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IN THE MATTER OF: )  
 )  
UNITED STATES COPYRIGHT OFFICE )  
SECTION 1201 PUBLIC HEARINGS )

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## HERITAGE REPORTING CORPORATION

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IN THE MATTER OF:                    )  
  )  
UNITED STATES COPYRIGHT OFFICE )  
SECTION 1201 PUBLIC HEARINGS    )

Remote Roundtable  
Suite 206  
Heritage Reporting  
Corporation  
1220 L Street, N.W.  
Washington, D.C.

Wednesday,  
April 7, 2021

The parties met remotely, pursuant to notice,  
at 10:30 a.m.

PARTICIPANTS:

## Government Representatives:

REGAN SMITH, General Counsel of the U.S.  
Copyright Office  
KEVIN AMER, U.S. Copyright Office  
NICHOLAS BARTELT, U.S. Copyright Office  
STACY CHENEY, National Telecommunications and  
Information Administration  
MARK GRAY, U.S. Copyright Office  
JORDANA RUBEL, U.S. Copyright Office  
DAVID WELKOWITZ, U.S. Copyright Office  
LUIS ZAMBRANO RAMOS, National Telecommunications  
and Information Administration

## Panelists:

ZIYAD ALGHAMDI, Samuelson Law, Technology & Public  
Policy Clinic a University of California,  
Berkeley  
TAIT ANDERSON, Samuelson Law, Technology & Public  
Policy Clinic a University of California,  
Berkeley  
MICHAEL AYERS, AACS LA & DVD CCA  
DAVID BAMMAN, University of California, Berkeley

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## Panelists: (Cont'd)

JACQUELINE C. CHARLESWORTH, Association of  
American Publishers  
PAMELA CHESTEK, Software Freedom Conservancy  
CHRIS HOFFMAN, University of California, Berkeley  
CHRIS MOHR, Software and Information Industry  
Association  
ERIN MOORE, Samuelson Law, Technology & Public  
Policy Clinic a University of California,  
Berkeley, on behalf of Authors Alliance  
ERIC STALLMAN, Samuelson Law, Technology & Public  
Policy Clinic a University of California,  
Berkeley  
DAVID J. TAYLOR, DVD CCA  
HENRY ALEXANDER WERMER-COLAN, Temple University  
J. MATTHEW WILLIAMS, Joint Creators and  
Copyright Owners

P R O C E E D I N G S

(10:30 a.m.)

1  
2  
3 MS. SMITH: Good morning. If panelists  
4 could please turn their video on, we are about to  
5 start? Well, great, I think we are all here.  
6 Welcome, everyone. I'm Regan Smith, General Counsel  
7 of the United States Copyright Office. We are on day  
8 three of our hearings for the § 1201 rulemaking. This  
9 morning's session will concern exemption number 16,  
10 which concerns a request with relationship to  
11 investigation of the copyright license status.

12 I think many people heard this before but  
13 not everyone, so just to quickly go through the rules  
14 of the road, please assume all of the government-side  
15 participants have read your submissions. Thank you so  
16 much for that. We're going to be asking some  
17 questions that try to clarify or hone in on areas of  
18 dispute in the record or perhaps flesh the record out.  
19 The roundtables will be moderated by Copyright Office  
20 attorneys and Mr. Cheney of NTIA. If you can try to  
21 use the "Raise Hand" button on Zoom, we realize that's  
22 a little bit easier, but you can also wave if for some  
23 reason that is not working for you.

24 And we have two sessions today, so for  
25 anyone watching in the audience, you can just stay on

1 the link, and after an hour break, we will start the  
2 afternoon session. With anyone having technical  
3 difficulties, just reach out in the chat or the Q&A,  
4 and someone from the Copyright Office will be able to  
5 assist you. One more thing, the chat should be  
6 circulating a link to a sign-up for those who might be  
7 interested in participating tomorrow. Our last  
8 session is called an audience participation session  
9 where people who are not panelists may participate and  
10 share a few minutes of remarks as to any of the  
11 proposed exemptions.

12 So I think, to begin, we will introduce  
13 ourselves on the Government side, so if we could  
14 please go Mr. Amer, Mr. Bartelt, and Mr. Gray?

15 MR. AMER: Good morning. Kevin Amer, Deputy  
16 General Counsel.

17 MR. BARTELT: Good morning. Nick Bartelt,  
18 Attorney-Advisor.

19 MR. GRAY: Good morning. Mark Gray, also  
20 Attorney-Advisor.

21 MS. SMITH: Mr. Cheney, could you please  
22 introduce yourself?

23 MR. CHENEY: Thank you, and good morning.  
24 Stacy Cheney, Office of Chief Counsel at NTIA.

25 MS. SMITH: Ms. Chestek, could you please

1 introduce yourself and your affiliation? Oh, you know  
2 what, I think you're muted.

3 MS. CHESTEK: My apologies. My name is  
4 Pamela Chestek of Chestek Legal, and I'm here  
5 representing the Software Freedom Conservancy.

6 MS. SMITH: Thank you. Mr. Ayers?

7 MR. AYERS: Good morning. Thank you. I'm  
8 Michael Ayers. I'm here today representing Advanced  
9 Access Content System Licensing Administrator, LLC,  
10 more commonly known as AACS LA, and DVD Copy Control  
11 Association, usually referred to as DVD CCA.

12 MS. SMITH: Thank you. And, Mr. Williams,  
13 could you introduce yourself for the record?

14 MR. WILLIAMS: Yeah, good morning. Matthew  
15 Williams from Mitchell, Silberberg & Knupp. I'm  
16 representing the Joint Creators and Copyright Owners.

17 MS. SMITH: Okay. So thank you. I think I  
18 should remind myself as well as everyone else to mute  
19 yourself if you're not talking and try to speak  
20 clearly and slowly for the benefit of the court  
21 reporter since this will be both transcribed as well  
22 as live-streamed with a recording made online.

23 So I think this morning's session, we're  
24 really looking forward to it because we saw the  
25 written comments really serve a purpose of narrowing

1 in on areas of potential disputes, so in the reply  
2 comments, there were a number of refinements, I think,  
3 advanced by the Software Freedom Conservatory, so I  
4 just wanted to sort of outline those.

5 So there had been an initial request that  
6 this exemption also extend to any activities making  
7 lawful use of a computer program, which I think is no  
8 longer on the table, and you have signaled a  
9 willingness to accommodate limitations suggested by  
10 those comments in opposition to clarify that the  
11 circumvention should be solely for the purpose of  
12 investigating this potentially infringing activity,  
13 finding an eligible user to someone who has standing  
14 to bring a breach of license claim, and prohibiting  
15 circumvention that would constitute a violation of an  
16 applicable law.

17 And I'm wondering maybe to start with Mr.  
18 Williams and Mr. Ayers, what are the issues that you  
19 see as still on the table to be fleshed out? Are  
20 there still -- as far as those concessions, do they  
21 resolve your concerns with respect to those issues  
22 advanced in your written comments? So, Mr. Williams?

23 MR. WILLIAMS: Yes, thank you. We  
24 appreciate the effort by the petitioner to narrow it,  
25 I think dropping what they referred to as section (b)

1 of the proposal was a step in the right direction. I  
2 do still have some concerns about the language they've  
3 put forward, and, of course, we laid out in our  
4 written comments what we believe to be alternatives  
5 that might obviate the need for any exemption.

6 Some of the specifics related to the new  
7 language they put in that I do have some concerns  
8 about is currently they did add that the device or  
9 machine on which the program is operating must be  
10 lawfully acquired, which is helpful.

11 Depending on the scope of what they're  
12 asking for, which I'm not entirely clear on, I think  
13 that "lawfully acquired" language should also relate  
14 to the computer programs, not just to the device or  
15 machine such that, you know, the copy they're using to  
16 investigate is not an infringing copy or an unlawfully  
17 obtained copy, and so that would just be a matter of  
18 either repeating the "lawfully acquired" language or  
19 putting it in a different location in the drafting.

20 I think there are other issues, such as  
21 right now it does say that they would not violate any  
22 other applicable law. We had said that, consistent  
23 with other exemptions that have been granted in the  
24 past, it should also say that it doesn't facilitate  
25 infringement. I think "does not violate any other



1 applicable law" may encompass that, but given that the  
2 other exemptions in the past have said both things, I  
3 think that would be an improvement. And, again, we're  
4 not endorsing granting any exemption, but these are  
5 just issues with the language that I still have.

6 One thing that we had suggested is something  
7 along the lines of the 117 language that requires  
8 restoring the device or the machine or the program to  
9 its normal operational functionality after the  
10 circumvention is engaged in. I think that that could  
11 be helpful. There could be a requirement that the  
12 program that's accessed through circumvention be  
13 deleted, especially if no infringement is identified  
14 such that, you know, there wouldn't be unintended  
15 consequences.

16 And then I also think that there should be,  
17 you know, a particularized reason for the  
18 circumvention. They say that they get a lot of  
19 specific complaints about certain devices or programs,  
20 although a lot of those devices or programs are not  
21 identified, if any, in the comments, and so I don't  
22 think, if you are inclined to grant an exemption, it  
23 should be open-ended to say you can circumvent just  
24 anything out there to try to decide whether there's  
25 infringement. There should be a reason, you know, and

1 I assume when they get complaints there's a reason --  
2 someone's observed how something functions and  
3 believes that it must infringe their own program,  
4 their own open-source program, and, therefore, they  
5 have to investigate, and the way it's phrased, I don't  
6 think that's included. So I don't think they should  
7 just be allowed to circumvent everything under the  
8 sun. I think it should be circumscribed to where they  
9 have a particularized reason.

10 And then, finally, you know, I do think some  
11 of the alternatives we laid out obviate the need for  
12 an exemption, but if you don't agree with that, I  
13 think they should be incorporated to some degree into  
14 any exemption, so there should be steps taken to try  
15 to avoid engaging in circumvention before that's done.  
16 So if they haven't reached out, for example, to the  
17 device manufacturer and said we have concerns here and  
18 then been denied access so that they can review the  
19 program in an agreed-upon setting, then I don't think  
20 there should be an exemption unless they've explored  
21 those alternatives.

22 MS. SMITH: Okay. Thank you. I think next  
23 we'll hear from Mr. Ayers and then Ms. Chestek, and,  
24 again, I think that what we're trying to do is figure  
25 out for these areas where the proposal's been refined

1 if there's some agreement on that, and then we will  
2 also go through some of the outstanding issues or the  
3 broader sense whether there is -- you've raised a  
4 question whether there's a need for the exemption.

5 So, Mr. Ayers?

6 MR. AYERS: Good morning. Thank you. So,  
7 to just build a little bit on Mr. Williams' comments,  
8 I mean, we do have very serious concerns about the  
9 very nature of the proposed exemption itself even with  
10 the proposed refinements, which we certainly do  
11 appreciate and certainly does demonstrate a  
12 willingness to work together, which is absolutely I  
13 agree the idea that we're trying to promote in this  
14 process.

15 I would reiterate that the proposal does not  
16 include anything that requires -- that has any sort of  
17 standard for what level of knowledge or suspicion or  
18 reasonable basis there is for believing that there is  
19 infringement involved and that there is no requirement  
20 to attempt to contact the firmware or software owner,  
21 who might be able to get a restraining order to  
22 attempt to -- or other protection against depending on  
23 the nature of the software that's involved and just  
24 noting that there are rules of civil procedure that do  
25 address how evidence is to be made available to the

1 parties in a contract dispute, in a legal dispute, and  
2 this proposal, even in its refined form, essentially  
3 sidesteps that.

4 MS. SMITH: Thank you. So, Ms. Chestek,  
5 would you like to respond? And I think in particular  
6 I saw three -- I'll group it into three buckets of  
7 suggestions from commenters for further refinement.  
8 I'm wondering if you're open to, one, is confirming  
9 that the program itself should be lawfully acquired,  
10 which might, I guess, Mr. Williams suggested, be just  
11 a drafting issue but not sure about that. Secondly,  
12 whether there's agreement that the software, once  
13 accessed, should not be maintained in a way that would  
14 facilitate infringement, and that would kind of lump  
15 in with whether 117 is helpful, whether there should  
16 be a requirement to delete uses when not necessary.  
17 That seems to go to the same issue. And third, you  
18 know, whether there's some general, you know,  
19 requirement to build in as to whether there's a  
20 particularized reason to engage in circumvention,  
21 including whether that should extend to -- you have  
22 tried to affirmatively contact or reach out.

23 MS. CHESTEK: Hi, yes. Thank you very much.  
24 I appreciate everybody's comments, and I'm happy to  
25 address them.

1           With respect to whether the program should  
2 be lawfully acquired, there certainly is no intention  
3 to investigate, no interest in investigating  
4 infringement of software that is itself infringing on  
5 someone else's rights, so I do suspect that that's  
6 something that we can just adjust. In drafting, I  
7 will say that, you know, our framework, as I'm sure  
8 you've all experienced, you know, you write these with  
9 a certain framework in mind and then, you know, that  
10 gets refined, so we were certainly thinking more about  
11 the embedded situation and hardware devices where, you  
12 know, was a situation those would have lawfully  
13 acquired software on them, so I think that that's -- I  
14 agree, I think that's probably just a drafting issue  
15 and certainly no intention to investigate other  
16 software.

17           In terms of whether or not to destroy the --  
18 well, let me just back up and say I sort of heard two  
19 conflicting things from Mr. Williams. One was to say  
20 that the device should be restored to its original  
21 condition and then also that the software should be  
22 destroyed. So those are inconsistent. I will say,  
23 with respect to returning the device to its original  
24 condition, this is not a repair exemption. This is  
25 not -- there is no need -- you know, this is not

1 designed to fix the device and return it to a  
2 condition where it's still operable, and, in fact, as  
3 we explained in our brief, sometimes the device has to  
4 be destroyed in order to investigate the infringement.

5 So returning it to its original form is not  
6 within the scope of the exemption, not required by the  
7 exemption, and not even possible. Whether or not to  
8 destroy proprietary software, I think that that's a  
9 trickier question because let's take, for example, a  
10 device, say there is a set-top box that has the Linux  
11 operating system on it, which is under an open-source  
12 license and which, you know, may be the software of  
13 interest in the investigation and on top of that  
14 operating system are some proprietary applications.

15 Well, I don't see anything inconsistent or  
16 improper in accessing the Linux operating system,  
17 perhaps modifying it to fix a bug or something,  
18 reinstalling it, and then reinstalling those  
19 proprietary software programs. You had a lawful copy  
20 of it. You can restore that to its original operating  
21 condition. So I don't see that as really a necessary  
22 or appropriate request for this rulemaking. And I  
23 apologize because I didn't get a chance to capture  
24 your third question.

25 MS. SMITH: Sure. I will repeat the third

1 question and then maybe go back up to what you just  
2 said, so I wonder if iterating off what you said  
3 there's other exemptions that the Copyright Office has  
4 adopted that include a requirement to sort of maintain  
5 the material that has been accessed after  
6 circumvention in a safe manner or use protective  
7 measures, and I wonder if that's getting to the thrust  
8 of what Mr. Williams was concerned about whether it  
9 doesn't necessarily need to mean applying TPM itself,  
10 but if it's not useful to say restore it into the  
11 manner in which it was originally accessed, some other  
12 way of limiting access or providing a similar sense of  
13 security to what, I guess, the TPM would have been  
14 intended or presumably intended to be functioning when  
15 it was applied.

16 And then the third question was, did you  
17 want to speak to the idea that you should have a  
18 particularized reason to circumvent in order to probe  
19 for the license status investigation, including  
20 whether there should be, you know, a suggestion that  
21 you should try to affirmatively make contact and see  
22 if circumvention is necessary.

23 MS. CHESTEK: Yes. Yes. So I'm not aware  
24 of any other exemptions. Well, first off, this is a  
25 very unique exemption, I believe, because what it does

1 is it -- what is happening here is that the DMCA is  
2 protecting the infringer at the expense of the  
3 copyright owner, and that is sort of what we are  
4 trying to do, so I think that that framework helps  
5 things. So are there other exemptions that are  
6 similar that we could draw on? I don't think so  
7 because I think this is such an unusual situation.

8 Another aspect that I tried to make clear in  
9 the brief is this is only about the circumvention  
10 itself, and it does happen that proprietary software  
11 is accessed in the context of doing an investigation,  
12 but it would be unlawful. It would be a copyright  
13 infringement for the investigator to do anything with  
14 that software outside of the investigation  
15 environment. They can't redistribute it. That would  
16 be a copyright infringement. And we have no qualms  
17 about saying that would be a copyright infringement to  
18 do that.

19 So this really is -- so I'm a little bit  
20 sort of puzzled by the thought that this is not a  
21 narrow exception because it is solely for the purpose  
22 of investigating a potential copyright infringement  
23 performed by or at the direction of a party that has  
24 standing to bring a breach of license claim. I mean,  
25 that's a pretty narrow description of who is entitled



1 to the exercise of this exemption. What I'm sort of  
2 hearing is: "we don't believe you that that's what's  
3 going on." And I don't -- you know, I don't -- I  
4 haven't -- I have to say I haven't examined  
5 all the other exemptions, but I certainly think that  
6 good faith is implied. If the exemption -- if the  
7 investigation was undertaken for a reason that did not  
8 fit this exemption, then, of course, the exemption  
9 wouldn't apply and there would be liability under the  
10 DMCA. So I do think that the restriction is really  
11 quite narrowly written for a very specific situation,  
12 the investigation of infringement.

13 And as to the suggestion that the  
14 investigating entity, the copyright owners first  
15 should have a duty to go to the hardware manufacturers  
16 or the software manufacturers to ask for a copy, first  
17 off, I don't -- I would love to know whether other  
18 panelists who work in this industry will typically go  
19 to an infringer and say, "gosh, you know, can you give  
20 us the proof of your infringement? That would be  
21 really useful to us." So I don't think that that's  
22 feasible, and I will tell you also having worked on a  
23 number of these cases that sometimes a bigger stick is  
24 needed than going to someone and saying, "gee, we  
25 think that there's something wrong with your

1 software." If you want, there are a couple --

2 MS. SMITH: Thank you, and --

3 MS. CHESTEK: I was going to say there are a  
4 couple of --

5 MS. SMITH: Oh, go ahead.

6 MS. CHESTEK: If I could just look at my  
7 notes and see if there were a couple other issues. I  
8 think, yes, and there's only one other point, which is  
9 the rules of civil procedure, and that, of course, as  
10 we mentioned there, you know, we should not have to go  
11 to court to actually file a lawsuit in order to make a  
12 determination of whether a device is infringing. I  
13 don't think that anybody takes that position that, you  
14 know, you must run to court every time there's an  
15 infringement, and, you know, that is your first avenue  
16 for relief and not other avenues for relief. So I  
17 think I've addressed everybody's points with that.

18 MS. SMITH: Okay. Thank you, and I wanted  
19 to pull out one thing you said, is that these  
20 investigations are undertaken in good faith, and  
21 that's a phrase we've used in other exemptions too to  
22 sort of clarify that. So I think Mr. Cheney wanted to  
23 ask a question.

24 MR. CHENEY: Yes, thank you, Ms. Smith, and  
25 thank you for the explanation and the conversation so

1 far. I think this has been helpful. I think, for me,  
2 and it might be helpful in this whole conversation, to  
3 give us a little bit more information about this  
4 investigative environment and sort of how this  
5 happens. There was a question about sort of a trigger  
6 event, and then how do you acquire the device? How  
7 does that investigator acquire that device? Do they  
8 go out, purchase the toy, for example? How does that  
9 happen and then what kind of -- describe a little bit  
10 more about that environment, because I think that  
11 might be helpful in a couple of those questions about  
12 protecting the software that may be exposed after the  
13 decryption or the breaking of the TPM. If you could  
14 describe that just a little bit more, I think that  
15 might be helpful both on the ownership question and on  
16 what happens to the device after.

17 MS. CHESTEK: Sure. So I will say without  
18 sort of limiting what may happen in the future, I will  
19 say that at the moment that the infringement actually  
20 is so commonplace that there are at least -- there are  
21 two entities who filed briefs, Software Freedom  
22 Conservancy and the Free Software Foundation, both of  
23 whom tell you that they take reports, so there are  
24 people out there in the world who purchase these  
25 devices, whether it's television sets or doorbell

1 cameras or baby monitors or whatever it might be, and  
2 discover that those devices do not appear to be  
3 complying with the open-source licenses, with the  
4 licenses on the software that they believe is on these  
5 devices.

6           And I'll be quite frank, these are fairly  
7 sophisticated users of these devices to be able to  
8 recognize that situation. So both of these entities,  
9 the Free Software Foundation said in its brief that it  
10 receives about 186 complaints a year. I can tell you  
11 the Conservancy averages around 100 a year, so we have  
12 somewhere between 186 and, say, 286 complaints per  
13 year where people have just come to these  
14 organizations to say: "here is a device that I believe  
15 is not complying with the open-source licenses."

16           That doesn't preclude anyone, any of these  
17 agencies from also going out themselves and they may,  
18 in fact, go out and also purchase the device in order  
19 to confirm the facts that were given to them. So the  
20 investigation, you know, is done by people associated  
21 with these organizations to take various steps to look  
22 at the device, evaluate the software and various tools  
23 they have that I can't disclose, various ways to get a  
24 good sense, and they convey their very, very  
25 sophisticated computer experts who can look at this

1 and tell why they believe that these devices have  
2 open-source software on them.

3 And we can tell from the documentation -- we  
4 can tell from looking at the device itself and the  
5 documentation on the device that they are not  
6 complying with those licenses because all of these  
7 licenses have a documentation requirement that you can  
8 look in the instruction manual, and it will say this  
9 is the open-source software on this device, and so, if  
10 there's no list at all and a reasonable investigation  
11 shows that there is open-source software, then we know  
12 that there is a license compliance problem. Has that  
13 answered your question?

14 MR. CHENEY: I think so. So there are  
15 basically two triggers that you're pointing to. One  
16 is somebody comes to you with a complaint, so that's  
17 at least one trigger. The other trigger would be that  
18 there's some indication in something you're reading or  
19 otherwise, the investigators then go out and purchase  
20 the equipment or the device to then do a further  
21 investigation on the device. Is that the two triggers  
22 that sort of start your process in the investigation?  
23 Is that a good summary of what you said?

24 MS. CHESTEK: I think so. I mean, I would  
25 say -- so they're not -- yes, the investigation can

1 arise in two separate ways, someone reports it or for  
2 some reason the investigators purchase a device. They  
3 aren't going to be motivated to purchase -- they  
4 generally aren't going to be motivated to purchase a  
5 device unless there's been a complaint about it. In  
6 other words, you know, they're not going into Best Buy  
7 and searching, you know, breaking open all the boxes  
8 to see whether or not there's an open-source license  
9 disclosure, you know, on all of the instruction  
10 manuals. That's not -- they generally are only going  
11 to purchase a device which is already suspected of  
12 being out of compliance with the open-source license.

13 MR. CHENEY: So would it be helpful perhaps  
14 to put in the language of the exemption in your mind  
15 to say -- to sort of signal what this triggering event  
16 is, which is primarily that somebody is filing a  
17 complaint, so it could be that the reasonable belief  
18 that was talked about earlier is triggered by a  
19 complaint received by your organizations. Would that  
20 be helpful?

21 MS. CHESTEK: No, no. No, I don't think so  
22 because I've given you a typical case. I haven't  
23 given you every single case. So, for example, it was  
24 fairly public that Tesla was out of compliance with  
25 its open-source licenses for its vehicles, and there

1 was a lot of publicity about that so that an  
2 investigation and work on that problem would not  
3 necessarily arise because any individual came and  
4 complained about it. It became known, it became  
5 generally known that Tesla was out of compliance, and  
6 that may be true, so there may be one -- so I'll give  
7 you another example, is there has been recent focus on  
8 baby monitors and internal cameras because those  
9 products are being hacked and people are taking  
10 control of cameras, so that's a huge privacy and  
11 security concern.

12           These investigative organizations might  
13 undertake of their own volition to investigate these  
14 devices to see whether or not there's open-source  
15 software on them that is being used improperly for  
16 this purpose or whether -- yeah, whether there's  
17 open-source software being used improperly. So the  
18 reports are not the only way. I frankly do believe  
19 that simply saying -- I guess I'm not understanding  
20 where your qualms are when we say the purpose is for  
21 investigation of infringement and particularly if you  
22 say "good faith," I'm not sure where your qualms are  
23 that that's going to be abused somehow.

24           MR. CHENEY: Thank you for this  
25 conversation. I think that the conversation has to do

1 with both how this is happening and perhaps the  
2 ownership issues and some of those kind of things, how  
3 this process happens. I think it helps build an  
4 exemption that seems to work. And I would give an  
5 opportunity, I think, to Mr. Ayers, Mr. Williams to  
6 perhaps respond to this if that's okay, Ms. Smith?

7 MS. SMITH: Sure. Just can I ask Ms.  
8 Chestek before we do that, and then I'm going to cede  
9 the Copyright Office questioning to Mr. Bartelt. It  
10 seems like this exemption is centered around software  
11 that has been embedded in a particular machine or  
12 device, is that correct?

13 MS. CHESTEK: That's the most -- I would say  
14 that's the most common investigation, but these  
15 organizations do also receive -- as we said in our  
16 brief, we do also receive complaints about ordinary  
17 application software running on computers.

18 MS. SMITH: Okay.

19 MS. CHESTEK: We do also receive complaints  
20 about those, yes.

21 MS. SMITH: Okay. Thank you. Do you think  
22 a response would be good, Mr. Bartelt? Do you want  
23 to --

24 MR. BARTELT: I think I just wanted to  
25 hear -- maybe Mr. Williams and Mr. Ayers had



1 other points that they wanted to make, but after  
2 hearing from Ms. Chestek about the current process for  
3 their investigations, I'm curious whether you feel  
4 like that's adequate to form a good-faith basis or if  
5 something more is needed in your view? Mr. Williams,  
6 you can go first, and then Mr. Ayers.

7 MR. WILLIAMS: Sure. Thank you. There's  
8 been a number of things said that I'll try to get to,  
9 but I'll start with the question you just asked. I  
10 think, you know, we assume the good faith of Ms.  
11 Chestek and her organization and we're not calling  
12 that into question. Nevertheless, typically, when  
13 exemptions are granted, even if that is assumed or  
14 built in, there are other layers of protection that  
15 are also added to the language of exemptions to try to  
16 curtail any unintended consequences.

17 And so, you know, the question that came up  
18 about, you know, if a complaint is filed and Ms.  
19 Chestek's organization determines that there is a  
20 good-faith basis because of the complaint to pursue  
21 it, that would be a more particularized reason to  
22 investigate than just an open-ended standard. I think  
23 what she was saying is that she would not want this  
24 limited, and it is not, as drafted, limited to  
25 organizations such as her own conducting the

1 circumvention and investigation, and, again, although  
2 we're not endorsing granting anything, you know, that  
3 would be a different scenario than essentially anyone  
4 with standing, which is the way they've drafted it.

5           So, you know, I think what I heard from Ms.  
6 Chestek was if the documentation for a device  
7 discloses the use of open-source software, that they  
8 may not have a reason to investigate, if I followed  
9 her, because the disclosure is there, and I assume the  
10 attribution that they require is there, but there may  
11 be other reasons that they think that the manufacturer  
12 is not in compliance with the license, so I may have  
13 misunderstood her.

14           But she said if it's not disclosed in the  
15 documentation, then they may have a reason to  
16 investigate, and I assume that that reason would not  
17 just be that there's no disclosure in there but that  
18 there's some functionality of the device or some  
19 operational aspect to the device that they believe  
20 requires the use of an open-source software program  
21 and cannot be somehow reverse-engineered or done in  
22 another fashion through a piece of proprietary  
23 software. So I still don't quite understand exactly  
24 how they come to the conclusion that the investigation  
25 needs to be "triggered" in Mr. Cheney's words, but she

1 may be able to speak to that a little bit more.

2 Just to clarify a couple of things that Ms.  
3 Chestek raised, so when I was talking about the need  
4 to restore a device to its normal functionality and  
5 destroying any copies that are made, what I was  
6 talking about with the destruction aspect is if  
7 someone, during the investigation, creates copies of  
8 the program, not the copies that are just inherently  
9 embedded in the device, that are running in the  
10 device, but create some other copies and there's no  
11 infringement identified, it turns out the  
12 investigation doesn't identify any infringement, then  
13 those copies should be deleted.

14 And with respect to the restoration of the  
15 devices, you know, the concern is, if no infringement  
16 is identified, but a device such as a video game  
17 console is opened up, is circumvented, then the  
18 proceedings over time have revealed that harm can  
19 result from that, and especially depending on the  
20 scope of who's allowed to use this exemption, there  
21 could end up being devices out there that have been  
22 opened up in a way that could lead to harmful results,  
23 and that's probably true in other areas, including  
24 set-top boxes.

25 And so that's one reason I suggested, even

1       though this is not a repair exemption, that the notion  
2       of restoring the device to normal functionality be  
3       included. And Ms. Chestek said, well, oftentimes the  
4       device has to be destroyed at the end of their  
5       investigation. Of course, if that's the case, then  
6       that concern is not applicable. If they destroy the  
7       device after the investigation, then the unintended  
8       consequences may go away.

9                She did mention set-top boxes running Linux  
10       and the need to modify them and whether that's lawful.  
11       As I understand it, now that they've changed the  
12       language and removed subpart (b) from the proposal,  
13       modification would not be part of this exemption, so,  
14       while we may discuss it in other contexts, I won't  
15       dwell on that. I do think the security is a good idea  
16       if something's going to be granted to be included as  
17       it has been in other exemptions because, again, it's  
18       about unintended consequences, and if copies are made  
19       and they are not secured, then that could lead to  
20       problems, of course.

21               And, you know, I'm glad to hear her  
22       acknowledge that any use outside of the investigation  
23       would be infringing, and so, you know, I do think the  
24       facilitation of infringement aspect should be  
25       incorporated if anything is granted. And then, you

1 know, I would prefer also that nothing other than the  
2 computer program that they're investigating be  
3 accessed by the circumvention.

4 MR. BARTELT: Great. Thanks, Mr. Williams.

5 And I think, you know, Mr. Ayers, you have  
6 maybe similar concerns here about not facilitating  
7 access to infringement. I'm wondering, you know,  
8 having heard what Ms. Chestek said about their  
9 process, again, if that mitigates any of your concerns  
10 or if maybe there needs to be additional language that  
11 should be considered, such as what Mr. Williams is  
12 proposing about, you know, not facilitating access to  
13 infringement or that we can borrow from other  
14 exemptions to safeguard against accessing expressive  
15 works -- so please, go ahead.

16 MR. AYERS: Thanks, Mr. Bartelt. So the  
17 situation we have here, just to make sure it's  
18 understood, the concern of the organizations I'm  
19 representing is we're not, in the case of the  
20 unintended consequences that Mr. Williams has  
21 mentioned, we're not talking about the release of a  
22 movie or two movies or three movies. We're talking  
23 about the potential exposure of the cryptographic  
24 values that the software in these devices controls and  
25 protects, and if these cryptographic values are

1 exposed and disseminated, we've now exposed every DVD,  
2 every Blu-ray disc to piracy, not just, you know, one  
3 or two movies at a time, and so this is a big concern  
4 to the organizations I represent.

5 And while we certainly acknowledge that  
6 there is a concern about how is an open-source  
7 software author going to pursue his or her rights in  
8 this situation, I think the current proposal shifts  
9 the -- swings the pendulum entirely the opposite  
10 direction and puts the software author in a position  
11 that other copyright owners would not be in.

12 Certainly, my organizations have had to  
13 follow legal steps, legal procedures, in order to  
14 pursue the circumvention devices and tools that  
15 they've pursued over the years, and so I think it is  
16 insufficient to merely say that a report coming into  
17 an organization is enough to trigger the applicability  
18 of the exemption.

19 One thing I would note is, in the baby  
20 monitor example, if we're talking about sort of what's  
21 commonly known, most reports indicate that the hacks  
22 are more due to users not using reasonable passwords  
23 and usernames, not so much a circumvention, and so  
24 none of the tools have been -- none of the cameras  
25 have been reset with a secure password, and so that's

1 what makes them vulnerable. And so, if that's the  
2 example, I would certainly hate that sort of approach  
3 to be used in determining whether there's a reasonable  
4 basis for engaging in the circumvention that we're  
5 talking about here.

6 And I would also note that standing to bring  
7 a suit does not really address the merits of the  
8 claims that would be in that suit, and so I certainly  
9 think it makes sense to strengthen the -- if we were  
10 to grant this at all, and we still maintain an  
11 objection to granting this at all, it certainly makes  
12 sense to bring much more definition and refinement and  
13 specificity to the table.

14 MR. BARTELT: Yeah. So I wanted to follow  
15 up just again, Mr. Ayers, on the particular  
16 architecture of these DVD players, and is it the case  
17 that circumventing to be able to investigate the  
18 firmware would necessarily expose the cryptographic  
19 key such that it would enable widespread piracy? I  
20 think that's what I picked up from the submissions,  
21 but maybe you could explain a little bit more about  
22 the particular risk that is unique maybe to DVD and  
23 Blu-ray players. And that goes beyond those  
24 particular devices, I'd be curious about that too.

25 MR. AYERS: Sure. So, as we explained in

1 our submissions, device manufacturers who sign up for  
2 a license for either CSS or AACS in making DVD and  
3 Blu-ray players sign on to sets of requirements to  
4 protect the cryptographic values, the decryption keys  
5 that they're issued that allow those discs, which are  
6 encrypted, to be decrypted by the device and then  
7 presented to the user on a screen that's connected to  
8 that device. So, while we have requirements that  
9 apply to protecting those cryptographic values, we do  
10 leave a bit of leeway for manufacturers to address it  
11 in the way that they deem most efficient for their  
12 manufacturing process, their design process.

13 So not every manufacturer does it in exactly  
14 the same way, but the common way is to use the  
15 firmware of the device to protect -- to obfuscate or  
16 protect those cryptographic values, making them  
17 unavailable to somebody who's attempting to access  
18 them. By removing or circumventing the firmware of  
19 that device, you arguably then, in many cases, are  
20 going to be exposing those keys to be available in the  
21 clear to use for other purposes. They could be  
22 extracted from the device and then incorporated into a  
23 circumvention tool.

24 MR. BARTELT: Okay. Thank you, Mr. Ayers.

25 Ms. Chestek, I wondered if you had any



1 particular insight about maybe devices where again it  
2 provides access to expressive content, whether it's  
3 through a cryptographic key or, you know, I don't know  
4 with video game consoles if your organization has  
5 investigated open-source claims relating to these  
6 types of devices and if, you know, you've done the  
7 risk -- or any sort of remedial measures they've taken  
8 to safeguard against the concerns that Mr. Ayers has?

9 MS. CHESTEK: So let me just start by  
10 pointing out that all of this can be avoided if these  
11 manufacturers simply were in compliance with the  
12 license. There will be no investigation. So let's  
13 take the most onerous example, which is a Linux  
14 operating system on a device, and it is a license that  
15 applies to the Linux operating system. You have to  
16 provide a copy of the source code. You have to either  
17 make it available with the device or you have to put  
18 in your documentation where a copy can be obtained so  
19 someone could just write to you and you provide the  
20 source code.

21 And, quite frankly, this is sort of the  
22 biggest non-license compliance that we see, is the  
23 failure to provide source code. It's a clear  
24 requirement of the license. If they were to simply  
25 meet their license obligations, which means they're

1 non-infringing, there would be no investigation of the  
2 device. There would be no exploration of it. So to  
3 say we're going to -- you know, there's this risk of  
4 exposing cryptographic keys, it's a risk that they  
5 brought on themselves by infringing.

6 MS. SMITH: Well, but can I just interrupt  
7 for one second and make sure I understand the supply  
8 chain right?

9 MS. CHESTEK: Sure.

10 MS. SMITH: So the people that you want --  
11 who you say are obligated to provide source code and  
12 are not -- those are not Mr. Ayers' clients, right?  
13 So Mr. Ayers is concerned that --

14 MS. CHESTEK: They are.

15 MS. SMITH: Or they are? Okay.

16 MS. CHESTEK: They are his clients, yes.  
17 Everybody in the distribution chain has that  
18 obligation, has that legal obligation, and we think of  
19 it --

20 MS. SMITH: I think part of the confusion --  
21 just a second. The confusion I had is he was saying  
22 that his clients give manufacturers flexibility to  
23 determine how to impose things, so I was trying to  
24 figure out whether it is the manufacturers that you're  
25 investigating or whether it is AACS, for example, and,

1 I mean, if you both wanted to speak to that just very  
2 briefly? I just want to make sure I had the right  
3 understanding.

4 MS. CHESTEK: Sure, and let me address that.  
5 So I do apologize for a little confusion over who's  
6 who here, so it is the manufacturers themselves who --  
7 it is not the AACS organization that we're concerned  
8 about with infringement, it is the manufacturers, so  
9 it's those manufacturers who need to be compliant.  
10 But, as Mr. Ayers pointed out, there are ways for  
11 these manufacturers to build their devices so that  
12 these cryptographic keys are not exposed. So it's  
13 sort of a double layer, sort of, first off, the  
14 manufacturers can avoid all problems by simply being  
15 in compliance with the license, by not being  
16 infringers.

17 Secondly, they can manufacture their devices  
18 in ways that allow the cryptograph -- that will not  
19 expose the cryptographic keys on these investigations.  
20 They may have chosen a different way, which does  
21 expose them, but, again, that was a design choice they  
22 made knowing that they have this obligation to provide  
23 source code. So to sort of put the investigators in  
24 handcuffs because of design choices and software  
25 choices that the manufacturers made seems to be an

1 incorrect balance when we're talking about who the  
2 wrong-doing party is here, and it is not the  
3 investigator who is the wrong-doing party, it's the  
4 manufacturer.

5 I do just, while I have the mike, I do just  
6 want to say that also there are many, many individuals  
7 who do the same kind of work. We focused on my  
8 client, the Conservancy, so that is the one I'm  
9 focused on, Free Software Foundation, but there are  
10 also many, many individuals who are pursuing this  
11 themselves. So it would be inappropriate to try to  
12 limit this exemption to organizational units that are  
13 doing this kind of work because there are individuals  
14 doing it also.

15 MR. AMER: Can I just follow up on that, Ms.  
16 Chestek? So, you know, you talked about how the  
17 manufacturers, you know, have some control over this  
18 investigation insofar as they control, you know,  
19 whether they're complying with the license terms, and  
20 I think that gets back to the question of okay, you  
21 know, what should the standard be in terms of, you  
22 know, what sort of level of knowledge or good-faith  
23 belief should be required in order, you know, for this  
24 exemption to apply.

25 So I was curious. I mean, you've framed the

1 language in terms of standing, which I gather means,  
2 you know, it has to be undertaken by someone who is  
3 either the copyright owner or a licensee of the  
4 copyright owner to, you know, who would have standing  
5 either to enforce the license or to bring an  
6 infringement claim. Is that sort of what was  
7 intended?

8 MS. CHESTEK: Yes. Yes. So that  
9 restriction was added again to sort of address the  
10 concern that there would be those who would try to  
11 take advantage of this exemption and just start  
12 hacking on devices to see what's going on. It has to  
13 be someone -- because it is for purposes of  
14 potentially bringing an infringement claim, then we  
15 believe it's appropriate to limit it to those people  
16 who would have the ability to bring that claim,  
17 someone who has standing for that claim.

18 MR. AMER: Okay. And so I think -- so then  
19 one of the concerns that I think we've also heard is  
20 the question of whether there should be some standard  
21 of knowledge or good-faith belief in addition to that,  
22 you know, and this goes to your point about, you know,  
23 I think -- it goes to the concern, I think, about  
24 whether, you know, this could give rise to just sort  
25 of why, you know, and I realize your clients probably

1 are not going to be interested in doing this unless  
2 they do have some basis for concluding that a  
3 licensing breach has occurred, but I wonder if you  
4 would be open to the idea of including some sort of  
5 additional language in addition to the standing  
6 language that would sort of refer to, you know, some  
7 reasonable basis for believing that an infringement or  
8 a breach of license has occurred.

9 MS. CHESTEK: Yes, if I could just go back  
10 to address to some of the earlier points that were  
11 made when I was explaining sort of what this process  
12 is. So, as I said, the absence of something in the  
13 documentation is a red flag that there probably is  
14 license non-compliance, and the question was raised,  
15 you know, is there a second step, which is  
16 functionality? Is there some functionality? So we  
17 know that of the devices that we've sampled in sort of  
18 the smart device market, all of these, you know,  
19 internet of things that we're talking about, that 90  
20 percent of those run on Linux.

21 So just as a matter of sort of, you know,  
22 the overall industry, we do know that software under  
23 the General Public License version 2 is on these  
24 devices, so there's sort of, you know, that  
25 sometimes -- I guess a lot of times there

1 are techniques that can also be used in looking at the  
2 device and evaluating it and running some tests on it  
3 and then checking it in certain ways. Certainly, my  
4 client would like to have much more information than  
5 simply probably there's Linux on it before going to a  
6 manufacturer and making an allegation that they're out  
7 of compliance.

8           And that's kind of -- we have kind of a  
9 chicken-and-egg problem here, which is you're saying,  
10 well, we need you to have particularized knowledge  
11 that there's infringement going on here, but that's  
12 exactly what we need the exemption for, is in order to  
13 gain that particularized knowledge. We have general  
14 knowledge that it's going to be highly likely based on  
15 circumstantial evidence that we're seeing on it, but  
16 we do like to have a much better level of evidence  
17 than that before approaching a manufacturer to accuse  
18 them of infringement.

19           We don't want to accuse anybody wrongly that  
20 there's infringement going on, so I think, you know,  
21 that's sort of the rock and the hard place that we're  
22 between is, if you set too high a level, if you try  
23 to, you know -- and the other thing is is that there  
24 are a lot of different indications, there are a lot of  
25 different things that they can see happening that may

1 indicate, you know, what kind of software is on the  
2 device. So I can't think of any sort of reasonable  
3 place to draw a line that says, you know, you have to  
4 meet X level of proof in order to then be able to  
5 crack open the device lawfully and get, you know, the  
6 next quantum of proof.

7 I mean, 90 percent of the market, I think,  
8 that's a pretty good level of -- you know, a pretty  
9 good guess that there's going to be the Linux software  
10 on there, you know, and then it will depend on, you  
11 know, what's going on with it, whether or not that's  
12 an infringing use or a lawful use.

13 MR. AMER: Well, what about something like a  
14 "reasonable good-faith belief?"

15 MS. CHESTEK: Yes, I think we would be  
16 comfortable with anything that is a generalized  
17 standard, "reasonable good-faith belief," yes,  
18 because, certainly, that is my client's present  
19 standard, is, you know, they don't investigate  
20 frivolous complaints. They certainly always have a  
21 reasonable good-faith belief that there is  
22 infringement going on because, you know, this is,  
23 frankly, a lot of work to do these investigations.  
24 It's many, many hours of work, so they don't pursue  
25 it, you know, sort of lightly.



1           MR. BARTELT: I just wanted to jump in to  
2 ask a question. There was one thing that was raised  
3 in the reply comments about where the Software Freedom  
4 Conservancy seemed open to limiting the investigation  
5 of instances of FOSS software. I see you have your  
6 hand raised, Mr. Williams. I'm just curious if that  
7 is a limitation that would make any difference to you,  
8 if it should be people using this exemption or  
9 potentially users could be investigating infringement  
10 of proprietary software or FOSS software. I don't  
11 know if your organization has a view on that, and then  
12 I think maybe you wanted to reply to some of the  
13 remarks we just heard.

14           MR. WILLIAMS: Sure. Thank you. Yes, I  
15 mean, I'm always a fan in these proceedings of trying  
16 to keep the exemptions tailored to the record that's  
17 been built, and this one has been exclusively focused,  
18 I believe, on open-source software, and so, if there's  
19 an exemption granted, I think it should be limited to  
20 that context. I do understand some of the other  
21 comments that say, well, that would create an unequal  
22 standard between proprietary software and open source,  
23 but I don't think there's been a record built on the  
24 proprietary side, and it sounded like Ms. Chestek's  
25 organization would be amenable to limiting it to open

1 source, so, on that question, I think, from our point  
2 of view, although, like I said, we don't think an  
3 exemption is necessary, if one's granted, I would  
4 rather keep it limited to that context.

5 To respond to some of what Ms. Chestek was  
6 just saying, it sounds like in a lot of these  
7 instances she's saying they know that Linux is running  
8 and, for example, someone has not yet published the  
9 rest of their proprietary source code along with the  
10 Linux code that they believe is being run and that  
11 that's a violation of the Linux license, and if they  
12 know already, that seems to get rid of the need for  
13 circumvention, and so I'm a little -- I'm still  
14 struggling a little bit to understand that issue.

15 And then I'm also curious to know how they  
16 are aware that 90 percent of a given market is running  
17 Linux if that hasn't been disclosed or there haven't  
18 already been investigations of all of these devices,  
19 but, again, if they know that devices are running it,  
20 the investigation isn't -- the circumvention to  
21 investigate isn't necessary. They already have  
22 everything they need to move forward with the  
23 complaint. And she mentioned earlier that, you know,  
24 it's uncommon in other spaces for people to, you know,  
25 get all of their evidence from the infringer in

1 advance, but that certainly doesn't stop people from  
2 filing lawsuits based on good-faith belief and Rule 11  
3 and then getting what they need through discovery.

4 And I do think that going to a manufacturer  
5 and saying, "hey, we think there's a problem here, are  
6 you willing to give us access to your code," that  
7 doesn't seem like it should be a big hindrance to the  
8 process because they would already be in possession of  
9 the device, and if, you know, the infringer somehow  
10 tried to cover its tracks, which I don't know exactly  
11 how that would work, but, if they did, they would  
12 already have the device in their hands, and so I don't  
13 think the evidence would disappear.

14 I do want to be specific about kind of video  
15 game consoles just because there's been a lot of talk  
16 about smart devices here and maybe there's more  
17 evidence with respect to those devices, but video game  
18 consoles were kind of grouped into a long list in the  
19 opening comments of devices, but there were no  
20 specifics provided about which consoles or why there  
21 was any belief that they were not complying with some  
22 open-source licenses.

23 And, you know, with video game consoles,  
24 going back to your question about does getting access  
25 to the firmware undermine the security of the devices

1 that Mr. Ayers addressed for his clients, we do have a  
2 record and a long history of establishing that that is  
3 the case with video game consoles, and so I would ask  
4 that they be excluded if this exemption is granted  
5 because Ms. Chestek said, well, there's an obligation  
6 on manufacturers to somehow separate and create all  
7 these different layers of access controls in order to  
8 enable the investigation without otherwise undermining  
9 the effectiveness of the security scheme that's  
10 designed to prevent piracy and other unauthorized  
11 access, and that really assumes infringement by the  
12 people that she's intending to investigate, and that  
13 to me isn't correct. You can't just assume that every  
14 device manufacturer is an infringer and therefore is  
15 obligated to separate these two types of access  
16 controls. So that's, I think, everything I wanted to  
17 address for now.

18 MR. BARTELT: Yes, thank you, Mr. Williams.  
19 Maybe I could kind of turn those questions back to Ms.  
20 Chestek for a minute just to get a little bit more  
21 clarity about, right, where maybe the Conservancy is  
22 able to, without circumventing TPMs, determine that  
23 there is, you know, FOSS within most devices, how  
24 often they run into issues where they are impeded from  
25 doing so for one reason or another, particularly by

1 TPMS, and then, if you have examples of where maybe  
2 complaints have been made concerning video game  
3 consoles, that would be helpful to know.

4 MS. CHESTEK: I don't have any specifics on  
5 the video game consoles. What I do just feel the need  
6 to reiterate, which is that the device manufacturers  
7 are using this software with full knowledge of the  
8 license requirements for it, and so to say, if you  
9 want to catch us, you shouldn't be allowed to catch us  
10 at infringement because of design choices we have  
11 made, I don't have a lot of sympathy for that  
12 argument. And then with -- and I'm sorry, I got  
13 sidetracked, and if you could just repeat your actual  
14 question that I didn't hear from --

15 MR. BARTELT: Sure. Sure, no worries. I  
16 think where Mr. Williams was headed was he was saying,  
17 in referring to your earlier comments that often the  
18 Conservancy is able to identify that Linux is being  
19 used or you have knowledge about it in 90 percent of  
20 the cases -- I'm sorry if I'm getting the statistics  
21 wrong -- that you're aware that it's there, so maybe  
22 that circumvention is not needed, and I'm just curious  
23 if you could provide a little bit more insight about  
24 how often you're actually prohibited from being able  
25 to make that evaluation by TPMS or by some other

1 means.

2 MS. CHESTEK: Yes. So it's kind of a  
3 delicate question because, you know, do we admit -- do  
4 we want to say that we have had to bypass TPMs in  
5 order to discover infringement when, at the moment,  
6 there's no exemption for it. You know, I think that  
7 the effort here is to try to draw a line where there's  
8 just no way to draw a line, which is to say you have  
9 to have, you know -- or what I'm hearing is an attempt  
10 to have it both ways, which is to say, "well, you  
11 already know, so you don't need the exemption." But  
12 we don't have enough information to know whether or  
13 not there is software on the device, you know, if  
14 it's, say, for example, just this generalized  
15 knowledge of, you know, that -- I'll give you an  
16 example.

17 So say there's a television manufacturer  
18 that you have a report and you've investigated and  
19 have determined that there likely is Linux running on  
20 that device and they're out of compliance with that  
21 license. Is it safe for you -- you know, is it --  
22 where do you draw the line between saying, okay, well,  
23 is it safe -- is it fair for me to assume that every  
24 television manufactured by this television  
25 manufacturer is also infringing or not, or should I do

1 investigation on that? So, you know, to --

2 MS. SMITH: Well, can I ask --

3 MS. CHESTEK: Yes.

4 MS. SMITH: -- what is your practice right  
5 now? Because it seems like just putting on, like, a  
6 litigation hat or even a negotiation hat you can say  
7 we have a reasonable belief that you're using Linux  
8 and we see that you haven't disclosed your source  
9 code, so please comply, and they can respond or not,  
10 and if you need to, you can go into court, and, you  
11 know, no one wants to go into court unless you have to  
12 go into court. But how do you handle this now? Do  
13 you conduct a forensic analysis before sending these  
14 letters out and, if so, why?

15 MS. CHESTEK: Yes. Yes, generally, they do  
16 perform significant analysis so that there is enough  
17 evidence when we go to the manufacturers that the  
18 manufacturers just simply cannot deny that we have,  
19 you know, very firm evidence that this software is on  
20 the devices.

21 And let me also point out I think what's  
22 really important to understand here too is that the  
23 Software Freedom Conservancy and the Free Software  
24 Foundation, the two organizations I mentioned before,  
25 have published standards for enforcement of these

1 licenses, and the first step on these standards is to  
2 work with the manufacturer to try to gain compliance.  
3 These organizations are not -- their first step is not  
4 going to court. So to say, "oh, well, you know, you  
5 can go to court and get discovery," that's fairly  
6 antithetical to the published standards they have for  
7 the ways they do enforcement.

8 MS. SMITH: Sure, but I guess I'll put my  
9 old, like, trademark enforcement hat on where you  
10 might not know exactly what a user is doing, but you  
11 sort of see something in the market that you might  
12 start by approaching them. Do you start those  
13 conversations with manufacturers saying "we think  
14 you're using Linux," or do your standards say that you  
15 need to have, like, documentary evidence before  
16 sending a letter? What do the standards say?

17 MS. CHESTEK: I don't believe that these  
18 community standards that I'm talking about go into  
19 that kind of detail. I can share with you, you know,  
20 as a litigator, what you try to do is develop the best  
21 case you have that you can get against your opponent  
22 because, you know, if you go with them to weak  
23 evidence, they're going to deny it, and so, you know,  
24 you always want to go to them with fairly compelling  
25 evidence, and you're going to achieve success, you're



1 going to achieve license compliance and  
2 non-infringement by going to them with the most  
3 compelling evidence that you can go to them with  
4 rather than sort of shady allegations.

5 If I went to, say, a doorbell manufacturer  
6 and said, "you know, 90 percent of the doorbells  
7 manufactured have Linux on them, based on that, we  
8 think that you might have Linux too," well, you know,  
9 they're not going to -- they're going to -- that  
10 letter's going to into the circular file when we say  
11 that. So, you know, we may -- we need those tools to  
12 be able --

13 MS. SMITH: And has that happened in your  
14 experience? Have people not responded to your letters  
15 when you haven't had documentary evidence?

16 MS. CHESTEK: I don't know that we've ever  
17 gone to anyone without documentary evidence, so, as I  
18 said before, we prefer to go to them with fairly  
19 compelling -- but what may be happening, though, is  
20 that those people against whom we have evidence are  
21 the ones who are maybe not using TPMs so that we can  
22 prove that, which means that you have a whole group of  
23 infringers who are able to protect their infringement  
24 and protect it lawfully by being able to allege a  
25 claim of 1201 by simply incorporating a TPM, so, you

1 know, you're kind of tipping the scales in favor of  
2 the infringers by, you know, requiring this sort of  
3 very high degree of evidence that there's infringement  
4 going on.

5 MS. SMITH: Okay. So just one last question  
6 before I turn over the mike. Are the standards for  
7 enforcement, is that in our record yet? Has that been  
8 provided?

9 MS. CHESTEK: They were. They were cited in  
10 a footnote. It's more a community --

11 MS. SMITH: Yes. Okay.

12 MS. CHESTEK: It's not sort of -- it's more  
13 like we're good guys and we will write to you. We're  
14 not going to sue you out of the box. We're going to  
15 write to you and try to fix this.

16 MS. SMITH: Okay. So we have them. Okay.  
17 Thank you.

18 MS. CHESTEK: I'm happy to provide them, I'm  
19 happy to provide a copy if you'd like me to provide a  
20 copy.

21 MS. SMITH: Okay. We will be in touch if we  
22 think we need that.

23 MS. CHESTEK: Okay.

24 MR. AMER: Ms. Chestek, can I ask you one  
25 other question about the language as you've -- the

1 proposed language as you've drafted it?

2 MS. CHESTEK: Mm-hmm.

3 MR. AMER: So the language talks about  
4 circumvention -- it talks about both copyright  
5 infringement and breach of license claims, which are  
6 two, you know, separate types of causes of action.

7 MS. CHESTEK: Mm-hmm.

8 MR. AMER: It sounds like we're talking  
9 about potentially both. I mean, as I understand it,  
10 in some cases, when a license is breached, there will  
11 be a cause of action for copyright infringement but  
12 not always. It depends, you know, on whether the  
13 license term is a condition or a covenant. I'm  
14 thinking of the MDY case in the Ninth Circuit which  
15 talks about this.

16 MS. CHESTEK: Mm-hmm.

17 MR. AMER: I was wondering if that is by  
18 design that you've sort of -- that the proposed  
19 language talks about standing to bring a breach of  
20 license claim as opposed to standing to bring a breach  
21 of license or an infringement claim?

22 MS. CHESTEK: So that's certainly a question  
23 only a copyright lawyer would love, and, actually, the  
24 breach of license, the language breach of license, was  
25 meant to -- and excuse my cat there -- was meant to --

1 his tail may flop here in a second, yeah -- it was  
2 meant to actually include both, whether it was a  
3 breach of contract -- that's why I said breach of  
4 license was trying to play it both ways -- was whether  
5 it's a breach of contract or whether it's a copyright  
6 infringement. The exemption was meant to cover both  
7 of those situations, yes, standing for either one of  
8 those types of claims.

9 MR. AMER: Okay. Thank you.

10 MS. CHESTEK: Mm-hmm.

11 MR. BARTELT: I realize that, you know, in  
12 addition to, you know, the commenters that are here  
13 with us today, Mr. Williams and Mr. Ayers, they didn't  
14 file anything specific to vehicles, but I just wanted  
15 to raise the issue because they're not with us here  
16 today if you had any view on whether the amended  
17 language prohibiting circumvention that would  
18 constitute a violation of applicable law  
19 satisfactorily addresses those concerns about vehicles  
20 and vehicle safety and protection of trade secrets.  
21 If you have any views on those, I appreciate it. If  
22 not, we can move on.

23 (No response.)

24 MR. BARTELT: All right. I think we've  
25 given that adequate time. I'm just looking through my

1 notes to see if we have any additional questions of  
2 issues we haven't covered. I don't know if Regan or  
3 Kevin or Mr. Cheney, if you have anything you wanted  
4 to raise yet in the remaining five minutes we have?

5 MS. SMITH: I think that maybe while we're  
6 checking our notes if anyone wants to, you know, have  
7 any last thoughts, any of the panelists, I don't -- go  
8 ahead. I think, Ms. Chestek, you've unmuted, and, Mr.  
9 Williams, you have your hand raised, so let's go in  
10 that order.

11 MS. CHESTEK: Yeah, I just wanted to comment  
12 one thing that we didn't -- that sort of was mentioned  
13 was whether or not all software should be included in  
14 this exemption or just free and open-source software  
15 should be included in this exemption, and as we've  
16 stated, I don't know any reason why it shouldn't be  
17 all software, because I believe that it's to the  
18 benefit of the owners of copyrights and proprietary  
19 software to include this also. I don't understand why  
20 they wouldn't want this exemption in their favor.

21 It simply is the case, however, that my  
22 client only investigates free and open-source  
23 software, so we only have the factual predicate that's  
24 required for the exemption for purposes of free and  
25 open-source software but nevertheless believe that it

1 would be valuable to all copyright owners.

2 MR. BARTELT: This might be a little out  
3 there. I'll let Mr. Williams chime in in a second.  
4 Are you aware, Ms. Chestek, of any particular types of  
5 devices that would never include free and open-source  
6 software? I mean, it's so pervasive nowadays, I'd  
7 assume that we find it everywhere, but I don't know if  
8 there are -- I mean, if others on the panel are aware  
9 of particular types of devices that would, you know,  
10 exclude that or never include that. We'd be curious  
11 to know that as well.

12 MS. CHESTEK: I believe I gave a statistic  
13 that studies have shown that all software kind of  
14 across all fields, firmware, you know, laptop  
15 software, all kinds of software, that something like  
16 99 percent of it has open-source software, so it  
17 certainly exists everywhere. You know, yes, there are  
18 devices that don't have open-source software.

19 It's become a more popular way -- it's  
20 become a much more popular way to build software  
21 because there are all of these pre-existing components  
22 that can be quickly assembled to create, and also a  
23 lot of them tend to be at the operating system level  
24 within the stack, not the application layer itself but  
25 within the stack. A lot of that is open-source

1 software, and so it's very easy, and that's sort of --  
2 you know, it's nothing special about it. It's  
3 infrastructure. You know, you're not -- your business  
4 is not succeeding on, you know, what's the operating  
5 system on your doorbell camera. That's not where  
6 you're making your money, so these softwares do tend  
7 to be used quite frequently.

8 MR. BARTELT: Sure. Thank you. And I  
9 think, Mr. Williams, we have you next. Then, Mr.  
10 Cheney, if you had a question after that?

11 MR. WILLIAMS: Thank you. Yeah, just very  
12 quickly I was going to say I think it's great that  
13 their standards for pursuing potential claims include  
14 first contacting the manufacturer before moving on to  
15 litigation and that I think their stated objectives  
16 are not to, you know, go out and obtain as many  
17 infringement lawsuit winnings as they can but to ask  
18 for compliance with license terms.

19 And I think that at least in my litigation  
20 practice, potential defendants, if they were told up  
21 front that litigation was not the ultimate objective,  
22 damages was not the ultimate objective as long as some  
23 form of cooperation and ultimate willingness to comply  
24 was pursued by the potential defendant, I think that  
25 would make it all the more likely that they could

1 cooperate with people to find out is there actually  
2 infringement here or not, and that's one reason why we  
3 had suggested some of the things we did to limit the  
4 exemption to require reaching out to the copyright  
5 owners first or --

6 MR. BARTELT: Thank you, Mr. Williams. Mr.  
7 Cheney?

8 MR. CHENEY: Thank you for the last couple  
9 of seconds here. I just have a quick question. Ms.  
10 Chestek, you can help me perhaps. You had mentioned  
11 that you wanted to move beyond just your two  
12 organizations or other organizations that are  
13 similarly situated to perhaps individuals that conduct  
14 these investigations. Can you tell us whether those  
15 investigators have particular trainings or  
16 certifications that go towards qualifying them for  
17 this that may be in those community standards or other  
18 locations that might help us in understanding how to  
19 perhaps cabin this for particular individuals? Can  
20 you help us there?

21 MS. CHESTEK: No, I don't -- I'm not aware  
22 of any sort of certification in circumventing TPMs. I  
23 will say -- so, as pointed out, this exemption is  
24 sought for copyright owners, so the reason that these  
25 individuals take interest in the question is they



1 have, for example, contributed to a piece of software  
2 that is found on these devices, or they suspect that  
3 it is and they want to confirm for themselves, and  
4 let's keep in mind what the tradeoff here is for the  
5 people who create open-source software, particularly  
6 the copy-lefts software, is their motive for  
7 participating and for putting software under these  
8 licenses is that this software is freely available to  
9 everyone to share.

10 So, when they see that their software that  
11 is under this license that is meant to be shared by  
12 the commons is not being shared by an entity, then,  
13 you know, they take particular offense at that, so  
14 they certainly are knowledgeable about the software  
15 itself that's being investigated because they are an  
16 author of it. So they know very well how that  
17 software works, what to look for, what kind of  
18 indications there are that the software -- much better  
19 than certainly maybe because I don't have the  
20 background, perhaps even much better than my client  
21 because, you know, if they wrote, for example, a piece  
22 of the software that communicates in a particular way,  
23 when they see a thermostat communicating with that  
24 particular signature, they may recognize that and say,  
25 "I know exactly what that is, that's my software

1 that's doing that."

2           So, you know, that may be another way that  
3 someone will have sort of particularized knowledge or  
4 will have a suspicion, let me put it that way, have a  
5 suspicion is the signature enough to go after someone  
6 and say, "I saw the signature, I think you're  
7 infringing my software." You know, I suspect, you  
8 know, that's another letter that's going to go into a  
9 lot of circular files.

10           So that's sort of the level we're talking  
11 about, is, you know, there's the level of suspicion,  
12 which is what would cause someone to investigate, but  
13 then there's a level of evidence that is sufficient  
14 that when you go to someone with that evidence that  
15 you then -- you know, that they will then have reason  
16 to engage with you because they realize that they are  
17 called out as being a copyright infringer if they are  
18 called out. And I do want to point out that when my  
19 client sends out letters to companies saying that the  
20 software is infringing, it's much less common to  
21 receive a response than it is to get no response.  
22 Very often, even with this evidence, these companies  
23 are ignoring, you know, these letters alleging that  
24 there's infringement.

25           So it would be a wonderful world if we could

1 just simply go to a manufacturer and say, "gee, we  
2 realize, you know, gee, we think there's a problem  
3 here," and the manufacturer would say, "oh, my gosh,  
4 we're terribly sorry, we didn't realize, let's fix it  
5 right away." I mean, you know, we'd be clapping each  
6 other on the back if that was the response, but that  
7 is not the typical response. The typical response is  
8 to duck, cover, and ignore.

9 MS. SMITH: Can I one, like, maybe final  
10 question on that because it does seem like you're  
11 focused on getting the manufacturer to respond to you  
12 based on the open-source license they may have  
13 obtained, and Mr. Ayers is focused on getting the  
14 manufacturer to comply with the restrictions to  
15 protect information based on those relationships, and  
16 so there's sort of, like, this shared target. If you  
17 reach out to the manufacturer and you say, "if we  
18 don't get a response, we are going to engage in  
19 circumvention," which may jeopardize some of the other  
20 relationships the manufacturer knows, do you think  
21 that's going to help it not go into the circular file,  
22 the letter?

23 MS. CHESTEK: I guess I'm missing a piece of  
24 the question because, yeah, if there's no exemption,  
25 no, they'll be thrilled to death.

1 MS. SMITH: Well, no.

2 MS. CHESTEK: Because then they -- yeah.

3 MS. SMITH: Well, no, no, I think assume  
4 that there was an exemption and I guess that the  
5 exemption, you know, either requires you to reach out  
6 to the manufacturer first or you just decide to do it.  
7 I'm wondering, it seems like the manufacturer probably  
8 doesn't want their device to be circumvented either,  
9 so that might serve as -- could that serve as a  
10 carrot -- or I don't know whether it's a  
11 carrot or stick -- serve as an incentive for them to  
12 respond to you?

13 MS. CHESTEK: Yeah, I mean, that's a novel  
14 thought. I have not -- so you're saying if a  
15 condition of the exemption was to say "but first you  
16 have to ask and you have to get" -- I guess, "first  
17 you have to ask," then what? I mean, sort of part of  
18 the problem with these exemptions is they become this  
19 sort of whole, like, you know, they grow and grow and  
20 grow as you try to add these things, so if say you  
21 said "yes, you have to write to them first and then,  
22 if they don't comply, then you're allowed to  
23 circumvent," you know, would the ones with  
24 cryptographic keys be more amenable? I mean, yeah, I  
25 don't know. I can't speculate because it's just -- I

1 don't -- I can't think and talk at the same time, so  
2 --

3 MS. SMITH: Okay. Well, thank you. Thank  
4 you for entertaining me. I mean, and I agree if we  
5 were to recommend an exemption, we don't have any  
6 desire to make these overly complicated, but given  
7 that open-source software and software generally is a  
8 more complex area, I think we want to make sure we  
9 would carefully consider all the angles for these  
10 types of users.

11 Does anyone else have any more questions or  
12 any more statements they would like to get on the  
13 record?

14 (No response.)

15 MS. SMITH: Okay. So we're a little over  
16 time. Yes. Go ahead.

17 MS. CHESTEK: I'm sorry, just one real quick  
18 comment. I guess this sort of letter, you know,  
19 letter first, then you get the exemption, just I don't  
20 know whether that might encourage sort of sending  
21 frivolous letters to -- like, there is a problem in  
22 this industry with trolls who people -- there's some  
23 very famous individuals who use open-source software  
24 as a trolling mechanism to gain income, and so sending  
25 out -- making it as easy as, you know, sending out a

1 letter and threatening might encourage those trolls to  
2 act in malicious ways.

3 So I guess that's my kind of hesitation  
4 about sending out these because, you know, then it  
5 becomes this sort of gap. I mean, it gives someone a  
6 mechanism, you know, just like patent trolls send out  
7 letters, you know, threatening infringement on the  
8 barest of circumstances. That's my concern. Thank  
9 you.

10 MS. SMITH: Okay. Thank you. Thank you for  
11 that.

12 I think that concludes this session. We  
13 will come back in 40 minutes, where we will examine  
14 proposed exemptions to permit text and data mining.  
15 And thank you all for your contributions this morning.  
16 If you are watching, you can just stay on the line and  
17 we will be back, and if you are a panelist, just mute  
18 yourself and turn off your audio because you will have  
19 a live mike. Thank you.

20 (Whereupon, at 11:52 a.m., the hearing in  
21 the above entitled matter recessed, to reconvene at  
22 12:30 p.m. this same day, Wednesday, April 7, 2021.)

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24 //

25 //



1 indicate in the Q&A or the chat if they're having  
2 technical difficulties, and someone from the Copyright  
3 Office will reach out to assist them. And the last  
4 thing I would like to remind everyone in terms of  
5 rules of the road is if anyone is watching who wishes  
6 to contribute to tomorrow's audience participation  
7 session, which will allow presentation on any of the  
8 topics in the rulemaking, you can sign up in the  
9 SurveyMonkey link which has been circulated in the  
10 chat. And I guess the very last warning should be  
11 please mute your audio when you are not speaking.

12 So we'll start by introducing ourselves, so  
13 from the Copyright Office, if we could have Mr. Amer,  
14 Ms. Rubel, Ms. Chauvet, and Mr. Welkowitz introduce  
15 themselves?

16 MR. AMER: Hello. Kevin Amer, Deputy  
17 General Counsel.

18 MS. RUBEL: Jordana Rubel, Assistant General  
19 Counsel.

20 MS. CHAUVET: Good afternoon. Anna Chauvet,  
21 Associate General Counsel.

22 MR. WELKOWITZ: David Welkowitz,  
23 Attorney-Advisor.

24 MS. SMITH: Thank you. And from NTIA, Mr.  
25 Zambrano Ramos?



1           MR. ZAMBRANO RAMOS: Hi, everyone. This is  
2 Luis Zambrano Ramos. I'm a Policy Analyst in NTIA's  
3 Office of Policy Analysis and Development.

4           MS. SMITH: Okay. I see Mr. Mohr has joined  
5 us.

6           MR. MOHR: Yes.

7           MS. SMITH: We are introducing ourselves,  
8 Mr. Mohr, so welcome. We're glad the technical issue  
9 was resolved.

10           We'll start by asking those who are here  
11 testifying in support of the exemption to introduce  
12 themselves, and I know Ms. Schofield was unable to  
13 attend today, but if we could start with the UC  
14 Berkeley folks, so I have Dr. Bamman, Dr. Hoffman, Mr.  
15 Stallman, as well as I think some student attorneys.

16           MR. BAMMAN: Hi, I'm David Bamman. I'm  
17 Assistant Professor in the School of Information at UC  
18 Berkeley.

19           MR. HOFFMAN: Good morning. I'm Chris  
20 Hoffman. I'm Associate Director of Research IT at UC  
21 Berkeley and Program Director for Research Data  
22 Management.

23           MR. STALLMAN: Hi. Erik Stallman. I'm the  
24 Associate Director of the Samuelson Law Technology &  
25 Public Policy Clinic.

1           MR. ALGHAMDI: Ziyad Alghamdi. I am a  
2           clinical student at the Samuelson Clinic at UC  
3           Berkeley.

4           MR. ANDERSON: My name is Tait Anderson. I  
5           am a law student with the Samuelson Clinic as well.

6           MS. MOORE: My name is Erin Moore. I'm a  
7           clinical student with the Samuelson Clinic.

8           MS. SMITH: Thank you. Mr. Band?

9           MR. BAND: Hi, I'm Jonathan Band. I  
10          represent the Library Copyright Alliance.

11          MS. SMITH: Thank you. Dr. Wermer-Colan?

12          MR. WERMER-COLAN: Hi. I'm Alex  
13          Wermer-Colan. I'm a digital scholarship coordinator  
14          at Temple University Libraries.

15          MS. SMITH: Thank you. And then I think  
16          we'll go alphabetically for those who are testifying  
17          not in support of the exemption, so, Mr. Ayers?

18          MR. AYERS: Thank you. Hello. I'm Michael  
19          Ayers, and I'm representing the Advanced Access  
20          Content System Licensing Administrator, LLC, commonly  
21          known as AACSLA, and DVD Copy Control Association,  
22          usually referred to as DVDCCA.

23          MS. SMITH: Thank you. Ms. Charlesworth?

24          MS. CHARLESWORTH: Hi. I'm Jacqueline  
25          Charlesworth. I'm representing the Association of

1 American Publishers.

2 MS. SMITH: Mr. Mohr?

3 MR. MOHR: Chris Mohr, General Counsel,  
4 SIIA.

5 MS. SMITH: Do we have Mr. Taylor? Yes.

6 MR. TAYLOR: I'm David Taylor. I'm counsel  
7 to AACCS LA and DVD CCA, which Mr. Ayers had explained  
8 earlier what they represent. Thank you.

9 MS. SMITH: Thank you. And Mr. Williams?

10 MR. WILLIAMS: Good afternoon. Matthew  
11 Williams from Mitchell Silberberg & Knupp representing  
12 the Joint Creators and Copyright Owners.

13 MS. SMITH: Great. So we'll dive in, and  
14 one of the things I wanted to just start with, I think  
15 there's a lot of broad comments both in support of and  
16 opposing this exemption et al., which we will  
17 certainly get into, but one of the things that has  
18 come up with this session as well as the one we had  
19 earlier is that in the reply comments there were a  
20 number of refinements offered by those in favor of an  
21 exemption, so I wanted to make sure we have an  
22 accurate understanding of the sort of proposal on the  
23 table as well as allow those who oppose an exemption  
24 to clarify if that is in fact their understanding too.

25 So what I have is that the proposed

1 exemption initially would have allowed researchers to  
2 engage in circumvention in order to deploy text and  
3 data mining techniques on literary works and motion  
4 pictures, and it has been refined by who the user is  
5 to specify that it should be a researcher affiliated  
6 with an institution of higher education, a more  
7 specific definition offered by that, for the purpose  
8 of scholarly research and teaching.

9           There has been another refinement offered  
10 that the research should use reasonable security  
11 measures to limit access to the corpus of circumvented  
12 works only to those other researchers for purposes of  
13 collaboration or replication and verification of  
14 research findings. Works which are accessed only as a  
15 rental would be excluded, although I think there is  
16 some concern that the exemption would not require the  
17 works to be owned outright with respect to digital  
18 copies. The fourth sort of broad, I guess, statement  
19 we saw in the replies is we're not quite sure whether  
20 this exemption is being requested to encompass  
21 consumptive uses, such as quotations, or whether that  
22 is not necessary or perhaps covered by separate  
23 exemptions that already exist.

24           And then the fifth thing I'll note is for  
25 literary works and motion pictures specifically, there

1 have been some exclusions, so computer programs or  
2 compilations compiled specifically for TDM, you know,  
3 is no longer what is being sought, as well as the  
4 AACSS2 technology or motion pictures offered for  
5 streaming only. So does anyone who is in support of  
6 the exemption want to say what I've gotten wrong or  
7 perhaps overlooked in terms of what refinements were  
8 made in the reply stage or let me know if I got it  
9 right? Mr. Stallman?

10 MR. STALLMAN: Yeah, thank you. I would say  
11 for the most part that you have it right. There are a  
12 few points of clarification that I did want to make.  
13 One is to make sure that when we're talking about the  
14 institutions in question, this includes colleges and  
15 universities, nonprofit colleges and universities, as  
16 well as libraries, archives and museums. And then,  
17 with respect to consumptive uses, yes, our intent is  
18 not to include those. We think that those are covered  
19 by different exemptions or in some cases, particularly  
20 with respect to literary works, the exemption is not  
21 required for those that exist. I would say that those  
22 are the major points of clarification.

23 MS. SMITH: Okay. Thank you.

24 Does anyone who has filed a comment in  
25 opposition wish to say do any of these refinements

1 address some of the concerns? And again, I appreciate  
2 we've also seen those concerns to whether there should  
3 be an exemption at all, and we will definitely tee up  
4 those issues too, but we wanted to give the opponents  
5 an opportunity to respond to the reply since it did  
6 iterate pretty significantly. Ms. Charlesworth?

7 MS. CHARLESWORTH: Yes. Well, first of all,  
8 thank you, and, you know, I think that they certainly  
9 narrow what is an extraordinarily broad proposal,  
10 speaking on behalf of the book publishers, though,  
11 they really don't go far enough because the proposal  
12 is still very broad, would allow, you know,  
13 researchers to amass very large libraries of material,  
14 unprotected material.

15 You know, I can go through some of the  
16 specific concerns that remain. I mean, there's no  
17 real definition of TDM. I think I'm still confused  
18 about the consumptive use issue because, you know, if  
19 you're counting words or how often a word appears in a  
20 book, that's one thing, but what I keep hearing and  
21 what I read is just that you could use the expressive  
22 content, which would, by the way, be offered in  
23 full-text format to researchers, which is quite  
24 distinct from -- and I know we're not talking about  
25 the case law yet, but that's quite distinct from any

1 recognized fair use under U.S. law.

2           So, you know, I think there's still a lot of  
3 confusion really about what activities would be  
4 covered, and from reading the papers, you know, the  
5 submissions, it looks like it would be pretty much  
6 anything that involved sort of an interaction of,  
7 speaking for the book community, you know, the  
8 literary work with a computer where there's some sort  
9 of computer processing. There is no definition -- you  
10 know, it refers to interfering with TDM without any  
11 sort of specificity about what that is.

12           The class of literary works is very broad.  
13 Although computer programs are out, it still would  
14 cover everything from, like, databases, which I'll  
15 talk about in a minute, to books to poems to, you  
16 know, journals. I mean, it's just a very broad, broad  
17 swath of literary works, and I don't know what a  
18 database that's specifically designed for TDM, I don't  
19 know what that means. I mean, would that include  
20 Nexis? I don't know. I mean, Nexis has a lot of  
21 content on it, but was that content designed for TDM?  
22 I would say not.

23           There's also concerns about what does it  
24 mean to lawfully obtain. I think you alluded to this,  
25 Regan, you know, does that mean you can get it from

1 someone else? Does it mean if your library has a  
2 license, then you'd have access say as a student at  
3 the school that, you know, you have lawful access to  
4 it, but is that lawfully obtained? Does that mean you  
5 can make a copy of it? Even in the papers, you know,  
6 the reply comments sort of suggested that, well, maybe  
7 it wouldn't really be owned, and so that's another  
8 question.

9           The question of who's affiliated with the  
10 institution, could it be -- you know, a lot of larger  
11 universities in particular have all kinds of  
12 information projects and, you know, things where they  
13 have very loose affiliations with lots and lots of  
14 people. Again, I mentioned the full-text access.  
15 That's a huge concern because it's very  
16 substitutional. If people can -- researchers can read  
17 the books, I mean, it comes down to, you know, it's  
18 essentially a form of space-shifting, and, you know,  
19 there's no protection against ultimate commercial  
20 uses, like a researcher at a university could then  
21 sell the research or actually be sponsored, I think,  
22 by someone for a very commercial purpose.

23           And, finally, last but not least, and I  
24 think we'll probably end up talking about this,  
25 there's a lot of issues with the security. I mean,



1 that is, I mean, of paramount concern. You have, you  
2 know, institutions, a range of institutions, and  
3 certainly a range of users and many of them would be  
4 individual. What does reasonable security mean, you  
5 know, it's not enough. I mean, this isn't -- we're  
6 not talking about a couple DVDs here that someone's  
7 taken because they want to create something and put it  
8 on YouTube.

9 We're talking about potentially massive  
10 unprotected libraries and, you know, in Hathi and  
11 Google, there were, you know, no internet, no  
12 internet-facing, you know, posting and so forth. I  
13 mean, you know, there's degrees of security depending  
14 on what you have, and that's really not, you know, the  
15 word -- I know, in some contexts, reasonable security  
16 measures may be enough to solve the problem. It has  
17 in the past, but, with something like this, it really  
18 just doesn't do enough work. So that's our list of  
19 sort of concerns, at least initial concerns and  
20 reactions to even the revised proposal. Thank you for  
21 bearing with me for that list.

22 MS. SMITH: Okay. Thank you.

23 Mr. Williams, do you have your own list, or  
24 are there areas where you feel the refinements had  
25 satisfied things, concerns?

1           MR. WILLIAMS: Thank you. Yes, and we share  
2 a lot of the same concerns that Jacqueline just  
3 expressed, and I know this is about the drafting, this  
4 question. We remain opposed to the need to grant this  
5 generally, but getting into the drafting, we really do  
6 appreciate the efforts made by the petitioners to  
7 narrow this down, and we acknowledge those efforts.  
8 However, there's a pretty long list of things if I was  
9 going to go through this that I would need to note and  
10 explain, and so one or two minutes in this context is  
11 probably not going to be enough for me to give the  
12 whole list, but I'd like to cover a few of them.

13           One point that Erik Stallman just made was  
14 that this goes beyond, you know, kind of academic  
15 institutions and graduate-level programs. I think the  
16 record, unless I'm missing something, really is  
17 focused on faculty members and graduate students in  
18 academic institutions at the university level, and so  
19 to broaden it beyond that scope in terms of the  
20 beneficiaries of the exemption gives us pause in  
21 addition to our general opposition.

22           If you look at the case law, as Ms.  
23 Charlesworth just said, there were very specific  
24 security measures in place, specific numbers of copies  
25 that were housed in very specific locations that were

1 not internet-accessible. There were staff members, I  
2 believe, only somewhere between six and 10 that  
3 actually had the encryption keys in place, and so the  
4 reasonable security measures language doesn't  
5 accomplish a lot for us because we feel it should be,  
6 if anything is drafted, much more specific and that  
7 this really seems about almost a laboratory  
8 setting-type situation for higher-level academic  
9 institutions and researchers.

10 And the copying, it's unclear who would do  
11 the circumvention exactly. Would the copies be made  
12 by a faculty member at home and then transferred to a  
13 university, or would they be made in a more controlled  
14 setting? The databases, you know, how many people  
15 would have access to them? Would there be no  
16 downloading capability within the databases such that  
17 only the research can be conducted without any  
18 additional copies being made?

19 And there are additional questions that we  
20 have on the security side and the scope of the  
21 beneficiaries side. With respect to beneficiaries and  
22 those who have access, we also believe that, you know,  
23 the collaborators language and the peer review  
24 language was a helpful addition but doesn't go far  
25 enough and isn't clear enough to really define who it

1 is outside of each institution that may be given  
2 access to these databases and the research results,  
3 and I think this is their intent, but I'm not sure,  
4 that each institution's database would be limited to  
5 people affiliated with that institution specifically  
6 and other than the collaborators and peer review  
7 individuals, this would not be a joint database shared  
8 by multiple institutions but would be siloed  
9 institution by institution based on the copies that  
10 they have lawfully obtained.

11 On the "lawfully obtained" point, I think it  
12 needs to be made clear that the obtained copy is a  
13 copy that essentially is a distributed copy, and I  
14 think Mr. Stallman acknowledged that in the opening,  
15 but it really should be limited to copies obtained  
16 from a licensed distribution, such as a DVD sale, or  
17 to a downloadable copy that is not a temporary copy.  
18 We wouldn't concede that such downloadable copies are  
19 owned as opposed to licensed, but I won't get into  
20 that debate now. I understand the position that  
21 they're taking on that.

22 Ms. Charlesworth mentioned that the literary  
23 works proposal references that the TPMs must interfere  
24 with the ability to conduct text and data mining.  
25 That language is not in the motion picture drafting

1 currently, which we would say calls into question  
2 whether alternatives such as the ones we've talked  
3 about in our comments should be taken into account  
4 before any circumvention could be engaged in. We  
5 agree with the comments a minute ago that "affiliates"  
6 has to be much more carefully defined. It could apply  
7 to a very, very broad group of people associated with  
8 an institution.

9           We feel that the commercial uses are not  
10 addressed in the drafting, that while it says the  
11 beneficiaries must be nonprofit, the language doesn't  
12 actually carry over to cover whether the uses that are  
13 engaged in are commercial or not. There's no sole  
14 purpose language in there, which is common in  
15 exemptions. One question we think is worth  
16 discussing, and I know I'm going long, but there's a  
17 lot here, is, you know, in some of the European  
18 approaches, there's a discussion of whether copyright  
19 owners should be engaged in the process cooperatively  
20 for setting security measures that would be put in  
21 place. That's not addressed here.

22           I think, for now, I'll leave it at that,  
23 but, like I said, I want to be cognizant of our time  
24 here, but this is a very, very important big issue  
25 that the government's been studying for a long period

1 of time without any consensus proposals, and so, in  
2 this setting, without, you know, a written response to  
3 the reply comments and without opening statements,  
4 we're inherently limited in this context, so that's  
5 what I'll leave it with. I do want to reiterate we  
6 appreciate all the efforts that the proponents made to  
7 do some narrowing, and I've talked to some of them,  
8 and I really appreciate their willingness to try to  
9 collaborate and discuss things, but we remain opposed  
10 to the exemption outright.

11 MS. SMITH: Okay. Thank you.

12 Mr. Mohr, if you wanted to quickly outline  
13 any issues where you may either agree with the other  
14 commenters or where the refinements have iterated some  
15 of this position, and then, Mr. Stallman, I will let  
16 you respond.

17 MR. MOHR: Sure. A couple of points. I  
18 mean, one of the things that concerns us, I think, and  
19 I do want to affiliate myself with the prior remarks  
20 and will not repeat them, just emphasize a few points  
21 and hopefully add a new wrinkle or two.

22 The first thing I want to express my  
23 agreement with is on the licensing point in that our  
24 members license their works to institutions in the  
25 context of agreements that are negotiated, et cetera,

1 and to the extent that those uses, particular uses,  
2 including text and data mining, are the subject of  
3 licensing restrictions on TPMs used, I mean, we don't  
4 believe there is grounds for an exemption here. We do  
5 oppose it, and we do appreciate the narrowing as well,  
6 but we do think it's very important that those license  
7 terms be respected and not part of this exemption at  
8 all should it eventually issue.

9           The second point is that I think one should  
10 look at this type of exemption and particularly look  
11 in two contexts. Suppose a university gets a hold of  
12 a corpus of literary works and it runs text and data  
13 mining on them, and then three years later, after the  
14 statute of limitations is over, it decides to make  
15 those works available to other people. That  
16 university could well be immune, and so we think it's  
17 reasonable that an additional condition, if you're  
18 going to do this, we think it ought to be limited to  
19 those institutions that do not have immunity so that  
20 they are actually responsible for any underlying  
21 infringement that may occur.

22           The third thing has to do with a particular  
23 fact pattern that may well elicit comments on  
24 differing views about whether it's legal or not, but  
25 it's something we're certainly concerned, and that has

1 to do with the consumptive uses and definitional ones  
2 about what text and data mining means because I am not  
3 sure. I think I know what you mean, and that's  
4 something I don't want to have to explain later to my  
5 members, this is what I thought they meant.

6 But the fact pattern that concerns me is  
7 this, which is the subject of litigation and one of  
8 our members where a competitor took a series of  
9 copyrighted annotations, if you like, and has used  
10 those to launch a competing service. In other words,  
11 they "mined" a body of copyrighted and mix of  
12 copyrighted annotations and public domain material and  
13 then are now using the results of that AI training to  
14 launch a competing and substitutive service.

15 That type of activity is very concerning to  
16 us, and we do not believe that given the steps that  
17 our members have taken to create their works and make  
18 those works available in a functioning market that  
19 that type of what we would view as market-destructive  
20 behavior ought to be allowed, and based at least on  
21 the kinds of comments about looking at post-1945  
22 novels and things like that, that doesn't appear to  
23 be, in fairness, what the intent of this exemption is.

24 But, again, I'm looking at the words that  
25 were offered, you know, and part of the role here is



1 to look for doom, and that's certainly one of the --  
2 that's one of the bad things that could happen the way  
3 that some of this language could be read. Thank you.

4 MS. SMITH: Okay. Thank you. I know people  
5 are looking for doom or optimism here. I think what  
6 I'm trying to do in this sort of last question before  
7 I turn it to Ms. Rubel to see if there's any  
8 low-hanging fruit, and then she can sort of lead us  
9 through the origins, so, Mr. Stallman, did any of  
10 those comments -- are there any other opportunities do  
11 you see for compromise, such as a couple I wrote down  
12 is testifying that the uses would be non-commercial or  
13 perhaps limiting databases so that they were not a  
14 joint effort unless there was -- I don't know whether  
15 that would be by institution or by shared project,  
16 whether there would be some considerations of  
17 controlled settings, such as restrictions on download  
18 of the work or some of the users, but if you could  
19 please let me know how you would like to respond?

20 MR. STALLMAN: Yeah. So thank you, and  
21 there's a lot to respond to there, and I want to get  
22 to the points about limitations on aggregation of  
23 databases across institutions in non-commercial uses,  
24 but I think it's really important just to respond  
25 directly to what Mr. Mohr said to clarify what the

1 point of this exemption is because there seems to have  
2 been some confusion about that.

3 I want to clarify that this exemption grew,  
4 in part, out of learnings from an NEH-funded Institute  
5 for Legal Literacies in Text and Data Mining. This  
6 was a convening of digital humanities scholars and  
7 copyright practitioners to really look at the work  
8 that they're doing and how it could be supported, and  
9 one thing that came across very, very clearly is that  
10 there are three distinct ways that the current  
11 prohibition on circumvention in 1201 is inhibiting  
12 this work.

13 One is, by and large, the work in digital  
14 humanities is only focusing on works in the public  
15 domain, works from 1925 and earlier, and this has the  
16 unfortunate tendency to reproduce biases in that  
17 collection, which predominantly are works written by  
18 white male authors. This both sort of marginalizes  
19 underrepresented authors, and also it forecloses  
20 research into certain contemporary culturally  
21 significant phenomenon, things like the representation  
22 of Muslim Americans after the 9/11 terrorist attacks  
23 or the Harlem Renaissance.

24 And then what is also happening is it's  
25 leading to having to do work with very limited

1 collections. There are some cases in which there are  
2 some in-copyright works available, but the value and  
3 the validity of legal -- sorry, of text and data  
4 mining turns largely on the comprehensiveness of the  
5 dataset. So what the researchers are seeking to do is  
6 to be able to assemble their own corpora so it is  
7 sufficiently comprehensive to answer the question they  
8 seek to ask.

9           So I understand Ms. Charlesworth's concern  
10 about the size of the dataset, but this is not just  
11 sort of an unbounded dataset. It's the datasets  
12 that's needed to answer the research question, and  
13 this really leads to the third problem, which is that  
14 research projects are being abandoned entirely because  
15 there's just no way that that corpora can be assembled  
16 without the researcher being exposed to significant  
17 civil and potentially criminal liability under § 1201.

18           So just to be perfectly clear, this is the  
19 problem we were seeking to solve, is to make it so  
20 it's the researcher's intellectual curiosity rather  
21 than the available corpora that does not require  
22 circumvention that is influencing the direction of  
23 digital humanities scholarship. So, when we ask  
24 questions, things about non-commercial use, yes, we  
25 don't contemplate the work of these scholars being

1 used for commercial purposes, so that limitation is  
2 fine.

3           When you talk about the aggregation of  
4 datasets across institutions, the idea is the  
5 researchers themselves are assembling their own  
6 corpora to answer their own questions, not that  
7 they're reaching out to use somebody else's, and so I  
8 just want to be very clear about that because there  
9 seems to be some sort of conception that the exemption  
10 seeks to create this general purpose database for a  
11 host of uses that are not things that we're  
12 contemplating, and I think the more that we think  
13 about what is the actual goal of the exemption and how  
14 that goal of the exemption both furthers the core  
15 purposes of copyright and does not really impair the  
16 normal markets for the original works, it seems like  
17 there should be room for a consensus here, and I  
18 really hope that we can get there in this hearing.

19           MS. RUBEL: Thank you, Mr. Stallman. And I  
20 do note that Mr. Band wanted to make some comments.  
21 I'm going to jump in and move the discussion along to  
22 some more specific topics, but I promise, Mr. Band, we  
23 will get back to you and give you a chance to talk. I  
24 want to just give you a quick roadmap of where we're  
25 expecting to go in this discussion so that you have a

1 sense of the topics that we're hoping to cover, and,  
2 hopefully, that will help you limit your responses to  
3 the specific topics that we're discussing and help us  
4 move the discussion along.

5 So we're going to talk first in a little bit  
6 more detail about what text and data mining techniques  
7 really are, and I'm hoping to hear a little bit more  
8 from some of the researchers who we have on the panel  
9 today about what that would actually look like for  
10 their proposed projects and also about some of the  
11 similarities and differences between these proposed  
12 exemptions and the EU's directive on copyright in the  
13 digital single market.

14 Second, I would like to have a more legal  
15 discussion about whether precedent clearly establishes  
16 that text and data mining is fair use, including the  
17 scope of the HathiTrust and the Google Books cases,  
18 the TV Eyes case, and then the two recent decisions we  
19 got within the past few days from the Second Circuit  
20 and the Supreme Court on fair use. I'm not going to  
21 put anybody on the spot about those specific cases,  
22 but they might inform our discussion.

23 Third, I want to discuss specifically  
24 whether the proposed uses would be non-infringing,  
25 specifically whether they would be fair uses, and

1 within that discussion how and whether the works would  
2 be used for their expressive purposes, which we've  
3 already touched on a little bit, the amount of work  
4 that would be used, security issues and the licensing  
5 market. And then, finally, I know Mr. Mohr discussed  
6 the contractual limits on text and data mining and  
7 also whether there are alternatives to circumvention.

8           So, obviously, that's a lot. I'll try to  
9 keep us moving at a fairly brisk pace so that we can  
10 cover those topics. As I mentioned, I would like to  
11 start out by drilling down a little bit into exactly  
12 what we mean by "text and data mining techniques."  
13 The proposed exemption just uses that broad phrase, so  
14 I'm hoping to get a little more detail about what  
15 types of techniques would be used, and I understand  
16 that there's probably many types of techniques that  
17 could be possibly used, but I think it would be useful  
18 to understand -- I know Dr. Bamman and Dr.  
19 Wermer-Colan have specifically described some of their  
20 proposed projects, including measuring directorial  
21 style in films and conducting research on 20th century  
22 literature.

23           So maybe they can explain what do you mean  
24 by "text and data mining" within those contexts and  
25 also how much access would the researcher actually get

1 to the full content of the work, whether it's a text  
2 or a motion picture? Dr. Bamman?

3 MR. BAMMAN: Right. Thank you for those  
4 questions. So I think what I want to do is give you a  
5 sense about what my own understanding of text and data  
6 mining is definitionally and also talk through a  
7 couple of examples both of work that's been done and  
8 is envisioned both on the literary side and on the  
9 movie side if that sounds okay. So text and data  
10 mining really is about the application of a  
11 computational method in order to learn something about  
12 the data sets now in the context of what we're  
13 discussing here, right, informed by discussions with  
14 humanists and social scientists.

15 A lot of this data comes in the form of  
16 cultural objects, right, so text, movies, these things  
17 that are the product of human creation, and in all of  
18 this work, however we see this kind of work being  
19 realized, an algorithm is representing this object,  
20 right, to take text as an example, in a specific way  
21 in order to make measurements about it. So earlier I  
22 forget who mentioned this, but one example of this is  
23 to just look at the counts of words in a text, right?  
24 So how many times a given book contains the word love  
25 or hate or gun, right?

1           For example, if we want to have a study that  
2 looks at the representation of violence in a book,  
3 having the count of the number of the times we see the  
4 word gun and knife and bomb is really important to be  
5 able to do that. Now this kind of work is often done  
6 at scale, right, so on the order of 10,000 books or  
7 100,000 books in order to learn about large-scale  
8 trends in culture, but at the same time, it doesn't  
9 need to be, so text and data mining can also be  
10 applied to a single work in order to trace, you know,  
11 the illusions, for example, that it contains.

12           Now, in terms of the work that's been done  
13 so far, right, using these kinds of methods to tell us  
14 something about culture, I've done work in the past  
15 looking at 100,000 novels published between 1800 and  
16 2000 in order to measure how much attention characters  
17 get as a function of their gender, and what we found  
18 was something really striking, that women as authors  
19 end up giving equal attention to both male and female  
20 characters in their books while men as authors give  
21 three times more attention to male characters than to  
22 female characters, so there is a very stark disparity  
23 in how gender is represented in books that has been  
24 relatively constant over the past 150 years.

25           So that's something that we didn't know



1       beforehand, right, that these kinds of methods really  
2       allowed us to take measurements about this phenomenon  
3       by designing algorithms that are really transforming a  
4       book into the number of characters that they have  
5       along with the screen time that each character  
6       possesses. So, in all this, we're reducing a book to  
7       a single quantity of how much attention is being given  
8       to male characters and to female characters.

9               Other work has looked at the  
10       heteronormativity of pairings in novels and also has  
11       found that 95 percent of works published in the last  
12       70 years by major publishing houses are written by  
13       white authors, all right? So really new knowledge  
14       that just didn't exist without these kind of methods  
15       that are being applied.

16              Now, when we think about the ways that we  
17       can apply these kinds of methods to movies, there has  
18       not been a lot of work on this aspect because of these  
19       data issues that give rise to this kind of exemption  
20       that's being sought. People are just not doing work  
21       in this space, and that's a huge opportunity that's  
22       being missed to tell us something about how culture is  
23       being represented in film. So the kinds of questions  
24       that we can ask if we had access to this kind of data  
25       and develop algorithms to transform movies into these

1 kind of quantities include questions about  
2 representation again, so even just asking how much  
3 screen time women get in movies is something we can't  
4 do right now, and even if we want to have a more  
5 fine-grain notion about representation bias to  
6 examine, for example, how black characters are  
7 depicted in a positive or negative light or how often  
8 they're not depicted in ways that reinforce negative  
9 stereotypes, that's again something that we could ask.

10 We can ask questions about directorial  
11 style, right? So what is it about the films and  
12 cinematography of movies by Ava DuVernay that makes  
13 her style different from Wes Anderson, right? This is  
14 about color palettes. It's about shot type. It's  
15 about the depiction of pacing as well.

16 Given a large enough dataset, we can also  
17 ask questions about influence, right? So how often a  
18 given director influences the visual style of movies  
19 that follow, right? Stanley Kubrick is a great  
20 example of this, that Kubrick made a lot of movies  
21 that are very influential. Can we detect his  
22 signature in other movies that were produced after his  
23 own time?

24 MS. RUBEL: So I want to just --

25 MR. BAMMAN: And most important --

1 MS. RUBEL: Hang on just a moment. I want  
2 to just ask you if you could to maybe break it down in  
3 lay terms if you can. I understand that you're  
4 talking about creating algorithms and then applying  
5 those to the works at issue.

6 MR. BAMMAN: Yeah.

7 MS. RUBEL: But what does that actually look  
8 like? So what is the input? Is it all going through  
9 some sort of machine? And then what is the output?

10 MR. BAMMAN: Yeah.

11 MS. RUBEL: What does the researcher  
12 actually receive after the work -- the algorithm is  
13 run through the work if that makes sense?

14 MR. BAMMAN: Great. Yes, absolutely. Great  
15 question. So let me talk through that. Let me talk  
16 through the tangible steps that I would go through as  
17 a researcher if I wanted to answer a question about  
18 the representation of violence in movies, for example,  
19 right? So say that we had access to 100 years of  
20 information about movies and we wanted to answer a  
21 question about how often we see violence being  
22 depicted in movies, right, because people have  
23 discussed a lot about how movies are getting more  
24 violent. Maybe this is also changing the parameters  
25 of PG-13 and R, right, as the boundaries about these

1 categories.

2           So, if I want to answer this question,  
3 right, and had access to movies that I could transform  
4 in order to do so, what I would do is purchase the  
5 DVDs, right, so to buy 10,000 movies in order to be  
6 able to create this kind of collection. I would run  
7 software to extract the content of those DVDs into a  
8 digital file. I would store that data in the UC  
9 Berkeley secure computing environment, and Chris  
10 Hoffman would be able to talk about what kind of  
11 security measures are in place in this environment  
12 right now that I and my designated collaborators have  
13 access to, right, only us.

14           And so, for this kind of question, I would  
15 design an algorithm that is specifically made to  
16 address an answer to this question, so can we measure  
17 the on-screen representation of violence in movies?  
18 So, in order to do this, I would need a couple  
19 different sources of information, right? This is a  
20 visual question, right? Because bombs explode in  
21 movies, we need to be able to detect when a bomb is  
22 going off, so we need to have access to the RGB values  
23 of the movie, right? So, for every given still, these  
24 numbers that correspond to the amount of red, green,  
25 and blue in each pixel for that still is also

1 expressed in dialogue, right?

2           So, you know, people talk in violent ways.  
3 We would need access to the words, which come from the  
4 subtitles, and it also requires a degree of  
5 representational fidelity, right, because we need to  
6 be able to identify that a specific region of the  
7 input is a gun and not just a bomb, right? So it's  
8 not something that just having a coarse-grain image  
9 gets us. We need to have a high precision fidelity  
10 for all this. So get all this. What we would do is  
11 design an algorithm that would analyze the still of an  
12 image, right, analyze the RGB values within each of  
13 those pixels to assign a numerical score to the degree  
14 of violence represented within that image.

15           All right. We design an algorithm that  
16 measures what we're looking to measure, run that  
17 algorithm in our secure computing environment at  
18 Berkeley where the output would be a single numerical  
19 score for every movie that we run it on. So I would  
20 put in a movie like "Pulp Fiction" and get out a  
21 single number, like 79 percent, right, where that  
22 number corresponds to the degree of violence that that  
23 movie has. The only information that we see about  
24 that movie is that single numerical score. We then  
25 publish that finding in a research article for

1 everybody to see, but what we see is that single  
2 score. That would be the process.

3 MS. RUBEL: Okay. Thank you very much. And  
4 just one quick follow-up on that. If you wanted to  
5 then, using "Pulp Fiction" as your example, like, is  
6 there corroborating? Like, would you want to go back  
7 and look at specific scenes to corroborate that a  
8 score has captured something that is actually a gun or  
9 is actually a word that's discussing violence?

10 MR. BAMMAN: I think that would be a  
11 separate process that in the context of running this  
12 on a really large collection of data, we would presume  
13 that there is some other kind of validation that we  
14 would have besides looking -- watching the movie and  
15 seeing if there's actually violence there. We  
16 wouldn't use the movie itself, the actual watching of  
17 it to verify that, and there's a really important  
18 reason why we can't do this because, in the context of  
19 running these algorithms on a secure computing  
20 environment or in any kind of environment that we do  
21 for our normal computation, these computers don't have  
22 screens, right? So we can't even watch the movie if  
23 we wanted to.

24 MS. RUBEL: That's very helpful. Thank you  
25 very much. And, Dr. Wermer-Colan, would you like to

1 provide any additional information?

2 MR. WERMER-COLAN: Yeah, I mean, I can just  
3 try to repeat and elaborate on what David said. You  
4 know, I think the most important point is that TDM,  
5 Text Data Mining, is used for the purpose of analyzing  
6 texts and movies in ways that humans cannot  
7 themselves. That means counting, you know, features  
8 of the text or image that are way too complicated for  
9 a human to count or to identify specific traits about  
10 them, like the color or, you know, if something is a  
11 place name or a proper noun. These kind of  
12 large-scale analyses involve way more materials than a  
13 human could read in a lifetime or watch in a lifetime  
14 and a level of detail to what parts are analyzed far  
15 beyond what a human could do.

16 The output that you were asking about, I  
17 think that's very important to elaborate on, is going  
18 to be, you know, just parts from the original that  
19 will not even imitate or look like the original, so  
20 it'll be what you'd call extracted features for  
21 various types of computational models, and those  
22 models will contain predictions about probabilities  
23 that were learned from the original data. There's no  
24 way the original data could be reconstructed from  
25 those extracted features or models, but those models

1 can be then analyzed by others as a way to continue  
2 doing research in the field without ever reinstating  
3 access to the original material

4 MS. RUBEL: That's very helpful. Thank you  
5 very much.

6 Mr. Stallman, I'm going to call on you in  
7 just a moment, but maybe when you respond you can also  
8 answer my next question, which is the proposal states  
9 that the use would be limited to collaboration or  
10 replication and verification of research findings, but  
11 there is no limit on the time period for which the  
12 corpus can be retained. So are you imagining that it  
13 would be just for the purpose of the initial research  
14 and replication or verification of the findings within  
15 a specific time period, or could it potentially be  
16 retained indefinitely?

17 MR. STALLMAN: So thank you for the  
18 question. I just want to very quickly just touch on  
19 the final point just to underscore what Dr. Bamman and  
20 Dr. Wermer-Colan are saying, and it's a range of  
21 techniques of computational analysis, which is, I  
22 think, in part why, if you look to, for example, the  
23 EU digital single market copyright directive, they  
24 don't define the term. They refer to sort of it  
25 being -- in the recital, they talked about



1 computational analysis of information in digital form  
2 rather than trying to get overly precise with a  
3 definition.

4 On this point of retention, the idea is that  
5 the dataset would be retained for as long as needed to  
6 validate and verify research results, and really, I  
7 think either Dr. Bamman or Dr. Wermer-Colan are  
8 probably best able to give you a sense of how long  
9 that would be. I would say that we're concerned about  
10 having a specific time limit on the retention of the  
11 database just because it could be that the researcher  
12 has more than one question that they want to ask, and  
13 so the idea that they would have to go and then  
14 recreate the entire database and circumvent all of  
15 those works again to basically query the same dataset  
16 seems to be -- one, it would lead to new access  
17 circumvention that seemed to be unnecessary, and two,  
18 it's just not a great use of resources.

19 MS. RUBEL: Thank you. Dr. Bamman, I'm just  
20 going to give you a quick moment to jump in and answer  
21 that retention question.

22 MR. BAMMAN: Yeah, just a very quick point  
23 here. I don't think that there are academic norms  
24 about how long data needs to be preserved within  
25 universities, but for scientific norms,

1 reproducibility is a huge issue. I think you probably  
2 heard about the reproducibility crisis in a number of  
3 different fields within academia, and the crux of that  
4 is being able to have data to rerun your experiments  
5 on to make sure that the results are the same as the  
6 ones you published for, so having access to data only  
7 for a very small period of time in order to carry out  
8 the initial experiment I don't feel would be  
9 sufficient for these kinds of academic norms of  
10 reproducibility that all of us are really trying to  
11 adhere to.

12 MS. RUBEL: Mr. Zambrano Ramos, did you have  
13 a question?

14 MR. ZAMBRANO RAMOS: Yes, thanks, Ms. Rubel,  
15 and this is a question for the proponents. There was  
16 a mention in the record about getting an exemption to  
17 actually teach the TDM techniques themselves, so not  
18 just to do research on a body of work, so I'm curious  
19 if you could just talk a little bit more about that  
20 and why you believe that an exemption is necessary to  
21 actually teach the TDM techniques themselves. Thank  
22 you.

23 MS. RUBEL: Mr. Stallman?

24 MR. STALLMAN: Yeah, I can take that,  
25 although I invite any of our researchers who actually

1 do teach these methods to chime in. The idea is  
2 specifically to teach these research methods to  
3 students in the digital humanities fields. The idea  
4 is, if they can work with a corpus of works that are  
5 more relevant to them, they'll be more motivated to do  
6 this kind of research and they'll also say it's  
7 something that's relevant to their interests. The  
8 reason why it would not be preferable to limit that  
9 kind of work to just works that are in the public  
10 domain is that students who have interest in  
11 contemporary questions of culture and language and  
12 linguistics might not see digital humanities  
13 scholarship as an attractive field to them.

14 MS. SMITH: Can I jump in just for one point  
15 of clarification on the retention question, Mr.  
16 Stallman? Are the academic norms that you are  
17 speaking of -- are they the same in Europe as in  
18 America if you know?

19 MR. STALLMAN: I do not know.

20 MS. SMITH: Does anyone know? Because the  
21 European exception does have a limitation for the  
22 length of the research project and to verify the  
23 results. Does anyone know if it's different in  
24 Europe?

25 (No response.)

1 MS. SMITH: Okay. Ms. Rubel?

2 MS. RUBEL: A quick point of clarification  
3 for the proponents. The proposal for motion pictures  
4 specifies that the motion picture is lawfully made and  
5 then obtained on a DVD, et cetera. We were curious  
6 what the reference to the motion picture being  
7 lawfully made, what's the purpose of that phrase? Mr.  
8 Stallman?

9 MR. STALLMAN: Yeah, thank you. We actually  
10 took that language from a prior exemption. I think  
11 the concern at the time was that there would be  
12 circumstances, and perhaps Mr. Williams can speak to  
13 this, in which the DVD itself had not been made  
14 lawfully, had been made by someone else and under  
15 conditions that might violate license, but the  
16 subsequent obtaining of that was not unlawful, so we  
17 just wanted to make sure. This is really  
18 belt-and-suspenders to say that whatever concerns led  
19 to that being included in earlier exemptions dealing  
20 with works on DVDs, that we also foreclose that  
21 concern here.

22 MS. RUBEL: Thank you. Mr. Williams?

23 MR. WILLIAMS: Yes, thank you. I mean, when  
24 I saw that language, and I tried to touch on this  
25 quickly earlier, my understanding of their intent was

1 to say really not that the motion picture was lawfully  
2 made, although that's important as well, but really  
3 that the copy of the motion picture that they are  
4 ingesting was lawfully made so that the copy they are  
5 obtaining is not from, you know, some peer-to-peer  
6 network or cyber locker or some other infringing  
7 source, that they have a lawfully made disk in their  
8 collection that they would want to incorporate. So  
9 that was my takeaway, but I would agree with you that  
10 the word would need to be moved in the drafting to  
11 make that clear.

12 MS. RUBEL: And just to clarify, Mr.  
13 Stallman, is that partially what you intended?

14 MR. STALLMAN: Yes.

15 MS. RUBEL: Okay. Thank you. Mr. Taylor?

16 MR. TAYLOR: I just wanted to chime in that  
17 I do think that we were more concerned at the time  
18 about physical disk piracy, so that's why it was  
19 there.

20 MS. RUBEL: Okay. Thank you. Just to touch  
21 quickly on the EU's directive, for the proponents to  
22 consider -- did you consider the specific language  
23 used in Article 3 of the EU's directive, and for the  
24 opponents, is there anything that you prefer about the  
25 way that article is phrased that we might be able to

1 borrow from to reach some sort of consensus? And I'll  
2 let Mr. Williams take that first if he was still  
3 raising his hand, unless he was raising his hand to  
4 answer the last question.

5 MR. WILLIAMS: I didn't just raise my hand,  
6 but it didn't seem to lower my hand after I just  
7 spoke, but I'm happy to address this to some extent,  
8 and I welcome others to do so too. We have looked at  
9 that language, and, you know, I did reference earlier  
10 that one thing that it seems to include is some  
11 ability for copyright owners to participate in the  
12 process of designing the security measures that would  
13 be put in place, and you've already touched on some of  
14 the other limitations that are built in there.

15 I would caution that I don't think we should  
16 look to foreign standards that have been adopted as a  
17 be all and end all for our own approach or assume that  
18 they overlap with the fair use standard or with other  
19 exceptions and limitations within our own law. Our  
20 own government, as you know and have been involved in,  
21 has been studying these issues for quite some time  
22 without adopting the approach that Europe or Japan or  
23 others have adopted in various forms.

24 And so I think this gets back to one of the  
25 questions you mentioned, but I don't think you've put

1 it to us yet, so I won't go into it in detail yet, but  
2 is there really a fair use precedent, you know, does  
3 the precedent say this is really fair use across the  
4 board in the United States, and I don't think the  
5 precedent goes there yet. There are rather limited  
6 opinions on this issue really that don't, for example,  
7 cover motion pictures and don't analyze all of the  
8 specifics here and that specifically say in some ways  
9 that the cases are fact-specific to a degree.

10 So, while it's helpful, I think, to study  
11 the other approaches in other places and they do  
12 include some helpful limitations, I just wanted to  
13 have a cautionary note.

14 MS. RUBEL: Thank you. Ms. Charlesworth?

15 MS. CHARLESWORTH: Yes. No, thank you. I  
16 want to, I guess, associate myself with Mr. Williams'  
17 remarks and just emphasize the point that, you know,  
18 of course, the European approach, first of all,  
19 they're very high-level principles that are meant to  
20 be then adopted more specifically, so I don't think  
21 the language is really nearly as specific as you would  
22 want here for purposes of actually regulating any  
23 conduct, but, you know, the principle where even when,  
24 you know, a library's using it or, you know, one of  
25 the accepted, you know, actors in Europe or permitted

1 actors in Europe is using it, that the rights holders  
2 actually can, you know, apply measures that says to  
3 ensure the security and integrity of their networks  
4 and databases.

5 And that's so essential here and is  
6 actually -- you know, we were not, you know,  
7 to the market issue yet, but, you know, when you look  
8 at the market that is here for TDM in some of the  
9 products, you know, that's of paramount concern, and,  
10 you know, if TDM is included in a subscription and so  
11 forth, you know, it's conducted through appropriate  
12 security, and, obviously, you know, I just want to  
13 emphasize the fact, I mean, there's a lot of  
14 references to having say Berkeley, you know, a large  
15 university may have secure facilities to host data.

16 But this exemption would allow individual  
17 researchers to probably it sounds like collect, we're  
18 hearing examples of 100,000 books perhaps and store  
19 them where? You know, I mean, I think that that is  
20 just a really critical concern, and, again, I don't  
21 want to -- I know we haven't gotten to Hathi or  
22 Google, but I think we've said it enough that that  
23 really distinguishes the situation from the U.S.  
24 precedents.

25 MS. RUBEL: Well, let's put a pin in the



1 idea of the rights holders potentially having a role  
2 to play in security measures, and we can come back to  
3 that idea when we specifically discuss security issues  
4 because I think that might be an interesting point to  
5 discuss, but, in the meantime, Mr. Band?

6 MR. BAND: Thank you. So just a couple of  
7 points with respect to the EU directive. I note it's  
8 somewhat amusing that the rights holders are very  
9 happy to look to the EU precedent when it supports  
10 their view of the world, such as notice and stay down,  
11 for example, but when it's something that favors our  
12 view of the world, then it's not a good precedent.

13 Second, the other point that's worth noting  
14 with respect to the TDM provision is that it is  
15 subject to the general provision, the general  
16 contractual override provision so that, you know, that  
17 to some extent responds to Mr. Moore's issues so that  
18 even if there is a contractual restriction on doing  
19 text and data mining to something that is in a license  
20 agreement that under the directive, you know, the  
21 direct -- the exception, the TDM exception, in  
22 essence, trumps that contractual restriction.

23 But the bigger point to recognize from all  
24 this is that all of the kinds of things that the two  
25 researchers before were talking about will be in very

1 short order completely permissible in Europe, and it's  
2 probably already permissible in Japan, and it would be  
3 very odd if all those kinds of research activities  
4 could be done in Europe and in Japan and not in the  
5 United States, and I would think that that should just  
6 be, you know, as an initial matter, you know, kind of  
7 an unacceptable perspective from what we want our  
8 research activities to be, that we should be behind  
9 what is permissible in those other jurisdictions.

10 MS. RUBEL: Mr. Stallman?

11 MR. AMER: Can I ask one --

12 MS. RUBEL: Oh --

13 MR. AMER: I'm sorry. Could I ask one  
14 follow-up question just about the scope? So it  
15 sounded to me from Dr. Bamman's description and Dr.  
16 Wermer-Colan's description that the outputs that are  
17 involved with the research you're talking about do not  
18 include expressive content. I think one of you said  
19 that it wouldn't even be possible to access portions  
20 of the films or literary works. Do I have that right?  
21 I mean, are you asking -- is the researcher describing  
22 excluding outputs that would encompass any expressive  
23 portions of the ingested works?

24 MS. RUBEL: Dr. Bamman?

25 MR. AMER: I guess Dr. Bamman. Sorry, yeah.

1           MR. BAMMAN: So, sir, I can't speak to the  
2 legal definition of what an expressive work is, but I  
3 can say for the kind of output that I would need in  
4 order to write an academic research article to  
5 contribute some new knowledge to the world, I don't  
6 know. We absolutely don't need to have a continuous  
7 stream of a movie or a continuous quotation from a  
8 text. What we need are measurements, and those end up  
9 being reduced to single numbers.

10           MR. AMER: Okay. And, Dr. Wermer-Colan, is  
11 that your view also?

12           MR. WERMER-COLAN: Yes, absolutely.

13           MR. AMER: Okay. And I don't want to take  
14 up too much time, but I would like to hear, I guess,  
15 from both sides as to whether it's fruitful to  
16 consider defining text and data mining for purposes of  
17 this proposal to, you know, to exclude situations  
18 where, you know, anything other than, you know,  
19 non-copyrightable data or, you know, expressive  
20 content was somehow produced as a result or accessible  
21 as a result of the research. Mr. Stallman, I know you  
22 had your hand up before, but if you wanted to weigh in  
23 on that piece too, that would be great.

24           MR. STALLMAN: Yeah, so quickly I just want  
25 to round out the question on the EU exception because

1 I don't think -- the question that was asked was did  
2 we consider it when working on this proposed  
3 exemption. I just want to make clear that we did  
4 consider it. We didn't follow it for a few reasons.  
5 One is we actually went with an exemption that's  
6 slightly narrower because the EU exception applies to  
7 all cases of lawful access, and we wanted to avoid the  
8 sort of issues related to that, I mean, when we revise  
9 the exemption.

10 The other issue is, and Ms. Charlesworth  
11 referred to this, is that we're still in the process  
12 of member state implementation of the exemption, and  
13 it's just -- it's a little bit -- when you have  
14 potentially 27 variations of how this might be  
15 implemented or transposed into national law, it seemed  
16 like it might be premature to cite that as a  
17 reference.

18 And then the third reason was the interplay  
19 between the DSM copyright directive and the  
20 Information Society directive just because sort of  
21 bringing the EU version into play would potentially  
22 also require sort of study and incorporation of some  
23 parts of it that are completely separate on the EU  
24 directive. We decided it was just better to deal with  
25 a single and sort of self-contained exemption.

1           And then I just want to underscore the point  
2           that Mr. Band made, which is that it would really be  
3           an undesirable state of affairs for researchers if  
4           there were certain types of work in digital humanities  
5           that could be conducted in Europe and Japan but not in  
6           the United States.

7           On this question of whether or not -- I just  
8           want to make sure I understand the question correctly.  
9           Is it whether or not expressive content could be  
10          copied for purposes of performing text and data  
11          mining? Because my understanding is that for this to  
12          work, the entire work must be copied.

13          MR. AMER: Well, no, sir. I was asking  
14          about the output, so I understand that the ingestion  
15          of material into the database would involve copying  
16          the entire works, but I'm talking about what is  
17          accessible as a result of the research, as a result of  
18          the text and data mining.

19          MR. STALLMAN: Yes, and I invite Dr. Bamman  
20          or Dr. Wermer-Colan to weigh in on this, but I think I  
21          refer to the earlier comments they were making about  
22          the extractive features of the computational analysis,  
23          which is not the expressive content.

24          MR. AMER: Okay. Thank you. Ms.  
25          Charlesworth?

1 MS. CHARLESWORTH: Yes, thank you. I just  
2 wanted to -- I think we've heard mainly about what  
3 would be contemplated for motion pictures. I know  
4 from the written reply comments there's definitely  
5 suggestions of analyzing some of the expressive  
6 content, I think, directly. I found them a little  
7 confusing, so I wondered if the answer's really the  
8 same for books, and I would say in answer to your  
9 question specifically whether it's helpful, yes, it  
10 certainly, I think, is helpful, although I think the  
11 other helpful piece of this is that the researchers,  
12 you know, wouldn't have access to the full text or the  
13 expressive content directly either, which is the  
14 situation in Google and Hathi.

15 So, in other words, there are sort of two  
16 pieces to the problem. I mean, you know, and I think  
17 certainly, I mean, without -- you know, we still have  
18 a lot of other reservations, which I won't repeat,  
19 but, I mean, certainly, that would be very helpful to  
20 limit the access of the researchers and then also  
21 limit the output so there's no expressive content  
22 being viewed or output.

23 MS. RUBEL: I see there's quite a few people  
24 who wanted to respond, but I'm going to just move us  
25 along a little bit because time is passing, and

1 there's a lot of other topics that I'd like to cover,  
2 but if time permits, we can come back to this issue at  
3 the end of the rest of our discussion. So I want to  
4 pivot now to talking about whether precedent clearly  
5 establishes in the United States that text and data  
6 mining is a fair use, and I'll start us off by  
7 focusing on motion pictures. The proponents cited a  
8 number of cases in their submissions, including Google  
9 Books, HathiTrust, Kelly v. Arriba, Perfect 10, and  
10 iParadigms, but none of those cases deals with motion  
11 pictures. So, for all, how are motion pictures  
12 different? Should the analysis be different for  
13 motion pictures? Mr. Taylor, were you raising your  
14 hand to respond to that question?

15 MR. TAYLOR: Yes, I can. I think that it is  
16 not a settled area of law. I mean, I think even their  
17 cases cited Google Books that clearly says that this  
18 area or activity tests the boundaries of fair use, so  
19 even in what they cite as a favorable decision, the  
20 court was very wary to say that this is non-infringing  
21 use, and I think that the problem that we have in this  
22 rulemaking and the last 20 minutes is that we don't  
23 really have an example of what this really looks like  
24 for motion pictures, and every time a proponent has  
25 come here, we've always insisted that we be able to

1 kick the tires, and I think we just need to go back  
2 and look at the nature of this rulemaking is supposed  
3 to be for non-infringing activities. All those  
4 non-infringing activities, we have a history of  
5 educational uses, we have a history of filmmaking.  
6 So, to say that we're going to create this broad, new  
7 exemption without that kind of context, I think we're  
8 really getting into an area that the office has really  
9 refrained from getting into new areas of law, so  
10 that's what I would say.

11 MS. RUBEL: Mr. Band?

12 MR. BAND: So I think that you won't be  
13 surprised to learn that I think that this is a very  
14 well-settled area of law, and it's also not only  
15 settled in terms of the law but in terms of the  
16 practice, right, in terms of what is going on on a  
17 daily basis when you have, you know, the text and data  
18 mining that goes on every single day mining the  
19 internet by all kinds of companies and all kinds of,  
20 you know, commercial entities, non-commercial  
21 entities. It's just a -- it's standard practice, and  
22 to suggest otherwise would be, you know, sort of like,  
23 you know, just ignoring what is going on in the world  
24 outside. So not only have legal decisions reached  
25 this issue, but they've also, in terms of what is



1 going on in the world, you know, there's really --  
2 there's absolutely no doubt about it.

3 Now, turning even specifically to motion  
4 pictures, I mean, there's no reason why the analysis  
5 should be any different with respect to a motion  
6 picture as opposed to a book or an image. Motion  
7 pictures are moving images, right? So why would that  
8 be any different? And compounding it is, you know,  
9 you might be getting to it soon, but, you know, we do  
10 have the TV Eyes case, and TV Eyes is interesting in a  
11 couple of respects. One is, you know, the reason why  
12 that was found not to be fair use is because you could  
13 see the results, right, and the results were way too  
14 long, right? It was like these 30-minute extracts.

15 But, here, we're not going to have any  
16 extracts or you're not going to see anything. You're  
17 just going to get a number. You're not getting any  
18 images. So, if anything, yes, that's a sort of  
19 helpful precedent to us that shows, you know, yeah,  
20 what is clearly not fair use in this area, what would  
21 not be seen as a permitted area of text and data  
22 mining. And, relatedly, you know, it's also  
23 interesting, you know, that Fox didn't bother  
24 appealing the District Court's decision, which I  
25 forget whether it's sort of implicit or the District

1 Court actually did find the assembly of the database  
2 to be fair use. Fox didn't bother challenging that  
3 because it knew it would lose, right? But, again, it  
4 certainly was, if not explicit in the District Court  
5 decision, it was certainly implicit that the assembly  
6 of the database, you know, the taping of all of these  
7 news broadcasts was perfectly permissible.

8 MS. RUBEL: Ms. Moore?

9 MS. MOORE: Thank you. I would like to just  
10 underscore the statements that Mr. Band has made. I  
11 am in agreement with those. I would also like to  
12 point out that where TV Eyes' service made it not only  
13 possible but a prominent feature of their database for  
14 consumers to view the clips of the audiovisual works,  
15 and as has been mentioned many times at this point,  
16 TDM research enabled by circumvention in this proposed  
17 use doesn't provide the sounds and images of the  
18 copyrighted works to the public. It was able to  
19 function as a substitute for the original works, and  
20 TDM scholarship simply is not. It also is a  
21 commercial use where, here, we are proposing a  
22 nonprofit scholarly use.

23 MS. RUBEL: Ms. Charlesworth?

24 MS. CHARLESWORTH: Yes, thank you. Just  
25 from the point of view of literary works, I think one

1 sort of founding principle both of Hathi and Google is  
2 that the uses are non-substitutional, and I think that  
3 the problem at least again reading sort of through the  
4 comments and the petitioners' comments on the book  
5 side, it's really not clear again whether -- well, it  
6 seems that there would be full-text access to the  
7 database. That's at least the way it's presented in  
8 the papers, and so that is substitutional.

9           If you're reviewing the expressive text, and  
10 when I was in college, I read paper books and analyzed  
11 them in papers, and I bought those books, and that's  
12 certainly a use of the expression in the book, so I  
13 think that's really a fundamental question. As you  
14 know, Google spent a lot of time -- Google -- Hathi  
15 didn't allow full-text uses for researchers, and  
16 Google actually, there was a very lengthy discussion  
17 about why the snippets were not a substitute for  
18 having the book, and so I think that's a really  
19 important concern.

20           Also, you know, in Google and Hathi, you  
21 know, the court basically said there was no market at  
22 least at that time. Here, you have a market. In the  
23 literary works area, you know, we have -- CCC has a  
24 product to do text mining, a lot of subscriptions, you  
25 know, particularly to scientific journals and so

1       forth, which would all be included in this, you know,  
2       they're part of the services that are offered, our TDM  
3       services that are conducted securely and so forth, so  
4       I think, you know, and we mention this in our papers,  
5       I mean, the whole, you know, large corpora of data are  
6       become increasingly valuable because of AI research.

7               So, you know, there are a lot of commercial  
8       activities now going on around analyzing expressive  
9       content, and so, you know, I really think that there's  
10      very -- as in Google, which said over and over again,  
11      and Hathi, you know, this is limited to its facts.  
12      Google said that like -- the Google Books case said  
13      that many, many times, it was right on the cusp of  
14      fair use, it tested the boundaries of fair use.

15              And, you know, I think, you know, it's very  
16      hard to talk about generalities in this area and say,  
17      oh, categorically, TDM is fair use. We don't -- I  
18      think that's just not a supportable position, and, you  
19      know, the office has always been very careful not to  
20      break new ground or get ahead of the law on fair use,  
21      so, you know, I think that sort of summarizes our  
22      concerns apart from the security as to why we don't  
23      think, you know, again, that the exemption is  
24      supportable on the grounds of fair use.

25              MS. RUBEL: Thank you. Mr. Stallman, maybe

1 you can clarify for us what seems to be a factual  
2 question. Would the full text of literary works be  
3 accessible through the database for researchers?

4 MR. STALLMAN: Thank you for the opportunity  
5 to clarify this question because I agree this seems to  
6 be tripping everyone up, and I just want to be very  
7 clear about this. The researchers themselves already  
8 have access to the book or the movie that is going to  
9 be put into the corpus for text and data mining, so  
10 it's not the case that the work is being copied so the  
11 user has access to the full expressive content, as was  
12 the concern that seemed to be -- that Ms. Charlesworth  
13 was --

14 MS. SMITH: So the answer is no?

15 MR. STALLMAN: Yeah. Right.

16 MS. SMITH: Is the answer no?

17 MR. STALLMAN: Yeah.

18 MS. SMITH: Okay.

19 MR. STALLMAN: The answer is no, but, to be  
20 clear, it's no because they already have that, and  
21 they don't need an exemption for circumvention to read  
22 a book or to watch a film, so just to be very clear  
23 about what this exemption is for.

24 MS. SMITH: Okay.

25 MR. STALLMAN: Yeah, so yeah.

1 MS. SMITH: No, I think we get that, but if  
2 this exemption would have a restriction and the answer  
3 is no, that seems like it is important to how the  
4 office can consider it, and I see you're saying  
5 because they don't need it, they will access, you  
6 know, the novel or whatever separately through their  
7 own purchased copies like we all did in the olden  
8 days. Thank you.

9 MS. RUBEL: Mr. Williams?

10 MR. WILLIAMS: Yes, thank you. There are  
11 distinctions between motion pictures and literary  
12 works, some of which may or may not be relevant in  
13 this context depending on the scope that's at issue.  
14 Of course, a clip from a motion picture that's very  
15 short arguably could have more value than one sentence  
16 from a literary work, although I think one sentence  
17 from a literary work could be valuable too, because  
18 there's an established and acknowledged market for  
19 clips for motion pictures and people want to view  
20 their favorite quick scene from a movie, and that is  
21 exploited where, as at least according to the Second  
22 Circuit in the Google cases and HathiTrust, the  
23 snippets were not -- you know, they didn't usurp a  
24 market, which one can agree with or disagree with.  
25 The TV Eyes case and what was said about

1 that by Mr. Band, I don't think it's fair to presume  
2 why Fox didn't appeal an issue or, you know, whether  
3 it was decided by the district court or not,  
4 litigators make decisions all the time, and I didn't  
5 litigate that case, but I think it would be unfair to  
6 hold it against Fox that an issue wasn't presented to  
7 the court and was never decided in the motion picture  
8 context, that issue being the creation of these full  
9 copies of motion pictures for ingestion, and that  
10 issue has just never been reached by a court to my  
11 knowledge.

12           And so I didn't get his words written down,  
13 so I apologize, Jonathan, if I got it wrong, but I  
14 think he said essentially that from his point of view,  
15 because of HathiTrust and Google Books, it's  
16 well-established or it's obvious that essentially all  
17 text and data mining of all different categories of  
18 works is lawful, and, you know, I would just say that  
19 after extensive multiple studies and as recently as  
20 last year, the U.S. PTO's report on mass digitization  
21 on AI issues says expressly that mass digitization and  
22 text and data mining as relevant examples of other  
23 activities with copyright implications may be  
24 considered copyright infringement or fair use  
25 depending on the facts and circumstances at issue.

1           So I don't think at least the PTO agreed  
2           that these cases by themselves establish a broad  
3           enough precedent for you to push them beyond their  
4           specific facts, and I think there's some language in  
5           the Second Circuit opinions that would also suggest  
6           that. And so, as Ms. Charlesworth said, I do think,  
7           in the motion picture space but also the literary work  
8           space, to grant this exemption, the Copyright Office  
9           would be, you know, embracing something that is not  
10          set forth in detail in any judicial decision. And so  
11          this rulemaking essentially would potentially be  
12          articulating a government position on an issue that's  
13          been studied for a long period of time without a  
14          consensus position and without a policy proposal to  
15          Congress on this, and so our hesitancy is, in large  
16          part, driven by that. There is not an established  
17          precedent on this issue one way or the other.

18                 MS. RUBEL: Mr. Band, I'll give you a chance  
19                 to respond in just a moment, but I'm going to add an  
20                 additional question to the pot. We did have two new  
21                 decisions come down, one from the Second Circuit in  
22                 the Andy Warhol Foundation case and the other from the  
23                 Supreme Court in Google v. Oracle, that both focus on  
24                 fair use, so in addition to responding to the  
25                 discussion relating to TV Eyes and the other



1 precedent, if anybody wants to comment on whether and  
2 how those two cases may change the legal analysis, I  
3 welcome you to do so. Mr. Band, we'll start with you.

4 MR. BAND: So just first to respond to  
5 Matt's point and some of the other points, you know,  
6 what that would suggest is that the Copyright Office  
7 could never grant an exemption based on fair use  
8 because, you know, every fair use case by definition  
9 is limited to its facts, and so, you know, then that  
10 would basically dramatically limit the range of  
11 exemptions the office would be allowed to grant, and,  
12 of course, the office in the past has looked at fair  
13 use decisions as a basis for granting exemptions.

14 And also, you know, there is now a pretty  
15 big body of cases from multiple circuits. We're not  
16 talking about just, like, a District Court decision  
17 here or there. We're talking about, you know, six or  
18 seven Circuit Court decisions if you add all of the  
19 cases together, and that's a pretty substantial body  
20 of knowledge, of cases.

21 Also, and this is critical in going back to  
22 Chris Mohr's point of looking for doom, if someone  
23 goes beyond what is permissible by law, by fair use,  
24 then they would still be liable for an infringement  
25 action. They would still be liable for copyright

1 infringement that, you know, especially if somehow  
2 someone, you know, were to access content or there was  
3 expressive content available or somehow something was  
4 distributed, I mean, all of those things would be  
5 infringements, and so the Copyright Office would  
6 simply be saying, well, we're going to allow  
7 circumvention for these kinds of activities that  
8 courts have shown to be lawful, but then, if somehow  
9 someone does something that seems to go beyond that,  
10 that would be still bounds or grounds for an  
11 infringement action. And even though conceivably in  
12 some circumstances damages might not be available  
13 because of sovereign immunity, there still would be  
14 injunctive relief available, et cetera. So there  
15 would be a way to sort of close that off. We're not  
16 really opening any floodgate here.

17           And then, finally, just quickly turning to  
18 the Warhol case certainly has nothing to do with this  
19 whatsoever. I don't see how it can have any impact.  
20 You know, conceivably, you know, you could look at  
21 dicta in the Google v. Oracle case, you know, about  
22 copyright being a tax or something.

23           But putting that aside, I really don't -- I  
24 don't see what that decision would really -- I don't  
25 think it would have any impact on this. You know,

1 it's a very, very different situation, you know, and  
2 also we're not talking about commercial actors here.  
3 We're talking about non -- if we were dealing with  
4 commercial actors, then, conceivably, that case would  
5 have more relevance, but because we're not, I just  
6 don't -- I really don't see it having much relevance  
7 here.

8 MR. AMER: Asking a quick follow-up question  
9 just quickly, so, I mean, I take your point about the  
10 idea that there have been a number of cases broadly  
11 involving text and data mining, you know, HathiTrust  
12 and Google Books, but, I mean, it's also true, I  
13 think, that the courts discuss the protective  
14 measures, the specific protective measures, that were  
15 in place in those cases in a lot of detail, right? I  
16 mean, you know, the court, particularly in Google  
17 Books, went on and on about how you could only, you  
18 know, get whatever -- an eighth of a page, that, you  
19 know, certain pages were blacklisted.

20 So how do we sort of deal with that, you  
21 know, from the Copyright Office's perspective in  
22 trying to write a regulation? I mean, do we -- I  
23 mean, what you've proposed says, you know, there need  
24 to be reasonable security measures, but that seems to  
25 be some distance away from the level of detail that,

1 you know, was provided in those cases, and if what  
2 we're trying to do is not break new ground, do we need  
3 to sort of adhere to some greater degree to the  
4 specific, you know, what the court said was okay in  
5 those cases?

6 MR. BAND: Well, first of all, the Copyright  
7 Office has already decided this issue to some extent  
8 certainly in previous exemptions. I mean, I just  
9 think the one that comes to mind is the software  
10 preservation exemption where there's obviously a  
11 database that's assembled, and I think that the office  
12 uses sort of, like, reasonable security or some  
13 language of that sort, you know, I just don't think  
14 it's necessary to go beyond that. I mean, obviously,  
15 it's appropriate to talk about reasonable security,  
16 but to go into the -- obviously, there's no reason to  
17 go into technical detail beyond that in a regulation.

18 If a person is not applying appropriate  
19 security measures, then two things are going to  
20 happen. One, there will be -- they won't be adhering  
21 to the requirements of the regulation, right? If  
22 there's, like, a lot of leakage, they're not applying  
23 the exemption appropriately and they would be  
24 therefore liable for a violation of 1201. Also, they  
25 would be presumably either directly or contributorily

1 infringing copyright, and they would be liable that  
2 way.

3           So I just don't think it's necessary to sort  
4 of try to think of all of the worst-case scenarios  
5 because even in the worst-case scenario there are  
6 legal remedies available sufficient that, you know,  
7 the protections that, you know, the academic  
8 institutions are going to use will be sufficient to  
9 prevent those.

10           MS. RUBEL: Mr. Hoffman, did you want to  
11 speak to security issues?

12           MR. HOFFMAN: Thank you very much for that  
13 question. Yes, I do. I'm really heartened to hear  
14 this conversation about the specificity of the  
15 security controls, what are the overarching principles  
16 that should be applied for information security, and I  
17 think I can provide some perspective on how  
18 universities, including the University of California,  
19 but not just our university are responding to this,  
20 and this is because, increasingly, researchers are  
21 coming to -- I work kind of in an information  
22 technology space. They come to us wanting to do  
23 research on data or content that has restrictions or  
24 is secure or sensitive. Sometimes those come with  
25 very specific controls from a data provider, such as

1 HIPAA, for instance, for protected health information.  
2 Other times it's just known that this is information  
3 that there's some risk and they require protections to  
4 be in place.

5           So, in our university, we engage in a  
6 process where we really look closely at those data, we  
7 consult with experts on campus, such as the Office of  
8 Scholarly Communications or Legal Counsel, to really  
9 understand kind of what are the super set of  
10 requirements and concerns and risks that might be  
11 faced bringing this kind of data into this kind of  
12 research context.

13           Based on that, we do a security risk  
14 assessment. We identify this as high, medium, or low  
15 risk, and then, if it's high risk, as, you know, this  
16 content would be, we work with the researchers to  
17 identify the appropriate environment to do their  
18 research in and develop a security plan that can be  
19 shared with our information security office that  
20 really stipulates, you know, what everybody is  
21 responsible for, because security is really, you know,  
22 you may have heard the phrase shared responsibility.

23           You know, as an IT service provider, I have  
24 responsibilities, but the researcher does as well.  
25 One of the things that we do in that security plan is

1 we have what's called a research user agreement which  
2 the principal investigator, the main researcher signs  
3 to say that they understand their responsibilities.  
4 They tell us when personnel on their team changes,  
5 those kinds of things, and then, you know, we register  
6 these systems with our information security office.

7 And I think all universities are actually,  
8 you know, given information security is a very  
9 evolving landscape, there's a lot of attention to this  
10 right now, so, increasingly, our security offices are  
11 monitoring for intrusion detection, for threats, and  
12 for the kinds of activities that you don't want to  
13 have happen. So, if you don't want the data to be  
14 copied out to the graduate student's computer, we can  
15 prevent that and we can monitor for it as well. So we  
16 have a number of things that we do that I see really  
17 happening at other universities as well as my own.

18 MS. RUBEL: Do you have a sense of if these  
19 what you just described are generally accepted  
20 understanding of what a phrase like "reasonable  
21 security measures" might mean or how it would be  
22 interpreted in universities?

23 MR. HOFFMAN: Yeah, you know, and I think  
24 this is one of those, you know, things where, you  
25 know, each university has, you know, set up its own

1 process and its own procedures and policies and  
2 information systems that they really are driven by,  
3 you know, standards, for instance, that are provided  
4 by the federal government, by NIST, by international  
5 standards like International Standards Organization  
6 that really, you know, it's not just about technology,  
7 so security, all of these security frameworks come  
8 down to technical controls, administrative controls,  
9 which include, like, human resource policies, as well  
10 as physical control, so the data centers have locks  
11 and have cameras that are recording what goes on and  
12 things like that.

13 MS. RUBEL: And are those things happening  
14 at smaller universities and colleges as well?

15 MR. HOFFMAN: You know, sometimes they're  
16 happening, you know, better at some of those schools,  
17 so it really does, you know, kind of depend on the  
18 local context, but I would say all universities are  
19 very concerned about information security as well as,  
20 you know, enabling researchers to do this kind of  
21 research responsibly, right, so that we're providing  
22 the kinds of environments and clarity of kind of  
23 process and procedure so that researchers know how to  
24 go about, you know, getting to that numeric or that  
25 finding that really is the goal of their research.



1 MS. RUBEL: Mr. Ayers?

2 MS. SMITH: You may have --

3 MS. RUBEL: Oh, sorry.

4 MS. SMITH: Can I just ask one question?

5 You may have already sort of said this, but it sounds  
6 like you have not identified any particular  
7 articulation of standards or, like, an organizational  
8 body to work through what these measures would be.  
9 Are you aware of any in this field?

10 MR. HOFFMAN: Well, okay, so, actually, yes,  
11 so, for instance, in our campus and actually the  
12 University of California system, based on these  
13 federal standards and these international standards,  
14 we've identified for highly sensitive data, so if we  
15 classified this data as highly sensitive, we then have  
16 a series of kind of 17 control areas, which might  
17 include things like encryption standards that have to  
18 be in place so that the data are encrypted at rest and  
19 when they're being moved around.

20 Now the standard might be more of an  
21 administrative one that says, you know, all staff  
22 involved in a sensitive data project -- in fact, all  
23 staff at our university have to do an annual  
24 cybersecurity refresher, right, so these kinds of  
25 things, and sensitive systems must be registered with

1 our Information Security Office so that they can apply  
2 their advanced toolkits, so, yes, we actually have a  
3 very specific policy that has, like, 34 control areas,  
4 many of them with, you know, multiple specific  
5 controls that need to be in place.

6 MS. RUBEL: And you referenced NIST as the  
7 source of one set of standards. Is there another set  
8 of international standards created by a  
9 standards-developing organization?

10 MR. HOFFMAN: So the one that we use a lot  
11 of the time is the International Standards  
12 Organization. It's like 27,001 and 27,002, so we use  
13 -- you know, really my job is to look at the super set  
14 of kind of requirements, so a data provider might say,  
15 like, you need to follow NIST 853 or they might say  
16 you need to follow, you know, HIPAA security, the  
17 HIPAA security standard even if it's not protected  
18 health information. So we get these requirements, and  
19 really it's then a process of kind of folding them  
20 together. Sometimes we go back and say, hey, you  
21 know, we can address the risk behind this concern in  
22 following one, so, you know, we do sometimes have  
23 negotiations based on what we're actually doing within  
24 our information system environment.

25 MS. RUBEL: Thank you. Mr. Ayers?

1           MR. AYERS: Thank you very much. To respond  
2 both to comments by Mr. Band and Mr. Hoffman,  
3 certainly, the remedy of pursuing damages for  
4 copyright infringement would be available if movies  
5 were leaked. That's, obviously, available. The  
6 problem is we want to avoid getting to that situation  
7 in the first place, especially when you consider the  
8 nature of the archives we're talking about here where  
9 there's been discussion of, while some may be small,  
10 some may be thousands of titles.

11           So just as we've seen in security leaks of  
12 private data in various situations, these leaks can be  
13 massive, and once the horse is out of the barn, so to  
14 speak, it's hard to put it back in. And so,  
15 certainly, copyright infringement damages are  
16 available. That's not the place we want to go to. We  
17 want to try to avoid that situation, and I'm  
18 encouraged to hear that the UC system thinks about  
19 data security very seriously and seems well prepared  
20 to be able to address this sort of situation.

21           I note that, while the UC system may  
22 designate this data as highly sensitive or highly  
23 confidential, there's nothing that requires anybody  
24 else to do the same, especially when the proposal as  
25 currently written deals not only with educational

1 institutions but deals with museums, libraries, and  
2 archives, which, you know, "archive" is a potentially  
3 very broad word. "Library" and "museum" are also very  
4 broad, and those are institutions that may not have  
5 the expertise or the resources to be able to pay  
6 proper attention to the matter of security.

7 So, while, certainly, the TPM providers in  
8 this case have continued to believe this exemption is  
9 not appropriate to pass at this time, to approve at  
10 this time in the first place, to the extent we can  
11 include more specific standards for security and  
12 clarifying the entities that are actually  
13 participating and are eligible for the exemption would  
14 be better than not having those. So we would  
15 encourage the office to consider that.

16 MS. RUBEL: Well, you read my mind. That's  
17 exactly what I was going to discuss next. You know,  
18 there's a possibility that we could include language,  
19 specific language that describes, you know, maybe  
20 something like a minimum set of security measures that  
21 could include things like encryption, authentication  
22 requirements, maybe some kind of choke that would be  
23 used to measure the rate of activity so that if there  
24 was mass downloading taking place, it would be  
25 identified and stopped.

1           So I'm curious to hear folks' reactions to  
2 adding something like that and also want to throw into  
3 the mix the idea that we put a pin in earlier, which  
4 is the possibility that the rights holders would  
5 participate potentially in designing the security  
6 measures. So I'm interested to hear folks' comments  
7 on any of those ideas. We'll start with Mr. Anderson.

8           MR. ANDERSON: Thank you so much. Security  
9 is really an important part of the considered use, and  
10 we want to ensure that research can take place without  
11 harming the market for the original copyrighted works.  
12 We appreciate the focus that's going on here.

13           I'd first like to just point out, like, a  
14 key distinguishment from HathiTrust and Google Books  
15 that is kind of why we went with a reasonableness  
16 standard for security here. HathiTrust and Google  
17 both involved giving access to third parties to works  
18 either through the search function or through the  
19 snippet view, and it involved millions of works,  
20 millions of copyrighted works. And while some  
21 researchers' projects may involve a lot of works, some  
22 other projects involve only a few works. So we want  
23 to make sure that we don't employ high strict  
24 standards of security that are based off what is  
25 reasonable for millions of works when it might not be

1 reasonable for just a few works.

2           And I think that gets to why we avoided  
3 putting in any specific minimum security standards.  
4 Like, we agree, we think that encryption and  
5 authentication are pretty straightforward things that  
6 most researchers can engage with. But, for very small  
7 research projects, such things might not even be  
8 necessary. And I think a reasonableness standard is  
9 able to encapsulate all the possible different types  
10 of research that could go on under this exemption and  
11 allows for very strict forms of security for very  
12 large databases and perhaps less strict for smaller  
13 research projects.

14           And I'd just like to point also to something  
15 that the office has previously said in the § 108 study  
16 document that attempting to prescribe detailed digital  
17 security requirements tailored to each kind of use  
18 could result in an unduly burdensome requirement, and  
19 we think that the same applies here. We don't want an  
20 unduly burdensome requirement where researchers are  
21 unsure of what they're able to do for fear of running  
22 afoul of the exemption.

23           And to answer your question about working  
24 with copyright-holders in order to implement security  
25 standards, there is the fear that for, say, someone

1 trying to create a corpus of 10,000 works, that's a  
2 lot of copyright-holders that you have to track down  
3 and ask, hey, what do you want me to do with this?  
4 And they could have different standards that they want  
5 them to impose. They may not even be able to find the  
6 copyright-holders. So it could be very difficult and  
7 potentially dissuade people from even pursuing this  
8 research in the first place. So we'd probably try to  
9 stay away from a standard like that.

10 MS. RUBEL: Thank you. Mr. Mohr?

11 MR. MOHR: Thanks. I mean, a couple of  
12 responses on this. I mean, I think, you know, the  
13 office has a lot to consider on its plate right here,  
14 and, you know, one of the questions I have is, how  
15 many of these considerations were fairly presented by  
16 the original petition? Because it seems to me like a  
17 number of angles were considered in terms of the  
18 language of the original petition, like security  
19 measures, but they weren't included and then they show  
20 up later.

21 And I understand the need for give and take  
22 here, but, you know, there comes a point at which  
23 there's a substantial amount of overbreadth, and it  
24 seems to me, when you look at the original proposal  
25 and the additional refinements that were introduced at

1 the reply stage and the further refinements and more  
2 detailed refinements that are introduced now, I wonder  
3 at what point what's really going on here is whether  
4 we're talking about the reply proposal, and that's  
5 actually the petition at issue here.

6 And now we as representatives of folks who  
7 make these works available are responding in a time  
8 constrained format and with the office operating  
9 without the benefit -- yep?

10 MS. SMITH: So, Mr. Mohr, I do appreciate  
11 that, but since we're time constrained right now, for  
12 the question, I just want to assure you that

13 MR. MOHR: You just made my point. Thank  
14 you.

15 MS. SMITH: -- we will be setting up an ex  
16 parte process and also utilizing post hearing letters.

17 MR. MOHR: Okay.

18 MS. SMITH: So I think, hopefully, that will  
19 give someone some comfort in this.

20 MR. MOHR: I hear you. So, on the second  
21 point, I mean, I think, with respect to things like  
22 reasonable security measures, I mean, there are  
23 drafting techniques that are available, such as use of  
24 the word "including," and our friends went through a  
25 number of factors, including an initial risk



1 assessment, the development of a security plan, the  
2 implementation of a user agreement that requires a  
3 notification of change in personnel with respect to  
4 access to the corpus, consistent monitoring, and the  
5 use of some type of surveillance of data controls.

6 I mean, these are all the types -- that is  
7 the type of specificity that, in our view, is  
8 appropriate to a regulatory proceeding of this nature  
9 while, at the same time, use of words like "including"  
10 or "such as" that are demonstrative that enable  
11 flexibility.

12 MS. RUBEL: Ms. Charlesworth?

13 MS. CHARLESWORTH: Yes, thank you. I think,  
14 first of all, you know -- I've mentioned this a few  
15 times -- the proposal, even the revised proposal, says  
16 that individuals can conduct this research and amass  
17 these libraries. So I think that's something that  
18 needs to be -- obviously, most individuals wouldn't  
19 themselves have any, you know, high security such as  
20 what Mr. Hoffman was describing. And I appreciate his  
21 candor, actually, in calling this highly sensitive  
22 material because that's exactly what it is.

23 Especially when you get into the thousands  
24 of books and movies, it's a very, you know -- that are  
25 unprotected, it is highly sensitive. And so I would

1 say and, you know, without articulating each piece of  
2 it, really, the security should be comparable to what  
3 was found acceptable, I mean, to the extent you're  
4 moving ahead with this, in Google Books or Hathi in  
5 terms of physical security, you know, choking -- I  
6 think you mentioned that -- who has actual access, you  
7 know, in terms of staff members and so forth.

8           And I think that's really imperative when  
9 you have a collection of this size, and that saying  
10 reasonable security, you know -- again, I think I made  
11 this point earlier -- if you're talking about a few  
12 CDs, that's one thing, or DVDs, but when you get into  
13 these very large collections, which are kind of the  
14 whole point of doing this sort of research is to have  
15 a large collection that's too big to look at yourself,  
16 then it just doesn't cut it to say "reasonable  
17 measures." It needs to be more specific.

18           MS. RUBEL: Mr. Stallman?

19           MR. STALLMAN: Great. If I could, I would  
20 like to just briefly address the point raised by Mr.  
21 Mohr, and then, if I can, just hand it over to Mr.  
22 Alghamdi to make a point about alternatives we've been  
23 discussing, if that's okay. The point I just want to  
24 make is this, that we acknowledge that the exemption  
25 was narrowed significantly in the reply comment, but

1 this was an artifact of two things: one, the nature  
2 of text and data mining, and the nature of this  
3 proceeding. Text and data mining is a multipurpose,  
4 multivalent research method that can support a number  
5 of socially beneficial uses that are also fair uses.  
6 Given that you have to propose sort of the initial  
7 formulation of the rule before you sort of develop the  
8 factual record for it, we didn't want to bolt the door  
9 to those potential uses that were socially beneficial  
10 and fair uses that were the ones other than the uses  
11 that are core components sought to engage in.

12 So then, at the point at which we made our  
13 initial comment and then we had responses to that  
14 initial comment from the opposition, and we knew at  
15 that point also the entire record of facts that would  
16 come into this proceeding -- this is, again, a little  
17 bit backwards from normal notice and-comment  
18 rulemaking where you would have the record first, then  
19 the rule -- we try, in good faith, as much as  
20 possible, to accommodate the concerns of the opponents  
21 that did not undermine the core purpose of the  
22 exemption we were seeking.

23 And that's really what we tried to do, and  
24 we feel like we went a long way to do that. And not  
25 all of those concessions were costless to the

1 researchers, and we're a little bit concerned that the  
2 message would be that if you change the exemption this  
3 much that this somehow results in a procedural foot  
4 fault that undermines your core exemption because then  
5 it sort of forces us into a position of fighting tooth  
6 and nail over issues that really aren't central to the  
7 exemption that we were seeking.

8 So, again, the narrowing of the proposed  
9 exemption in the reply comment was to do two things:  
10 one, to contour it to the factual record that was  
11 developed at that point in time, and two, as much as  
12 we can, address the concerns that were brought by  
13 opponents without undermining the core of the  
14 exemption. And that's what we really tried to do.

15 So, with that, I would like to give it over  
16 to Mr. Alghamdi to address the alternatives.

17 MS. RUBEL: Okay. Hang on just a second,  
18 Mr. Alghamdi. We'll come to you in just a moment.

19 Mr. Williams, did you want to jump in here?

20 MR. WILLIAMS: Yes, thank you very much.  
21 And I do appreciate Mr. Stallman's efforts and the  
22 others' efforts to narrow this, although I agree with  
23 Mr. Mohr's comments that it can be a frustrating  
24 process. It was helpful for them to do the narrowing,  
25 and I appreciate the time they took to do that.

1           On the security issue and the fact that this  
2 reasonable security measures language is in other  
3 exemptions, I would reiterate that this is just a very  
4 different animal in the sense of the size of these  
5 databases potentially and what's at issue. But also,  
6 it's different in that the case law that is being  
7 relied upon here, HathiTrust especially, goes, as Mr.  
8 Amer said in great detail, through the very specific  
9 security measures not only just to point out that they  
10 were there but because they were relevant to the third  
11 factor in terms of the number of people who were given  
12 access to the complete copies.

13           It was a very controlled environment. The  
14 number was very specified by the universities. There  
15 were only four copies of each work made as I  
16 understand it -- a primary server copy, a secondary  
17 server copy, each at Michigan and Indiana, and then  
18 two backup copies that were only accessed if there was  
19 a point of failure -- and different people had  
20 encryption keys to get into those copies.

21           And even the people who maintained the  
22 system and the admins, as I read the opinion, didn't  
23 have those decryption keys. So that played a role in  
24 the third and the fourth factor in these cases. And  
25 so, in most of the areas that we've dealt with in this

1 proceeding where that language is used, there really  
2 weren't cases out there that made the security  
3 measures a part of the analysis.

4           So that's one reason I think that if you do  
5 break new ground and recommend something here that  
6 there should be a more specified level of security.  
7 And I did appreciate Mr. Hoffman's overview of what  
8 they do, and I think it's quite helpful. It's one  
9 reason why, at the outset, I said that if something is  
10 done here based on the evidence in the record and the  
11 research projects that we've been told about, you  
12 know, I see it really as a university setting and a  
13 specific setting within a university that involves  
14 specific people in terms of the creation of the  
15 copies, the storage of the copies, accessing the  
16 copies, and how those copies are used.

17           I don't think adopting a really broad  
18 beneficiary class would be a good idea because it  
19 would be very difficult to know that the types of  
20 measures Mr. Hoffman's institution takes could be put  
21 in place by others. So I'll leave it with that.

22           MS. RUBEL: Mr. Alghamdi, I'm going to give  
23 you just a quick moment to respond. We are short on  
24 time at this point, and I still do want to discuss  
25 licensing and adverse effects real briefly. So, Mr.

1 Alghamdi, with that in mind?

2 MR. ALGHAMDI: Thank you very much. That is  
3 actually the point that I wanted to talk to today,  
4 speaking about the adequacy of alternatives that exist  
5 in licensing. So thank you for the opportunity. We  
6 think and we believe that the alternatives that have  
7 been proposed by opponents in the record are not  
8 adequate for the purposes that researchers in the  
9 digital humanities interest and text and data mining  
10 need.

11 For example, the HathiTrust digital library,  
12 which keeps getting brought up as a database of works  
13 that can be used, the collection of the HathiTrust  
14 digital library is very limited and it does not  
15 contain the majority of contemporary literature that  
16 proponent researchers want to study and, furthermore,  
17 does not contain any motion pictures. It's also only  
18 available to a small subset of researchers that are  
19 affiliated with member institutions.

20 Other collections, as well, that have been  
21 suggested, such as RightFind for XML, they also are  
22 only focused on scientific journals and don't contain  
23 any contemporary literature that researchers need.

24 Also, there is the issue of working across  
25 multiple siloed proprietary databases, and this is

1 something that Dr. Wermer Colan actually raised in his  
2 letter attached in our initial comment about the  
3 difficulty of working with these multiple siloed  
4 databases. And this is something that perhaps he can  
5 elaborate on today. But that is another prohibitive  
6 obstacle in front of researchers.

7 And any other suggestions and alternatives  
8 that opponents put forth, such as Optical Character  
9 Recognition or OCR, or screen capture for motion  
10 pictures, we also find to be prohibitively time  
11 consuming for researchers for this purpose.

12 Finally, to the point about licensing, we  
13 haven't found any licensing model that we know of that  
14 can be used by researchers in order to license entire  
15 motion pictures for the purposes of text and data  
16 mining. We know there are models right now that exist  
17 where people can go and license short clips, for  
18 example, or still images, but no such model exists or  
19 no such pathway exists for text and data mining of  
20 entire motion pictures at this point, and opponents  
21 have not put forth an alternative for that purpose.

22 MS. RUBEL: Mr. Ayers?

23 MR. AYERS: Two quick points. First, on the  
24 security question regarding not wanting to impose  
25 requirements that are perceived as burdensome on



1 smaller collections, I think it's important to note  
2 that it's not the quantity perhaps, it's sort of the  
3 market value. For instance, a small collection may be  
4 the most recent big blockbuster hits for whatever  
5 question is being sought to be researched, and so the  
6 exposure of that small collection could actually be  
7 very damaging to the rightsholders as opposed to a  
8 larger collection of lesser known works that are not  
9 currently popular. So I would certainly be cautious  
10 about looking at the size of the collection,  
11 especially in the context where we've learned today  
12 that these are siloed archives.

13           And so how does the university or the other  
14 institution count the collection when there's an  
15 archive for Professor X, Professor Y, and Professor Z?  
16 Are those three archives? Is it one archive? How is  
17 that counted? And in that sense, what security --  
18 what would be reasonable security for each collection  
19 versus the three taken together?

20           And further, sort of bridging over into the  
21 alternative uses -- alternative measures, the concept  
22 that there may be smaller collections that, you know,  
23 the concern is are there resources to be able to put  
24 towards appropriate security actually may indicate  
25 that those collections are small enough that other

1 methods for accessing the content may be useful, for  
2 instance, screen capture. And if it's a smaller  
3 project that relies on a smaller number of titles,  
4 that may be sufficient for the need at the time.

5 MS. RUBEL: Ms. Charlesworth?

6 MS. CHARLESWORTH: Yes. I mean, I know  
7 you're short on time, so I would refer you to our  
8 submission on these questions and just point out that,  
9 you know, I think the parallel is OCR, you know,  
10 especially for a smaller collection, which, you know,  
11 of course, Google Books made millions of copies by OCR  
12 and they're fully searchable.

13 So, you know, the question is -- I mean, it  
14 may take a little longer, but that's, you know, as the  
15 office has long said, a mere inconvenience doesn't  
16 mean that, you know, you qualify for an exemption.  
17 You don't get necessarily the choice of format. So,  
18 other than that, I would refer you to our submission  
19 on this issue.

20 MS. RUBEL: Thank you. And I can assure you  
21 that we have read and will continue to look through  
22 all of the written submissions very carefully.

23 We're close to the end of our time. I think  
24 we will just push back our discussion for a few more  
25 minutes to touch on just a couple of issues that I

1 wanted to address that were either not teed up in the  
2 written comments or we had some questions about from  
3 the written comments.

4 So I did want to give the opponents an  
5 opportunity to respond to proponents' argument that  
6 the existence of a potential licensing market should  
7 not be a sufficient showing of market harm. Their  
8 fear was that researchers shouldn't have to be content  
9 with using materials that are in the public domain  
10 until copyright owners decide that they want to  
11 actually create a licensing market.

12 So I wanted to give opponents a chance to  
13 respond to that point, and we can start with Ms.  
14 Charlesworth if your hand is raised for that purpose.

15 MS. CHARLESWORTH: No, it was a leftover  
16 hand. I'm sorry.

17 MS. RUBEL: Okay. Sure thing.

18 MS. CHARLESWORTH: I'll respond very briefly  
19 again in the interest of time. I mean, this is  
20 something, you know, the statute, the fair use statute  
21 says if a potential market is there, it counts  
22 against, it weighs against fair use.

23 I think here, especially in the case of  
24 literary works, you see more than a potential market.  
25 You see an actual market. I think it's a developing

1 market, but it's not a nothing market, and there's  
2 nothing to say that CCC can't -- you know, I believe  
3 they will expand in this area. I think this is a very  
4 potentially commercially valuable market. And so I  
5 don't think that can be overlooked. I think there  
6 were a couple other examples cited in the papers of,  
7 you know, people who were, you know, marketing these  
8 licenses.

9 Another thing I will point out is I do  
10 think, and I think I said this earlier, especially in  
11 the sort of journal database market, TDM is often  
12 included as part of that subscription package, and,  
13 you know, so there's definitely quite a bit of  
14 evidence that this market exists, and as I said, I  
15 think there's no reason to think it won't continue to  
16 grow as the interest in, you know, large bodies of  
17 data, including, you know, both non fiction and  
18 fictional works, you know, continues to grow for any  
19 number of reasons.

20 MS. RUBEL: Mr. Williams?

21 MR. WILLIAMS: Yes, thank you. So I  
22 appreciate the question. In this proceeding, we have  
23 to consider potential licensing markets when  
24 conducting the fair use analysis, but we also have to  
25 consider them when considering are there alternatives

1 to circumvention that would obviate the need for an  
2 exemption based on the language of the statute and the  
3 § 1201 factors that lay on top of the underlying  
4 lawful use analysis.

5           And so I think contacting copyright owners  
6 is relevant in both spaces, but I'll focus on it as an  
7 alternative. If, say, a copyright owner of a motion  
8 picture is willing to engage in licensing discussions  
9 around these issues and a university can obtain copies  
10 without circumvention, I think that is preferable from  
11 a policy point of view to just engaging in the  
12 circumvention and assuming that there is no  
13 alternative through licensing.

14           Whether that would be charged licensing at a  
15 price, whether it would be gratis licensing with some  
16 conditions that, to get to your earlier question I  
17 failed to address, would allow the copyright owner to  
18 be involved in the security measures that are in place  
19 and specify what they would be, which I do think is  
20 worth consideration because it would give us a record  
21 of who is using the exemption and what are they doing  
22 and what have they been willing or unwilling to do  
23 with security, that's something that we're often  
24 lacking in this proceeding with exemptions.

25           We do get the benefit of the petitioners

1 filing every three years on things, but we don't  
2 really have a record of the instances of use under  
3 each exemption. And for something as important as  
4 this, I think the idea that they would have reached  
5 out to the copyright owners, to the extent they can be  
6 identified, and discuss security measures with them  
7 would be a step in the right direction. It wouldn't  
8 obviate all of my concerns, of course, but I do think  
9 it would be worth consideration.

10 MS. RUBEL: Ms. Moore?

11 MS. MOORE: Yes. Thank you. I would like  
12 to address the concern over harm to the developing or  
13 potential market, particularly for databases. As  
14 Google Books and HathiTrust discussed, the fact that a  
15 fair use can be licensed does not mean that those  
16 making fair uses are obligated to pay for that use.

17 Additionally, the output for text and data  
18 mining, as we've discussed, does not function as a  
19 substitute for the original work. The fact that the  
20 works are collected into a database doesn't vitiate  
21 the conclusion that it's a fair use.

22 Additionally, it's -- let's see -- I  
23 apologize. We would like to make the point that these  
24 database markets, as noted in HathiTrust and Google  
25 Books, are databases of fair uses, and lost licensing

1 revenue does not apply for those fair uses, and they  
2 don't constitute a market harm. Thank you.

3 MS. RUBEL: Dr. Wermer Colan?

4 DR. WERMER COLAN: Yeah, I just wanted to  
5 return to the subject of siloed databases and whether  
6 they are sufficient for researchers by saying that all  
7 the available databases do not contain a sufficient  
8 amount of data in corpora for researchers to answer  
9 their questions. More importantly, what we are seeing  
10 is each individual database developing specific text  
11 data mining portals for their database, there is no  
12 way for a researcher to do a holistic analysis across  
13 different databases if separate databases contain  
14 different aspects of their corpora.

15 Finally, those databases are producing a lot  
16 of their data through OCR, which was brought up  
17 before. It's important to point out that OCR, like  
18 other forms of screen capture, produce degraded sets  
19 of data. I have looked in a lot of detail at Google's  
20 Scholar Lab for text data mining as well as  
21 HathiTrust's data mining, and the OCR oftentimes is to  
22 the point of unreadability, especially when you're  
23 dealing with texts in other languages. Comparing that  
24 to already borne digital eBooks that could be adapted  
25 for text mining, the error rate is just too high for

1 researchers to do the analysis.

2 MS. RUBEL: Thank you. Let's go to Mr.  
3 Zambrano Ramos.

4 MR. ZAMBRANO RAMOS: Hi, yeah, just a quick  
5 question about screen capture. If the corpus of work  
6 that's necessary to do TDM is fairly small, would  
7 screen capture be an alternative to circumvention in  
8 that specific scenario? And then, coupled to that, I  
9 don't know who the best party is to answer this, but  
10 I'm curious about the licensing terms that are  
11 involved in this kind of technology and whether some  
12 of the license agreements require implementors of  
13 players, for example, operating system vendors or  
14 manufacturers, to take steps to disable screen capture  
15 and, if so, is screen capture a reasonable alternative  
16 to circumvention in those instances? Thank you.

17 MS. RUBEL: Mr. Hoffman, did you want to  
18 address those questions?

19 MR. HOFFMAN: Well, I want to actually defer  
20 that question to Dr. Bamman, but I just want to say  
21 that in my experience working with many researchers,  
22 when they have access to a reliable data repository  
23 information source to answer their questions, they  
24 will go there because they spend maybe 70 percent of  
25 their time creating a reasonable database or



1 information resource for their research questions.  
2 They don't want to spend that time. So, if the  
3 resource is there, they will use it. But the point is  
4 that researchers are always coming up with new  
5 questions and new methodologies and need this kind of  
6 access for uses that we cannot specify exactly right  
7 now, within secure bounds, of course, but they need  
8 that kind of access in order to address the kinds of  
9 -- or develop the kind of techniques that then vendors  
10 may build into their own offerings.

11 MS. RUBEL: Thank you. Dr. Bamman?

12 MR. BAMMAN: Yes. So I'd like to address  
13 the issue about screen capturing and about the  
14 licensing too. So, to take the screen capturing  
15 first, yes. So, to answer the question about whether  
16 screen capture is sufficient for smaller datasets, I  
17 would still say even in that case, it's not for two  
18 reasons. One, that, with screen capture, we don't get  
19 access to really important metadata about movies, so  
20 that includes structural information like chapter  
21 boundaries that can be useful for problems like seed  
22 and segmentation.

23 But the biggest thing that we would need is  
24 information about the subtitles, right? So, for many  
25 studies, we need to know exactly what the characters

1 are saying in order to carry out research about them.  
2 You may be familiar with the Bechtel test as one  
3 example of this. This is, you know, a measure of  
4 gender representation in movies to see how often a  
5 movie has two women who are talking about something  
6 that is not another man in a movie, right? To answer  
7 this, we need to have access to what the words are  
8 that they're saying. So subtitles give us that.

9 The other issue here for screen capture is  
10 really about quality, that yes, screen capture is fine  
11 for a number of research questions involving color  
12 palettes, for example, but some studies do require  
13 finer granularity. So, if we want to have any kind of  
14 study that uses object recognition, right, to  
15 understand what the specific things are in the scene  
16 that we see, we need to have better granularity than  
17 just a screen capture.

18 For example, if we want to have a question  
19 about the representation of wealth in a movie, we need  
20 to be able to find out not just that a car exists in a  
21 scene but also that it's a BMW as a kind of a car. So  
22 a higher granularity really requires that.

23 For larger movies, for larger kinds of  
24 datasets that we want to create, it really is time as  
25 being the main factor why screen capture can't really

1 work for us. And I know the suggestion was put forth  
2 in some of the responses that one of the things that  
3 we could do is just buy more computers and hire more  
4 people, but one thing I want to stress is that time is  
5 really critical here because, in the scope of this  
6 exemption, every single researcher needs to digitize  
7 their own data themselves, right? We're not talking  
8 about sharing digitized movies with each other. Every  
9 researcher needs to go through this process of  
10 digitizing their own films.

11 And to get to this, it's important to  
12 differentiate between two different modes of  
13 computing, one of transferring the data from the  
14 physical medium, right, from the DVD onto a computer,  
15 and the other is processing that data to convert it  
16 into a specific format and then run our algorithms on  
17 our data.

18 The bottleneck here is that first step of  
19 transferring the data from the medium onto a computer.  
20 Now there's a number of aspects that individual  
21 researchers have control over, and funding is a part  
22 of that, right? We can get funding for buying DVDs,  
23 but one thing that is outside of any individual's  
24 control is space in a university, and having 10  
25 computers all with screens attached to carry out the

1 screen capture process requires a dedicated space and  
2 an operator to work, you know, 9 to 5 to carry out  
3 this process. That's not feasible within my  
4 university at Berkeley, a relatively well funded R1,  
5 and if it's not possible at Berkeley, I think it's  
6 also very unlikely to be possible at other  
7 universities as well.

8 I'd also like to address the licensing issue  
9 if I have time for that.

10 MS. RUBEL: Very quickly, please.

11 MR. BAMMAN: Okay. So one of the issues  
12 here with licensing is also the issue with databases  
13 and with the HathiTrust overall. So the HathiTrust is  
14 great for lots of questions, right, but it mainly has  
15 books about literary fiction, so Virginia Wolfe,  
16 William Faulkner, James Joyce. It doesn't have the  
17 kind of books that we read every day, right, the books  
18 that you buy in an airport bookstore. And if we want  
19 to carry out a study about what people are reading  
20 right now, we need to have access to that kind of  
21 books that we digitize ourselves.

22 For licensing for movies, this is the same  
23 issue, that if we want to carry out a study that  
24 involves what people are watching right now, right,  
25 the most popular movies in the world to see how gender

1 is being depicted right there, licensing is a problem  
2 because, if we were to go to every single studio to  
3 license the movies that are in the top 1,000 by box  
4 office, if one studio says no, that means that  
5 completely shuts down this research. We can't carry  
6 it out if there's any single studio that doesn't allow  
7 the licenses for those terms.

8 MS. RUBEL: Mr. Zambrano Ramos, did you have  
9 a follow up?

10 MR. ZAMBRANO RAMOS: Yeah, this is a very  
11 good question actually. This would probably be to  
12 AACCS LA. I was specifically referring to the license  
13 terms on screen capture technology that may restrict  
14 their use on operating systems, and I was wondering if  
15 maybe opponents could speak a little bit to that if  
16 there are licensing terms that implementors like  
17 operating system providers or manufacturers have to  
18 follow that disable screen capture. Thank you.

19 MS. RUBEL: And a related question, and this  
20 will be the last question that I pose to the group, I  
21 think it comes back to the issue of causation, and I  
22 saw that opponents argued in the papers that even if  
23 circumvention were possible, there were still  
24 contracts and contractual provisions that may prevent  
25 the works being made for anything other than, for

1 example, personal use, and those contractual  
2 provisions might include things like restrictions on  
3 the ability to use screen capture or even  
4 technological restrictions on the ability to use  
5 screen capture. So perhaps these questions are  
6 related. Mr. Taylor?

7 MR. TAYLOR: Yeah, I think my colleagues  
8 would be mad if I don't raise my hand. So my  
9 understanding is that screen capture systems or  
10 programs, they don't really impose any terms of use on  
11 the users. They all basically represent that they're  
12 not circumvention devices. As we have talked on other  
13 panels, there are manufacturers who are trying to  
14 prevent the recording of DVDs on desktops and laptops,  
15 and they're variously successful for that, and that  
16 has a problem which has been overcome in this  
17 proceeding on past examples.

18 And as far as the license terms, I don't  
19 know what you're referring to, so I would refer to Mr.  
20 Williams. Maybe he has an idea.

21 MS. RUBEL: Mr. Ayers?

22 MR. AYERS: Thank you. So, just to address  
23 that, in the license agreements for AACCS, for  
24 instance, the focus in what we call the "compliance  
25 and robustness rules" is certainly on preventing the

1 unauthorized copying and further distribution of high  
2 quality audio and video. There are some certain  
3 circumstances in which analog video and audio is  
4 permitted, but it's basically focusing on the high  
5 quality, high definition content.

6 And in other contexts in these proceedings,  
7 we've not opposed the reasonable use of screen capture  
8 as a means for achieving the needs of an exemption.

9 MS. RUBEL: Mr. Alghamdi?

10 MR. ALGHAMDI: Thank you so much. To the  
11 point about contractual terms, nothing about  
12 additional barriers like contractual terms or browser  
13 app agreements that opponents might put up changes the  
14 fact that § 1201's prohibition on circumvention is the  
15 cause of the adverse harm to researchers in this case.  
16 I mean, there are serious questions about the  
17 enforceability of such agreements to begin with, but  
18 in previous proceedings, the office has acknowledged  
19 these contractual terms while not weighing on their  
20 merit, and still, the exemptions were passed.

21 For example, the 2010 recommendation about  
22 allowing or circumventing computer programs on mobile  
23 devices to allow them to connect to third party  
24 networks, opponents raised the issue that they have  
25 contractual terms with their customers that say that

1 customers can't circumvent these mobile devices, and  
2 the office has acknowledged that but still mentioned  
3 that contract law is distinct from copyright law in  
4 that case, and the exemption was granted anyway.

5 MS. RUBEL: Ms. Charlesworth?

6 MS. CHARLESWORTH: Yeah, I mean, I think --  
7 thank you -- I think this ties to sort of an issue  
8 that was raised much earlier on a couple hours ago,  
9 which is what does it mean to lawfully obtain  
10 something and own it versus, you know, say, a  
11 subscription to a journal, where you have certain  
12 privileges and uses permitted under your license and  
13 others are not.

14 I mean, I certainly don't -- if you agree  
15 that you're not going to circumvent or conduct TDM or  
16 perhaps maybe not conduct it independently of using  
17 the subscription provider's tools for security  
18 purposes, I think that then your inability to conduct  
19 TDM is -- you know, the reason for that is your  
20 contractual term.

21 But, again, I think this begs the bigger  
22 question of exactly what are we talking about here in  
23 terms of lawful access and obtaining works. I was  
24 confused -- I mean, there was the initial proposal and  
25 then the reply proposal really was, for me, murky in



1 this area and I think maybe worth some further thought  
2 and exploration if you have the opportunity.

3 MS. RUBEL: All right. We are going to shut  
4 this line down. I feel like the woman at the grocery  
5 store who's telling you no more people added. So  
6 we'll hear from Mr. Williams, Mr. Mohr, and then Mr.  
7 Stallman will be last. Mr. Williams?

8 MR. WILLIAMS: Thank you. Yes, on the  
9 question that Mr. Ramos asked about will certain  
10 operating systems interfere with the functionality of  
11 some screen capture programs, my understanding is that  
12 might be the case on some devices with certain  
13 operating systems but that it's certainly not true  
14 across the board and that there are devices and  
15 operating systems out there that don't interfere with  
16 the functionality of screen capture.

17 So, historically, in the proceeding, when  
18 there are alternatives of that nature, devices and  
19 platforms, operating systems that do enable the use of  
20 something, that is an alternative to circumvention.  
21 And so my understanding is screen capture would still  
22 be an alternative where it otherwise is workable.

23 On the question of license terms, there  
24 seemed to be two distinct issues. One, if I  
25 understood your question, Ms. Rubel, is do license

1 terms prohibit the use of screen capture when you pay  
2 a copyright owner or a retailer for access or the  
3 download of the content? And I'm not personally aware  
4 of any license terms that specifically prohibit screen  
5 capture or only allow it for personal use, but it is  
6 common in the license terms to say things that, you  
7 know, you're only going to use the item for personal  
8 use and that you're not going to reproduce it or  
9 otherwise violate copyright law.

10 But it's also common, of course, and almost  
11 across the board to say that you're not going to  
12 circumvent the TPMs that are in place. So, if there  
13 was a violation of the terms of service, a breach of  
14 contract because someone used screen capture, I don't  
15 think that it would be very likely that they would not  
16 breach the same contract by circumventing the TPM. So  
17 I don't think that the end user ends up in a better  
18 place under the contractual terms to circumvent  
19 instead of using screen capture.

20 And then, finally and quickly, the other  
21 issue that was raised is, you know, this question of  
22 are copies owned versus licensed and are the terms of  
23 service enforceable. You know, my understanding based  
24 on the reply comments and what we heard today,  
25 especially from Mr. Stallman, is that they are not

1 looking through this exemption to include motion  
2 pictures that are available only through a  
3 subscription service or only through a time limited  
4 download, such as a rental that's only supposed to be  
5 obtained for access for 48 hours or a time limited  
6 download that's only associated with a subscription  
7 that you must pay every month or else lose access to  
8 it.

9 So that goes a long way towards resolving  
10 the delta between us on that issue of how the terms of  
11 service impact their proposal. I would still take the  
12 legal position that if someone licenses a more  
13 permanent copy of a download through an online  
14 retailer and the terms of service specified that it is  
15 a licensed copy, not an owned copy, and that, for  
16 example, if the service goes out of business, you're  
17 no longer entitled to maintain possession of that  
18 copy, that that is not an owned copy and it's a  
19 different legal matter, the analysis there.

20 But, like I said, what he's done, if I  
21 understand it correctly, does dramatically close the  
22 gap between us on that, and so, even though there's a  
23 little bit of a disagreement, I think, there on the  
24 law, it's smaller than it was.

25 MS. RUBEL: Mr. Mohr? You're still muted,

1 Mr. Mohr.

2 MR. MOHR: I am sorry for the monologue, but  
3 the first part of my remarks were directed to Mr.  
4 Stallman, which is to say that if I suggested that  
5 anything that was submitted was done in any way other  
6 than good faith, I apologize, because that was not my  
7 intention.

8 The second thing I would like to say is  
9 that, you know, the concerns about licensing and what,  
10 in our view, is the certainty of those agreements  
11 should apply also as well to those kinds of literary  
12 works that are provided, essentially, as content as a  
13 service. And you will see that, again, in the STM  
14 context. So, from our point of view, I guess we would  
15 disagree with our friend on the law. We do believe it  
16 is not -- the enforceability of those agreements is  
17 not in legal doubt. And I'll close. That's it.  
18 Thank you.

19 MS. RUBEL: Thank you. Mr. Stallman, you're  
20 going to get the last word.

21 MR. STALLMAN: Wonderful, just like I drew  
22 it up. So, just quickly on this point about the  
23 meaning of "lawfully obtained," and I really  
24 appreciate the comments of Mr. Williams because I  
25 think we are quite close. We are trying to exclude

1 cases of rentals or works acquired via streaming  
2 services, but with the advent of digital borne works,  
3 this issue of when you actually own a copy is fraught,  
4 and we want to avoid the situation where someone would  
5 have an eBook that they had bought -- they had  
6 downloaded and they bought a copy of it, but somehow  
7 it was viewed as not being eligible for this exemption  
8 because that purchase via a Kindle store or whatever  
9 came encumbered with some contractual restrictions.

10           And on this point of contractual  
11 restrictions and whether or not they are the cause of  
12 the harm to the researcher for 1201, they're both  
13 potential harms to the researcher. And I would just  
14 like to refer the office to the comment filed by Kyle  
15 Courtney and Rachael Samberg in the reply round  
16 addressing this point because I know that was  
17 something that was raised by the publishers in their  
18 opposition. But, first of all, the licensing  
19 practices forbidding these kind of uses are not  
20 uniform across publishers, and even if they were, we  
21 still think that 1201 is causing cognizable harm here.

22           And then the final point is just really  
23 going to the sufficiency of the alternatives. I think  
24 that the licensing behavior with respect to these  
25 restrictions sort of points to the degree to which

1 this is really not a space where researchers have  
2 available to them the ability, through licensing  
3 channels, to get copies of the works that they want to  
4 use for the digital humanities scholarship.

5           And I think that the class of works that Mr.  
6 Bamman was talking about -- contemporary popular  
7 literature, contemporary popular film -- are the works  
8 we're really sort of talking about and that no one, in  
9 the course of this proceeding, when they pointed to  
10 other databases that are available, they don't include  
11 those works, and that is precisely why the researchers  
12 have sought this exemption. And so the need for this  
13 exemption, it persists, and we remain in this state  
14 and we will remain in this state until this exemption  
15 is granted where the research that is being conducted  
16 using TDM in the digital humanities is being  
17 determined by the works that are available to the  
18 researcher via the public domain or a few licensing  
19 channels rather than the works that they want to  
20 study. And just to repeat, that is the core issue  
21 that we're trying to address here.

22           MS. RUBEL: Thank you, and thank you to  
23 everyone. I think this was a really helpful and  
24 interesting discussion. I'm going to just pass the  
25 mic quickly to Ms. Smith.

1 MS. SMITH: Thank you. Yes, thank you all.  
2 Thanks for indulging us, and we went a little bit over  
3 time. I wanted to talk process for a second because I  
4 noted the concern that there might have not been an  
5 adequate opportunity to say everything that people  
6 wanted to say in response to the reply comments.

7 So, just as we'll do for the rulemaking  
8 overall, we will institute ex parte procedures to  
9 allow the office to receive additional information  
10 from parties subject to transparent guidelines. That  
11 will probably happen in a couple of weeks.

12 We will be looking at all of the proposed  
13 classes and issuing a targeted number of post hearing  
14 letters. But I think, for this class in particular, I  
15 can let you know that we do intend on letting a sort  
16 of surreply type of phase. So, if there are things  
17 that you want to put into writing to respond to the  
18 refinement from the reply, which, again, we appreciate  
19 the spirit in which that refinement was made, you may  
20 as well get started. But we will be issuing a letter  
21 as to that.

22 And, you know, as far as how the process  
23 happens, I think, if you participated before, you  
24 realize the Copyright Office is in a tricky position  
25 where we need to do the rulemaking efficient enough so

1 that it is beneficial because we need to redo it every  
2 three years. So I want to thank my team because I  
3 know they work very hard to work extremely efficiently  
4 and allow those who are participating enough time to  
5 have their say, but that, you know, in this case, I  
6 think this has made it appropriate to have another  
7 stage. So we will be issuing a letter.

8 So, with that, we will conclude today. And  
9 then tomorrow, at 10:30 Eastern, we will be entering  
10 our fourth day of hearings to evaluate proposed  
11 adjustments to the security research exemption. So  
12 thank you very much.

13 (Whereupon, at 2:59 p.m., the hearing in the  
14 above-entitled matter adjourned, to reconvene at 10:30  
15 a.m. the following day, Thursday, April 8, 2021.)

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CERTIFICATE

CASE TITLE: Section 1201 Rulemaking Hearing

DATE: April 7, 2021

LOCATION: Washington, D.C.

I hereby certify that the proceedings and evidence are contained fully and accurately on the digital recording and notes reported by me at the meeting in the above case before the Library of Congress.

Date: April 7, 2021



John Gillen  
Official Reporter  
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