalent for functional
10 reasons too because it simply wouldn't even open
11 these dependent files.

12 And then the other thing I wanted to
13 bring up was the idea of introducing sort of
14 something that would limit it to - or sort of saying,
15 "Okay, well, you could go online and buy a new copy
16 from, you know, secondhand, as long as it's a new
17 copy if that's available, even if it's not
18 commercially available from the original vendor,"
19 and I think that would also be really tricky for
20 us because that also brings into question
21 difficulties specifically because of TPM.

22 So definitely there is a question of if
23 you're buying something not from the original
24 vendor, even if it's commercially available,

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1 there's a possibility that if you were to, say, go
2 on eBay and buy something that is supposedly new
3 software, that the CD key that comes with it or
4 something like that might not actually function,
5 and therefore for preservation purposes, it
6 wouldn't be an appropriate copy for you.

7 So it seems to really matter that it's
8 available from the original vendor in this case
9 because secondhand copies might be inaccessible
10 because of TPM.

11 Oh, and the other thing was that we were
12 discussing the 108(c) exemption which museums are
13 not currently covered under at all. So working at
14 Rhizome, even if we were considered an extension
15 of the New Museum legally such that I could say,
16 "Okay, we're operating as a museum entity," that
17 wouldn't actually cover us for a lot of this.

18 MR. AMER: Thank you. Mr. Williams,
19 so, you know, what about the fair use argument and
20 particularly, you know, the fourth factor? You
21 know, is there really a substantial harm to the
22 marketplace if, you know, we can agree that the
23 software is no longer being made commercially
24 available?

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1 MR. WILLIAMS: Sure, thanks. So your
2 question was would you be breaking new ground on
3 fair use to grant what's being requested and I think
4 the answer is yes.

5 The previous recommendations have said
6 that there is no legal basis to assert that
7 systematic archival activity of libraries and
8 archives that is outside the scope of section 108
9 would necessarily be covered by the fair use
10 doctrine.

11 And they've also emphasized that fair
12 use involves a case by case analysis that requires
13 the application of the four mandatory factors to
14 the particular facts of each particular use.

15 MR. AMER: I mean, do you think the -
16 sorry to interrupt. I mean, do you think, you know,
17 is there an argument that the ground has sort of
18 shifted since 2003, 2006 in light of *Google Books*,
19 *HathiTrust*?

20 MR. WILLIAMS: I mean, clearly those
21 cases didn't exist at that time. However, if you
22 were to read them as broadly as Mr. Band reads them,
23 then the entire section 108 reform process to create
24 expansions to section 108 would be completely

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1 pointless.

2 I don't think those cases go as far as
3 they're reading them, and I think that until section
4 108 reform is resolved, we shouldn't be assuming
5 that all of this other activity, which is largely
6 undefined what preservation means in the record,
7 that it's all fair use.

8 And you asked a specific question about
9 market harm, and I think the point - and I know you
10 don't want me to talk about video games specifically
11 yet, but the point that was raised previously about
12 the copyright owners' right to withdraw from the
13 market is important because with video games
14 especially, there's an incentive to preserve them
15 because they are often rereleased, and so there can
16 be market harm as is discussed in the Class 8
17 filings.

18 MS. SMITH: What do you think about the
19 phrase Mr. Lowood was using with research access?

20 MR. WILLIAMS: Right, so that was
21 another point I wanted to raise is that one thing
22 that Jonathan said about the Google case is, well,
23 the piece of it where it's preserved or copied, but
24 no one sees it, that, under those cases, is lawful

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1 in his read of them, but that's not, as I understand
2 it, what's being proposed. There is going to be
3 access provided, and so it's not that no one sees
4 it.

5 In the TVEyes's case, the fact that Fox
6 didn't want to have to argue two separate issues
7 when there was one clearly in its favor in terms
8 of providing access that was determined not to be
9 fair use, the fact that they didn't argue the initial
10 copying issue doesn't mean that they conceded that
11 it's fair use or that it is a fair use. It's just
12 there was an easier way to win the case.

13 And so the research access, I would need
14 to see, I guess, in order to weigh in on it, very
15 specific language that defined exactly how stuff
16 was going to be used after all of the copying is
17 done.

18 MS. SMITH: Okay, but it's conceivable
19 research access is different from now I'm going to
20 resell something on Amazon, that maybe, you know,
21 research access could be smaller than widespread
22 access?

23 MR. WILLIAMS: I would stipulate that
24 research access is a narrower subset of activities

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1 than certainly redistributing things on Amazon,
2 which should not be anything considered here at all.

3 What research access means, can the
4 thing be copied and circulated around to other
5 places? Is coming into a place and just playing video
6 games all day research access? All of those are
7 questions that are unanswered in the current record,
8 and so I'm hesitant to endorse that concept.

9 MS. SMITH: What if access were limited
10 to, like, on premises, which I think is the existing
11 video game preservation exemption?

12 MR. WILLIAMS: Well, I think that they
13 have said that they would limit it to on premises
14 access in the reply comments. I did have a question
15 about whether that meant that still additional
16 copies could be made and provided to other libraries
17 that would also provide on premises access.

18 Also, if you look at the record in Class
19 8, there is some real concerns about on premises
20 access still basically meaning that people can show
21 up and play games all day, and that, to us, is an
22 unauthorized public performance of the game and,
23 you know, sometimes money is even changing hands,
24 and so there are real market concerns and concerns

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1 about whether that would be lawful.

2 MR. AMER: Thank you. Mr. Mohr?

3 MR. MOHR: Just to, I guess, echo a
4 couple of those points, so I think I'm going to be
5 fairly brief. First of all, to the extent you're
6 looking for a consensus, I think I share the views
7 of many of my colleagues over here, in that, one,
8 the concept of obsolescence is okay. We don't have
9 a problem with that. I think what we're fighting
10 about is the definition and as it's applied to access
11 controls.

12 Two, I think, in terms of the fair use
13 argument, I think there may be -- I would certainly
14 look at the cases differently, the kind at Google
15 Books, differently and analyze it differently if
16 it was making a whole slew of digital preservation
17 copies, without the added functionality and
18 benefits versus what actually happened in that case.

19 I think if you had just a large scale
20 digital copying and no new so-called transformative
21 functionality you might get a different analysis.
22 That would be new law, one way or the other.

23 And the final thing I kind of wanted to
24 get to is just -- and this echoes what -- I'm sure
25 you've had this discussion in many other panels,
26 including during the security discussion.

1 But, you know, there's a causation requirement here
2 in terms of that the prohibition has to be the cause
3 of the issues, right?

4 And so, I mean, I am sympathetic to the
5 things that -- some of the specific examples that
6 were mentioned. So for example, if there's a server
7 jack in a specific access control and the server's
8 not -- that's an access control and the server's
9 no longer there and the software's been acquired
10 and it's subject to reasonable restrictions
11 that -- that's not the sort of thing we have a problem
12 with.

13 MR. AMER: So then would you -- I mean,
14 would you limit the class of eligible works to works
15 that were originally -- I mean, would you limit it
16 to something similar to 108(c), which is, you know,
17 works that were originally distributed on physical
18 media? And if so, you know, the other side has the
19 argument, well, you know, what if we have something
20 on a CD which is not obsolete anymore, or we have
21 something that was originally downloaded, but
22 there's not server support anymore and so we can't
23 access the program? You know, where do you come down
24 on that?

25 MR. MOHR: Well, if they already -- so
26 this is about preservation, if it's something you

1 already have a copy of you can copy indefinitely,
2 whatever that problem is, that's not -- I don't know
3 that that's necessarily a preservation problem.

4 All right, so let's take those examples
5 one at a time, I guess, is the easiest way, right?
6 So in the front, let's start with the download
7 example, because with my short-term memory, the way
8 it is that's the easiest one to start with.

9 In that case, you don't really have a
10 preservation problem because you can continue to
11 use -- you can continue to back up a downloaded work
12 folder, almost, you know, for quite some time,
13 right? But you do have an obsolescence problem
14 because the means of the way you get into the
15 program, again, in that context it's obsolete.
16 That's how I look at it.

17 In a context of a CD, I mean, you
18 potentially have two kinds of problems. One is, all
19 right, the media is deteriorating, can you make a
20 preservation copy? I know that, most licenses for
21 those media -- a lot of licenses for that kind of
22 media will permit you to do that, so that's not a
23 bar.

24 So the next question is, all right, in
25 terms of can you then get access to what's on there,
26 if you image it, et cetera -- and again, I think,

1 the question comes back to obsolescence and not so
2 much the question of preserving it. Does that make
3 sense?

4 MR. AMER: Thank you. Let's go to Mx.
5 Albert.

6 MX. ALBERT: Yeah, so I just think that
7 -- I want to echo what Mr. Lowood said earlier that
8 it doesn't make -- I think the distinction that the
9 opponents are drawing between, like, preservation
10 and, like, access is not one that we actually see
11 from practitioners in the field.

12 The ensuring access to works is the
13 purpose of preservation; keeping a copy that no one
14 can access and indefinitely, you know, transferring
15 it across formats is not consistent with the best
16 practices in this field, at all.

17 So I think that, you know, the problems
18 that we suggested, the problems with section 108's
19 obsolescence requirements are the problems that
20 keep software from being preserved and keeps
21 software from being accessible, even in cases where
22 folks own a copy.

23 And I want to sort of, you know, just
24 note that I think lots of -- especially in the
25 context of this proceeding -- lots of folks have
26 recognized that there are lots of difficulties with

1 section 108.

2 And I worry that we're going to -- I would
3 strongly encourage the Office to sort of cast the
4 -- allow all non-infringing use under the exemption
5 and not just limited to sort of the uses
6 conceptualized under 108. Because, as we saw, in
7 the cases we've already cited that have happened
8 since 2006, there's a wide variety of uses that are
9 considered non-infringing that hadn't been
10 conceptualized when these exemptions were
11 previously considered.

12 And that, you know, I think as we talk
13 about in our reply, the leeway that, you know, fair
14 use allows for copies that might be made slightly
15 outside of, you know, the very narrow constraints
16 of things like 108(c) is incredibly important to
17 the sort of actual practices of preservation. And
18 I think that that's a key part of, you know, what's
19 important to us and what's important to sort of
20 preservationists more generally.

21 MR. AMER: Thank you. So I'm going to
22 go to Mr. Band and then Ms. Moulds. And then we're
23 going to move to the question of program-dependent
24 materials. So this will be the last two comments
25 on this topic, unless my colleagues have questions.

26 MR. BAND: So, first, to some extent in

1 response to Mr. Williams' suggestion that we wait
2 until the 108 process is done: well, we might be
3 waiting 20 or 30 years. And, in which case, you
4 know, another generations of software and
5 software-dependent material will not get preserved
6 properly. So, waiting for 108 is, I don't think,
7 the best approach.

8 MS. SMITH: I think at the Copyright
9 Office we are eager to continue discussing
10 documents, so.

11 (Laughter.)

12 MR. BAND: So, that's number one.
13 Number two, just to make clear my point with respect
14 to, you know, preservation versus access:
15 obviously, the goal is access, but there are
16 different kinds of access. And so, you know,
17 certainly, your suggestion of research access seems
18 to me to be highly likely to be comfortably within
19 the zone of fair use.

20 Other kinds of access, maybe not. Such
21 as, you know, just putting it out on the open
22 internet for anyone to access. I mean, maybe under
23 certain circumstances that could be fair use, but,
24 you know, that's less likely to be -- but it also
25 depends on what the software is.

26 Restricting it to on the premises, as

1 in 108, I think is, perhaps, too limiting. And, you
2 know, maybe that was -- it was certainly beyond the
3 scope, I think, of what a court now would consider
4 to be fair use. I would certainly think that, in
5 the case of Stanford, you would want it not just
6 at the university, at the library, but, you know,
7 probably for authorized users on campus, and
8 conceivably authorized users off-campus.

9 MR. AMER: But that's not what you're
10 asking. Sorry to interrupt. You're not asking for
11 that here, right? I mean, I thought your proposal's
12 limited to, provided that the computer program is
13 not distributed or made available to the public
14 outside of the premises of the eligible institution.

15 MR. BAND: Well, and in that point, it
16 could be that the libraries disagree with the
17 Software Preservation Network on that specific
18 point. I mean, that we think that it should be that
19 conceivably off-premises in appropriate
20 circumstances would be appropriate. And that's
21 why, again, you know, we would think something that
22 doesn't have the on-the-premises limitation is
23 reasonable.

24 But I think the basic point is that it
25 should be simple, flexible, and, you know, again,
26 especially if it's limited to research uses, then,

1 you know, I don't think that you need to necessarily
2 limit it to on the premises.

3 MR. AMER: Ms. Moulds.

4 MS. MOULDS: Yeah, I just wanted to
5 speak quickly to the first example of sort of
6 downloaded software not necessarily having a
7 preservation problem.

8 I would argue that sort of somewhere in
9 between what Mr. Lowood says about that and sort
10 of my stance on it, like -- I don't know, it's a
11 little bit difficult to articulate. But there are
12 cases where I want to know that the software that
13 I have downloaded is intact. And one of the places
14 where that sort of falls apart is proprietary
15 compression software.

16 So like the ZIP format, which,
17 thankfully, right now, there are lots of functional
18 options for opening ZIP-formatted software, if
19 you've compressed something into a ZIP.

20 But when you run into older stuff, like
21 the stuff, that Expander kind of file compression
22 and these sort of obsolete file compression
23 algorithms that you may need a proprietary piece
24 of software to open, but maybe these proprietary
25 pieces of software to ZIP and unZIP this software
26 have fallen out of commercial usage.

1 That's a case where, if I have something
2 that's in that format, that's been compressed in
3 that format, and I look at that in that browser
4 download, I don't really know whether the file
5 that's inside that compressed format is intact.
6 And so it's difficult for me to say, as a
7 preservationist, yes, I definitely have a preserved
8 copy of this file, when I can't even open it in terms
9 of being able to uncompress it.

10 MR. AMER: Thank you. So, I'd like to
11 turn now, just in the interest of time, to the issue
12 that was raised about program-dependent materials.

13 So, the proposal would allow
14 circumvention for the purpose of preserving a
15 computer program and/or a computer
16 program-dependent material. And that is defined as
17 -- computer program-dependent material refers to
18 a digital file where accessibility requires a
19 computer program.

20 So I think the first question that I
21 think was raised by Mr. Williams is, you know, why
22 do we need to include that in this definition?

23 I mean, as I understand it, you're not
24 talking about circumventing TPMs on computer
25 program-dependent materials. This is a situation,
26 where, you know, if you have an old word processing

1 program you're also interested in preserving
2 digital files, literary works, other types of works
3 that were written on that format.

4 But why do we need to include that? I
5 mean, that can either be infringing or not. Why do
6 we need to go that far in this exemption, Mx. Albert?

7 MX. ALBERT: Sure. So, the reason we
8 included that is to make sure that this exemption
9 covers use cases involving, like,
10 program-dependent materials, which is actually a
11 significant percentage of the use cases that are
12 important to software preservationists, right?

13 You know, there may be situations in
14 which preserving the software is sort of, like, the
15 activity that one is engaged in. But, as we talked
16 about, I think, in the reply brief with those sort
17 of examples regarding AutoCAD, right, often there
18 are actual software, you know, files that require
19 a particular version of software.

20 And so the reason it's in here is to make
21 clear to folks who might use the exemption that this
22 exemption covers that activity. You know, as we
23 have talked about, there is significant, really
24 significant chilling effects from 1201, but also
25 sort of a conservative bent to many practitioners
26 of software preservation, especially in large

1 institutions.

2 And our goal here was to make very clear
3 that if you are circumventing the TPM for the
4 purposes of preserving the computer-dependent
5 material, not just the computer program, that's
6 still a thing covered by the exemption.

7 MR. AMER: Thank you. But, so, as it's
8 currently defined, it's pretty broad. I mean, and
9 the computer program-dependent material is not
10 limited to, you know, obsolete formats or
11 program-dependent materials that are no longer
12 commercially-available.

13 It sounds like that's kind of the thrust
14 of what you're trying to preserve. I mean, would
15 it be acceptable to you to have a limitation where,
16 you know, if we were to include program-dependent
17 materials, that we had language to the effect of,
18 you know, where those materials are accessible only
19 by inter-operating with the program that you've
20 gotten access to as a result of the exemption.

21 MX. ALBERT: So, just regarding
22 narrowing that, I appreciate that there's some
23 circularity, also, to the definition. You know, we
24 actually thought about that particular issue of
25 whether we thought narrowing it was possible.

26 And I think one of the reasons we leaned

1 against, sort of, requiring, like, oh, you can only
2 circumvent a TPM on software in order to access that
3 computer-dependent material if it requires that
4 particular piece of software is because often the
5 actual process of determining that would be
6 incredibly difficult, right, to determine whether
7 there were alternative pieces of software that might
8 access those kinds of files.

9 And because the reality of software
10 preservation is nobody circumvents things they
11 don't have to, that, like, the process of
12 circumvention, even under the exemption, is
13 sufficiently complicated and, to put it mildly, not
14 fun.

15 So that, you know, the reality is that
16 if there's a commercially-available alternative
17 piece of software that reads those files in the way
18 they were originally intended to be read that's
19 going to be the alternative that the library
20 archive, the cultural heritage institution would
21 pick.

22 MR. CHENEY: Would that also be if the
23 newer versions of that software were
24 backward-compatible or they could read some of that?
25 And where do you run into problems with that?

26 For example, with AutoCAD, you have many

1 versions that have come out. You may have made a
2 design in AutoCAD in '95 or whatever, and then the
3 2004 version only reads parts of it, so you have
4 to go back until you find a version that would read.
5 Does that make sense? And is that something that
6 you do as part of that analysis to figure out which
7 one will open it?

8 MX. ALBERT: Yes, exactly. Part of the
9 reason we wrote that in is because of exactly that
10 problem, which is that even software that is
11 theoretically backwards-compatible doesn't
12 necessarily produce all of the same information as
13 software that -- as the original version of the
14 software that the file was written in.

15 And so the goal is that, if you wanted
16 to access that AutoCAD '95 file, you know, you may,
17 in order to view the file in the way that it was
18 originally intended to be viewed, need to access
19 it in AutoCAD '95. And I see that Ms. Moulds has
20 her placard up, so she can probably tell you more
21 about it than I can.

22 MR. AMER: Please.

23 MS. MOULDS: One example, I can give of
24 this is the GIF standard, like the animated GIF.
25 That is one thing where you can have a GIF that was
26 made in 1999 and a modern browser will still open

1 that GIF, but the way that browsers interpret those
2 GIFs is completely different from browser to
3 browser.

4 And especially around 1999 or 2000,
5 there was a lot of sort of variation in the way that
6 that format was interpreted, because the sort of
7 World Wide Web Consortium standards weren't
8 completely solidified around the file format.

9 So we have cases where we have artists
10 who bring us works that have GIFs in them, and we
11 really end up needing to display them in, you know,
12 some particular browser, because otherwise it'll
13 be like cycling through something super-fast, or
14 it will be way slower than it was intended because
15 they had made it for this particular browser and
16 made it to appear in a particular browser in certain
17 way.

18 So, even though, if you, you know, were
19 to go to something like the PRONOM file type
20 database, it would tell you, yes, absolutely, you
21 can open a GIF in Chrome 60, your current version
22 of Chrome on your computer.

23 Yes, that's true, but it might not
24 interpret it in the way that the artist intended.
25 And to us, as a cultural heritage institution,
26 that's really important.

1 MR. AMER: Thank you. Mr. Williams.

2 MR. WILLIAMS: Thank you. Yes. We
3 were very relieved to see in the reply that the end
4 goal is, apparently, not to circumvent any access
5 control on what's being referred to as dependent
6 materials.

7 We don't support the adoption of the
8 class of works, but that was clearly a significant
9 improvement. But, as you were saying, and I was
10 saying earlier, I do think that essentially means
11 that, if you were inclined to do anything in this
12 area, there's no reason to reference the dependent
13 materials in accessing them.

14 If you were able to define a category
15 of activities that could be described as
16 preservation that you were confident were all
17 non-infringing, and if you were to say that
18 circumventing an access control for the purpose of
19 gaining access solely to a piece of software for
20 the purpose of preservation, those defined
21 activities, there's no reason to reference the
22 dependent materials if there's no circumvention
23 required to get at those materials.

24 So that would be, I think, our position
25 on that.

26 If I could just respond quickly to one

1 thing that was said about 108 reform, if you'll
2 indulge me.

3 You know, Jonathan said, well, if you're
4 going to wait for that to get completed, it could
5 be 20 or 30 years. Well, part of the reason for that
6 might be that Jonathan's clients are expressing
7 opposition to it passing.

8 So, to me, it would be a little perverse
9 to say you should give us an exemption because we're
10 holding up the very process that might get us some
11 relief that is balanced in a way that government
12 can get onboard with.

13 I can't speak on behalf of each of my
14 separate association clients as to their individual
15 positions on every aspect of what's in the
16 discussion document, but they do publically support
17 preservation efforts of a legitimate nature. And
18 I think, for them, it's more about defining what
19 those things are. So I just found that to be a little
20 bit of a misleading argument.

21 MR. AMER: Some cards were up but
22 they've gone down. Let's go to Ms. Meyerson.

23 MS. MEYERSON: I just wanted to follow
24 up with Mx. Albert's comment earlier about the need
25 to clarify for cultural heritage practitioners that
26 this is, if it were granted, an exemption that they

1 could use to preserve software-dependent works. I
2 think this is crucial in representing the
3 organizations that we do.

4 I just want to point to a Mellon-funded
5 report that was written in 2015 by David Rosenthal,
6 who's no longer at Stanford University, but worked
7 for LOCKSS, which is a distributed digital
8 preservation dark archive network, a consortial
9 entity, that it's clear that institutions will not
10 build collections of preserved system images and
11 software at the scale needed to preserve cultural
12 heritage unless the legal basis for doing so is
13 clarified.

14 MR. AMER: Thank you. I wanted to
15 follow up, and, Mr. Band, you can maybe incorporate
16 this into your answer. I mean, I guess one concern
17 is, if we don't limit the program-dependent
18 materials to commercially-unavailable works, you
19 know, would that sort of, you know, suggest that
20 the Copyright Office is kind of making a
21 determination about whether, you know, preserving,
22 copying for preservation purposes, works that are
23 still commercially available in some cases, would
24 be a fair use.

25 I mean, that certainly is far beyond 108,
26 you know, so I think that would be a concern for

1 us, to the extent that it is necessary to address
2 program-dependent materials.

3 MR. BAND: Well, let me first address
4 the necessity to address the program-dependent
5 materials, and then I'll get to your specific
6 question.

7 So it seems that you need to include
8 program-dependent materials, because the reason
9 you're circumventing is not to get access to the
10 software. And so, in every other case, or in every
11 exemption, you're saying you're allowed to -- you
12 have to define a class of works for which you're
13 allowed to circumvent. And if the class of works,
14 you know, were circumventing the production on
15 software, but not for the purpose of getting to that
16 software.

17 So I think it would need to be clarified.
18 And, otherwise, people -- unless it's clear that,
19 you know, it's worded in such a way to make it clear
20 that it's not restricted to just -- you're not trying
21 to just preserve the software -- you're able to get
22 to the Adobe file itself, but then, you know, there
23 will be confusion.

24 So maybe there is some way to draft it.
25 And maybe this is really a drafting issue, but the
26 key is to make sure that -- and whatever you do,

1 that it is unambiguous that, you know, it's the Adobe
2 file, you know, if you're trying to preserve the
3 Adobe file, that you should have a way of doing that
4 even though, you know, you're not interested in
5 preserving the Acrobat, you know, the --

6 MS. SMITH: So are you agreeing with Mr.
7 Amer that there needs to be a reason to preserve
8 the Adobe file?

9 MR. BAND: So, well, first of all, I
10 mean, I think you need to -- it needs to be clear
11 that there's a -- that the software-dependent
12 material, you know, that it's not limited to
13 preserving software, but as well as the stuff that
14 runs on that software, the files that are dependent
15 on that software. And, again, maybe, it's a
16 drafting issue, but --

17 MS. SMITH: Get all files that run on the
18 software? Or files that are no longer
19 commercially/reasonably available or in need of
20 preservation?

21 MR. BAND: Well, I guess, part of the
22 problem is like you don't -- I mean, there's -- I
23 would think that -- then there's so many different
24 kinds of files. So, and it would seem -- I think
25 it would -- you would want to be able to, at least
26 for preservation purposes, you know, do sort of like

1 any preservation that would likely to be a fair use.

2 And so it could very well be that, if
3 it's -- you -- it would -- you would be making a
4 determination of fair use, maybe broader than you
5 want, if you start saying, okay, well, we can do
6 it for this and not for that, and just say, okay,
7 you're able to -- you're -- all we're saying is
8 you're able to do the circumvention and then what
9 you do with that circumvention, if you cross the
10 line and do-- or, again, you know, it -- I imagine
11 no one's going to sue you if -- with the
12 preservation, but if you somehow preserve and then
13 provide access to some file that is somehow,
14 somewhere on the market and in a way that that person
15 feels is not, you know, goes beyond fair use, you
16 know, that the institution will get sued and it'll
17 be litigated -- there'll be -- but you -- but that
18 goes beyond what you need to define here.

19 Here, you just need to say, you can
20 engage in the circumvention, and then it's up to,
21 you know, caveat emptor, or whatever the Latin
22 equivalent would be. I mean, you know, if the
23 institution goes beyond what's prudent, then, you
24 know, it's up -- you know, they get sued.

25 MR. AMER: So, you're saying, you know,
26 you need clarity -- you need to include

1 program-dependent materials because you need
2 clarity where your ultimate goal is to preserve,
3 you know, those dependent materials that need the
4 underlying program in order to run.

5 So if we were to do that, you know, we're
6 sort of -- in order to do that, I think we need to
7 sort of, I think, make a determination that, well,
8 that activity itself, that preservation of the
9 dependent materials is going to be non-infringing.

10 I mean, we can't, you know, sort of --
11 I don't think there's any way for us to say, well,
12 you can do it for purposes of preserving, you know,
13 program-dependent materials if we're not fairly
14 confident that that activity is going to be
15 non-infringing.

16 But how can we have that confidence if
17 the class of those materials includes things that
18 are still commercially-available, in some cases?
19 Or that don't require, maybe, the old, you know,
20 Commodore 64 software to run. Maybe you can run -- I
21 mean, I don't know how far-fetched that example is,
22 but, I mean, if the need is based on the idea that
23 you have to run this underlying operating system
24 in order to run the files, then why can't the class
25 of dependent materials be limited to those kinds
26 of files?

1 MR. BAND: I guess the short answer is
2 I don't know enough about the technology to say,
3 you know, whether it's possible that those files
4 could only run on that format, and whether by wording
5 it that way you could cause some unintended
6 consequences and unreasonably limit the access that
7 you might otherwise have.

8 I mean, part of it is, it could be that
9 this is -- I mean, this is the file that's in your
10 possession, right? I mean, you know, someone
11 donates some files to the museum, that's what they
12 have, they don't have something else.

13 I mean, so -- and that's -- I mean, so,
14 they have to work with what they have. The fact that
15 someone else somewhere might have some other file,
16 or that file in another format, doesn't really help
17 them.

18 But I guess -- and then I'll yield the
19 floor to Mx. Albert. You know, the other point is,
20 again, the framework of the exemption says that,
21 you know, all of these -- you can only make any of
22 these uses to the extent that they're not -- that
23 the ultimate use is non-infringing, right?

24 That's always there. And so to the
25 extent that what you're doing, ultimately, is not
26 -- if it's infringing, then you're infringing.

1 And so you don't -- you are not making
2 a determination by virtue of giving an exemption
3 that allows steps one -- you're not deciding, you
4 know, that step three is necessarily infringing or
5 non-infringing.

6 I mean, it could be what someone
7 ultimately does with it could be infringing, or it
8 could be non-infringing, and if it's infringing then
9 they get sued.

10 MR. AMER: Thank you. Mx. Albert.

11 MX. ALBERT: Yeah, so I want to push back
12 pretty strongly on the idea of focusing on
13 commercial availability for these files. Because
14 I think that maybe it stems from sort of a -- you
15 know, I do think the category is broad, but the ways
16 in which this kind of things usually comes up is
17 these files, the kinds of files we're talking about,
18 are already present in library collections.

19 This is, like, you know, the things like
20 we mentioned in our reply have to do with, like,
21 AutoCAD files that are being used to, like, access
22 historical information about architecture, or,
23 like, data sets that researchers need to replicate.

24 Like, this is not the sort of thing where
25 commercial -- like, I don't -- you know, if we think
26 that we have problems determining commercial

1 availability for the software, that's an entirely
2 separate -- like, I can't imagine even how we would
3 think about it from the program-dependent
4 materials.

5 And in terms of the sort of fair use
6 analysis, I think what I would say is that, you know,
7 my understanding is that, you know, that has to do
8 with the work that the TPM is on. And that, you know,
9 you're looking at that as determining whether the
10 circumvention is appropriate, I think that, you
11 know, like, the ultimate potential purposes that,
12 you know, it might be used for down the line, I don't
13 think that, necessarily, requires the Copyright
14 Office to make a determination about the use of those
15 works.

16 MR. AMER: Thank you. Mr. Troncoso.

17 MR. TRONCOSO: So it seems that, really,
18 what we're talking about for the software-dependent
19 materials is we're talking about materials that are
20 on obsolete formats. I realize that that's a term
21 of art from 108(c) and that in 108(c) it's sort of
22 talking about physical formats.

23 But I think, if you look back to the 2003
24 Copyright Office recommendations, they interpret
25 it as also including any system necessary to render
26 perceptible a work stored in that format.

1 And so I think if we look at this through
2 that frame, and if you make clear in your
3 recommendation this time that this type of activity
4 should be encompassed by the rule, I think using
5 108(c) as the template for how we look at these
6 things can work. And I think it can alleviate,
7 probably, a lot of the concerns on the proponent
8 side, as well. Or, I'm sorry, the opponent side.

9 But I want to throw that out there, like,
10 almost as a discussion point for the group. And you
11 may have questions, too, but --

12 MR. AMER: Oh, yes, Mr. Lowood.

13 MR. LOWOOD: Yeah, this is just an echo
14 of what Mx. Albert just said, from a library
15 perspective. I understand that this discussion is
16 about the red flag being a commercially available
17 dependent materials that circumventing TPM on
18 obsolete software would somehow open up access to.
19 That is a complete non-issue from a library
20 perspective.

21 I don't know of any collection that we
22 have that that would apply to. The reverse is much
23 more likely: that currently available commercial
24 software that renders obsolete software, that
25 happens a lot.

26 But that something would be unlocked,

1 some dependent software would be unlocked that is
2 commercially available by circumventing for the
3 obsolete platform, that's just -- I would just love
4 to hear an example of any kind of collection like
5 that. I just don't know of any.

6 MR. AMER: So I'm going to go to Mr.
7 Williams and then we're going to move on to video
8 games.

9 MR. WILLIAMS: Okay. That was actually
10 going to be my question, is, I see them more as a
11 dependent material than as similar to the other
12 types of software that is being discussed. So I was
13 going to ask, should I talk about video games as
14 the dependent material? So I'll just lead in from
15 there.

16 As I was just saying, you know, really
17 what seems to be at issue is pieces of software that
18 are not entirely functional, but essentially
19 provide the function of getting access to other
20 works, and then getting that access doesn't require
21 some additional act of circumvention.

22 Video games, as software, are also
23 audiovisual works. They're also expressive works
24 and they are more similar to these other dependent
25 materials than they are to those more functional
26 pieces of software that you might need to get to

1 in order to access the dependent materials.

2 So they're distinct, and as we discussed
3 before, they're often rereleased. In terms of
4 research purposes, they're distinct from, you know,
5 an old piece of operating system software because
6 you're not going to get a line around the block to
7 come look at how, you know, an old browser worked.
8 That's likely to be something only scholars are
9 interested in.

10 But if you've got access to a bunch of
11 video games, you could have a pretty high level of
12 demand for that. They're just a distinct set of
13 works.

14 And the other concerns that are raised
15 by them are that sometimes the piece of software
16 that maybe would get you to the video game is the
17 type of firmware on a console that you have
18 repeatedly concluded hacking can cause all kinds
19 of harm.

20 And, as is at issue in Class 8, there's
21 stuff stored on remote servers that might have to
22 be hacked in order to get to it that could cause
23 all kinds of problems and result in infringement
24 of unpublished works.

25 So I just want to emphasize strongly
26 that we feel like video games should not be a part

1 of this class. That's a huge piece of our overall
2 opposition to it. And so if you have any questions
3 about that, I'd be happy to answer them.

4 MR. AMER: Thank you. So, just to
5 clarify, so, would video games be included in the
6 class, or are those just program-dependent
7 materials?

8 MX. ALBERT: It's our position that
9 video games would be included in the class.

10 MR. AMER: Even though, as Mr. Williams
11 said, I mean, they're not just computer programs,
12 they're also audiovisual works, so that expands
13 the --

14 MX. ALBERT: I mean, like, all computer
15 programs? Like, I think Mr. Williams seems to think
16 that there's a much clearer line between, like, the
17 types of audiovisual works that video games are and,
18 like, you know, computer programs that otherwise
19 contain, you know, parts, like interface items that
20 might be expressive, right?

21 Like, I think that -- I don't think that
22 line is as clear as Mr. Williams seems to suggest
23 it is. And I think that, you know, as we said in
24 our reply, all of the same arguments we meet in our
25 original petition cover video games.

26 And I think that the -- I admit, I find

1 it really surprising to consider them in the realm
2 of sort of program-dependent materials. And I saw
3 Mr. Lowood's card go up, so I can let him address
4 that.

5 MR. LOWOOD: The first thing I want to
6 say is I would love to have lines of people waiting
7 to get into the library to use something. We've
8 provided access to games in our media center,
9 probably for at least 15 years now. And the use has
10 been entirely either research use or instructional
11 use, you know, for courses. Nobody's ever come to
12 the library, as far as I know, for any kind of
13 recreational use.

14 Also, I'll mention, because performance
15 was mentioned earlier, performance rights are a
16 whole different thing and we know all about that
17 and nothing about performance rights is suggested
18 by any of this.

19 Games is a class of software, I might
20 mention that I'm also an historian and mostly what
21 I've been writing about the last 15 or 20 years has
22 been the history of video game technology. It's
23 something that I've worked on quite a bit.

24 Just to echo, again, what Mr. Albert
25 said, all forms of software do have audiovisual
26 components to them. There's nothing particularly

1 unique about the fact that games render graphics
2 and music.

3 For example, let's look at educational
4 software as another category, the same sort of
5 thing, e-books, many classes of multimedia software
6 that are not game software render imagery and
7 include audio on them, they're multimedia works.

8 That's very typical for software to be
9 able to do that. One of the great things about
10 software is that it can do so many things. And games
11 do, indeed, take advantage of many of the
12 capabilities of software. One of the reasons
13 they're so -- that games are so difficult to preserve
14 is that they involve all of these different
15 components.

16 You know, the performative aspect of
17 games, the fact that, you know, somebody is
18 operating the game could also be compared to reading
19 a book or listening to music, you know, those are
20 activities that, in our context of the library, are
21 conducted as research activities.

22 People do play games or listen to music
23 or read books for recreation, but they also do it
24 for research. It's something that, you know,
25 certain areas of scholarship or instruction
26 require.

1 So I don't think -- it's very difficult
2 for me to think of any clean distinction between
3 games and software that would hold water that would
4 be a useful distinction that could be clearly
5 applied in this case.

6 MR. AMER: Now, the opponents argue
7 that, you know, video games are already covered by
8 Class 8. And I understand your response to be that
9 Class 8 is limited to server-based games.

10 Could you elaborate sort of on the need
11 -- you know, why -- you know, is it problematic to
12 have sort of overlapping preservation video game
13 exceptions?

14 MX. ALBERT: Sure. So I'm pretty
15 familiar with Class 8. And what I'll say about it
16 is that I think it covers a very narrow slice of
17 the types of TPMs that apply to video games.

18 It covers, like, server-based
19 authentication mechanisms where an outside server
20 is necessary. You know, I think that the record in
21 Class 8, you know, was originally developed in
22 response to that particular sort of prompt and that
23 particular sub-category.

24 And that, you know, a lot of the concerns
25 that the Entertainment Software Association has
26 expressed regarding that category have to do with

1 a very particular aspects of, you know, server
2 authentication, local play, multiplayer play, you
3 know, and now, MMOs.

4 You know, the types of works that we talk
5 about -- that we're talking about in the context
6 of this exemption, you know, we're literally talking
7 about, like, video games that were distributed on
8 floppy discs for, like, the Iomega or the Commodore
9 64, and those sort of mechanisms of copy protection,
10 are akin to all other software.

11 So what we've suggested is that be, you
12 know -- we understand that the Copyright Office has
13 a very particular record and has, like, you know,
14 spent a lot of time determining what the exact
15 contours of an exception that applied to server
16 authentication should be. We think if it's a
17 server-based TPM on a video game, then I think that
18 that exemption should apply.

19 And, in other cases, I would I think that
20 the clearer, you know, overlap that Mr. Lowood was
21 talking about between video games and software
22 generally suggests that, you know, the kinds of
23 preservation uses we're talking about, and the
24 considerations here, would apply.

25 And, you know, we specifically
26 mentioned, I believe, Battle Droids and Dark Side

1 in the reply, but those are the kinds of works that
2 we're looking at, ones that are no longer
3 commercially available, not dependent on a server
4 authentication mechanism.

5 MR. AMER: Thank you. I'm going to go
6 to Mr. Freeman and then Ms. Moulds. And then we'll
7 give Mr. Williams and the opponents a chance to
8 respond about video games.

9 MR. FREEMAN: So another hat that I wear
10 is that I co-facilitate art courses at the
11 University of California, Santa Barbara. And many
12 of our students do, essentially, a lot of conceptual
13 or performance-based art.

14 And sometimes the boundary between
15 something that is a game and something that is an
16 art piece is something that is actually difficult
17 to even draw even -- I mean, it's not just a matter,
18 like, you know, as Mr. Lowood was saying, you know,
19 how can you separate a computer program from a video
20 game, but it's how can you separate a multimedia
21 work from a game, sometimes? How can you
22 separate -- actually, the example that I brought
23 up earlier of my friend's work that got put into
24 the San Francisco Museum of Modern Art catalogue,
25 that's something where he, himself, does not think
26 it's a game, but many of the people who have

1 interacted with it do feel that it is a game. It
2 is one of these performative interactive artworks.

3 And then I would also point out that
4 there's a museum -- I mean, it was mentioned by Mr.
5 Lowood in his collection, but there's a museum, a
6 living computers museum, which, to react to some
7 of the earlier comments, actually, they really are
8 about just letting you understand and experience
9 what computers were like back 20, 30 years ago.

10 And so sometimes, I mean, I don't know
11 if you're going to see lines around the block looking
12 for what a web browser used to be like, but you are
13 going to see people who are just interested in what
14 a word processor was like 30 years ago.

15 And right now they have an exhibit on
16 what video game arcade machines were like in the
17 '80s. So it's kind of an experience that people can
18 no longer have, these are cabinets and games that
19 are no longer commercially available.

20 And that's the kind of thing where, if
21 you were to do that with machines that are available
22 today in another 30 years from now, they would be
23 protected by some kind of TPM that would make being
24 able to repair and maintain them in a museum setting
25 impossible.

26 MS. SMITH: Thank you. Ms. Moulds.

1 MS. MOULDS: Yeah, I just wanted to
2 start by echoing the sentiment that determining
3 legally what constitutes a video game --

4 MS. SMITH: I understand. We're not
5 going to solve that ontological question today.

6 MS. MOULDS: Okay.

7 MS. SMITH: We're taking on a lot, so
8 let's just, you know, move on to what we can do --

9 (Laughter.)

10 (Simultaneous speaking.)

11 MS. MOULDS: Another thing I wanted to
12 say was the --

13 MR. AMER: It's been a long week.

14 (Laughter.)

15 MS. MOULDS: I would consider, in some
16 cases, video games to be dependent software, because
17 we have, even at Rhizome, specifically seen cases
18 where artistic works are game modifications,
19 they're mods.

20 So we had one work called Velvet-Strike.
21 And part of that work was a performative act where
22 there are videos of people playing Counter-Strike
23 in a very particular manner.

24 And then there are other parts of that
25 work that are mods that people were encouraged to
26 download and install themselves into their own

1 copies of Counter-Strike.

2 And so, in this case, I think that,
3 potentially, those mods could still function with
4 commercially available copies of Counter-Strike,
5 and I'm not able to think of a better example of
6 this that, where the software's already obsolete.

7 But, in the near future, that software
8 could become obsolete if Valve were to pull it from
9 Steam, or whatever it is. And I think very much
10 there were pieces of art that are dependent on video
11 games, in terms of access.

12 MR. AMER: So, Mr. Williams, I mean,
13 what about, you know, Mr. Lowood's point about, you
14 know, it being sort of far-fetched that people are
15 going to be lined up around the block to go to a
16 library to play a video game?

17 MR. WILLIAMS: Yeah, I mean, you know,
18 lined up around the block was kind of casual language
19 for a concept that I think still holds true, that
20 there's higher level demand for classic video games
21 than there is for most pieces of classic functional
22 software. And I think the evidence that ESA put in
23 on Class 8 is demonstrative of that.

24 I wanted to clarify something.
25 Because, you know, I'm here representing specific
26 organizations, one of which is ESA, so our interest

1 is focused on video games.

2 I tried to say earlier -- and I'll maybe
3 say it more clearly now -- I'm not saying that
4 there's no other types of software that are
5 expressive and that everything else should be
6 inbounds of an exemption.

7 That's not at all what I'm saying, and
8 I don't think the record's been built to establish
9 that. It's just that the gentlemen to my left are
10 far more appropriate to speak to those issues
11 because of the interests they represent.

12 I'm focused on video games because ESA
13 is one of my clients, and I think that the record
14 on this class with respect to video games is very,
15 very, very, very sparse.

16 There's a couple of examples that are
17 discussed, and I think what is said is that they
18 believe that they would have to circumvent copy
19 protection measures in order to engage in the
20 conduct at issue.

21 A copy control, of course, is not an
22 access control, necessarily. And there's really
23 nothing done to beef up the record and establish,
24 even in those two examples, that access controls
25 had to be circumvented.

26 And with respect to video games, there

1 have been previous records where far more evidence
2 was put into the record, very careful thinking was
3 done. The exemptions were denied, or a specific
4 exemption that we're now re-litigating with Class
5 8, to some degree, was granted.

6 That's the kind of record I think you
7 have to build to justify an exemption. And the fact
8 that their proposal is so broad that it's difficult
9 for them to put evidence in the record on every
10 single piece of what they're trying to get at is
11 not a justification for granting the class.

12 If, ultimately, you decide that you can
13 define a set of activity that you believe to be
14 sufficiently non-infringing and that applies to
15 other types of software that aren't video games,
16 then that's not what I'm here to debate.

17 I think that that would be, based on this
18 record, not the right decision. But I'm here to
19 speak on behalf of the video game industry. And if
20 other pieces of the software sector that also create
21 expressive software don't have as big a problem with
22 it, then, you know, I can't address their, their
23 market issues. But I do think, for video games,
24 there's just not a record here to justify it.

25 MR. AMER: Thank you. Mx. Albert.

26 MX. ALBERT: So, I just want to respond

1 to that, briefly. I think, so, just -- I'll start
2 with a very more specific point, which is about the
3 copy controls section.

4 So, as we said in our reply, you know
5 -- and as Mr. Lowood, actually, I believe said
6 earlier -- that, like, the use of the term copy
7 control can be colloquial, is often colloquial, but,
8 like, they often basically function as access
9 controls. So I just think that that's maybe not the
10 correct characterization.

11 And, I mean, I think, just with regards
12 to the sort of burden, you know, we think that video
13 games are like other forms of software, that's why
14 we chose to write the class the way we did, you know,
15 and to include video game examples, you know, and
16 we did, you know, provide more detail on those video
17 game examples in our reply.

18 And I think that that meets the burden
19 of showing that there are adverse effects of the
20 prohibition on that particular part of the class.
21 So, you know, I understand that the ESA has strong
22 feelings about video games, as do I, but I think
23 that, given -- they provided -- I actually -- no
24 evidence why this exemption -- you know, they sort
25 of refer to the Class 8 exemption, which, you know,
26 the types of evidence that are coming up there are,

1 frankly, entirely different than the kinds of uses
2 that we're talking about here.

3 MR. AMER: Thank you. Mr. Lowood, let's
4 go to you, and then we'll move to the next topic.

5 MR. LOWOOD: Okay, I'll make it quick.
6 I just wanted to say about the popularity of games
7 and such, in the cases where there are older versions
8 of games, and that's what we're talking about here,
9 versus newer versions that have been changed in some
10 way, there's actually a fair amount of research
11 already, both in the museum world and in the
12 preservation world, that contemporary players
13 today, kids today, basically much prefer to play
14 the more recent versions of games. They're not
15 confused, at all. Their interest is, actually
16 quite low in the older historical versions.

17 I could refer you to, like, the Seeing
18 Double exhibit that was at the Guggenheim some years
19 ago that was one example where that was shown. And
20 so that, really, again, there isn't that much
21 confusion between these older versions on obsolete
22 platforms that we're talking about from a
23 preservation point of view, and the sort of
24 contemporary play interests of people today.

25 MR. AMER: Thank you. Moving to a new
26 topic. I wanted to ask about the term, "other

1 cultural heritage institutions," which was a source
2 of some debate.

3 So the class of institutions eligible
4 for this proposed exemption would include -- I may
5 have lost my -- oh, library, archive, museum, or
6 other cultural heritage institution.

7 The concern that was raised by the
8 opponents is that "other cultural heritage
9 institution" is sort of an ambiguous, amorphous
10 term.

11 And to sort of drill down on this, I mean,
12 I wonder, you know, if you had considered, again,
13 plugging the 108 discussion document from our
14 Office, which, in its proposed changes to section
15 108, would include some additional criteria.

16 It would extend the eligibility for 108
17 to include museums, but it had, in addition to the
18 current eligibility requirements, for additional
19 requirements, public service mission, trained
20 staff, lawfully acquired materials, and reasonable
21 digital security measures. I wonder if you had
22 considered including those criteria.

23 Mx. Albert?

24 MX. ALBERT: Sure. I believe we cite
25 the 108 discussion document in our reply saying that
26 we believe the other cultural heritage institutions

1 should share those conditions.

2 And, you know, Ms. Moulds can speak,
3 like, with particularity, why we think that that's
4 important, but I think it has to do with the
5 specifics of how software preservation works, so
6 I think we would be comfortable with those
7 conditions.

8 MR. AMER: Ms. Moulds.

9 MS. MOULDS: Yes, I think that's,
10 generally, accurate. And Rhizome was originally
11 founded as sort of an artist group of artists, sort
12 of discussing, like, a collective, and sort of the
13 idea of preservation and starting an archive came
14 up out of a desire to preserve the works that were
15 being created in this community, specifically.

16 And so we are affiliated with the New
17 Museum, but we haven't always been. We're, you
18 know, independent in a lot of ways, legally, and
19 as an institution, from the New Museum, and so I
20 think, technically, you know, I'm not 100 percent
21 clear, whether adding a museum to the language of
22 108 would actually include us.

23 And I'm also hesitant, because, in my
24 mind, I feel like, even before we were technically
25 part of the New Museum, or affiliated with the New
26 Museum, as a cultural heritage institution that was

1 a collective artist, interested in preserving their
2 own work, as they were threatened with obsolescence
3 that should be something that should be considered
4 within the bounds of this exemption.

5 MS. SMITH: So before you were
6 affiliated with the New Museum, did you fit the other
7 criteria in the 108 discussion document?

8 MS. MOULDS: I can't say, because I
9 didn't work at Rhizome, but I suspect that we would
10 have.

11 MR. AMER: So the first criteria in the
12 108 discussion document talks about public service
13 mission, so would it be acceptable to you to limit
14 this to exclude for-profit institutions?

15 Yes, Mx. Albert.

16 MX. ALBERT: So, I mean, I think that I
17 -- I mean, maybe this is me over-layering this, but
18 I would read public service mission as not
19 necessarily totally aligned with, like, the
20 for-profit/non-profit distinction.

21 And I think that there are some
22 for-profit, some organizations that offer,
23 operate, technically, as for-profits that I believe
24 have a public service mission. So I'd be
25 comfortable with the public service mission
26 language, but I think I wouldn't necessarily want

1 to rest the distinction on, like, you know, how they
2 incorporate it or whether they got tax status
3 through the IRS.

4 MR. AMER: Ms. Moulds.

5 MS. MOULDS: Yes, similarly, I think,
6 when Rhizome did form, as an artist collective, it
7 first incorporated and then, later, had different
8 Articles of Incorporation, as a non-profit.

9 And, I think that, generally, another
10 case that might come into concern here is the idea
11 of galleries, some of which operate for-profits,
12 some of which operate non-for-profit.

13 And, also, even just like smaller
14 collections, or individual collections, we have
15 this issue where, if someone wanted to acquire a
16 work that had a dependency on obsolete
17 software -- so, if a non-profit gallery was showing
18 this artist's work, and then an individual said,
19 "I want to acquire this software," or, "I want to
20 acquire this art, and it has this dependency."

21 And then maybe they acquire that
22 software and the motherboard on the computer dies,
23 or something happens where the obsolete dependency
24 needs to have its CD key re-whatever, reentered,
25 like, are they then -- are their hands tied because
26 they're not -- because this piece has been purchased

1 by an individual collector and it's no longer part
2 of a cultural heritage institution?

3 Are they then unable to circumvent the
4 TPM on this obsolete software format, because it's
5 entered the collection of a private collector, who's
6 not associated with one of these cultural heritage
7 institutions anymore?

8 That's a question that I have. And I
9 think that's something that effects being able to
10 sell, or see these digital works as commercially
11 viable at all.

12 Because, even if all of the software is
13 currently commercially available, it's difficult
14 to convince a collector that all of these
15 dependencies will exist in the future, even if they
16 have access to the artist's files indefinitely.

17 MR. AMER: Mx. Albert.

18 MX. ALBERT: Yes, Ms. Meyerson
19 suggested I add, which I think is relevant. So,
20 often there are -- so, organizations, like, design
21 firms, or architectural firms that have archives
22 that may meet some of, most of these criteria, but
23 don't necessarily -- aren't necessarily operating
24 as non-profits.

25 MS. SMITH: Do you have examples of that,
26 in the record, where they need to circumvent and

1 they don't own the copyrighted work?

2 MX. ALBERT: I don't have examples of
3 that, off the top of my head. But, Ms. Meyerson.

4 MS. MEYERSON: Ms. Smith, can you
5 clarify that question? I don't think I heard what
6 you said.

7 MS. SMITH: I'm trying to figure out
8 where you've demonstrated the need for that, of
9 design firms, or architectural firms, where they
10 need to circumvent something, to access a work that
11 maybe they don't, and when there's an issue that
12 they would not have had the permissions to engage
13 in the circumvention.

14 MS. MEYERSON: Oh. I can actually answer
15 that question. On Page 4 of the reply, we cite Aliza
16 Leventhal, who's a librarian and archivist at a
17 design firm, who talked about that specific issues
18 related to AutoCAD and file preservation.

19 MR. AMER: Thank you.

20 MS. SMITH: Yeah, so she works at a
21 private design firm, is that right? Like, I mean,
22 how is that a cultural heritage institution, a
23 library, or museum, if there's nothing open to the
24 public? That just seems like a private
25 institution.

26 MS. MEYERSON: That's true, their

1 archives are not open to the public. But these
2 members of our community do participate in all of
3 the same digital curation/preservation activities,
4 which is why I raised that. So, in terms of
5 accessing their own internal work -- but, yes,
6 you're right, it does not meet that criteria.

7 MR. AMER: So would you be comfortable
8 incorporating that criteria, those criteria into
9 the exemption language?

10 MS. MEYERSON: Yes.

11 MR. AMER: I just would like to invite
12 the opponents, you know, to address this issue, you
13 know, because you had raised concerns about this
14 other cultural heritage institutions language,
15 would the incorporation of the 108 study factors
16 do anything to allay your concerns?

17 MR. TRONCOSO: Yes, definitely, we'd be
18 comfortable.

19 MR. MOHR: Yes, that would improve
20 things.

21 MR. AMER: Okay. Thank you.

22 MS. SMITH: Is your placard up? Okay.
23 All right, I think we are on a roll and we're going
24 to end this session also 13 minutes early. So we
25 had scheduled it to 4:30 p.m., audience
26 participation.

1 And if it's something that you may be
2 interested in, then if you could please come up,
3 we may actually be able to, I think, begin that a
4 little bit earlier than 4:30 p.m. so we can all get
5 out of here a little bit earlier, too. But, thank
6 you very much.

7 MR. AMER: Thank you.

8 (Whereupon, the above-entitled matter
9 went off the record at 3:47 p.m. and resumed at 4:11
10 p.m.)

11 MS. SMITH: All right, hello. So this
12 is what we've termed the audience participation
13 segment.

14 MR. AMER: All right.

15 MS. SMITH: We're happy to have you and
16 we're going to have another short session tomorrow.
17 And the goal is, really, for the members of the
18 audience, or people, who wanted to participate and
19 weren't able to participate in a panel that's being
20 held on an opposite coast, just say a brief word
21 as far as, you know, again, about what's already
22 in the record, what was on the panel, so if you would,
23 if you could, please, start by just, you know,
24 stating your name and your affiliation.

25 MR. BUTLER: Of course. I'm Brandon
26 Butler and I'm the Director of Information Policy

1 at the University of Virginia Library.

2 MS. SMITH: Okay. And I understand you
3 are here to talk, the comments you wanted to offer
4 are in connection with Class 9, the panelists just
5 concluded about software preservation.

6 MR. BUTLER: Yes, that's right. And so,
7 in particular, from my sort of context as a lawyer
8 who works in a library, I just wanted to make sure
9 that it was clear, a couple of things about the way
10 libraries use 108 and fair use together.

11 So one thing I wanted to point out was
12 just, I -- so, Mr. Williams mentioned, you know,
13 we shouldn't go beyond the realm, or, or we
14 shouldn't, we shouldn't amend 108, or go beyond 108,
15 you know, there's this obsolete formats requirement
16 and that should be enough.

17 And I just wanted to make sure, and I
18 know you all, you know, you print, you print the
19 authoritative version of this stuff, so you have
20 access to the text, but, you know, in 108(c), there
21 are multiple triggering conditions that permit
22 libraries to do preservation, and obsolete formats
23 is one of those.

24 But we have damaged, deteriorated,
25 lost, and stolen, and there is, in, in library world,
26 you know, one of the difficulties with 108 is

1 figuring out, you know, how do you handle the fact
2 that you're not allowed to make a preservation copy
3 until something is stolen, right? I mean, that sort
4 of seems absurd. It's gone, how can I copy it?

5 Or it's deteriorating, and in a digital
6 context that's particularly disastrous, if you were
7 to wait for your digital copy to deteriorate,
8 especially with digital media, it may not be
9 readable at all. You'll put the disc in and it'll
10 just sort of make a nasty buzzing sound and come
11 back out.

12 So I think it's the general feeling, in
13 the library world, among the folks that I talk to,
14 is that we read this provision to permit us to take
15 action with an especially-unique and rare copies
16 that, that we don't have to wait for something to
17 become so damaged and deteriorated, you know, we
18 can foresee that a format is of the kind that it's
19 fragile, for example, even if that format isn't
20 obsolete.

21 So the Library of Congress has done
22 studies on optical media, for example, that show,
23 you know, that media is much more fragile than we
24 thought, so CDs may not be, you know, may not be
25 obsolete, yet, but they're quite more fragile than
26 we thought, when we first adopted that format in

1 wide distribution. So --

2 MS. SMITH: So it sounds like you are
3 saying for the relevance to the section 1201
4 exemption at issue that 108(c) may prove useful in
5 examining, whether there's non-infringing bases?

6 MR. BUTLER: Exactly right.

7 MS. SMITH: Okay.

8 MR. BUTLER: So, other than
9 obsolescence, there are other things in 108(c) that
10 will be useful to you, as you consider, whether
11 there's a non-infringing activity here that you
12 should permit under the rulemaking.

13 And then, relatedly, I wanted to just
14 mention one case and one bit of legislative history.
15 So the case is *Sundeman v. Seajays*, and that's a
16 fair use case where there was a unique copy of a
17 manuscript that was in the custody of the Seajays
18 Society and a scholar came and wanted to consult
19 that manuscript.

20 And also, a buyer came, or a collector,
21 the University of Florida, wanted to also consult
22 the manuscript. And Seajays made copies for each
23 of those people to look at, for those, for that
24 scholarly purpose and for that, sort of, you know,
25 library collection building, you know, decision
26 making purpose.

1 And the court said both of those were
2 fair use, because the original copy was so rare and
3 fragile, right, you can't give that over to someone
4 and let them walk off with it, they might, you know,
5 it might be harmed and, once it's harmed, it's gone.

6 And again that, that fair use logic, I
7 think, is a big part of what, so I've been working
8 for the last year and change with the software
9 preservation community to help them think through
10 all kinds of things, and I think a lot of them are
11 doing these format migrations, because they are in,
12 precisely that same position of worrying that, we
13 have one copy.

14 We don't know how many other copies there
15 are and we need to get this off of this, you know,
16 media. The media may not be obsolete, the media may
17 not be broken, yet, may not be deteriorated yet,
18 but we need to get it off of there, or, if it's gone,
19 it's gone.

20 And I think that's something that the
21 court blessed. The legislative history of section
22 107, also includes a reference to nitrate film and
23 preservation as, you know, if anything is fair use,
24 this is fair use.

25 And so Mr. Williams mentioned that, we
26 don't know, whether preservation is fair use and,

1 I think, there's actually a much deeper pedigree
2 for preservation, as fair use than, perhaps, many
3 other things. And that's all, I wanted to make sure
4 that was in the record.

5 MS. SMITH: Okay. Thank you. Would
6 you say that case that you're discussing, it almost
7 sounded like you did, if not fitting strictly within
8 the contours of 108 and maybe you too will be excited
9 to continue discussing the discussion document,
10 but --

11 MR. BUTLER: Always excited.

12 MS. SMITH: Always.

13 (Laughter.)

14 MS. SMITH: Because I think we can get
15 it done, you know, much faster than 20, or 30 years.
16 But the concept of preservation, plus replacement
17 copy, you know, or you use a lending copy versus
18 preservation copy, it seems like that is, sort of,
19 fitting in how you described that case, would you
20 agree?

21 MR. BUTLER: Yes. Yes, exactly.
22 Exactly. Access copies, lending copies, exactly.

23 MS. SMITH: Great.

24 MS. SLOAN: And, do you know with that
25 particular case, what the third-parties had to do
26 with their respective copies, like, after they

1 decided, whether or not to purchase it, or did they
2 have to destroy it, was that part of the analysis
3 that the court considered?

4 MR. BUTLER: So I'm not sure what the
5 University of Florida did. I think the scholar
6 might have kept her copy and I don't -- and then,
7 also, part of the case, the scholar created a
8 presentation and a piece of scholarship and both
9 of those included excerpts and the court said all
10 of that was, was fair use. That's right.

11 MS. SLOAN: All right.

12 MR. BUTLER: All right.

13 MS. SMITH: Well, thank you. We really
14 appreciate your perspective and contribution and
15 staying until the end of the day, to offer it, so
16 thanks, very much.

17 MR. BUTLER: Thank you, all, and you all
18 for staying.

19 (Whereupon, the above-entitled matter
20 went off the record at 4:17 p.m.)

21