DIGITAL MILLENNIUM COPYRIGHT ACT

---000---

SECTION 1201 RULEMAKING HEARING

BEFORE THE COPYRIGHT OFFICE PANEL

California Hearing

DATE: May 17, 2012

TIME: 9:00 a.m.

LOCATION: UCLA School of Law

405 Hilgard Avenue

1242 Law Building, Moot Courtroom Los Angeles, California 90095

REPORTED BY: LISA MOSKOWITZ

Certified Shorthand Reporter License Number 10816, RPR, CLR

	2
1	APPEARANCES
2	
3	Moderator:
4	MARIA PALLANTE
5	
6	Panel Members:
7	DAVID CARSON
8	ROBERT KASUNIC BEN GOLANT
9	STEPHEN RUWE
10	List of All Panelists:
11	MARCIA HOFMANN
12	Electronic Frontier Foundation
13	CHRISTIAN GENETSKI Entertainment Software Association
14	STEVE METALITZ
15	Joint Creators and Copyright Owners
16	ART NEILL New Media Rights
17	CORYNNE McSHERRY
18	Electronic Frontier Foundation
19	JONATHAN McINTOSH Remix Video Artist
20	MICHAEL DONALDSON
21	General Counsel, Film Independent
21	LAURENCE THRUSH Film Director
23	CLARISSA WEIRICK Warner Brothers Home Entertainment, Inc.
24	
25	
1	

		3
1	List of All Panelists: (Continued)	
2	DAN MACKECHNIE 20th Century Fox Home Entertainment	
3	BRENDAN CHARNEY	
4	Student at USC Intellectual Property and Technology Law Clinic	
5	ALEX COHEN	
6	Student at USC Intellectual Property and Technology Law Clinic	
7		
8	JACK LERNER Clinical Associate Professor of Law at USC Intellectual Property and Technology	
9	Law Clinic	
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

			4
1	I N D E X		
2	O F P A N E L S		
3			
4	PA	GE:	
5	9:00 A.M.	8	
6	Proposed Class to be discussed:		
7	Section 3. Computer programs that enable		
8	lawfully acquired video game consoles to execute lawfully acquired software applications where		
9	circumvention is undertaken for the purpose of enabling interoperability of such applications		
10	with computer programs on the gaming console.		
11	10:30 A.M.	75	
12	Proposed Class to be discussed:		
13	Section 5. Computer programs that enable wireless telephone handsets ("smartphones") and		
14	tablets to execute lawfully acquired software applications where circumvention is undertaken		
15	for the purpose of enabling interoperability of		
16	such applications with computer programs on the handset or tablet.		
17			
18	AFTERNOON SESSION		
19			
20	1:30 P.M.	126	
21	Proposed Classes to be discussed:		
22	Section 7A. Motion pictures on DVDs that are		
23	lawfully made and acquired and that are protected by the Content Scrambling System when		
24	circumvention is accomplished solely in order to accomplish the incorporation of short portions of		
25	motion pictures into new works for the purpose of criticism or comment and where the person engaging in circumvention believes and has		

5 reasonable grounds for believing that circumvention is necessary to fulfill the purpose of the use in the following instances: (i) Educational uses by college and university professors and by college and university film and media studies students; (ii) Documentary filmmaking; (iii) Noncommercial videos. Section 7B. Audiovisual works on DVDs that re lawfully made and acquired and that are protected by the Content Scrambling System where circumvention is undertaken for the purpose of extracting clips for inclusion in primarily noncommercial videos that do not infringe copyright and the person engaging in the circumvention believes and has reasonable grounds for believing that circumvention is necessary to fulfill the purpose of the use. 10 Section 7C. Audiovisual works that are lawfully 11 made and acquired via online distribution services where circumvention is undertaken for the purpose of extracting clips for inclusion in primarily noncommercial videos that do not 13 infringe copyright and the person engaging in the circumvention believes and has reasonable grounds 14 for believing that circumvention is necessary to fulfill the purpose of the use and the works in 15 question are not readily available on DVD. Section 7D. Motion pictures that are lawfully made and acquired from DVDs protected by the 17 Content Scrambling System and Blu-ray discs protected by Advanced Access Content System or, if the motion picture is not reasonably available 18 on DVD or Blu-ray or not reasonably available in 19 sufficient audiovisual quality on DVD or Blu-ray, then from digitally transmitted video protected 20 by an authentication protocol or by encryption when circumvention is accomplished solely in 21 order to incorporate short portions of motion pictures into new works for the purpose of fair 22 use and when the person engaging in circumvention reasonably believes that circumvention is 23 necessary to obtain the motion picture in the following instances: (1) Documentary filmmaking; 24 OR (2) Fictional filmmaking.

- 1 Section 7E. Motion pictures that are lawfully made and acquired from DVDs protected by the
- 2 Content Scrambling system or, if the motion picture is not reasonably available on or not
- 3 reasonably available in sufficient audiovisual quality on DVD, then from digitally transmitted
- 4 video protected by an authentication protocol or by encryption when circumvention is accomplished
- 5 solely in order to incorporate short portions of motion pictures into new works for the purpose of
- 6 fair use and when the person engaging in circumvention reasonably believes that
- 7 circumvention is necessary to obtain the motion picture for multimedia e-book authorship.

8

- Section 7F. Motion pictures on DVDs that are
- 9 lawfully made and acquired and that are protected by the Content Scrambling System when
- 10 circumvention is accomplished solely in order to accomplish the incorporation of short portions of
- 11 motion pictures into new works for the purpose of criticism or comment and where the person
- 12 engaging in circumvention believes and has reasonable grounds for believing that
- 13 circumvention is necessary to fulfill the purpose of educational uses by college and university
- 14 professors and by college and university film and media studies students.

15

- Section 7G. Audiovisual works (optical discs,
- 16 streaming media, and downloads) that are lawfully made and acquired when circumvention is
- 17 accomplished by college and university students or faculty (including teaching and research
- 18 assistants) solely in order to incorporate short portions of video into new works for the purpose
- 19 of criticism or comment.
- 20 Section 10A. Motion pictures on lawfully made and lawfully acquired DVDs that are protected by
- 21 the Content Scrambling System when circumvention is accomplished solely in order to accomplish the
- 22 noncommercial space shifting of the contained motion picture.

- Section 10B. Legally acquired digital media
- 24 (motion pictures, sound recordings, and e-books) for personal use and for the purposes of making
- 25 back-up copies, format shifting, access and transfer.

```
1
                     PROCEEDINGS
 2
   MAY 17, 2012
                                                 9:00 A.M.
 3
 4
 5
             MR. NIMMER: Good morning, everybody.
             I'm David Nimmer. I'd like to welcome you
 6
 7
    all to the UCLA School of Law. Several years ago the
    Copyright Office conducted its Section 1201 Hearing
 8
 9
    right here at the law school in the room next door.
10
   We're delighted they've chosen to return here.
11
    like to welcome Maria Pallante, David Carson, Robert
12
    Kasunic, and all the members of the Copyright Office
    as well as the witnesses.
13
14
             In lieu of my following two hours of
15
    remarks, I will just quote Patrick Henry or perhaps
    Title 7 of the Code of Federal Regulations: "Let the
16
17
    rulemaking begin."
18
            MS. PALLANTE: Thank you, David.
                                               I want to
19
    thank David Nimmer, of course, and UCLA for hosting
2.0
    us.
21
             Welcome to the 1201 Rulemaking. I'm Maria
    Pallante. Let's introduce our team here.
22
                                               To my far
23
    right is Rob Kasunic, deputy general counsel; David
24
   Carson, general counsel; Ben Golant, assistant
25
    general counsel; and Steve Ruwe, attorney advisor --
```

8 all in the general counsel's office. This morning we have two panels. 2 going to go from 9:00 to about noon and start with panel 3. We're going to have the witnesses speak for ten minutes. We have a very high tech system of letting you know when you near the end of your ten minutes and then followed by questions. With that, I'd like to hand it over to 8 Marcia Hofmann. 10 ---000---PROPOSED CLASS TO BE DISCUSSED: 11 SECTION 1201(3) 12 13 PANELISTS: MARCIA HOFMANN CHRISTIAN GENETSKI 14 STEVE METALITZ 15 MS. HOFMANN: Good morning. My name is Marcia Hofmann. I'm a senior staff attorney at the 16 Electronic Frontier Foundation. My organization is 17 18 the proponent for proposed Class 3. 19 The exemption we're seeking will let users 20 get full administrative access to their own video 21 game consoles to make them intraoperable with 22 lawfully acquired third-party software. This is 23 essentially like letting consumers open the hoods of 24 their own cars. 25 I'm going to hit four points this morning.

- 1 I'd like to talk first about the need for this
- 2 exemption. Second, I'm going to talk about the
- 3 contours of our proposed exemption, what we're asking
- 4 for and what we're not asking for. Then I'm going to
- 5 turn to a couple of the fair use factors that I think
- 6 are particularly salient for this exemption request.
- 7 And finally I'm going to give you a little bit of new
- 8 information that I think is relevant to Statutory
- 9 Factor 2.
- 10 First, why do we need this exemption? The
- 11 record that we've given you shows in great detail
- 12 that users of video game consoles have been adversely
- 13 affected in their ability to make legitimate,
- 14 non-infringing uses of content on their consoles over
- 15 the past three years. Video game consoles are very
- 16 sophisticated computing devices. They are capable of
- 17 tremendous things. They have great potential that
- 18 users would like to be able to take advantage of.
- 19 I think it's telling that Sony has, in the
- 20 past, marketed PS3 with a campaign that uses the tag
- 21 line "It only does everything." These are devices
- 22 that are incredibly sophisticated, and while the
- 23 opponents of this exemption will tell you that really
- 24 they're only useful for playing video games, the
- 25 record shows that that's, frankly, just not true.

1 We have shown you evidence of scientific researchers who have made tremendous use of these competing devices by installing the Linux operating 3 system on them in the past and performing very 5 sophisticated research into astrophysics, artificial 6 intelligence, and military purposes among other 7 things. 8 In 2010 Sony modified the firmware on the PS3 to make it impossible for those devices to run 10 alternate operating systems, that is, operating 11 systems other than the game OS. The effect of this 12 has been researchers have been impaired in their 13 ability to continue socially beneficial research, 14 research that is good for us all. It benefits 15 humanity. 16 The opponents of this exemption will tell you the Sony PS3 really isn't a very good computing 17 18 device for research anyway and that gaming consoles 19 aren't the type of thing scientific researchers 20 really need for their work. But I think it's 21 interesting to note that the scientific community has 22 shown continuing interest in gaming technology. artists and scientific researchers have made great 23 24 uses recently in gaming technologies like the Xbox 25 Kinect and the Wii remote. This is a motion sensing

- 1 technology that is peripheral to gaming consoles
- 2 specifically, and they're not at issue in this
- 3 proceeding because they were designed to be open and
- 4 intraoperable with other systems, and that's why
- 5 researcher are able to use them.
- 6 The fact of the matter is consoles have been
- 7 limited in that ability. If there is any doubt that
- 8 those are useful for research purposes, I encourage
- 9 you to look at the declarations that we have
- 10 submitted with our proposed request. Both Dr. Khanna
- 11 and Dr. Pinto made clear that they used PS3s right up
- 12 until the ability to run Linux was removed, and at
- 13 that point that technology to them was no longer
- 14 attractive for research purposes.
- 15 The other community that's been affected by
- 16 this is the homebrew community. There is a vigorous
- 17 community of developers that like to write
- 18 independent software for the Wii, PS3, and other
- 19 consoles. They write independent games to play on
- 20 the consoles, but they also have transformed their
- 21 gaming consoles with software that lets them operate
- 22 their devices as though they're metronomes,
- 23 calculators, alarm clocks, Japanese language learning
- 24 devices, 3D maps, and even painting programs that are
- 25 simple for very small children.

1 In the past year Sony filed a lawsuit against several members of the homebrew community alleging circumvention violations of the DMCA among other claims. Since then there's been a chill over the homebrew community. If you look at the 5 declaration of Aaron Morris that we've submitted with the record, you will see that that is, in fact, true. So the reason we need this exemption is to ensure that scientific research and independent software 10 development can continue to flourish over the next 11 three years because at this point, frankly, that's in 12 doubt. 13 So let's talk about the scope of the 14 exemption that EFF is seeking here because I think that the record reflects some confusion about what 15 16 exactly we're asking for here. We are asking for a 17 very specific exemption designed to allow users to install and run the software of their choice on their 18 19 own gaming consoles. The exemption would cover 20 computer programs that enable lawfully acquired video 21 game consoles to execute lawfully acquired, 22 independently created software programs for 23 non-infringing purposes. It would apply only when a 24 user circumvents an active control to enable 25 intraoperability of that lawful acquired software

- 1 with other programs.
- I want to be very, very, very clear here.
- 3 It wouldn't permit infringement. It simply wouldn't.
- 4 We are not asking for any circumvention for unlawful
- 5 purposes. This will not authorize or foster any
- 6 infringing activities, and it won't sanction the
- 7 distribution of anti-circumvention tools. That is
- 8 just simply outside the scope of this rulemaking.
- 9 However, we do think it is covered and authorized by
- 10 1201(f).
- This exemption would apply in a very narrow
- 12 circumstance where a user circumvents an active
- 13 control to make a console that he lawfully owns
- 14 intraoperable with lawfully acquired but unapproved
- 15 third-party software for non-infringing purposes.
- 16 That's all. That's all we're asking for.
- 17 I'm going to talk for a moment now about two
- 18 theories factors that I think are particularly
- 19 important for purposes of this exemption. I'm not
- 20 going to through a whole theories analysis. We've
- 21 briefed that in detail. But these two, I think, bear
- 22 a little bit of discussion.
- The first theories factor is the purpose and
- 24 character of the use. In many cases modifying
- 25 firmware to jailbreak a console is going to be highly

- 1 transformative, and that's because the user is going
- 2 to be adding something new to the original firmware
- 3 to create a further purpose for different character
- 4 for the console.
- 5 Let's take scientific research, for example.
- 6 The gaming console is meant for playing games. It's
- 7 going to be transformed into a device that can
- 8 perform sophisticated scientific research. The
- 9 user's direct purpose in modifying the firmware is to
- 10 create intraoperability, which is a favored purpose.
- 11 The ultimate purpose may be something else like
- 12 scientific research or developing independent
- 13 third-party games. All of these purposes are things
- 14 that the Copyright Office encourages and embraces.
- 15 It's also important to keep in mind that the
- 16 ultimate purposes that I just discussed, performing
- 17 scientific research or creating independent software
- 18 applications, are legitimate and non-exploitive
- 19 purposes. That's important for purposes of SEGA and
- 20 Connectix. These are two cases that I think are
- 21 highly relevant and completely square with our
- 22 exemption request.
- Furthermore, the uses that we are seeking to
- 24 authorize are generally private, noncommercial uses.
- 25 Those are also favored under the Copyright Act.

- 1 Finally, the uses that are being made are highly
- 2 beneficial to the public.
- 3 I'd also like to turn for a moment to the
- 4 second fair use factor, the nature of the work. Now,
- 5 the Copyright Act doesn't protect the functional
- 6 element of a work even if other elements of the work
- 7 are expressive and protected. So making a copy is
- 8 fair use when it's the only way to access the
- 9 functional elements of a work and getting access is
- 10 necessary to make something intraoperable with
- 11 another program.
- 12 Here the firmware is highly functional. It
- 13 is software that runs programs on devices. Users
- 14 want to modify the lockout code that keeps software
- 15 from running on the console. Again, highly
- 16 functional. Making a copy of the firmware is the
- 17 only way to access those unprotected elements of the
- 18 work. People must do so for a legitimate direct
- 19 purpose which is intraoperability. So, again, fair
- 20 use factor 1 and 2 support us very strongly.
- 21 Finally, I want to say just a few words
- 22 about Statutory Factor 4, which is the availability
- 23 for use of works for nonprofit archival preservation
- 24 and educational purposes. I've provided copies to
- 25 everybody here of a report that we recently became

- 1 aware of which was a joint study by a digital
- 2 archivist at several universities with support from
- 3 the Library of Congress. They were setting
- 4 challenges to preservation of video games and
- 5 interactive fiction.
- 6 The executive summary on pages 7 and 8 --
- 7 this is what they say in this report: "Intellectual
- 8 property laws as they currently stand represents
- 9 serious obstacles to preservation of computer games
- 10 and interactive fiction. The inability of libraries
- 11 and other cultural memory organizations to make
- 12 preservation copies of materials employing
- 13 technological protection measures will certainly doom
- 14 these materials to a rapid demise."
- Now, I think our exemption request isn't
- 16 going to solve all the problems that that community
- 17 faces particularly when computer games are protected
- 18 by separate distinct access controls. But I do think
- 19 that potentially it would make more software
- 20 available to those communities for preservation
- 21 purposes, particularly the software on the gaming
- 22 consoles themselves and independently created games
- 23 that would be made as a result of our exemption
- 24 request. So I think that suggests that this way is
- 25 in favor of Statutory Factor 2.

- 1 So I know my time is up. Thank you very
- 2 much, and I look forward to addressing any questions
- 3 you have.
- 4 MS. PALLANTE: Thank you very much.
- 5 MR. GENETSKI: Proposed Class 3 seeks an
- 6 exemption that would gut video game console's piracy
- 7 protections to enable a narrow sliver of uses on game
- 8 consoles that can already be accomplished on personal
- 9 computers. This office has consistently rejected
- 10 similar requests to access works on preferred
- 11 platforms as a matter of convenience in the past, and
- 12 it should do so again here.
- 13 My name is Christian Genetski. I'm the
- 14 general counsel of the Entertainment Software
- 15 Association, and I'm appearing today on behalf of its
- 16 members, the game publishers that produce the wide
- 17 array of highly expressive, interactive, copyrighted
- 18 works that entertain hundreds of millions of
- 19 consumers and generated \$25 billion to U.S. economy
- 20 last year.
- 21 The dynamic growth of the video game
- 22 industry could not have occurred without strong
- 23 copyright protections for video game publishers.
- 24 We're here today because our copyright interests are
- 25 at stake. These game publishers, the console makers

- 1 who depend on their games, and the millions of
- 2 American consumers who play them all stand to lose if
- 3 proposed Class 3 exemption is granted.
- 4 EFF, the proponent of Class 3, seeks to
- 5 minimize the copyright interests that are at stake.
- 6 They focus in their comments on the functional
- 7 aspects of and the market for console firmware. We
- 8 heard in the introductory comments that they
- 9 analogized what they're seeking to opening the hood
- 10 of a car. But this ignores both the reality of what
- 11 the critical TPMs at issue here are designed to
- 12 protect as well as the real world impact on the
- 13 market for these copyrighted works of excusing the
- 14 hacking of those TPMs.
- Video game consoles are platforms for the
- 16 creation, distribution, and consumption of
- 17 copyrighted works, and they rely on the TPMs at issue
- 18 and specifically the TPMs in the firmware itself to
- 19 prevent infringement of those works. We're in the
- 20 heartland of what the DMCA is designed to protect.
- 21 It's precisely because strong copyright
- 22 protections are critical to the investment and
- 23 creation of copyrighted works that Congress made
- 24 clear that exemptions to 1201's anti-circumvention
- 25 provision should not only be disfavored but should

- 1 only be made in the most exceptional of
- 2 circumstances. Simply put, this is no exceptional
- 3 case.
- 4 Proponents ask the Copyright Office to open
- 5 Pandora's box to accommodate the personal preferences
- 6 of a few hobbyists who, having downloaded or created
- 7 software like Linux or Pong on their computers, want
- 8 to now be able to install and run these same programs
- 9 on their video game consoles.
- 10 We explained in our comments that we filed
- 11 with the office why the proponent has not met its
- 12 heavy burden of proving as to any individual console,
- 13 let alone all three of them, why this exemption is
- 14 necessary. I won't review all those details today,
- 15 and I'm going to leave it to Steve Metalitz to
- 16 explain why the firmware modification is itself an
- 17 infringing use. But there are two critical points I
- 18 want to spend my time on today.
- 19 First, I want to make clear that, unlike the
- 20 record in the prior request involving jailbreaking of
- 21 other devices, the proposed Class 3 exemption creates
- 22 a real and substantial threat of copyright harm in
- 23 the form of digital piracy.
- 24 Second, I'll cover the failure of proponents
- 25 to identify any adverse impact beyond mere

- 1 inconveniences in accessing works on the platform of
- 2 their choice, an interest that plainly doesn't
- 3 warrant granting an exception in light of the
- 4 potential for harm.
- 5 First, the proposed exemption would allow
- 6 and encourage the play of pirated content on video
- 7 game consoles. This is the very infringement that
- 8 TPMs are designed to prevent. The same hacking
- 9 methods covered by the proposed exemption are most
- 10 well known for their association with piracy and used
- 11 to pirate games.
- Now, in its reply comments -- and we heard
- 13 this morning -- EFF claims this argument is
- 14 speculation. But our concerns about piracy are based
- 15 on evidence, not conjecture. Video game piracy would
- 16 be more rampant if circumvention of console TPMs was
- 17 permitted by the Copyright Office. Let's be clear.
- 18 If a console is not jailbroken, piracy is not
- 19 possible. Already the number of downloads and
- 20 infringing console games dwarfs any comparable
- 21 measure of interested non-infringing homebrew games.
- 22 For example, ESA's anti-piracy vendors identified
- 23 over 1 million downloads of infringing versions of
- 24 250 select console games in just the first quarter of
- 25 2012.

1 One need only look at the piracy rates for PC games which are played on a platform that doesn't employ its own TPMs to see the risk of this office granting an exemption for the circumvention of 5 As Sony explained in its comments console TPMs. filed with the office, the PC game market has been decimated because widespread piracy has diminished 7 publishers' incentives to continue making those 8 9 games. 10 Today the PC market is largely reduced to 11 multiplayer online games that employ server-based access controls or PC versions of so-called AAA 12 13 games, high-quality, high-budget games with budgets 14 in the tens of millions to \$100 million that also 15 have console game alternatives. In fact, if you look 16 at the top 29 most frequently downloaded and 17 infringing games on Bit Torrent, 28 are PC games, and 18 in each case the PC version has an equivalent 19 copyrighted console version. 20 The piracy rates for these dual platform 21 titles are significantly higher for the PC games, on 22 the order of seven times higher by one publisher's 23 measure of infringing downloads of several of its 24 most popular titles. In this regard console TPMs are

© 2012

DMCA's success story. If console's ability to

- 1 enforce platform TPMs is diminished such that console
- 2 piracy rates mirror those of PC piracy, the incentive
- 3 to create works for those platforms will likewise be
- 4 diminished.
- 5 Now, EFF asserts that people who rely on
- 6 this exemption will not commit piracy, but Exhibit B
- 7 and C are comments filled with evidence that the very
- 8 methods that EFF asks the Copyright Office to excuse
- 9 are used almost exclusively for copyright
- 10 infringement. EFF's own filing and tech
- 11 demonstration last week underscores just how
- 12 entangled piracy and the alleged non-infringement
- 13 uses are and how no meaningful line can be drawn
- 14 between the two.
- 15 We saw a demonstration of the letter bomb
- 16 exploit for Hackmii for the Wii console, and that's a
- 17 program that is downloaded by default as a bundled
- 18 all-in-one package with step-by-step instructions on
- 19 how to use The Homebrew Channel to play pirated Wii
- 20 games. Even some of the specific applications that
- 21 EFF asserts in its comments would benefit from this
- 22 exemption of well-known piracy and anti-utilities,
- 23 backup managers, so called backup managers like
- 24 multiMAN. These are applications that even the
- 25 homebrew community, cited in EFF's comments,

- 1 disavowed any discussion of on their website because
- 2 they understand that those are proxies for piracy.
- 3 Of course, any attempt to cast an exemption
- 4 in this context is ultimately illusory because no
- 5 matter the alleged purpose for the hack, once a
- 6 console is hacked, the damage is done for all
- 7 purposes. There are no subsequent barriers to piracy
- 8 should the user of that device later opt to install
- 9 pirate games. The protections provided by the DMCA
- 10 are already lost.
- In light of this real and substantial threat
- 12 of Internet piracy on the viability of the console
- 13 platform and by extension the market for the
- 14 availability of works that are published for that
- 15 platform, the burden on proponents to show a real
- 16 need that cries out for an exemption is particularly
- 17 steep.
- That brings me to my second point. The
- 19 Class 3 request is at best nothing more than a
- 20 platform-shifting exemption, one to accommodate
- 21 personal preferences and convenience, not any of the
- 22 core interests that this proceeding is intended to
- 23 protect. Specifically the proponent and its
- 24 supporters want people to be able to move Linux and
- 25 other software programs from their computers, on

- 1 which they already reside and in many cases were
- 2 created, to their video game consoles.
- 3 Congress intended these proceedings to act
- 4 as a safety valve so that individuals can continue to
- 5 comment and report on and criticize copyrighted
- 6 works. But none of the supporters of the proposed
- 7 exemption want to comment and report on or criticize
- 8 the video console firmware or the copyrighted video
- 9 games that the console TPMs protect. Instead they
- 10 want to install software on their video game consoles
- 11 instead of computers.
- 12 As this office has reiterated time and time
- 13 again, there is no unqualified right to access works
- 14 on any particular machine or device the users choose.
- 15 Even if this was a protected interest, the record is
- 16 lacking evidence that TPMs have had a substantial
- 17 adverse impact. Instead, the record really provides
- 18 only examples of mere inconveniences and isolated
- 19 individual cases, clearly insufficient to warrant
- 20 exemption.
- 21 56 percent of American households own
- 22 current generation video game consoles. The chart
- 23 that EFF displayed during their tech demonstration
- 24 last week makes clear that these consoles are
- 25 overwhelmingly used for the consumption of

- 1 copyrighted works. The desire of a relatively few
- 2 users to disarm piracy protections for those works to
- 3 satisfy particular curiosity in platform shifting,
- 4 save a few dollars, or avoid a simple licensing and
- 5 registration process carries little weight especially
- 6 where each of the allegedly non-infringing activities
- 7 proffered by EFF are achievable through readily
- 8 available equivalent lawful alternatives. I'll take
- 9 each of their three examples in turn.
- 10 First, proponents cited TPMs as an
- 11 impediment to installing Linux. Linux comes
- 12 installed on thousands of devices. As EFF's own
- 13 technologist acknowledged last week, you can get
- 14 Linux anywhere. On the research uses, those uses are
- 15 clearly, if you read the comments, about harnessing
- 16 computer power. They're not about the copyrighted
- 17 work at all. That's not a concern in this
- 18 proceeding. In any event, the record is very clear
- 19 that there are no instances of Sony ever denying
- 20 authorization for collaborative research uses. In
- 21 fact, the record is clear Sony has made several
- 22 attempts and has successfully authorized several
- 23 researchers to use the PS3 for that purpose.
- 24 Finally, proponent wants an exemption for
- 25 running homebrew games on console platforms. We saw

- 1 at the tech hearing that this exemption is primarily
- 2 about being able to take a game like Pong that you
- 3 create on a PC, that is playable on a PC, putting it
- 4 on a USB drive, and moving it over to a Wii game
- 5 console. Clearly there's an alternative platform
- 6 that's available for this same activity that was
- 7 demonstrated in the tech demonstration itself. The
- 8 same computers that are used to acquire the software
- 9 hack, to perform that software hack, and to create
- 10 and play it to independent homebrew apps.
- 11 Finally, also the record makes clear there's
- 12 a lawful route to play these applications and games
- 13 and develop them and innovate on the consoles
- 14 themselves. The console makers want to encourage
- 15 many of the uses identified by EFF, and they're
- 16 actively doing so. Each of the console makers has an
- 17 independent game channel that offers any developers
- 18 the opportunity to self-publish through a much less
- 19 rigorous licensing process.
- On balance the record here plainly shows
- 21 that console makers strive to enable the very
- 22 activities that EFF seeks on the consoles so long as
- 23 doing so does not also enable piracy. As a practical
- 24 matter, there's only one activity that is
- 25 substantially adversely affected by the game console

- 1 TPMs, and that's the playing, copying, and
- 2 distributing of pirate game content.
- 3 I want to thank you for your time this
- 4 morning. This issue is critically important to the
- 5 members of my association, many of whom are here in
- 6 attendance this morning, and I look forward to
- 7 answering any questions you have.
- 8 MS. PALLANTE: Thank you, Christian.
- 9 Steve.
- 10 MR. METALITZ: Good morning. I'm Steve
- 11 Metalitz. I'm here on behalf of the joint creators
- 12 and copyright owners, seven organizations that are
- 13 listed in our submissions. You've already heard from
- 14 two very-well briefed and articulate counsel on this.
- 15 I'd just like to highlight a couple of points that I
- 16 think are important to your analysis of this proposed
- 17 exemption.
- First, the role of Section 1201(f). We have
- 19 an exemption in the DMCA for achieving
- 20 intraoperability of computer programs. It's called
- 21 Section 1201(f). The threshold burden that the
- 22 proponents need to satisfy is to show that their
- 23 activity is not covered by that because, if it is
- 24 covered by that, then obviously there's no basis for
- 25 granting an exemption. Prohibition on circumvention

- 1 can't possibly be having an adverse impact.
- I thought I heard Ms. Hofmann say this
- 3 activity is covered and authorized by 1201(f).
- 4 Possibly I misheard her because I think EFF has
- 5 avoided answering this threshold question that they
- 6 have the burden of answering before you can go any
- 7 further in considering their proposed exemption. So
- 8 maybe that can be explored more in the question and
- 9 answer.
- Now, of course, you looked at this question
- 11 in the last go-round in the smartphone hacking
- 12 exemption. The beauty of a de novo proceeding like
- 13 this one is you can and, in fact, Congress has
- 14 instructed you to take another look at those
- 15 questions that you resolved. And, of course, this is
- 16 a different proposed exemption anyway. I would
- 17 encourage you to take that close look at the statue
- 18 and the legislative history to see if you're
- 19 satisfied that the proponents have met their burden
- 20 of showing that their activity is not covered by
- 21 1201(f).
- 22 Since I had no role in drafting this portion
- 23 of the statute, I'm perfectly happy to say this is
- 24 not the clearest part of Section 1201. I think if
- 25 you look at the statute, you may want to revisit some

- 1 of your analysis from last time. Let me just read
 2 part of 1201(f): "A person may employ technological
- 3 means to circumvent a technological measure for the
- 4 purpose of enabling intraoperability of an
- 5 independently created computer program with other
- 6 programs if such means are necessary to achieve
- 7 intraoperability and if it doesn't constitute
- 8 infringement."
- 9 Now, I'm not reading from 1201(f)(1), which
- 10 is the portion that applies to (a)(1). I'm reading
- 11 from (f)(2). (f)(2), which applies to (a)(2) and (b)
- 12 and therefore not directly within this proceeding --
- 13 (f)(2) makes it very clear exactly what -- it seems
- 14 as those what the proponents want to do is what the
- 15 statute would allow them to do. Then if you look at
- 16 the legislative history and you see what paragraph 1
- 17 is about, legislative history says -- paragraph 1
- 18 "permits the circumvention of access control
- 19 technologies for the sole purpose of achieving
- 20 software intraoperability," which as I understood it
- 21 was exactly what the proponents are asking for.
- It goes on to say, "For example," an
- 23 important phrase, this subsection permits software
- 24 developer -- this is the identification and analysis
- 25 which was the focus of your analysis of this

- 1 provision last time around, that because they're not
- 2 seeking to identify and analyze -- they're actually
- 3 seeking to hack the protective measure -- perhaps
- 4 it's not covered. I just urge you to take another
- 5 look at that. I suggest the reading you gave of this
- 6 rather convoluted provision may not be the most
- 7 plausible one.
- In any case, it's the proponents' burden to
- 9 you explain to you why their activity did not fall
- 10 within 1201(f)(1). They have not done that. If it's
- 11 not within 1201(f)(1), then the question arises when
- 12 Congress addressed the issue of achieving
- 13 intraoperability between computer programs, why
- 14 didn't it accommodate this situation that they're
- 15 facing? Perhaps the most plausible explanation is
- 16 that it described the circumstances under which
- 17 achieving intraoperability would be permitted but
- 18 only under those circumstances. Again, I would just
- 19 encourage you to take another close look at that
- 20 question which is a threshold question.
- 21 Another threshold question, of course, is
- 22 whether the use the proponents wish to make is
- 23 non-infringing, and we have -- again, you did look at
- 24 this question in the context of smartphone hacking
- 25 three years ago or two years ago and encourage you to

- 1 take a re-look at that and talk about that, I'm sure,
- 2 later this morning.
- 3 I think the reliance of the proponents on
- 4 the SEGA case and the Sony versus Connectix case, the
- 5 leading software intraoperability fair use cases, is
- 6 somewhat uncomfortable for them because that's
- 7 what -- we know one thing Congress wanted to do in
- 8 enacting 1201(f) is to codify and make sure the
- 9 principles underlying SEGA and Accolade were not
- 10 frustrated by Section 1201. If that's the basis for
- 11 their claim that it's non-infringing, it's kind of
- 12 hard to avoid the question of whether the activity
- 13 they're undertaking is already covered by
- 14 Section 1201(f).
- If it's outside 1201(f), then it's hard to
- 16 see how SEGA and Accolade is controlling in their
- 17 fair use analysis. I think the big distinction is
- 18 that those cases were about intermediate copying, and
- 19 this case is not. This case is about permanent
- 20 copying, about making a permanent change to the
- 21 firmware.
- 22 I know that EFF, in its reply comments,
- 23 makes some reference to the copying being transitory.
- 24 That's not how I understand what's going on here.
- 25 Once the console is jailbroken, it stays jailbroken,

- 1 and you can continue to play pirate games on it as
- 2 Christian describes. There's nothing transitory
- 3 about this.
- 4 I accept that SEGA and the Connectix case --
- 5 the law is not confined to those facts. The
- 6 intermediate character seems to be extremely
- 7 important in the analysis throughout those cases, and
- 8 it's just not present here. The reply comment then
- 9 points to the Lexmark decision as an example of how
- 10 perhaps this has been extended in other cases, that
- 11 copying device firmware is a fair use. I think if
- 12 you look at that decision, you'll find it was not
- 13 infringing to copy the firmware there because it was
- 14 something like 37 bytes. It was not really enough to
- 15 attract copyright protection in the first place.
- The Lexmark court compares that lockout code
- 17 to an operating system as the difference between a
- 18 lamp post and the Sears tower. We're in Sears tower
- 19 territory here. This is extremely complex and
- 20 extensive firmware, and when it's copied in total not
- 21 for transformative use but for the very use it was
- 22 intended to run the machine, I think it's very
- 23 difficult to sustain the fair use analysis.
- 24 We have a footnote in our submission that
- 25 explains why we think the fair use analysis you did

- 1 last time in the smartphone setting kind of turns the
- 2 fair use factors on their head. So we encourage you
- 3 to take another look at that as Congress asked you to
- 4 do in this de novo proceeding. I think you will find
- 5 it's difficult to conclude that the proponents have
- 6 met their burden of showing this is a fair use.
- 7 I just want to conclude with a couple of
- 8 points that really pick up on what Christian talked
- 9 about, the centrality of the technological protection
- 10 measures on the operating system of these consoles,
- 11 how central that is in combatting piracy of video
- 12 games. That's a factor I think you have to take into
- 13 account. You have taken it into account in the past,
- 14 and I hope you will do that. Just really three
- 15 points on this.
- 16 First, Christian already talked about the
- 17 platform-shifting issue. I think what we have here
- 18 is two copyrighted works, an operating system and an
- 19 application, and steps are taken using circumvention
- 20 to make them intraoperable. You have encountered
- 21 this problem many times before when the access
- 22 controls on the application were hacked so that they
- 23 would run on a particular platform. You really had
- 24 very little hesitation in finding in some of these
- 25 platform-shifting cases that that was not a

- 1 sufficient basis for granting an exemption.
- I don't think there's any meaningful
- 3 distinction here between that and hacking the access
- 4 controls on the platform to enable running the
- 5 application unchanged. I guess if there is a
- 6 distinction, this falls on the negative side of the
- 7 ledger because instead of simply leaving one
- 8 copyrighted work in the clear, this enables a great
- 9 number of copyrighted -- pirate copyrighted works to
- 10 be consumed if the protection of the TPMs is taken
- 11 away.
- 12 The second point on this is I think -- I
- 13 urge you to take another look at the question of
- 14 whether the DMCA factor about the availability of
- 15 copyrighted works -- we would assert that doesn't
- 16 refer to the copyrighted work as to which
- 17 circumvention has occurred. That refers to
- 18 copyrighted works in general. I think that's very
- 19 consistent with your prior rulings and your prior
- 20 recommendations. It's consistent with the statute,
- 21 and I think the thrust of the opposition to this is
- 22 based on the impact it's going to have on the
- 23 availability of all works or broad range of works in
- 24 the video game area.
- 25 Finally, on the point of defining out

- 1 infringing activity, Ms. Hofmann said, "We're not
- 2 asking for any circumvention for an infringing use."
- 3 I'm glad to hear that, and I think it's inevitable
- 4 that that's what would be asked for. But I think we
- 5 have to look at the reality, the real world
- 6 implications of this. I think, as Christian said,
- 7 what's going to be the impact? What use is it going
- 8 to enable? It can't be made in any other way than
- 9 through circumvention.
- I know that this defining the exemption so
- 11 that it doesn't apply to infringing uses is something
- 12 the office has done more and more over the years. I
- 13 understand the rationale for it, and in some places I
- 14 can accept the rationale for it, but I think it's
- 15 kind of a matter of degree.
- 16 I've been casting about for an analogy. The
- 17 best I can come up with is that if I have a Chihuahua
- 18 and I'm building a dog door for my dog, I think it's
- 19 probably okay and fits within your mandate if you
- 20 approve a dog door that's the size of a Jack Russell
- 21 terrier. Maybe some other things will get through
- 22 that are infringing, and you can tolerate that if
- 23 there's a substantial -- I don't want to argue that
- 24 Chihuahuas have a substantial positive social value.
- 25 There are some people who think so.

- 1 On the other hand, I think what we have here
- 2 is a dog door the size of a Great Dane. By far the
- 3 main use of this exemption, if it is granted, will be
- 4 to enable the play of pirated games. I think you've
- 5 recognized in the past the impact of that reality,
- 6 and I would just encourage you to do that again in
- 7 your consideration of this proposed exemption.
- 8 Thank you.
- 9 MS. PALLANTE: Thank you very much, Steve.
- 10 I'd like to give Marcia three minutes or so
- 11 to respond to what you just heard.
- MS. HOFMANN: Sure. I would like to start
- 13 with the reverse engineering exception to the DMCA.
- 14 I have it in front of me now. I'm going to walk
- 15 through it a little bit. If you'd like to go through
- 16 it with me, please by all means do.
- 17 It seems to me this exception has three
- 18 distinct parts. The first part of it authorizes a
- 19 person to circumvent a technological measure of an
- 20 effectively controlled access to a particular portion
- 21 of a work for the sole purpose of identifying and
- 22 analyzing those elements of the program that are
- 23 necessary to achieve intraoperability. So this
- 24 authorizes reverse engineering itself. I mean this
- 25 is the provision that authorizes somebody to actually

- 1 perform the reverse engineering which may well be the
- 2 person who actually created the tools we're walking
- 3 about, the jailbreaking program.
- 4 The second part of it says a person may
- 5 develop and employ technological means to perform
- 6 reverse engineering or for the purpose of enabling
- 7 intraoperability of an independently created computer
- 8 program with other programs. So that authorizes a
- 9 person to create the tool to reverse engineer or to
- 10 achieve intraoperability.
- Now, Subsection 3 basically allows an
- 12 individual then to distribute those tools. All
- 13 right? So we have a provision that allows you to
- 14 reverse engineer, create a tool for reverse
- 15 engineering or for intraoperability, and then finally
- 16 a provision to distribute those tools.
- Now, there is no provision here that
- 18 actually allows you to take a tool created by
- 19 somebody else and then use it to achieve
- 20 intraoperability with an independently created
- 21 program. So I think that is the big gap here. I
- 22 think it's also worth noting that none of these three
- 23 provisions apply in situations constituting
- 24 infringement.
- 25 My understanding is that Mr. Metalitz's

- 1 position is that intraoperability, the
- 2 intraoperability we're talking about for purposes of
- 3 this proceeding, is not fair use, and so if it's not
- 4 fair use, I think it would be infringement. So I
- 5 think that under his reading of it, the reverse
- 6 engineering provision wouldn't apply anyway. I think
- 7 the reverse engineering provision simply isn't
- 8 something that's going to help here.
- 9 I think Congress created a floor here and
- 10 not a ceiling. I think the reason we have this
- 11 rulemaking proceeding is because Congress recognized
- 12 that technology changes and uses of the technology
- 13 changed. We don't have this rulemaking every
- 14 20 years. We don't have it every 10 years. We have
- 15 it every three years, and the reason is because uses
- 16 of technology change frequently, and Congress could
- 17 not have foreseen every possible use of gaming
- 18 consoles that there could be in the future when it
- 19 created the DMCA.
- 20 So I think clearly an exemption is necessary
- 21 here, and the reverse engineering provision simply
- 22 doesn't apply.
- 23 MR. KASUNIC: Steve, what's your view of
- 24 that analysis of 1201(f)?
- 25 MR. METALITZ: Well, as I said, this is not

- 1 the clear statute, but the word "use" is in there.
- 2 "A person may employ" -- I guess it's the word
- 3 "employ." It's not the word "use." "A person may
- 4 employ technological means to circumvent a
- 5 technological measure for the purpose of enabling
- 6 intraoperability."
- 7 I don't think it could be much clearer that
- 8 if those conditions are met, it may fall within
- 9 1201(f)(1). Of course, if it's infringing, it
- 10 doesn't fall within 1201(f)(1). But if it's
- 11 infringing, you wouldn't give the exemption either.
- 12 This analysis assumes it's not infringing. It
- 13 assumed for the purpose of argument that it is. I
- 14 think there's a good argument that Congress address
- 15 this.
- 16 You went through the analysis last time.
- 17 It's kind of odd that Congress said you can develop
- 18 the tool, but they didn't really make any provision
- 19 for using it. That would be odd, wouldn't it? I
- 20 just don't think that's the plausible reading here.
- 21 The plausible reading might be you can use the tool
- 22 if you meet these criteria. If that's right -- I
- 23 should say if the proponents don't persuade you that
- 24 that's wrong, then your consideration of this
- 25 proposal is at an end. If 1201(f)(1) might apply,

- 1 then there's no argument that the prohibition is
- 2 inhibiting anything because it's not part of the
- 3 prohibition. There's a place to adjudicate that.
- 4 It's called a U.S. court.
- 5 MR. GOLANT: Thank you all for your
- 6 presentations and your cogent arguments. Now I'm
- 7 going to come in and ask you some very basic
- 8 questions for clarification so I understand, as we
- 9 write this going forward, that we have the knowledge
- 10 that we need to for the definitional purposes that
- 11 are important.
- 12 First, I'll ask this very basic question:
- 13 What exactly is firmware? And I let each of you
- 14 respond if you'd like to and let me know because
- 15 that's critical. It doesn't really say so in any of
- 16 the proponents or opponents pleadings, and it's
- 17 essential that we all know what it really means.
- 18 MS. HOFMANN: I think it's a very
- 19 interesting question. One of the problems I think we
- 20 face here is that we're talking about a bunch of
- 21 different devices that are created differently. I
- 22 think we want something broad enough to make sure we
- 23 capture all of the important uses we want to enable.
- 24 I think we would say that firmware is the software
- 25 that controls access to the booting functions of the

- 1 machine and access to the operating software.
- 2 MR. GOLANT: Christian? Steve? You want to
- 3 add anything to that? Or we can take questions and
- 4 come back later.
- 5 MR. GENETSKI: I think the general -- at a
- 6 high level the description Marcia gave is accurate
- 7 what firmware generally is. I would point out a
- 8 proponent seeking an exemption bears the burden of
- 9 establishing which copyright works are at issue, what
- 10 the impact as to those specific works are, what uses
- 11 need to be made of those specific works. It's
- 12 incumbent on them to articulate that.
- MR. METALITZ: I would add although, yes,
- 14 "firmware" appears a lot in these papers, the
- 15 proposal is not for -- the proposed class of works is
- 16 not firmware. It's computer programs that enable
- 17 consoles to do certain things; so that could extend
- 18 beyond the narrative.
- 19 MR. GOLANT: What is the difference between
- 20 a program and firmware?
- 21 MS. HOFMANN: Firmware is a computer
- 22 program. I would say it contains multiple computer
- 23 programs. I think that firmware is certainly a
- 24 subclass of that, but I think we wouldn't want it to
- 25 be restricted to firmware, per se. We certainly want

- 1 it to reach the underlying element of firmware that
- 2 are themselves computer programs that control access
- 3 to the operating system of the machine.
- 4 MR. GOLANT: And so can firmware be a simple
- 5 eight lines of code versus a thousand lines? Can it
- 6 vary from place to place, device to device.
- 7 MS. HOFMANN: It can vary from device to
- 8 device.
- 9 MR. GOLANT: So firmware could be a subset
- 10 of a computer program, but can firmware itself be
- 11 copyrightable under Section 102 of Title 17?
- MS. HOFMANN: Yes.
- MR. GOLANT: With regard to the exemption
- 14 you requested, are you only talking about three
- 15 devices here, PS3, Nintendo Wii, and Xbox?
- 16 MS. HOFMANN: No, we're not talking about
- 17 just about those devices. We're talking about video
- 18 game consoles as a class of device. The reason why I
- 19 think that's important is because there are other
- 20 gaming companies out there and because if we restrict
- 21 it to three manufacturers, if another gaming company
- 22 starts up next week and produces a video game
- 23 console, this wouldn't reach that company. So I
- 24 think that the important thing to do is to focus on
- 25 the uses and the purposes that we want to authorize

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

43 and enable as opposed to the actors in the space. 2 MR. GOLANT: So that means you would say the PS2 and Game Cube would also be part of this 3 exemption? 5 MS. HOFMANN: Yes, exactly. MR. GOLANT: And future games, PS4 and the next version of Xbox, would probably be included and part of this? 8 9 MS. HOFMANN: Yes. I just need a clarification 10 MR. GOLANT: 11 because the discussion about what the adverse effects 12 are now with regard to those particular system, but I 13 thought is the universe limited or more expansive, 14 and you answered that question. Our discussion is limited to 15 MS. HOFMANN: certain consoles because those are the consoles used 16 17 by most people in this day and age, but that doesn't mean there couldn't be a new console invented 18 19 tomorrow that wouldn't have these same problems. 20 think it would turn the proposed exemption on its 21 head to basically give that manufacturer a free pass. 22 MR. GOLANT: So extending the question 23 further, the firmware locks you'd say are very 24 different or very similar between the three consoles 25 we are now discussing, Wii and Xbox and PS3?

1 MS. HOFMANN: This is a complicated They use different -- each console uses different firmware. I think it's fair to say they all use a system of encryption and authentication 5 checks to control access to the booting software and to the operating system of the machine. And I think that those are the access controls that are at issue here, the encryption and authentication checks. 9 MR. GOLANT: That's good to know. Moving on to Christian for this particular 10 11 question, in Sony's comments there were discussions 12 about firmware is a highly creative work. Can you 13 possibly state what that means, "highly creative"? 14 MR. GENETSKI: I can elucidate as a reader 15 of Sony's comments. Obviously, I was not counsel 16 filing those comments and wouldn't speak for them on 17 I think the comments do make clear there are a that. number of different elements in the firmware 18 19 including software that controls the graphics engine 20 for the games that enables the games that are 21 published for that platform specifically to harness 22 that. 23 I think what's important is what the 24 exemption seeks to be able to do with the firmware,

though, is to actually engage in a circumvention of

- 1 the authentication sequence that's in the firmware
- 2 itself. The uses itself also is circumvention.
- 3 Could I address briefly Marcia's answer to
- 4 the broader question you had?
- 5 MR. GOLANT: Sure.
- 6 MR. GENETSKI: It sounds to me like the
- 7 proponent is saying they can't identify what the
- 8 universe of computer programs would be that would be
- 9 covered by the exemption they seek. They don't want
- 10 to limit it to the only game consoles and firmware
- 11 that they've discussed. They want it to be broader.
- 12 They can't limit it to the consoles that they
- 13 discussed. And I'm struggling to understand how they
- 14 can carry their burden of showing a present adverse
- 15 impact and a lack of meaningful alternatives if they
- 16 can't define what it is they're seeking.
- 17 This proceeding is not about granting an
- 18 exemption for a broad philosophical right to do
- 19 certain things for all purposes and all times though
- 20 I understand that may be part of the motivation.
- 21 It's about carrying the burden of showing current
- 22 real world adverse impacts and lack of alternatives.
- 23 Just as a concrete example from the record in this
- 24 proceeding, there are only three game consoles
- 25 mentioned here, and there are two primary uses, the

- 1 research use for Linux and the running of independent
- 2 homebrew apps, and yet for one of the three consoles,
- 3 the Xbox 360, there's an admission in the record that
- 4 there is no homebrew community seemingly because of
- 5 the indie games marketplace on Xbox, and there's no
- 6 single research use cited.
- 7 At the same time that neither of the
- 8 supposed needs for the exemption appear to apply to
- 9 that console, the comments also say there's a
- 10 thriving jailbreaking community at each of the three
- 11 consoles. It begs the question to which the answer
- 12 is obvious. What's the thriving jailbreaking
- 13 community for a console that doesn't have any uses
- 14 for the others need? It's for piracy.
- 15 MR. GOLANT: That's my next question. I had
- 16 seen from your proposal that you've made some
- 17 comments about the Wii and their homebrew community
- 18 but not for Xbox and PS3, and in converse with regard
- 19 to research purposes you talk about PS3, but you
- 20 don't talk the Wii and Xbox. So can you give me some
- 21 idea as to whether or not all three systems meet all
- 22 of the adverse effects for each of those categories
- 23 for homebrew?
- 24 MS. HOFMANN: So let's start with the
- 25 homebrew community. The homebrew community is the

- 1 biggest, it appears, among the Wii, users of the Wii.
- 2 Now, our comments say that -- actually our comments
- 3 don't say there is no Xbox homebrew community but
- 4 that it is small. The PS3 appears to be small as
- 5 well although we have shown in our opening comments
- 6 and also in our reply that there definitely is a
- 7 community there. I think that it's important to
- 8 focus not only on the number of people involved but
- 9 the larger effect that their favored uses have for
- 10 the rest of us. There may be not a large community
- 11 of people performing these uses, but they're creating
- 12 independent games, and they are engaging in new
- 13 socially valuable expression that benefits us all. I
- 14 think that the impact of that expression is something
- 15 that's worth considering in addition to the number of
- 16 individuals involved.
- Now, in terms of the PS3 -- or I'm sorry,
- 18 the scientific research, the PS3 is the one that's
- 19 been most often used in the past, but the reason is
- 20 because it was able to run Linux whereas none of the
- 21 other consoles were able to do that. At this point
- 22 I'm not sure that there are any scientific
- 23 researchers -- at least I'm not aware of any -- that
- 24 are running research on locked-down boxes without the
- 25 help and aid of one of the gaming manufacturers.

- 1 And with all due respect to them, I think it's wonderful that they have facilitated that research in certain cases, but it shouldn't be up to a company to decide what research is socially 5 valuable enough to support or not. I think it is up to an individual researcher to decide whether or not a gaming console could be useful for purposes of what he's trying to accomplish, and he is in the best position to decide that. If making a box 10 intraoperable with software would accomplish that, I 11 don't see any reason why the law shouldn't permit 12 that. 13 MR. CARSON: Are we aware of any cases in 14 which someone has wanted to do a particular kind of 15 research on one of these consoles and asked 16 permission and been denied? 17 MS. HOFMANN: I have not heard of a case
- 18 where a person has been denied, but Dr. Khanna, who
- 19 submitted a declaration in support of us -- he
- 20 mentions he spoke to Sony about the research he
- 21 wanted to do while the consoles were able to run
- 22 Linux. Sony liked the idea, and they gave him a
- 23 number of consoles on which to perform his research,
- 24 which I'm sure he really appreciated, but that number
- 25 was not actually adequate, and then he had to buy

- 1 more. So I think we do have evidence there have been
- 2 times when researchers have approached companies,
- 3 Sony specifically, and they've gotten some help and
- 4 some aid but really not everything that they need.
- 5 MR. CARSON: Did Sony forbid him to use the
- 6 additional ones he bought for those purposes?
- 7 MS. HOFMANN: No, they didn't.
- 8 MR. CARSON: What was the problem?
- 9 MS. HOFMANN: That was at a time when the
- 10 Sony PS3 could run Linux. That didn't happen after
- 11 Sony removed that functionality.
- MR. CARSON: To be clear, once Sony has
- 13 removed that functionality, you're not aware of any
- 14 case when someone has got his own and asked
- 15 permission to use the console in that respect, and
- 16 Sony said, "No, we're not going to assist you in
- 17 using it for those purposes."
- MS. HOFMANN: Correct. I haven't heard of
- 19 any instance of that.
- 20 MR. CARSON: Sorry. I just wanted to make
- 21 that clear.
- MS. HOFMANN: I also just wanted to mention
- 23 quickly that with respect to the exemption that was
- 24 granted for smartphones last time, of course, the
- 25 evidence presented to you had mostly to do with the

- 1 iPhone because that was the dominant player in the
- 2 market at the time. But that exemption didn't apply
- 3 solely to the iPhone. It applied to all smartphones.
- 4 I think that that is -- I think that makes sense
- 5 because if you have a situation where copyright laws
- 6 or anti-circumvention laws apply to one manufacturer
- 7 but not others, I think that could create some really
- 8 strange market effects. I think the important thing
- 9 is to create a situation where users can perform the
- 10 function for a very specific purpose to enable
- 11 intraoperability, to conduct fair uses because if
- 12 things are specific to -- if these exemptions are
- 13 specific to a manufacturer, I think we have a
- 14 situation where, number one, there's likely to be a
- 15 lot of confusion about what's legal and what's not
- 16 because it's going to be very specific to one market
- 17 player and conceivably even to certain models of
- 18 technology. And also I think it might throw a wrench
- 19 in the market.
- 20 MR. GOLANT: I think we're going to ask
- 21 Christian some questions.
- MR. GENETSKI: Can I respond briefly?
- MR. GOLANT: Go ahead.
- MR. GENETSKI: I heard a couple points,
- 25 acknowledgments, that I think are salient to the

- 1 burden analysis. We heard the homebrew -- an
- 2 acknowledgment that the homebrew community -- one of
- 3 the two principal adverse impacts cited to support
- 4 the exemption is quite small with regard to at least
- 5 two or three consoles.
- 6 MR. GOLANT: Is it important in the overall
- 7 analysis that if the group is small, that means the
- 8 likelihood of granting exemptions will also be small?
- 9 In other words, is there some sort of proportionality
- 10 that there's a bigger community out there that will
- 11 benefit from exemption that makes the case stronger?
- 12 MR. GENETSKI: I believe it's salient to the
- 13 analysis of whether the impact is de minimis, that
- 14 very few people are actually trying to make this use.
- 15 In the Sony comments they note that when the other OS
- 16 feature was available, less than one-tenth of
- 17 1 percent of users actually made use of the feature.
- 18 Since it was disabled -- and it was disabled because
- 19 that was used as a means to hack the TPMs and allow
- 20 for piracy -- the record is clear that Sony has
- 21 authorized researchers to continue to use that. It's
- 22 made keys available, even though the other OS has
- 23 been removed, for them to continue research.
- 24 More importantly, broadly, these activities
- 25 are not foreclosed by the console TPMs. They're

- 1 available on other alternatives. A lot of this is
- 2 about being able to use your video game console like
- 3 a computer. The thing you can do to use that is a
- 4 computer. So you also have for independent game
- 5 development three available channels. The console
- 6 makers want to encourage these activities. They're
- 7 doing it. They just can't do it by allowing the
- 8 disabling of the only protection they have to prevent
- 9 the piracy of the copyrighted works that are the
- 10 lifeblood of the platform.
- 11 MR. GOLANT: You bring up a point I wanted
- 12 to raise also. In terms of characterization of the
- 13 systems themselves, I think the ESA as well as Sony
- 14 has said that they're entertainment devices, not
- 15 computing devices. Do you want to clarify what is
- 16 meant by that?
- 17 MR. GENETSKI: I alluded to in my opening
- 18 comments at EFF's tech demonstration last week they
- 19 showed a chart for U.K. usage of consoles, but
- 20 there's a Neilsen study of U.S. console usage that
- 21 had very similar other than BBC programming perhaps
- 22 versus HBO GO as the television component. It's very
- 23 similar. These devices are used to consume
- 24 copyrighted works, video games primarily but also
- 25 increasingly television movie content. That is their

- 1 primary use. The TPMs are designed to ensure there
- 2 is a market for all of those copyrighted work.
- 3 They're designed to make sure pirated versions of the
- 4 same works are useless so that there is no digital
- 5 redistribution of the pirated version of those works.
- 6 That's what they're for, and the reason this
- 7 exemption is troublesome for us is that it would
- 8 sanction and, we believe, allow and encourage the
- 9 circumvention of those TPMs that occur.
- 10 MR. GOLANT: I was thinking that there's a
- 11 divergence of devices. I want to get -- you would
- 12 never think that your exemption would ever apply to
- 13 cable set-top box, but now cable plays games, online
- 14 video, On Demand video, linear cable TV broadcast.
- 15 So that's something -- you don't think a set-top box
- 16 like that is anywhere within the scope of your
- 17 particular request; right?
- MS. HOFMANN: No.
- 19 MR. GOLANT: You want to make another point?
- 20 MS. HOFMANN: Yeah, may I respond to that?
- 21 I just want to be clear again. I keep hearing a lot
- 22 about infringement and piracy. Our exemption
- 23 wouldn't apply in situations like that. If an
- 24 individual circumvents the encryption and
- 25 authentication on protecting firmware for purposes of

- 1 running pirated content, it simply doesn't apply. It
- 2 simply doesn't apply. The content-holders and the
- 3 device manufacturers will have the full range of
- 4 legal remedies available to them in that case as they
- 5 do now.
- 6 MR. CARSON: What about the following
- 7 scenario: So I circumvent in order to do scientific
- 8 research. A couple weeks from now I decide, you
- 9 know, there's this pirated game I'd like to play. I
- 10 don't have to circumvent again because it's already
- 11 broken; so I can start playing pirated games on it.
- 12 You acknowledge there's some risk that once the box
- 13 is open essentially, that it can and in many cases
- 14 probably will be used to play pirated games.
- 15 MS. HOFMANN: I think in a situation like
- 16 that where the purpose is for conducting scientific
- 17 research, the exemption would apply, but, of course,
- 18 once the person actually starts to infringe, then
- 19 there are remedies available under the Copyright Act
- 20 for that, full range of remedies. The question of
- 21 whether or not the purpose for circumventing for
- 22 scientific research or something else I think would
- 23 be a factual question for a court to sort out, and if
- 24 the court didn't believe the actual purpose was for
- 25 scientific research, then the exemption wouldn't

- 1 apply at all.
- 2 MR. KASUNIC: So anyone can use one
- 3 non-infringing act as the basis for global
- 4 circumvention, and then even if every subsequent act
- 5 after that was infringing, 1201 would be inoperative.
- 6 It would be left to copyright law.
- 7 MS. HOFMANN: I think that the exemption
- 8 would apply only where the circumvention is
- 9 undertaken for the purpose of a legitimate
- 10 non-infringing use, and anything that happens after
- 11 that is examined independently. So I think if you
- 12 have a situation where it's a mixed question of
- 13 whether an individual was circumventing for a
- 14 legitimate purpose and an illegitimate purpose,
- 15 that's something that a court would have to sort out
- 16 whether or not the exemption actually applied. Just
- 17 to be clear, if an individual is circumventing for an
- 18 infringing purpose, it wouldn't apply.
- 19 MR. KASUNIC: How do you see that
- 20 technically working with the console if someone
- 21 circumvented and had a non-infringing use in the
- 22 first instance, would then circumvention or 1201 no
- 23 longer be operative if you disabled the technological
- 24 protection measure in that first instance? Then
- 25 would subsequent use of that box still implicate

1 1201?

- 2 MR. GENETSKI: That's our concern. You put
- 3 your finger on the exact concern here. Setting aside
- 4 the ability to divine the present intent at the
- 5 moment of circumvention, once jailbroken, the console
- 6 is jailbroken. And if I jailbreak it on a Tuesday
- 7 and install The Homebrew Channel and then I wait a
- 8 day until Wednesday to use the same tool which also
- 9 has multipurpose functionality that allows me to then
- 10 surf the web and download and play infringing copies
- 11 of Wii games, my circumvention is arguably already
- 12 exempted and excused. So the DMCA is now taken out
- 13 of play. If there were evidence that -- it may be
- 14 proffered that someone -- you know, that they were
- 15 lying and asserting that that was their use at the
- 16 time, but that's going to be obviously a very
- 17 difficult proof question. I think there are other
- 18 problems too with trying to -- I respect that the
- 19 proponents try to cabin the exemption to not
- 20 encourage piracy, but I think there are a number of
- 21 reasons why that purpose-driven exemption doesn't
- 22 work here. At the end of the day the reason you've
- 23 cited is really the overriding one. It's illusory in
- 24 this context to try to create a purpose for the
- 25 exemption.

- 1 MR. KASUNIC: Given that we know software
- 2 video game piracy is a significant issue just in
- 3 terms of thinking about Section 1201 factors and the
- 4 balancing that has to take place, how do you balance,
- 5 for instance, the use of being able to play Pong in
- 6 the homebrew system with the numbers that we are
- 7 aware of in terms of video game piracy and given the
- 8 fact that there are many alternatives that are
- 9 available on which that particular game can be
- 10 played?
- 11 MS. HOFMANN: First of all, I think that
- 12 with respect to the balancing factors, if you're
- 13 going to take into account the works created by
- 14 Mr. Metalitz's clients and the works created by the
- 15 individuals that Mr. Genetski represents, I think you
- 16 also have to take into account the works of the
- 17 homebrew community and the scientific research
- 18 community as well. I think that these are all things
- 19 that need to be balanced together.
- We don't just take into account the
- 21 companies that manufacture entertainment content
- 22 here. We also take into account the independently
- 23 created games and the scientific product that comes
- 24 out of research as well.
- 25 MR. KASUNIC: But even taking those into

- 1 account, you're not saying that those could not be
- 2 accomplished without an exemption; right? There are
- 3 many alternative platforms on which those other uses
- 4 and other works could be employed.
- 5 MS. PALLANTE: That's our question. What's
- 6 the scope of the available alternatives.
- 7 MS. HOFMANN: There are available
- 8 alternatives in the sense that individuals have
- 9 computers, and perhaps they can accomplish certain
- 10 purposes on certain other computers. I think the
- 11 point here is that we're talking about a situation
- 12 where an individual owns a video game console which
- 13 is a computer. This is this person's own lawfully
- 14 owned console, and this person wants to use it for
- 15 certain purposes that are legitimate, and this
- 16 individual wants to make that box intraoperable with
- 17 independent third-party software in order to run it
- 18 the way that he would like. It is a private home
- 19 use.
- 20 MR. KASUNIC: Well, then in terms of the
- 21 question that Ben had asked about the set-top box and
- 22 I think it was a little narrowly drawn. It's not
- 23 covered by the scope of this exemption, but isn't the
- 24 reasoning you just cited completely applicable?
- 25 Couldn't you apply the reasoning or opine where you

- 1 own something -- okay, maybe in the cable situation
- 2 you don't actually even own the box. You just rent
- 3 it.
- 4 But wouldn't it be the situation that any
- 5 device that was owned, if there was some
- 6 non-infringing use to which you could put that, then
- 7 you could circumvent? Even though there were many
- 8 other platforms available, many other types of
- 9 devices, you could do the exact same thing. So if I
- 10 want to start to play music on my e-Book reader, I
- 11 should be able to circumvent that even if that's
- 12 doing a very good job of protecting the content on
- 13 that particular device. It basically seems unlimited
- 14 the underlying rationale.
- 15 A. I do think that there are very good
- 16 arguments that those would be fair uses. So I do
- 17 think that the underlying rationale is something that
- 18 supports the idea that those should be made
- 19 permissible uses. The scope of the exemption as
- 20 we've drawn it here is what it is because we've heard
- 21 from the community that we represent that this is
- 22 what they need. This is what they're facing right
- 23 now. There are individuals out there who want to
- 24 make certain uses of video game consoles as opposed
- 25 to other devices like cable boxes on top of TVs to

- 1 accomplish certain very legitimate socially desirable
- 2 purposes. So that's why we're asking for this right
- 3 now.
- 4 MR. GOLANT: Let me just raise another
- 5 question I was going to ask Christian along those
- 6 lines. Tell me, again, the scope of the gaming
- 7 industry's suits against individuals for jailbreaking
- 8 their consoles now. How many have there been
- 9 roughly, and what have been the claims? Particularly
- 10 we've read about George Hotz. Were there other high
- 11 profile cases like that?
- MR. GENETSKI: That's the only case cited in
- 13 the record. I'm not aware of any lawsuits that have
- 14 been filed based on jailbreaking of consoles to run
- 15 homebrew, for example. I'm not aware of any cases
- 16 filed against college professors and researchers who
- 17 were attempting to run an alternative operating
- 18 system.
- 19 What I am aware of is discussion in the
- 20 marketplace about criminal actions against
- 21 trafficking in circumvention tools where the
- 22 commentary is a close eye is being kept on this
- 23 rulemaking because those sorts of prosecutions will
- 24 be mooted if the exemption is granted and
- 25 jailbreaking is legal.

1 Obviously, I understand the subtleties of what this proceeding is supposed to cover and that that's incorrect, but that perception is certainly out there, and I think that's the context in which 5 you see these things being discussed. 6 MR. GOLANT: Along those lines, you would 7 say the chill out there that people are concerned about, about what you call legitimate purposes, for these particular consoles, that's what you said in 9 10 your comments. That's right. 11 MS. HOFMANN: The declaration 12 of Aaron Morris mentions that. I would like to say 13 also that the lawsuit against George Hotz was also against several other people who are very vigorous, 14 15 robust, productive members of the homebrew community, 16 many of whom live abroad. 17 But the reason that they got swept up in 18 this lawsuit is because they gave a presentation at a 19 conference in Germany in which they discussed their 20 research studying the authentication and encryption 21 measures in firmware on several different devices --22 the Wii, the Xbox, and PS3 among others -- and they 23 were all sued by Sony in addition to George Hotz. 24 want to be clear that that lawsuit included a claim 25 of anti-circumvention as well as distributing tools.

- 1 It is directly relevant here.
- 2 Also, another thing that I'm not sure if
- 3 it's in the record or not because it is a little bit
- 4 tangential. But Microsoft creates this technology
- 5 called the Kinect, which allows you to -- it uses
- 6 motion-sensing technology so you can use your body as
- 7 the controller for the Xbox. A couple of years ago
- 8 there was a situation in which an individual who was
- 9 actually one of the people sued by Sony, one of the
- 10 members of the homebrew community sued by Sony,
- 11 developed on open source driver that made it possible
- 12 for you to plug a Kinect into a different computer
- 13 and open a USB connection so you can get the input
- 14 from the camera.
- 15 Microsoft's first response to that was to
- 16 issue a vague public legal threat about how they were
- 17 in touch with law enforcement about this, and they
- 18 didn't appreciate tampering with their product. And
- 19 then Microsoft realized that actually what had
- 20 happened there was that this individual took
- 21 advantage of an open design of the product to make
- 22 this innovative new use of the Kinect. There was no
- 23 access control. There was no TPM that created a
- 24 barrier; so, of course, there was no 1201 problem.
- 25 And after that Microsoft totally embraced this, and

- 1 that's been very important because enabled a great
- 2 deal of artistic and scientific research using the
- 3 Kinect with other machines.
- 4 So, for example, there's an MIT researcher
- 5 who created a little robot who uses the Kinect to
- 6 create 3D maps of environments that's responsive to
- 7 people gesturing and pointing, and the thinking is
- 8 this might be very, very useful at some point in
- 9 emergency or disaster situations. There are artists
- 10 who have created these puppet shows where children
- 11 can interact with the puppets and actually be part of
- 12 the show.
- 13 So the use of the Kinect has been really
- 14 exciting in those ways, and it is all due to the fact
- 15 that a member of the homebrew community came up with
- 16 this open source driver.
- 17 MR. GOLANT: Good to know. I'm winding down
- 18 my questions, but one illustration is by Andrew Wong
- 19 about repairing broken consoles. Is it in your view
- 20 necessary to jailbreak a console in order to repair
- 21 it? Or maybe that depends on what's being broken.
- 22 If an operating system fails, how does someone, if
- 23 they have the savvy to do it, self-repair a console?
- MS. HOFMANN: I think depending on what
- 25 you're trying to repair it may be necessary. I have

- 1 to be honest. I don't know the details. If you'd
- 2 like more information from Mr. Wong on that, I'm sure
- 3 he'd be happy to provide it.
- 4 MR. GOLANT: One of the other reasons given
- 5 as to an adverse effect if you didn't have an
- 6 exemption in place, there would be a fear among
- 7 people wanting to get their cases back in order and
- 8 didn't know whether or not they would be in trouble
- 9 with 1201 because of that.
- 10 MR. KASUNIC: I just had a couple questions
- 11 about ownership issues. We've heard in other
- 12 contexts about differences between the devices and
- 13 software contained on devices. Is there any -- from,
- 14 I guess, most of these consoles -- are there
- 15 particular licensing agreements that go with those
- 16 consoles with respect to the software residing on the
- 17 device?
- 18 MR. GENETSKI: I believe that Sony's
- 19 comments may address that in part, but it was the
- 20 ownership versus licensing, which I understand was a
- 21 robust part of the discussion in the iPhone
- 22 jailbreaking context, was not proffered as a
- 23 rationale by the proponents. Frankly, I have not
- 24 studied those licensing agreements; so I wouldn't be
- 25 prepared to speak to their particular terms today.

1 MR. METALITZ: If I could add to that as a veteran of the last go-round, I don't think there was any claim this time that Section 117 makes the use non-infringing. I think fair use was the only basis 5 for that assertion; so that makes the ownership 6 question less relevant. 7 MR. KASUNIC: One thing about -- I was just looking back at 1201(f), and the language that you 8 9 cited relating to "employ" is in subsection 10 1201(f)(2). If you look at the beginning of that 11 provision, it says, "Notwithstanding the provisions of Subsection (a)(2) and (b)." So it doesn't cover 12 13 (a) (1); right?14 Right. I agree. This is a MR. METALITZ: 15 puzzling provision because it talks about -- it's 16 basically about the act of circumvention. It says, 17 "The act of circumvention can be carried out 18 regardless of (a)(2) and (b)." I think perhaps the 19 key to understanding that is the legislative history 20 on (1) that says the particular activity described in 21 (1) is an example of the kinds of circumvention that 22 can be carried out for the purposes of 23 intraoperability. 24 I'm not prepared to say this is conclusively 25 covered by 1201(f)(1). It still surprises me that

- 1 the proponents until today never really addressed
- 2 this question of whether (f)(1) affects the activity
- 3 that they're talking about because if it does, then
- 4 the game is over for them. Maybe that's why they
- 5 haven't addressed it.
- 6 MR. KASUNIC: Let me put that to you, then.
- 7 You walked us through the different provisions and
- 8 why it might not, but I thought I heard you saying,
- 9 too, in your opening statement that 1201(f) applied.
- 10 MS. HOFMANN: No, I don't think it applies
- 11 to the types of uses we're seeking an exemption for.
- 12 I think that reverse engineering could apply in
- 13 situations where individuals actually perform the
- 14 reverse engineering, create a jailbreak tool, and
- 15 then distribute it. I think those uses or those
- 16 actions may be covered by this exception, but I think
- 17 that your typical individual who just uses that tool
- 18 to perform a jailbreak is not covered.
- 19 MR. KASUNIC: So wouldn't that be the case
- 20 in every use, then, of Section 1201(f)? As the way
- 21 Congress drafted 1201(f), then, it's completely
- 22 ineffectual to do anything but create tools that
- 23 can't be used?
- MS. HOFMANN: I think it's possible Congress
- 25 didn't foresee this kind of a situation.

1 MR. KASUNIC: But they didn't foresee allowing the creation of tools that could never be used under their default rule of a prohibition being in place. I mean that's what you're saying; right? 5 MS. HOFMANN: I think what they were 6 expecting was that this would apply to individuals 7 who were pretty sophisticated and who are performing reverse engineering for purposes of software 8 9 development or creating intraoperability in the 10 computing industry. I think that's what Congress was 11 thinking about when they created this exception. 12 I don't think they foresaw a situation where 13 programmers might create tools that are useful for consumers and then put them in the hands of consumers 14 15 so that consumers could obtain intraoperability of 16 their own individual computers. So that's why I 17 think an exemption is particularly apt here. I just think it was something Congress wasn't foreseeing at 18 19 the time, and now the time is right for the Copyright 20 Office to say in this particular situation for these 21 specific legitimate uses it's okay for users to use 22 those tools to jailbreak. 23 MR. KASUNIC: In the case of the research 24 uses of the consoles, isn't the main focus, then, on 25 the hardware? So the benefits there -- I quess I

- 1 should ask first. These consoles are essentially
- 2 subsidized to a certain extent? Is that why we're
- 3 seeing a price differential in people saying that
- 4 they can use these consoles for very effective
- 5 research as opposed to going out and buying another
- 6 hard drive or processor somewhere else? Is there a
- 7 reason why this is cost effective for using consoles
- 8 for doing research as opposed to just getting the
- 9 hardware somewhere else? Does that have to do with
- 10 some kind of subsidy for those?
- MR. GENETSKI: I can't speak to what the
- 12 researchers' business calculations and which console
- 13 can be used for which purpose and which it might be
- 14 more efficient for. Everything I know is in the
- 15 record pertaining to the PS3 that the proponents put
- 16 forward. I think, generally speaking, consoles
- 17 are -- as I said, they are devices used for the
- 18 consumption of copyrighted works, and yes, the
- 19 revenues for that platform are driven by -- each of
- 20 the console makers are also first-party publishers of
- 21 content for their own platforms. The revenues
- 22 generated through this business are largely derived
- 23 from the sale of those first-party works and
- 24 licensing revenues for the other works published for
- 25 the platform and not from the sale of the devices

- 1 themselves.
- 2 MR. KASUNIC: Then in terms of using these
- 3 consoles, is the primary goal, then, to use the
- 4 hardware that exists on the consoles, or is it to --
- 5 in some cases it sounds like to replace the software
- 6 or use the hardware for other purposes for which it
- 7 was initially designed.
- 8 MS. HOFMANN: I think that's particular to
- 9 the user. I think that that's a question that
- 10 doesn't have an answer that reaches across all of
- 11 the --
- 12 MR. KASUNIC: Let's talk about the
- 13 scientific research, then, because that seems to be
- 14 the most broadly socially beneficial one that's being
- 15 cited. What kind of uses is the -- how does the
- 16 scientific -- do the scientific researchers use the
- 17 device? Is that per the hardware?
- 18 MS. HOFMANN: In the situations that we've
- 19 cited in our papers, the researcher are using the
- 20 hardware along with the different operating system in
- 21 order to crunch numbers and make scientific
- 22 calculations in ways that the original operating
- 23 system wouldn't enable.
- MR. KASUNIC: Then do you see any particular
- 25 problem if someone owned the particular device and

- 1 went to wipe the software and everything that existed
- 2 on it and I would expect at that point the device
- 3 probably would not play games that had required some
- 4 kind of secret handshake or some kind of
- 5 authentication within it. But if someone wanted to
- 6 wipe the device to use it for a completely different
- 7 purpose just for the hardware alone, is that
- 8 something that implicates 1201?
- 9 MR. GENETSKI: I can imagine a scenario
- 10 where, you know, the innards of the box are removed,
- 11 and it's used to elevate your other audio device to
- 12 sit on top of it to block your outlet so it's not in
- 13 plain view in your living room. I assume that that
- 14 would probably be a use that doesn't implicate 1201.
- 15 It's hard for me to speculate where along
- 16 the continuum -- clearly we're here today because
- 17 what we're concerned about is the circumvention of
- 18 the TPMs because those TPMs are designed to prevent
- 19 play of pirated works. Uses of the device that don't
- 20 implicate those core copyright concerns are probably
- 21 outside the province of this proceeding.
- 22 MR. METALITZ: If I can just add, I don't
- 23 think it's the first time this question has arisen in
- 24 these proceedings. For example, in the security area
- 25 one of the things a couple cycles ago people wanted

- 1 to do was basically remove software. It's hard to
- 2 say if you remove an access control and the result is
- 3 you no longer have access to the thing the access
- 4 control is protecting, it's a little hard to fit that
- 5 into the 1201 paradigm. That's obviously not what
- 6 the proponents are seeking.
- 7 MR. CARSON: That's what we're trying to
- 8 find out. I'm not sure it's clear to me. Maybe it's
- 9 clear to you. Would you be satisfied if one were
- 10 permitted to circumvent simply in order to remove all
- 11 software from the device and put their own software
- 12 on it?
- MS. HOFMANN: Well, I think that that
- 14 probably wouldn't help the homebrew community at that
- 15 point.
- MR. CARSON: Let's talk about research
- 17 purposes right now.
- MS. HOFMANN: My understanding, based on the
- 19 use cases that we've seen, is that the need is for
- 20 researchers to be able to make their consoles
- 21 intraoperable with independent third-party software.
- 22 We've seen situations where they would like to
- 23 install a new operating system and then run software
- 24 that they create themselves or that they get from
- 25 another source that wouldn't be intraoperable with

- 1 the console's original operating software. In terms
- 2 of scientific purposes that are implicated here, I
- 3 think that's what we're talking about.
- 4 MR. CARSON: So you don't need the existing
- 5 operating system or the existing firmware basically.
- 6 You need the box. You need to be able to put your
- 7 own operating system on it. You wipe it clean of
- 8 whatever was on it before. Is that true?
- 9 MS. HOFMANN: You do need the firmware, I
- 10 believe.
- MR. CARSON: Why do you need the firmware?
- 12 MS. HOFMANN: To run the hardware. The
- 13 firmware controls access to the programs and so
- 14 you -- and it coordinates the booting sequence, and
- 15 so you certainly would need that.
- MR. CARSON: It's not possible to come up
- 17 with your own substantive firmware to do the same
- 18 thing?
- 19 MS. HOFMANN: I think it is potentially
- 20 possible to do that will, but I have to say with
- 21 respect to the individual users that we are
- 22 representing, I don't know what their individual
- 23 needs are with respect to that. But if you want more
- 24 detail, we can provide it.
- MR. CARSON: That would be helpful.

Just one more question on 1201(f). 1 thing I can agree with you on, Steve, is it's not entirely clear. Let's assume that we reread it several times, and we conclude that some or all of 5 the conduct the proponents and their class want to be able to do actually falls within the scope of 1201(f), and they can do it under 1201(f); so they don't need us to designate a class. We'll make it quite clear in our federal register notice that we 10 have analyzed 1201(f), and we are confident that 11 1201(f) permits them to do exactly what they want to 12 Therefore, there's no need for us to recommend a class of works to be exempt. 13 14 Any problem with that from your perspective? 15 MR. METALITZ: I don't think that's really 16 your job. I think your job is to determine whether 17 they have made the case that it doesn't apply. 18 MR. CARSON: But part of making the case 19 might be we really need to do this. There's no way 20 under the law we can do this; so we need your help. 21 If we say, well, yeah, there is a way under the law 22 you can do it; so you don't need our help, then 23 that's very pertinent to our ruling. 24 MR. METALITZ: There are a lot of -- in the

250 pages of your recommendation last time, there

- 1 were a lot of opinions expressed about different
- 2 aspects of the copyright law. I don't know what
- 3 weight courts would give them in a proceeding where
- 4 you're not asked to -- you don't have a factual basis
- 5 for determining the application of laws to particular
- 6 facts. I think it's perfectly appropriate for the
- 7 Office to give its opinion on the scope of these
- 8 provisions.
- 9 The real question here is whether the
- 10 proponents have met their burden of showing that the
- 11 prohibition is preventing something. If they can't
- 12 show that 1201(f) doesn't apply, then they can't meet
- 13 that burden.
- 14 MR. CARSON: Let's assume we read it, and we
- 15 explain exactly why we think 1201(f) permits people
- 16 to do exactly what you want them to do, and therefore
- 17 we're going to deny the exemption. Do you walk out
- 18 feeling, "Oh, my God. Now we're in trouble," or do
- 19 you feel, "Great. We got what we needed" or
- 20 somewhere in between?
- 21 MS. HOFMANN: I think I would have mixed
- 22 feelings about that. I would be very glad that you
- 23 feel that that's the case and that you're so
- 24 supportive of intraoperability, but I would also
- 25 worry because I don't think that that necessarily

- 1 quarantees at the end of the day that Mr. Genetski's
- 2 clients feel the same way or that Mr. Metalitz's
- 3 clients feel the same way. It doesn't quarantee at
- 4 the end of the day that a court would agree either.
- 5 So while I think that would be incredibly
- 6 helpful and exciting, I don't think that it would
- 7 remove the legal concerns and the murkiness that the
- 8 users that we represent are experiencing.
- 9 MS. PALLANTE: Thank you. We're going to
- 10 end this panel. Let's take a ten-minute break.
- 11 (Recess taken.)
- 12 ---00---
- 13 10:30 A.M. PROPOSED CLASS TO BE DISCUSSED:
- 14 SECTION 1201(5)
- 15 PANELISTS: MARCIA HOFMANN

ART NEILL

- 16 STEVE METALITZ
- 17 MS. HOFMANN: I am Marcia Hofmann from the
- 18 Electronic Frontier Foundation, which is the
- 19 proponent of proposed Class 5.
- 20 In 2010 the librarian granted an exemption
- 21 to let smartphone users add independently created
- 22 computer programs to their devices through a process
- 23 known as jailbreaking or rooting. Since then
- 24 innovation has flourished among independent app
- 25 developers and allowed users to make creative new

- 1 uses of their phones.
- 2 I'm going to talk about three things this
- 3 morning. I'm going to talk about what's changed in
- 4 the market since that exemption was granted. Second,
- 5 I'll talk about why the exemption should be renewed
- 6 and then expanded also to include tablets, and I am
- 7 going to briefly speak at the end about the
- 8 opposition to this exemption.
- 9 So what's changed since the last Rulemaking?
- 10 At this point 50 percent of all Americans own a
- 11 smartphone. That's a figure that comes from Nielsen.
- 12 At this point Android has nearly a 50 percent market
- 13 share and Apple, 32 percent. Apple announced this
- 14 year that it has sold more than 25 billion apps. In
- 15 2009 when the last Rulemaking proceeding was going
- 16 on, they had sold about a billion. So as we can see,
- 17 things have gone well in this market, and Apple has
- 18 done tremendous work and has made tremendous gains.
- 19 Another thing that's changed is that tablets
- 20 have exploded onto the scene. At this point about --
- 21 well, actually not at this point. In January about
- 22 30 percent of Americans owned an e-Reader or another
- 23 tablet. That's a very interesting figure because a
- 24 much smaller number owned a tablet just a month
- 25 before. It was about 18 percent. So this is a

- 1 device that lots of people are buying and taking
- 2 advantage of and finding incredibly exciting and
- 3 useful in their lives.
- 4 The reason we are asking that tablets be
- 5 added to this class this time around is because they
- 6 are a very similar device to smartphones, and people
- 7 tend to use them in very similar ways. They are both
- 8 small handheld devices that you carry with you on a
- 9 day-to-day basis that you use for all sorts of
- 10 things, keeping in touch with people. They are
- 11 basically little computers. You can do web browsing.
- 12 You can do messaging. You can do any number of
- 13 things with these devices.
- 14 They both get applications from online
- 15 marketplaces like, for example, the Apple App Store
- 16 if we're talking about the iPhone and the iPad. They
- 17 use the same operating systems protected by the same
- 18 access controls. In fact, many jailbreaking programs
- 19 work identically on both types devices. For example,
- 20 the iPhone dev team released a jailbreak program
- 21 called Absinthe earlier this year and it works on
- 22 iPhones, iPads, and the iTouch.
- 23 So that's why we think that there are
- 24 interesting and special commonalities between these
- 25 two devices. There is no principled reason for

- 1 having an exemption for smartphones and not tablets
- 2 at this point particularly given the tremendous
- 3 uptake in their use.
- 4 Another thing that has done very well since
- 5 the last Rulemaking is the practice of jailbreaking.
- 6 I mentioned Absinthe, the iPhone dev team's
- 7 jailbreaking program. It was released in January,
- 8 and it was downloaded nearly a million times in just
- 9 three days. Three days. The last time we had this
- 10 Rulemaking we were aware of about a million people
- 11 who had jailbroken their devices. At this point
- 12 we're talking about a million people in three days.
- 13 I think it's worth noting that, as I mentioned, that
- 14 jailbreak applies to iPhones and iPads and to the
- 15 iTouch. I can tell you about half of those downloads
- 16 of Absinthe were for iPads.
- 17 Jay Freeman, who is here today -- he runs
- 18 the independent app marketplace Cydia, where people
- 19 can get independent third-party applications to run
- 20 on jailbroken Apple devices, and he tells me that
- 21 Cydia had downloads from nearly 50 million different
- 22 jailbroken devices in the past year. We see that
- 23 people are getting a lot of content from these
- 24 third-party marketplaces. So everybody is doing
- 25 well. Apple is doing well. The manufacturers are

- 1 doing well. Google is doing well, and the
- 2 independent developers are doing well, too.
- 3 Let's turn to why this exemption should be
- 4 renewed. Andrew "bunnie" Huang submitted a petition
- 5 with more than 27,000 signatures supporting this
- 6 exemption and also exemption 3. So we see that there
- 7 is a lot of public support for this. Several hundred
- 8 people filed comments in support of proposed Class 5,
- 9 and some of them really showcase how the public are
- 10 making beneficial, fantastic uses of the ability to
- 11 jailbreak their devices. For example, I encourage
- 12 you to read the comments of Kevin McCleod, who is a
- 13 deaf man who rooted his Android phone in order to
- 14 remove some of the more intensive applications that
- 15 were installed by the carrier.
- 16 And the reason he wanted to do that is
- 17 because he needs to use video relay software on his
- 18 phone which is very resource intensive and sucks up a
- 19 lot of battery power. So by rooting the phone, he
- 20 was able to make it so he could run that software all
- 21 day. He really underscores in his comments how this
- 22 has helped him stay on a level playing field with his
- 23 hearing peers at work and has really contributed to a
- 24 very fulfilling professional life.
- 25 Also, Stephanie Hughes submitted comments.

- 1 She's a nurse, and she spoke about how she is able to
- 2 use jailbroken iPhone for work purposes as well. She
- 3 is able to track her performance and record details
- 4 about her interactions with her patients, and it's
- 5 been useful for her as well.
- 6 Tom Van Nostrand works at an Army base in
- 7 the Middle East, and he talked about how he modified
- 8 his jailbroken iPhone to make the flashlight turn on
- 9 more quickly than Apple would otherwise let you, and
- 10 that's been really important for him because when
- 11 he's walking around on the Army base late at night,
- 12 he might encounter scorpions or wild dogs, and we can
- 13 see that's obviously a very beneficial use.
- 14 And last week we heard from a developer from
- 15 Mozilla, and he told you why engineers need to be
- 16 able to root Android devices in order to create and
- 17 test software for those machines. As he told you, a
- 18 company like Mozilla, which develops Firebox,
- 19 wouldn't be able to develop high quality professional
- 20 grade software without the legal ability to root a
- 21 device.
- 22 There's a great deal of creativity and
- 23 innovation going on, and all of this would go back
- 24 under a cloud if this exemption isn't renewed. I
- 25 think there are many, many beneficial uses in the

© 2012

- 1 record which would suddenly become legally fraught if
- 2 this exemption isn't granted.
- 3 So finally I'd like to talk very briefly
- 4 just about the case against this exemption that's
- 5 been made. First and foremost, I think it's a very
- 6 conspicuous fact that nobody has opposed this who has
- 7 a device in issue. Apple has not opposed it.
- 8 Google, which provides the Android platform, hasn't
- 9 opposed this. The manufacturers of the phones --
- 10 HTC, Samsung, Motorola -- they haven't opposed this.
- 11 They're not here today testifying. The carriers
- 12 haven't opposed it. They're not here testifying.
- 13 Anyone who actually has a work within the proposed
- 14 class is not here testifying today. And I think that
- 15 speaks volumes about the amount of harm they've
- 16 suffered over the past two years since that exemption
- 17 was granted. There is not a shred of evidence of
- 18 harm in the record. In fact, everybody has done
- 19 quite well by all indications.
- The joint commenters have opposed this, and
- 21 Mr. Metalitz is here today. It's interesting that
- 22 their opposition is as minor and as circumscribed as
- 23 it is. They don't challenge that users are making a
- 24 fair use here. They don't even challenge three of
- 25 the four statutory factors. The one that they do

- 1 challenge is the effect of circumventing access
- 2 controls on their copyright interests.
- 3 Their objections are based on two articles
- 4 talking about piracy, both from 2009, which predate
- 5 the 2010 exemption. So I don't think that those can
- 6 be reliably relied upon as evidence of harm that has
- 7 actually come from the smartphone exemption granted
- 8 in 2009. Basically the harm is totally speculative,
- 9 and I don't see any actual evidence that there has
- 10 been harm even to these clients.
- Just to sum up, the 2010 exemption served
- 12 the public interest by enabling innovation, consumer
- 13 choice, and competition. We ask that the register
- 14 recommend this exemption be renewed and expanded to
- 15 include tablets, and I look forward to your
- 16 questions.
- 17 Thank you.
- 18 MR. NEILL: Good morning.
- 19 My name is Art Neill, and I'm the founder of
- 20 New Media Rights, which is a nonprofit organization
- 21 based in San Diego. We provide a lot of one-to-one
- 22 assistance to Internet users, consumers as well as
- 23 independent mobile application and other software
- 24 creators. So our work with folks directly is why I'm
- 25 here talking to you today because we've actually seen

- 1 consumers on the ground trying to use these apps as
- 2 well as mobile app developers that are trying to
- 3 develop independently.
- 4 What we've seen is that jailbreaking is
- 5 actually essentially over the last couple of years to
- 6 creating competition and dynamism in the marketplace.
- 7 As with a number of exemptions that you're all
- 8 reviewing today, jailbreaking is simply a safety
- 9 valve; right? It's simply a safety valve to the
- 10 anti-circumvention laws. In this case the exemption
- 11 that's before you allows competition in what is
- 12 otherwise a series of closed systems. The exemption,
- 13 we believe, proposed Class 5 should be renewed for
- 14 smartphones, extended to tablets allowing consumers
- 15 to jailbreak their devices.
- 16 Marcia mentioned that about 50 percent of
- 17 folks now own -- there's about 50 percent ownership
- 18 for smartphones, about 20 percent of Americans
- 19 currently now own a tablet. There's an interesting
- 20 statistic that I pulled up recently from cellular
- 21 telephone industries is that 31 percent of consumers
- 22 now access the Internet only on their cell phone
- 23 which means that you've got these smartphones and
- 24 tablets gaining in terms of usability and their
- 25 capabilities, but there's actually an often

- 1 unrecognized difference between tablets and
- 2 smartphones and traditional personal computers.
- 3 And that's that it's much easier for device
- 4 manufacturers, operating system makers, and other
- 5 user access to legal programs otherwise legal
- 6 programs that they want to use on their smartphone or
- 7 tablet. It's hard for anybody in this room to
- 8 imagine their personal computer not being able to
- 9 install certain types of software because the
- 10 manufacturer of the computer decides that's not okay
- 11 or the operating system maker decides that that's not
- 12 okay. That's the system that we have for
- 13 smartphones, and jailbreaking is an important outlet
- 14 safety valve for that.
- 15 So jailbreaking provides consumers with
- 16 greater control of their devices that they purchased
- 17 for 5- or \$600 often, maybe \$200 for an iPhone, let's
- 18 say, with a two-year commitment. But often
- 19 standalone they can cost \$500 for an iPad maybe, \$600
- 20 for an iPhone.
- Jailbreaking has given consumers alternative
- 22 marketplaces to obtain apps, allows consumers to gain
- 23 a better understanding of their device, allows
- 24 consumers to actually fully use the devices that they
- 25 legally own, and in some cases jailbreaking has

- 1 actually been helpful to combatting censorship, and
- 2 I'll go into that in a minute. I think we need to
- 3 extend also the benefits that we've given to
- 4 smartphone users over the last few years to tablets
- 5 as well.
- 6 Let me talk a little about how jailbreaking
- 7 increases and helps competition in the marketplace.
- 8 I think the preeminent example is the proliferation
- 9 of marketplaces. For example, with jailbreaking on
- 10 iOS, Apple's operating system, this has led to the
- 11 creation of a competing app store called Cydia, which
- 12 Jay Freeman is here today. The alternative app store
- 13 is only available on jailbroken iOS devices. Think
- 14 about what Cydia actually hosts. They host legal,
- 15 independently created apps that are not available in
- 16 the official App Store due to Apple's approval
- 17 process. The approval process has been criticized at
- 18 times as being unpredictable, unclear, and
- 19 subjective.
- 20 The competition provided by Cydia -- it
- 21 allows Apple on one hand, which is probably the
- 22 reason you don't see them today, to maintain a user
- 23 experience that they want to maintain, but for users
- 24 who want to, they can go ahead and make -- install
- 25 otherwise legal programs they want to use on their

- 1 device. It kind of maintains this balance where
- 2 Apple is able maintain a user experience. Users are
- 3 able to make use of the device in the way that they
- 4 choose.
- 5 One of the best examples of this may be the
- 6 use of Flash on the iPhone, let's say, which is
- 7 restrict by Apple. That's a business decision. They
- 8 may want to use HTML5 standard in the future, and
- 9 they feel that for whatever reason Flash is
- 10 inappropriate for their advice and their user
- 11 experience. But certain users don't appreciate that.
- 12 They do want to use Flash. They're able to access
- 13 otherwise legal Flash video content, otherwise legal
- 14 Flash games by simply going to an alternative
- 15 marketplace and having access to the Flash
- 16 application on Cydia.
- 17 So alternative marketplaces, providing a
- 18 safety valve to censorship by iOS makers, operating
- 19 system makers, wireless carriers, and device
- 20 manufacturers, and all those folks in the chain have
- 21 some gatekeeping power, and they all have exercised
- 22 it at one point or another.
- Just as a brief example, certainly these can
- 24 be arbitrary types of reinjections, but they can also
- 25 be a bit politically motivated. A couple years ago

- 1 there was an app called iSingle Payer, which so
- 2 happened to advocate for a single-payer healthcare
- 3 system. This app was not allowed for having a strong
- 4 political message. There was another app that --
- 5 eventually actually with this app Apple did reverse
- 6 its decision because there was a public outcry. Not
- 7 every developer gets a public outcry about their app,
- 8 right, to get it back into the store or not.
- 9 Another app of the political example would
- 10 be Freedom Time, which was a clock that counted down
- 11 to the end of President Bush's term. This was
- 12 rejected apparently due to the community standards of
- 13 Apple. Now, if you look at the community standards,
- 14 this makes sense, right? Apps that are obscene,
- 15 pornographic, offensive, defamatory, those are not
- 16 allowed. But it also excludes apps that in Apple's
- 17 reasonable judgment may be found to be objectionable.
- For developers that means they need to guess
- 19 what's going to be okay in Apple's reasonable
- 20 judgment. And that means two things for developers.
- 21 It means, A, for independent developers, that
- 22 rejection comes after they've invested a lot of time
- 23 and money in their application; and B, it means they
- 24 need to scale back. They need to play it safe since
- 25 those rejected apps may mean a lot of lost time and

- 1 profit. For consumers it means that content and
- 2 services that are otherwise legal are unable to be
- 3 accessed and that these apps are unavailable to them
- 4 because the operating system or phone manufacturer
- 5 simply find them objectionable. Again, it's a safety
- 6 valve.
- 7 Apple's ability to maintain a consumer
- 8 experience is actually maintained here. Apple can
- 9 provide the user experience to a vast majority of
- 10 users that they want to provide it, but for those who
- 11 choose to have some greater control over their
- 12 device, they can because of this exemption.
- This proceeding is not just about Apple.
- 14 It's broader than just Apple of course. You talk
- 15 about the ability to update operating systems, let's
- 16 say. So if you have an Android phone, there are many
- 17 Android phones. Let's say you get an Android phone.
- 18 You have a two-year contract. The responsibility for
- 19 updating that device is actually given to the carrier
- 20 in the Android situation. Many Android phones that
- 21 are in folks hands right now are actually two, three,
- 22 four versions behind the current state of the
- 23 software. What that means is you're beholden to your
- 24 carrier for updates to OS which can mean security
- 25 flaws, which can also mean other improvements to the

- 1 operating system. The only way to make those
- 2 improvements yourself, then, is to have access by
- 3 jailbreaking.
- 4 Just a couple notes about giving users
- 5 control of their devices. When the iPhone first came
- 6 out, there was a privacy issue with an initial text
- 7 message feature called SMS Preview. It just put a
- 8 text message right up on screen without the user's
- 9 choice, and a lot of users had an issue with it. It
- 10 put the whole text message right on the screen so
- 11 sometimes people could read people's text messages
- 12 that they didn't want seen. It was a simple feature,
- 13 but you couldn't change the user experience. You
- 14 couldn't change that feature without jailbreaking.
- 15 The same with the iPad. When the iPad first
- 16 came out, there was actually a button on the side of
- 17 the iPad that locked the screen. When you turned the
- 18 screen, it locked it that direction. That was
- 19 changed to a mute button. Folks actually remotely --
- 20 and so folks wanted to actually change it back to its
- 21 original button. Only way to do that, again, was
- 22 jailbreaking.
- Jailbreaking has provided users the ability
- 24 to customize their device with WinterBoard and
- 25 DreamBoard, which customizes the home screen;

- 1 SBSettings, which allows battery control and the
- 2 ability to customize their settings. People on
- 3 Android would be actually familiar with that.
- 4 Otherwise, there's been a -- last fall I think is a
- 5 good example with the Carrier IQ spyware program, the
- 6 Carrier IQ program that key-logged and recorded
- 7 location and web history of users. This program was
- 8 included automatically on Android and iPhone, but you
- 9 only could get it removed by a remote update from the
- 10 carrier. The only other way to remove this spyware
- 11 program was to actually jailbreak.
- 12 Tablets and smartphones are quickly becoming
- 13 just as powerful and useful as personal computers,
- 14 and it's only logical that these devices allow users,
- 15 if they desire it, the same freedom of software
- 16 choice the users have enjoyed for years with personal
- 17 computers.
- MS. PALLANTE: Thank you, Art.
- 19 Steve.
- 20 MR. METALITZ: Thank you very much. Steve
- 21 Metalitz, representing the joint creators and
- 22 copyright owners.
- I guess it's 30,000 to 1. I like those
- 24 odds. In fact, of course, you are going to get some
- 25 testimony as well next month in Washington from the

- 1 Business Software Alliance, one of the members of our
- 2 group which, I think, includes some of the companies
- 3 you referred to. Let me just briefly respond to some
- 4 of the issues that have been raised.
- 5 This exemption does raise some of the same
- 6 issues we talked about in the first panel. I'm not
- 7 going to into them in great detail. There is a
- 8 threshold issues, but the proponents have shown
- 9 1201(f) is not applicable or any other statutory
- 10 exemption. I don't think it's quite correct that our
- 11 submission is limited to one or two of the ESA
- 12 factors. We are also critical of the fair use
- 13 analysis that the Office made in the last cycle, and
- 14 we don't think that the burden of showing these are
- 15 non-infringing uses has been made. That's all laid
- 16 out in our submission; so I won't go into details
- 17 there.
- I guess I'd like to talk about three general
- 19 issues and then a couple of specific questions about
- 20 the proposed exemption. I think the first thing we
- 21 have to bear in mind here is that -- or have to ask
- 22 is whether the proponents have carried their burden
- 23 of showing there are no alternatives to circumvention
- 24 to do what they want to do. I'm not talking here
- 25 about circumvention of the firmware. I'm talking

- 1 about running the applications that jailbreaking
- 2 enables. There is not just one platform for
- 3 smartphones. We heard the largest part of the market
- 4 is Android, and that comes in many different flavors
- 5 and many different degrees of openness or of ability
- 6 to accept or to run applications that are not
- 7 specifically approved by the provider.
- 8 There are many great applications that have
- 9 been described in the previous presentation. I think
- 10 the question is are there no alternatives to
- 11 circumvention in order to run those applications, and
- 12 we have a competitive marketplace, competitive
- 13 platforms, and I don't think it's the case that the
- 14 fact that one manufacturer, for example, has refused
- 15 to approve a particular application means that users
- 16 have no alternatives if their main goal is to run
- 17 that application.
- The second point which is related to that is
- 19 the problem that the recommendation 2010 created of
- 20 drawing a distinction between business interests and
- 21 copyright interests and that only the latter can be
- 22 recognized in this proceeding. The former as the
- 23 Office defined them are not given any weight. I
- 24 think it's a bit less clear than that. I think it's
- 25 obvious Congress was concerned about copyright owners

- 1 but not just about the narrowly defined copyright
- 2 interests of those owners. It's very clear,
- 3 particularly after the MDY decision, that
- 4 infringement is not or even a causal relationship to
- 5 infringement is not an element of 1201(a) and the
- 6 ability to protect access controls.
- 7 And it's also not true, contrary to the
- 8 assertion by EFF in their reply comments, that a
- 9 violation of 1201(a) can only be invoked by the
- 10 copyright owner. In fact, if you look at the
- 11 totality of the litigation that's been brought,
- 12 probably the majority of it has been brought by
- 13 providers of access control technologies who are
- 14 going after people who are using their tools to
- 15 circumvent, particularly in cable and satellite
- 16 piracy situations. So it's not tied to -- in other
- 17 words, people who have no copyright interest, if you
- 18 will, in the material that's being accessed do have
- 19 the ability to enforce Section 1201. That was
- 20 Congress' determination, and so for the Office to
- 21 draw that distinction, it truly has no basis in the
- 22 statue. We think it was a mistake and should be
- 23 revisited.
- 24 The third aspect of this, again, related to
- 25 that is this issue of proprietary platforms.

- 1 Mr. Neill said he can't imagine a situation in which
- 2 you're not able to run a particular program on a
- 3 computer because of the way that the operating system
- 4 is configured. I think I'm quoting him correctly.
- 5 You can't install a particular program X on
- 6 platform Y. I find that very easy to imagine. Maybe
- 7 that's because I'm a lot older than Mr. Neill because
- 8 that used to be the predominant model for how
- 9 computers were designed and marketed.
- I think the market has probably rendered,
- 11 certainly in the personal computer area, a fairly
- 12 strong verdict that that's not a viable business
- 13 model to follow. But while I agree that smartphones
- 14 and tablets are computers and it's harder and harder
- 15 to distinguish between them, in fact, those markets
- 16 are different, and I don't think it's conclusive that
- 17 that's going to be the outcome in the smartphone or
- 18 tablet market. In any case, it's irrelevant. That's
- 19 a decision the market should be making. That's not a
- 20 decision the Copyright Office should be involved in,
- 21 enforcing and putting its thumb on the scale in
- 22 opposition to proprietary platforms and insisting
- 23 that those who try to offer them really don't have
- 24 the tool of Section 1201 available to them in order
- 25 to try to enforce that and to promote that business

- 1 model.
- I mean in the first panel we had the example
- 3 of someone who wants to use their eBook to play
- 4 music. That's really exactly the same situation as
- 5 here. It's not something the Copyright Office has
- 6 the authority in this rulemaking proceeding to say
- 7 that that is not -- that a proprietary system is not
- 8 valid and cannot be enforced under Section 1201.
- 9 Again, I think the market may well render that
- 10 verdict. I'm not here to defend any particular type
- 11 of model. I think it's clear that that steps far
- 12 beyond what this proceeding was set up for.
- I do have to raise the question about the
- 14 indication of censorship. I think all of us know
- 15 that that epithet has really been misused a great
- 16 deal lately in conversations about copyright. I
- 17 would be very cautious before saying a decision by a
- 18 provider -- I don't know anything about the facts
- 19 that were just raised about Apple, but I don't think
- 20 that's censorship. I think that's a decision by a
- 21 provider as to which application it wishes to allow.
- 22 Although the proponents seem to be okay if those
- 23 applications are pornographic or defamatory or
- 24 something else in the judgment of the provider, if
- 25 it's something else, some other reason that's being

- 1 used to keep them out, then that becomes censorship.
- 2 I think people need to be very careful with how that
- 3 phrase or that epithet is used in this debate about
- 4 copyright policy.
- 5 Then finally I just want to mention two or
- 6 three smaller but I think significant questions about
- 7 the proposed exemption. One is the exemption that
- 8 exist right now says that -- I don't have it right in
- 9 front of me, but it says that you can circumvent the
- 10 access controls if your sole purpose is to enable
- 11 intraoperability of applications with computer
- 12 programs. Now I see the word "sole" has fallen away.
- 13 I don't know quite why that is or what the
- 14 justification would be. In some of the scenarios we
- 15 were talking about in the earlier panel where
- 16 circumvention is carried out for one ostensible
- 17 purpose and then used for another. I think that
- 18 would be a bit of a concern.
- 19 The second is the word "tablet." I think I
- 20 know what a tablet is, but I think you have to define
- 21 that. In order to have an effective exemption, you
- 22 would have to define what a tablet is the way a
- 23 telephone handset was defined in some of the previous
- 24 rounds, and the proponents have never put forward a
- 25 definition of a tablet. One man's tablet may be

- 1 another person's something else, personal computer,
- 2 and you can get an exemption for it and where is the
- 3 dividing line. So I think that needs to be
- 4 clarified.
- 5 Finally in terms of the impact on piracy,
- 6 I'm not here to represent that this is the same as
- 7 the situation with regard to exemption 3. Perhaps
- 8 we're dealing here with a Jack Russell terrier rather
- 9 than a Great Dane coming through the dog door, but I
- 10 think there is certainly evidence that this exemption
- 11 has had an impact on increasing piracy, and I think
- 12 that needs to be taken into account along with all
- 13 the other factors as the Copyright Office makes its
- 14 recommendation.
- Thank you.
- MS. PALLANTE: Thank you, Steve.
- 17 We're going to jump right into our questions
- 18 now.
- 19 MR. KASUNIC: Marcia, I would think it would
- 20 be prudent to respond to the last report of what
- 21 Steve just said regarding the scope of the exemption
- 22 particularly the word "sole" being dropped and also
- 23 clarify what you believe. So the floor is yours.
- MS. HOFMANN: Sure. He has said quite a
- 25 bit. I'm going to respond to the things I think are

© 2012

- 1 the most important.
- 2 With respect to the dropping of the word
- 3 "sole," guite frankly, we think "the sole purpose"
- 4 and "the purpose" is the same thing. We just think
- 5 it was a word that was superfluous, and we would have
- 6 no problem with the Copyright Office recommending
- 7 that it be put back in there. That's fine by us.
- 8 We're not trying to gain the system or anything. We
- 9 have drawn our exemption request narrowly so that we
- 10 are talking about situations where people obtain
- 11 intraoperability for the purpose of legitimate uses.
- 12 We're not trying to sneak infringement in there in
- 13 any way, shape, or form.
- I also wanted to respond to the point that
- 15 there are varying degrees of openness in this system,
- 16 and that's true. The Android system, for example, is
- 17 more open than Apple's system. Among Android devices
- 18 there are varying degrees of openness. And so the
- 19 argument is that there are market alternatives here
- 20 because you can choose an Android phone with an
- 21 unlocked loader, for example, if you feel that
- 22 openness and intraoperability is very important for
- 23 you in your use of your device.
- MR. KASUNIC: By "openness" you mean the
- 25 owner of the device has the ability to do what he

© 2012

- 1 wants with that device in terms of the applications
- 2 to run?
- 3 MS. HOFMANN: Exactly. Install third-party
- 4 applications.
- 5 The Android platform allows people to
- 6 install unauthorized apps. It doesn't raise the
- 7 scope of the problem that the iPhone and the iPad do,
- 8 but the problem is that phones with unlocked loaders
- 9 still present some issues especially for developers.
- 10 Brad Lassey, who did a tech demo last week, showed
- 11 you why it's important for developers to have access
- 12 to -- to have root access to the phone so that they
- 13 can see how a program is running on the phone, and
- 14 they can debug it and make sure that the program is
- 15 running properly. So even devices with an unlocked
- 16 loader don't have -- they don't give you full access
- 17 to every component of the phone.
- 18 If you are a developer who is trying to
- 19 develop an application that is going to work on
- 20 multiple phones, one with unlocked boot loaders and
- 21 one with locked boot loaders, you're going to have a
- 22 very difficult time making sure that the program runs
- 23 properly on a phone with a locked boot loader if
- 24 you're not allowed to lock it. The idea that people
- 25 who really care about this problem can just use a

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

100

- 1 phone with an unlocked boot loader have a solution in
- 2 the market really isn't realistic especially for
- 3 purposes of development.
- 4 MR. KASUNIC: Let's go back to some of the
- 5 other issues about the scope of the exemption. Now,
- 6 I believe it was raised -- and clarify if it
- 7 wasn't -- that it's not only for tablets that are
- 8 considered iPads, but it also includes readers like
- 9 the Nook and the Kindle?
- MS. HOFMANN: Yes.
- 11 MR. GOLANT: What's the adverse effects that
- 12 you've demonstrated in the record for those people
- 13 who want to so-called "jailbreak" those particular
- 14 devices?
- 15 MS. HOFMANN: The reason we chose to focus
- 16 on tablets, as I mentioned earlier, we feel like
- 17 these are devices that have very similar
- 18 characteristics to iPhones. The problem that we're
- 19 trying to focus on here is the closed nature of the
- 20 environment. The fact that many of these devices
- 21 restrict what programs you're allowed to install and
- 22 use. Also, the fact that there are these locks that
- 23 restrict what you can do with the device. That's a
- 24 problem that's certainly manifested first with
- 25 smartphones, but it's something that continues in the

© 2012

- 1 tablet environment because they are devices that are
- 2 mobile and handheld and have many computing
- 3 functions.
- 4 You purchase applications from a third
- 5 party, often in the case of Apple, for example, the
- 6 party that actually manufactures the device. That's
- 7 not always the case, but that's often the case. So
- 8 there's a closed system, and we feel like this is a
- 9 situation where we've got devices that are very
- 10 equivalent, and there's no principled reason to say,
- 11 "Okay. It's all fine for you to jailbreak your
- 12 smartphone, but your tablet is another beast
- 13 entirely, and we're just not going to allow you to
- 14 have any sort of access that you would otherwise have
- 15 with your iPhone."
- Now, as for smartphones, I think the problem
- 17 is demonstrating harm in the last three years is kind
- 18 of acute because, of course, we've had an exemption
- 19 in the last three years. So I think that evidence of
- 20 the flourishing of that market is important and the
- 21 flourishing of alternative places to get applications
- 22 and alternative development of applications.
- The problem is for tablet owners, I think,
- 24 the spectre of legal liability. I think we have a
- 25 situation where they would like to make the same uses

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

102

- 1 of their devices as owners of smartphones, or they
- 2 would like to make the same use of their iPad that
- 3 they make of their iPhone, and legally it's unclear
- 4 whether they can do that. I think that that has a
- 5 chilling effect.
- 6 MR. GOLANT: Are the stores dedicated to
- 7 eReaders and tablets as there are for iPhones and
- 8 other mobile devices like it?
- 9 MS. HOFMANN: For eReaders and tablets?
- 10 MR. KASUNIC: If you go to Cydia, is that
- 11 solely for iPhones, ones that were included in the
- 12 last exemption, or can you get applications for other
- 13 devices there too?
- 14 MS. HOFMANN: I know you can get
- 15 applications there for iPhones, iPads, and the iTouch
- 16 which is very similar to an iPhone, but it just
- 17 doesn't have a calling capability. I don't believe
- 18 you can get Android applications there.
- 19 Is that right, Jay.
- 20 MR. FREEMAN: There are alternatives to
- 21 Cydia on Android.
- 22 MS. HOFMANN: There are alternatives to
- 23 Cydia on Android.
- MR. KASUNIC: Okay.
- 25 MS. PALLANTE: Steve, on Marcia's previous

© 2012

- 1 point she said it's not really just about the fact
- 2 that consumers have a choice when choosing a phone
- 3 that has an open platform or not but the fact that
- 4 developers need the access to produce better quality
- 5 applications. Could you respond to that?
- 6 MR. METALITZ: Yes, I guess I'd respond in
- 7 two ways. If that's the area where there are no
- 8 alternatives, then the exemption should be limited to
- 9 that, and it should be developers that would have the
- 10 ability to do this or do it for the purpose of
- 11 development as was shown in the tech demo.
- 12 The other point I think is -- I'm afraid
- 13 I've just lost my other point. I guess my first one
- 14 was so eloquent, but I will come right back to it.
- 15 Sorry about that.
- MR. GOLANT: Let's go back to the beginning
- 17 as we did in the last session and get some
- 18 clarification on some definitions.
- 19 I remember at tech day we had Dan discuss
- 20 what jailbreaking is meaning it allows administrative
- 21 access to the underlying system. For persons who are
- 22 not computer literate, as I would love to be, what
- 23 does "administrative access" mean?
- 24 MS. HOFMANN: It means full root access.
- 25 Full root access. Access to the components of the

© 2012

- 1 device.
- 2 MR. GOLANT: I read in the comments some
- 3 people use the term "rooting" versus "jailbreaking."
- 4 Is there a difference in what those terms mean?
- 5 MS. HOFMANN: The process is the same.
- 6 "Jailbreaking" is the term people tend to use for
- 7 iPhones, and "rooting" is a term that people tend to
- 8 use for Android devices, but the basic idea is the
- 9 same, and it is to get full administrative access to
- 10 the device.
- MR. GOLANT: We've heard about how easy it
- 12 was to jailbreak a Wii at tech day. Is it as easy to
- 13 jailbreak devices in this class as it was for video
- 14 game systems?
- 15 MS. HOFMANN: Yes, it's a matter of
- 16 downloading a tool that's distributed by another
- 17 party and running the jailbreaking program on your
- 18 device. As I mentioned before, many of the jailbreak
- 19 programs work on multiple devices. For example,
- 20 Absinthe, the jailbreak program I mentioned that's
- 21 been produced and was released in January by the
- 22 iPhone dev team, works on a certain operating system
- 23 used by the iPhone and the iPad and the iTouch.
- 24 MR. GOLANT: We've learned in the last three
- 25 years, at least, as we observed for Apple that they

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

- 1 oftentimes send updates that might eliminate whatever
- 2 jailbroken software you might have downloaded.
- 3 Does Google or the carriers that work with
- 4 Google do the same? Do they release updates that
- 5 would obliterate any sort of jailbreak that was for
- 6 that particular device?
- 7 MS. HOFMANN: That's my understanding, yes.
- 8 MR. GOLANT: So it's a race between the
- 9 consumer and the company in terms of keeping up if
- 10 they want to have a jailbroken device being open in a
- 11 sense?
- MS. HOFMANN: Right. I think that's a
- 13 burden that the consumer takes on when the consumer
- 14 decides this is what he or she wants to do with his
- 15 or her device.
- 16 MR. KASUNIC: I would assume, as much, that
- 17 Apple made clear that if you jailbreak, you void the
- 18 warranty. Would the same go for an Android device
- 19 that you know?
- 20 MS. HOFMANN: I believe so. I think that
- 21 would likely void -- well, that would void the
- 22 manufacturer's warranty if that's the position the
- 23 manufacturer takes. My understanding is that Google
- 24 doesn't have a position on that.
- 25 MR. GOLANT: Okay. I was trying to look in

- 1 the record to see, and that's why I'm asking these
- 2 questions now.
- 3 Turning to Steve, I have a couple of
- 4 questions, but do you want to respond to something
- 5 first?
- 6 MR. METALITZ: I think I can respond to
- 7 Maria's earlier question. I apologize for that
- 8 lapse.
- 9 I think in terms of the market impact on the
- 10 developer, I think that's a market question. There
- 11 is no God-given right to sell a Chevy at a Ford
- 12 dealer. Similarly, if you've got a great product and
- 13 you want to be able to use it -- if you develop a
- 14 great product and you want to be able to sell it to
- 15 people who have an iPhone, just for example, if Apple
- 16 decides not to do that, then you only have -- that
- 17 means you only have -- I think the figure was
- 18 68 percent of the market that you can reach, the
- 19 non-Apple users. I think this is for the smartphone
- 20 market. I'm not sure what the numbers are for
- 21 tablets because I don't know what's included in the
- 22 category of tablets.
- That's still a pretty good market, and if
- 24 you've got a great application, one of two things is
- 25 going to happen: Either there will be market

- 1 pressure on Apple to allow that application to be
- 2 installed on an iPhone, or if it's such a great
- 3 application, people may say, "Gee, maybe I'm better
- 4 off without an iPhone, and I should have a different
- 5 type of phone that runs this application."
- 6 MS. PALLANTE: I think in fairness to the
- 7 point, though, I think the point was we won't get the
- 8 great applications in the first place. I think that
- 9 was your point.
- 10 MS. HOFMANN: May I respond to his point? I
- 11 think Mozilla is a very good example here to discuss.
- 12 Mozilla produces the Firefox browser. In the
- 13 personal computing space, they have a 25 percent
- 14 market share. There is no Firefox browser for Apple
- 15 because Apple doesn't allow other browsers. So
- 16 Mozilla develops a version of Firefox for Android
- 17 phones. If Mozilla could only develop that for a
- 18 certain class of Android phones, those with unlocked
- 19 boot loaders, then that would further limit the
- 20 number of devices that could install and use that
- 21 application. As Mozilla said in the tech demo last
- 22 week, if they didn't have that full administrative
- 23 access, they wouldn't be able to develop a high
- 24 quality product for phones that may have an open
- 25 platform but have restrictions on the hardware of the

- 1 device that manufacturer has installed.
- 2 So I think it's pretty clear that without
- 3 this exemption, there's a very good market effect on
- 4 developers like that, even developers who, in a freer
- 5 environment, are able to have a very big market
- 6 impact.
- 7 MR. METALITZ: Well, as we heard earlier
- 8 this morning, Congress is aware of that. Congress is
- 9 sensitive to that. Congress adopted 1201(f) to deal
- 10 with that problem. Therefore, that's the place to
- 11 look to solve that problem and not this proceeding.
- MS. HOFMANN: But Congress did that almost
- 13 15 years ago, and it created this safety valve in
- 14 this proceeding, I think, exactly to address
- 15 situations like this because Congress could not have
- 16 foreseen them.
- 17 MR. METALITZ: I think what this panel --
- 18 what the Office has said in the past is that when
- 19 Congress has dealt with a subject and it doesn't
- 20 address a particular point at issue, that's evidence
- 21 that perhaps they didn't intend to cover it. It's
- 22 not conclusive, and I'm not objecting to the Office
- 23 looking at it, but it's a factor. If you're talking
- 24 about developers and you have an exemption that goes
- 25 way beyond developers, a proposed exemption, but you

- 1 also have 1201(f) to look at which clearly is
- 2 targeted to developers.
- 3 MR. GOLANT: Hold on. I wanted to ask you,
- 4 Marcia, you had said in your closing statements about
- 5 the public interest, and knowing myself that that is
- 6 sort of standard what the FCC has in determining
- 7 broadcast rules, is that a particular standard that
- 8 we should be paying attention to? Are we supposed to
- 9 look at the public interest when entertaining
- 10 exemption requests, or is that outside the scope of
- 11 this proceeding?
- MS. HOFMANN: I think that the Copyright Act
- 13 is intended to serve certain goals, and I think one
- 14 of them is the general benefit to the public of a
- 15 certain use. I certainly know that that is relevant
- 16 to a fair use analysis, particularly factor 1, the
- 17 character and purpose of the use. I think that
- 18 that's where this is most relevant here. I think
- 19 that making it possible for users to install
- 20 unauthorized third-party applications on their phones
- 21 stimulates the creative market.
- 22 I think there are applications out there
- 23 that wouldn't otherwise exist which are creative
- 24 works with their own value. I think it enables the
- 25 user to make innovative new uses of their phone that

- 1 perhaps weren't otherwise considered by the
- 2 manufacturer. I think that that's where that factor
- 3 really comes into this discussion.
- 4 MR. GOLANT: Okay. That leads into my last
- 5 question for the panel here. Please describe for us
- 6 what you meant when you said that we got it wrong in
- 7 2010 with regard to the fair use analysis. I'd like
- 8 to hear more about how that all worked out.
- 9 MR. METALITZ: Okay. While I look for what
- 10 we said about that this time, I will just say that
- 11 I'm not opposed to the -- it makes sense for the
- 12 Office to take public interest into account. I think
- 13 the public interest may be a little more -- a
- 14 complete look at the public interest also includes
- 15 the question of whether a government agency should be
- 16 dictating to a private party that it must have an
- 17 open platform. In effect, that's what grading this
- 18 exemption does. It's taking way this particular
- 19 tool, legal tool, for trying to maintain a
- 20 proprietary environment. I recognize that's not the
- 21 only tool. There are technological tools. There are
- 22 a lot of other -- that's only part of the picture.
- 23 But I think that has to be taken into account in the
- 24 public interest analysis.
- 25 I think we've set out in footnote 32 of our

- 1 submission where we think the office went wrong on
- 2 the fair use analysis last time. This is clearly not
- 3 a transformative use. The firmware -- the operating
- 4 system is being used precisely for the purpose for
- 5 which it was designed. Obviously, use doesn't have
- 6 to be transformative in order for it to be fair, but
- 7 most of the modern jurisprudence does look at that as
- 8 an important factor.
- 9 I think the treatment of operating system
- 10 software which is fully protected under copyright but
- 11 the way the Office approached it in its analysis two
- 12 years ago really gives a very extremely limited -- I
- 13 don't know what's left of the adaptation right in an
- 14 operating system if what the Office says is the law.
- 15 Basically someone can take 7,999,950 bytes, copy
- 16 them, and change 50 bytes, and somehow that's a fair
- 17 use, or rather I should say that doesn't even lead to
- 18 a negative finding on the amount taken and on the
- 19 nature of the work. I mean I understand that
- 20 operating systems are functional works, but I think
- 21 this analysis kind of drives the value of
- 22 copyrighting an operating system pretty much down to
- 23 the ground, and I think that's probably mistaken.
- So we would encourage you to look, again, in
- 25 this de novo proceeding at that question. I don't

- 1 know if the facts are different in tablets because I
- 2 don't know what's encompassed in tablets, and we
- 3 haven't heard anything about applications that are
- 4 dying on the vine for eBook readers and Nook and
- 5 Kindle and so forth. Maybe the record is there, and
- 6 it hasn't been discussed today. But I just think
- 7 this is an area where the Office should re-look at
- 8 its analysis from last time.
- 9 MR. CARSON: Can I say something in response
- 10 to that really quick? First of all, in regard to
- 11 eBook readers and Nooks and Kindle Fire and things
- 12 like that, Kindle Fire is actually a sort of flavor
- 13 of Android for what it's worth, and there is sort of
- 14 a different marketplace; so this exemption would
- 15 certainly apply to independently created apps in that
- 16 respect. When we're talking about the public
- 17 interest -- Marcia and Steve both talked about the
- 18 public interest. I think the fundamental thing to
- 19 remember when you think about public interest is the
- 20 basic purpose of U.S. Copyright Law, which comes from
- 21 Article I, Section 8, which is all about promoting
- 22 the progress of science and useful art.
- 23 And the reason I bring it up is because what
- 24 it means is in the Unite States our goal, as the
- 25 Supreme Court has reiterated over and over again, is

- 1 to get works produced. It's not solely about
- 2 protecting a monopoly and a copyright-holder. It's
- 3 about the utilitarian aspect of getting works
- 4 produced. If you don't provide the jailbreak
- 5 exemption, we've hurt this whole ecosystem that
- 6 exists. You're cutting off that ecosystem. So in
- 7 regards to public interest, you think about the
- 8 fundamental place from which the Copyright Act
- 9 springs which is Section I, Article 8.
- Just one last thing to mention about, I
- 11 actually am old enough to have used the very original
- 12 PCs and Macs from the early '80s and late '70s, the
- 13 original consumer-based computers that were
- 14 available. Most of those came, as I very well
- 15 remember, even though I was only three or four years
- 16 old, most of those came with a blank prompt, right,
- 17 just a blinking prompt, and you simply installed what
- 18 software you wanted to those computers. So I would
- 19 disagree with the history of computers. As the
- 20 personal computer, the history is pretty clear out
- 21 there in terms of how open those computers were from
- 22 the beginning.
- 23 MR. METALITZ: I'm glad to see the return of
- 24 the ecosystem here, and I guess the ecosystem means
- 25 one this in exemption 3 where the proponents are

- 1 concerned about the effect on the video game
- 2 ecosystem, and now it means something else in
- 3 exemption 5 where the proponents are arguing for the
- 4 application ecosystem. I certainly agree that the
- 5 goal of copyright is to promote the development of
- 6 works. But I don't know that that necessarily means
- 7 that it is inconsistent with copyright or somehow
- 8 anti-copyright for a company to choose to -- to
- 9 choose which applications can run on its platform and
- 10 which works it will make available to its users.
- MR. NEILL: On the second part of that, they
- 12 have all the right in the world, right, to make
- 13 available what works they choose to make available in
- 14 the Android market or in the iPhone app store. They
- 15 make those decisions; right? They make those
- 16 decisions in those marketplaces, and that's why there
- 17 are other options. Nobody is forcing Apple to change
- 18 their practices in their marketplace. This exemption
- 19 has nothing to do with that. This exemption is all
- 20 about simply providing alternative marketplaces for
- 21 folks.
- 22 MR. CARSON: Just a couple questions. First
- 23 of all, Marcia, Steve said -- and I assume it's true,
- 24 but I just want confirmation. You've not offered any
- 25 definition of what a tablet is. You've just sort of

- 1 used the word "tablet" and leave it undefined. Is
- 2 that correct?
- 3 MS. HOFMANN: Yeah, to the extent that we
- 4 tried to define the word "tablet," I think our papers
- 5 lay out the types of devices that we think are
- 6 encompassed here. You know, the word "tablet" is one
- 7 that is, I think -- it doesn't have a defined term,
- 8 and this is a market that's very much developing. I
- 9 mean there are -- two years ago there was basically
- 10 one tablet out there on the marketed which was
- 11 extremely successful, and now there are about 70.
- 12 New devices are being made all the time which I think
- 13 might be a part of this class.
- I think the thing that's important to focus
- 15 on when we try to decide what is a tablet is what
- 16 commonalities they share. I think what it comes down
- 17 to at the end of the day is we're talking about these
- 18 portable handheld computing devices that are subject
- 19 to these locked down marketplaces for works. What
- 20 we're asking for is for people to be able to go to
- 21 these alternative marketplaces if that's what they so
- 22 wish, and to the extent that they need to circumvent
- 23 any sort of a technological protection measure on the
- 24 device to do that, then we're asking that they be
- 25 able to do that.

1 MR. CARSON: I've heard, for example, references to Kindle, and I know some of the newer Kindle devices are described, but for example, my Kindle is a Kindle DX. It's basically good for one 5 thing, reading eBooks. You can't do anything else I can well imagine there are very different considerations with respect to that particular device than there is to a tablet that I might off the top of my head define as a multipurpose mobile computing 9 10 device for which there might arguably be stronger 11 arguments than there would be with respect to a 12 single-purpose device that has someone marketing 13 eBooks which has particular access controls on them 14 to prevent piracy. Off the top of my head, I can 15 think of less compelling reasons much less think of 16 any reasons why it's so important to be able to 17 jailbreak those. 18 So if you could help us out, either off the 19 top of your head or something you can give us in 20 writing perhaps in the next week so we have an 21 opportunity to test it at the next hearing whether 22 it's a definition or a list of the characteristics 23 that you think are those which are important so that 24 we don't just -- if we were choose to issue an 25 exemption along the lines of what you're requesting,

© 2012

- 1 we don't just use the word
- 2 "tablets." But we flesh it out a bit so everyone has
- 3 an understanding of what is or isn't within the scope
- 4 that. That would be very helpful.
- 5 MS. HOFMANN: I would certainly do that, but
- 6 if I could respond just briefly, let me give you a
- 7 use scenario. I have a Kindle which I enjoy very
- 8 much and which is useful basically for reading books.
- 9 What if I wanted to install an e-mail application on
- 10 it so that every so often, if I wished to, I could
- 11 interrupt my reading and check my e-mail.
- Basically what we're asking for is for
- 13 people to be able to install that kind of application
- 14 on their device if they so wish to do that.
- MR. CARSON: And then the one question that
- 16 arises to me -- and maybe the answer is no one's come
- 17 forward to oppose it, but I'm not quite sure how
- 18 clear the implications have been made thus far --
- 19 would be, well, if in jailbreaking it you could put
- 20 that e-mail device on it without doing any harm to
- 21 the protection measures there that protect the
- 22 literary works that are on there which is the primary
- 23 purpose of it, that might be one thing.
- But if by jailbreaking you suddenly open up
- 25 everything on it, there are some very important

- 1 copyright concerns that might be militating against
- 2 that. I don't know that we've got a record in front
- 3 of us that helps us understand the pros and cons of
- 4 that. I'm not sure, as I said, whether in your
- 5 initial proposal, which arguably was a bit vague with
- 6 respect to how broad it was, whether it was made
- 7 clear that that would -- that this proposal would
- 8 affect what is essentially a single-purpose device
- 9 and is designed to offer literary works in a
- 10 protected atmosphere which, under your proposal,
- 11 might jeopardize that protected atmosphere in a way
- 12 that you may or may not care about but that
- 13 publishers might care about.
- 14 MS. HOFMANN: I think it's as we discussed
- 15 this morning. The exemption that we're asking for is
- 16 for people to be able to jailbreak their devices, to
- 17 make them intraoperable with independent third-party
- 18 software, and use it for non-infringing uses. To the
- 19 extent somebody decides to jailbreak a device for
- 20 purposes of infringement, this simply wouldn't apply.
- 21 It wouldn't apply.
- MS. PALLANTE: When you're responding to the
- 23 characteristics that David has asked you for, can you
- 24 also talk about even within one manufacturing brand.
- 25 The Kindle has different price points for different

- 1 products, and Kindle Fire does have many uses now,
- 2 you can go to e-mail and get a whole lot more than
- 3 just books. We would need to know what would be the
- 4 perspective of the manufacturer on that with respect
- 5 to their careful orchestrating of price points as
- 6 well.
- 7 MS. HOFMANN: You're hoping I could respond
- 8 to that?
- 9 MS. PALLANTE: No, when you define "tablet"
- 10 for us, you can take that into account too.
- MS. HOFMANN: Of course.
- MR. CARSON: Steve, I have a question for
- 13 you. I want to be sure I heard something you said
- 14 clearly, and if I did, I'd like you to elaborate. I
- 15 think I heard you say the existing exemption has had
- 16 an impact with respect to increasing piracy. Is that
- 17 what you said?
- MR. METALITZ: I think it's enabled pirate
- 19 applications to be used on these devices on the
- 20 smartphones to which it applies now.
- 21 MR. CARSON: Maybe you've already presented
- 22 stuff in the record that I haven't looked at, but
- 23 what's the evidence of that?
- 24 MR. METALITZ: We have some links in the
- 25 record, and as Ms. Hofmann pointed out, they're not

- 1 the most current, and we can certainly try to give
- 2 you some more current information on that. But I
- 3 think there has been that impact that needs to be
- 4 taken into account.
- 5 MR. CARSON: This is the 1999 article?
- 6 MR. METALITZ: 2009. I went back and
- 7 looked, and she's correct. They not only predate
- 8 your -- your recommendation actually predated the
- 9 hearing; so we need to update that.
- 10 MR. CARSON: Okay.
- 11 MR. KASUNIC: And I think following up on
- 12 that in particular, you distinguished this proposal
- 13 from the video game consoles in the last one because
- 14 of the -- perhaps because of the extent of
- 15 copyrighted works that are being implicated. If
- 16 there's any distinction in or on either side in terms
- 17 of information about distinctions between those works
- 18 that are available on cellular phones like the iPhone
- 19 or the Android versus some of the tablets and knowing
- 20 exactly what the scope of those tablets are would be
- 21 important to even understand that aspect of it. So
- 22 if we're talking about an eBook reader specifically,
- 23 there are certain issues that might arise from that.
- I guess one thing to the extent there's any
- 25 knowledge on it within -- how is this somewhat

- 1 resolved within the context of these particular kind
- 2 of applications, the apps that are contained on, for
- 3 instance, an iPad? So if you loaded onto your iPad a
- 4 Kindle app, it would seem like even though you are
- 5 adding -- you had enabled yourself to add new apps to
- 6 the iPad, that it wouldn't necessarily affect any of
- 7 the protections that are internal to the Kindle app.
- 8 Did anyone understand that? So the fact
- 9 that the applications themselves in time sometimes
- 10 protect the copyrighted work so we have more discreet
- 11 protection going on within the overall device, and
- 12 that was one of the problems we were seeing
- 13 potentially in the video game console where there
- 14 wasn't that kind of granular protection.
- 15 So are you aware of that? Is that something
- 16 that you think would tend to decrease the adverse
- 17 effects on various types of works that maybe are
- 18 already within the safe ecosystem but then that would
- 19 be jailbroken or breached. Would jailbreaking affect
- 20 those in any way?
- 21 MS. HOFMANN: The exemption we're requesting
- 22 would only let people jailbreak to get administrative
- 23 access to the device. So it would have no effect on
- 24 any technological protection measure that protects
- 25 content on the device separately. So those would

- 1 absolutely be in place, and this exemption would not
- 2 reach those. I think in that kind of situation that
- 3 content would still be protected, and if somebody
- 4 were to circumvent an access control at that point,
- 5 that would be a violation of 1201.
- 6 MR. KASUNIC: I think that from the fact
- 7 that we have different questions, that we'll probably
- 8 be asking for certain follow-up and be putting these
- 9 into specific questions we'll be sending out. One of
- 10 the things that would be useful to know too is in
- 11 distinguishing between those two types of devices. A
- 12 lot of the record we had in the last rulemaking and a
- 13 lot of the analysis was all based on the smartphones.
- 14 So having some distinctions, I think we'll be sending
- 15 out some questions in addition to define and have
- 16 exactly what potential effects may be for particular
- 17 types of tablets.
- Just getting back to the -- since all of
- 19 this would be based on -- any kind of exemption would
- 20 be based on the question of whether the underlying
- 21 use is non-infringing and given that we have some
- 22 critiques of that analysis, I just want to clarify a
- 23 little bit about the transformative argument and what
- 24 you were taking issue with the last time around. It
- 25 seems to me to be the case you were taking issue

- 1 primarily with a sentence that said because these --
- 2 or two, that because are -- this use is for the same
- 3 purpose for which the device was intended, so that
- 4 would be something that would not be transformative
- 5 because it's for the same purpose.
- 6 But aren't we also talking about in this
- 7 context when -- and so the same purpose we're
- 8 discussing is to be able to play apps on the iPhone
- 9 or on the Droid or some other smartphone. Isn't
- 10 another element of the transformative purpose,
- 11 though, here the intraoperability issue? So the fact
- 12 that yes, it's for the same purpose but for the fact
- 13 that these are locking out certain types of works
- 14 that are in furtherance of that particular purpose of
- 15 being able to render apps that this is enabling
- 16 intraoperability.
- 17 So isn't intraoperability a different
- 18 purpose from the original purpose? So on one hand
- 19 there's the same purpose of being able to play apps,
- 20 but the exemption here and the non-infringing use
- 21 being argued is a reverse engineering and
- 22 intraoperability issues. So the two are both part of
- 23 the same package; so your criticism is all directed
- 24 at one part of that, the same use aspect.
- 25 MR. METALITZ: Yeah, I was reacting to what

- 1 you said last time which was "The proponents of the
- 2 exemption make no claim of transformative use, and in
- 3 light of the modest nature of the modification to the
- 4 Apple firmware" -- remember there's only 50 bytes out
- 5 of 8 million -- "it is unlikely that they would be
- 6 considered transformative. However, use need not be
- 7 transformative to be a fair use, "which is true. I'm
- 8 just highlighting the fact that increasingly we do
- 9 look to transformativeness as an important aspect of
- 10 the first factor.
- MR. KASUNIC: And we have looked at that,
- 12 too, in terms of reverse engineering and
- 13 intraoperability issues. We've looked at that
- 14 general framework, not putting aside.
- MR. METALITZ: I'm not really able to
- 16 respond comprehensively, but I think if you go back
- 17 and look at the earlier intraoperability cases, they
- 18 are finding it's not a transformative use.
- 19 MR. KASUNIC: We can look into it. It's not
- 20 my recollection.
- 21 MR. METALITZ: You could be right.
- 22 MS. PALLANTE: So I think we're finished
- 23 with the questions. Would the witnesses like to say
- 24 anything in closing?
- MR. GOLANT: Thank you for listening.

	0 0	1
		125
1	Thank you, and we'll resume at 1:30.	
2	(Luncheon recess taken at 11:53 p.m.)	
3		
4	00	
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

```
126
 1
                           ---000---
 2
    MAY 17, 2012
                        AFTERNOON SESSION
                                                 1:30 P.M.
 3
    PROPOSED CLASSES TO BE DISCUSSED:
 5
    SECTION 1201(7)(A), (7)(B), (7)(C), (7)(D), (7)(E),
    (7) (F), (7) (G), (10) (A), and (10) (B)
 6
    PANELISTS:
                CORYNNE McSHERRY
 7
                ART NEILL
                JONATHAN McINTOSH
 8
                MICHAEL DONALDSON
                LAURENCE THRUSH
 9
                CLARISSA WEIRICK
                DAN MACKECHNIE
10
                BRANDON CHARNEY
                ALEX COHEN
11
                JACK LERNER
12
             MS. PALLANTE: Corynne, the floor is yours.
13
             MS. McSHERRY: For the record, my name is
   Corynne McSherry. I am the intellectual property
14
15
   director at the Electronic Frontier Foundation, and
   we're the proponents of proposed classes 7(B) and
17
    7(C). Thank you for the opportunity to speak today.
   We have a very full afternoon; so I will keep any
18
19
    comments brief. I promise.
20
             Two years ago the librarian removed a legal
21
    cloud over a very important form of artistic and
22
   political expression. Our proposal this round, in a
23
   nutshell, asks that that exemption be renewed and
24
   moderately expanded to take account of evolving
25
   practices and technologies.
```

First, let's talk about preserving the 1 existing protections. As the record I think amply shows, the remix video continues to be an essential form of political and artistic expression, one that 5 truly has hit the mainstream. Teenagers, young adults, and even a few of us older folks, 13 percent of Americans, are making and sharing remix videos for all kinds of criticism and commentary. 2- to 6,000 videos continue to be uploaded to YouTube every day 10 according to YouTube ethnographer -- I so envy that 11 job -- Michael Wesch. Fan videos are being used in all kinds of circumstances such as educational forums 12 13 to help students learn about the politics of gender 14 and color in mass media. We're seeing this form of culture has really 15 16 hit the mainstream and also is currently being used 17 in a political context. It seems to me you all and 18 your predecessor Marybeth Peters should be commended 19 for clearing the way and removing the legal cloud 20 that was inhibiting and hanging over these uses, 21 these clear fair uses. Let me say that first. 22 think that it is indisputable that the kinds of 23 videos that I'm talking about are fair uses. 24 many, many examples in the record of that. 25 I would just point to, to grab one, Joe

- 1 Sabia's "Primetime Terror." I think simply no
- 2 question that that video created by the Lear Center
- 3 is protected by the fair use doctrine and rightly so.
- 4 I would point out critics of our proposed exemptions
- 5 didn't manage to muster any evidence or argument that
- 6 the examples we put into the record weren't fair
- 7 uses. That's there. That's accomplished. We have
- 8 evidence.
- 9 We also have evidence that removing that
- 10 cloud has had a tremendously beneficial effect. The
- 11 Organization of Transformative Works will tell you in
- 12 greater detail next week that they're hearing from
- 13 remixers who are saying we are no longer afraid to
- 14 counternotify when we get a DMCA takedown notice,
- 15 which is precisely what we talked about last time.
- 16 We're not afraid to dispute a content ID flag. We
- 17 are not afraid to defend our fair use rights. That's
- 18 wonderful. That's exactly what these rulemaking
- 19 proceedings are supposed to accomplish.
- This is particularly important for
- 21 marginalized communities such as people of color and
- 22 LGBT community. What they are seeing is their speech
- 23 is being affirmed as legitimate. I think we're going
- 24 to hear more testimony next week about whether
- 25 alternatives are available, but what we are hearing

- 1 is that alternatives are woefully insufficient, and
- 2 we have that testimony in the record about that.
- 3 Opponents of renewing the exemption also
- 4 suggest this is a false worry. They shouldn't have
- 5 been afraid in the first place. Contact owners
- 6 rarely target individual art. That may be true, but
- 7 "rarely" is not "never." It could change at any
- 8 time. If you had asked most people in 2002 whether
- 9 the record companies were going to sue thousands of
- 10 individual music fans, they would have said, "No, of
- 11 course, not." But that changed, didn't it? Again,
- 12 there's no evidence in the record, not one jot, that
- 13 the existing exemption has in any way impeded the
- 14 distribution of motion pictures. So let's keep that.
- 15 Let me turn now why we should build on that
- 16 existing exemption in two ways. First, it should be
- 17 clear to include works that have a commercial aspect.
- 18 This is to accommodate the new reality. As the remix
- 19 culture goes mainstream, professional remix artists
- 20 are emerging such as Joe Sabia. He's a classic
- 21 example. He was paid for his work for the Lear
- 22 Center, but his work was still fair use. No question
- 23 about that.
- Other folks may, for example, make their
- 25 videos and put them up on a blog, but they keep the

- 1 lights on by running a few ads. But if they get hit
- 2 with a takedown cease and desist or some other legal
- 3 challenge, that lawyer is going to have to tell him,
- 4 "Well, because you didn't pass the digital literacy
- 5 test, the DMCA literacy test" -- I'm sorry. That's
- 6 another exemption. "Because there's a commercial
- 7 aspect to your work, you failed the DMCA test, and
- 8 you're at legal risk." This is not going to make any
- 9 sense to most people because, if they read Campbell
- 10 versus Acuff-Rose, they know they're still protected
- 11 by fair use. This is counterintuitive. There's no
- 12 logical reason this should be.
- Remix videos, in this respect, aren't any
- 14 different necessarily than documentaries.
- 15 Documentaries can have a commercial aspect. That
- 16 doesn't take them out of the fair use doctrine and
- 17 currently doesn't take them out of the exemption. I
- 18 would counsel that we should take guidance from the
- 19 Supreme Court fair use analysis in Campbell versus
- 20 Acuff-Rose. Section 107 and Section 1201 both
- 21 contain a commitment to protecting commentary and
- 22 criticism. In Section 107 it's embedded in the
- 23 preamble, and in Section 1201 it's embedded in
- 24 Statutory Factor 3.
- 25 In Campbell versus Acuff-Rose the Supreme

- 1 Court noted that presumption against commerciality in
- 2 a fair use analysis would swallow commentary,
- 3 criticism, and education if they were undertaken for
- 4 profit because that's what a lot of commentary and
- 5 criticism -- how it occurs in this country.
- 6 Similarly a presumption against fair use remix videos
- 7 just because a creator relies on ads to keep its
- 8 lights on would, it seems to me, undermine the
- 9 purpose in Statutory Factor 3.
- 10 Third, let me turn to proposed Class C,
- 11 which builds again on the previous exemption to
- 12 accommodate a new reality of how works are being made
- 13 available now. The fact is DVD source, while still
- 14 an important source, is not always an option.
- 15 Sometimes a work is not available promptly. There
- 16 might be a current event. Sometimes a work will
- 17 never be available. Say, an old season of
- 18 "Survivor." Probably not going to make a whole
- 19 season available; so if you want to comment on gender
- 20 politics of "Survivor," you're going to have a hard
- 21 time doing that.
- 22 Remix video artists are going to turn to the
- 23 next best alternative source, and often that's going
- 24 to be online distribution services such as iTunes or
- 25 Amazon Video. Now, these are folks who are perfectly

- 1 willing to pay for this content. In fact, they're
- 2 committed -- ethically committed to pay for content
- 3 making sure original creators are compensated. But
- 4 they're going to fail the digital literacy test. If
- 5 they get hit with a takedown notice or a content ID
- 6 flag and they talk to a lawyer -- probably they're
- 7 not going to talk to a lawyer before then -- they're
- 8 going to find out that from a 1201 perspective they
- 9 should have gone to BitTorrent. That would have been
- 10 safer for them.
- 11 That's, again, suddenly counterintuitive. I
- 12 don't want to rehash arguments that are in our papers
- 13 and that we've made before, but it seems to me the
- 14 same analysis has to obtain. This is particularly
- 15 unfortunate because we know that DVDs are still
- 16 important but they're slowly being phased out as a
- 17 source for new audiovisual works. It seems to me one
- 18 of the reasons we come here every three years is to
- 19 take account of technological developments. This is
- 20 one of those technological developments that we
- 21 should be paying attention to.
- 22 Finally, it seems to me that there is no
- 23 evidence beyond mere speculation that we're going to
- 24 have any adverse effect on the distribution of
- 25 audiovisual works if this exemption is granted. Of

© 2012

- 1 course, it's our burden to support our exemption, and
- 2 it seems to me that what we can do is look over the
- 3 past decade and learn from experience and treat it as
- 4 circumstantial evidence. In 2003, -- 2000 tools are
- 5 already available to break encryption on DVDs, but
- 6 there was hesitation to grant an exemption because it
- 7 wasn't yet clear what effect an exemption might
- 8 cause. In 2006 we had an exemption. 2010 we have an
- 9 exemption. What effect has that had on the DVD
- 10 market? None whatsoever.
- 11 With respect to these new services,
- 12 similarly tools already exist to break the encryption
- 13 to allow people to access the source material for
- 14 these limited purposes that we're talking about here.
- 15 Based on our experience with DVDs, I think we can
- 16 conclude that it's likely that just as the exemption
- 17 has had no effect on the DVD markets and that
- 18 thriving of those DVD markets and eventually
- 19 saturation, so too it's highly unlikely that an
- 20 exemption as we're proposing here limited to very
- 21 limited purposes, short portions, non-infringing
- 22 uses, primarily no commercials -- it's very unlikely
- 23 to expect that there will be any effect there. We're
- 24 not going to help pirates with this exemption.
- 25 Pirates neither need it nor want it.

1 Let me conclude by quoting someone I didn't expect to be quoting today. Christian Genetski said this morning that, "These exemptions in this process is supposed to be a safety valve to allow citizens to 5 criticize and comment on copyrighted works." 6 Proposed classes (7)(B) and (7)(C) do exactly that. 7 Thank you. 8 MS. PALLANTE: Thank you very much. 9 Art. MR. NEILL: Good afternoon. 10 My name is Art 11 Neill. I'm the founder of New Media Rights and 12 executive director. It's a nonprofit based in San 13 We provide one-to-one assistance with a 14 number of remix artists, video creators, folks who 15 create and share their work online. 16 There's a number of reasons why we think the 17 exemptions in (7) (B) and (7) (C) are necessary. 18 covered it really briefly. (7)(B) and (7)(C) are 19 necessary because, number one -- or they're justified 20 exemptions because, number one, they're very limited. 21 They're very focused exemptions. In every way, like Corynne was mentioning, they're focused on actual 22 23 legal reuses of content. They do nothing, in fact, 24 to stem the copyright holders' ability to actually 25 pursue real infringers. They still have the right to

- 1 pursue infringers.
- 2 Secondly, the exemptions simply protect what
- 3 are, like I said, otherwise legal, fair uses of
- 4 content, and that's the whole purpose of why we're
- 5 here. The DMCA circumvention provisions in their
- 6 original drafting didn't take account of fair use and
- 7 sort of ran over the idea of fair use. That's why
- 8 every three years we have it built into the statute
- 9 that we get together, and we talk about what type of
- 10 uses we need to provide a safety valve for, and this
- 11 is one of those types of uses.
- 12 Creators also need, No. 3, high quality
- 13 content to communicate their message. Jonathan will
- 14 explain that in some more depth.
- 15 And, fourth, from a practical perspective,
- 16 as Corynne mentioned, we deal with a lot of these
- 17 folks one to one, and they have a difficult time
- 18 understanding the anti-circumvention provision. Many
- 19 times folks don't realize, even if they are making a
- 20 fair use, in one way they may be violating
- 21 anti-circumvention. Certainly if we were to pull the
- 22 rug and suddenly make the exemption unavailable to
- 23 folks who are already gathering content from DVDs,
- 24 there would be confusion on that front as well.
- On the second exemption, though,

© 2012

- 1 particularly to (7)(C), the two reasons we support
- 2 this, number one, there's a lot of content that's
- 3 simply not available on DVD. The state of the
- 4 industry is it's moving to online distribution for
- 5 video. Number two, it's necessary to reuse content
- 6 based on its timeliness. The timeliness of the work,
- 7 we hear over and over again from artists, is as
- 8 important as the message itself. I want to focus on
- 9 the narrowness of the exemption, the need for high
- 10 quality and timely content. Those are things I'm
- 11 going to focus on.
- 12 First of all, as far as how narrow and
- 13 limited this exemption is, it's focused on
- 14 noncommercial, non-infringing use, particularly fair
- 15 use which is transformative and noncommercial.
- 16 Copyright holders, as I mentioned, have every
- 17 available remedy. They can still sue. They can
- 18 still send an DMCA takedown notice. They can still
- 19 send cease and desist letters, and we see that happen
- 20 on a day-to-day basis with copyright holders whether
- 21 they're large media companies or smaller entities.
- 22 They use these remedies on a day-to-day basis. It's
- 23 a way of policing their copyrights; so providing this
- 24 exemption certainly doesn't create any kind of new
- 25 defense, doesn't create any kind of exception to the

- 1 copyright holders' rights to bring an infringement
- 2 lawsuit. So creators were using content legally
- 3 already face the DMCA takedown notices and formal
- 4 takedown activity.
- 5 I want to talk about high quality content.
- 6 We hear from folks on a day-to-day basis that high
- 7 quality video and audio are necessary. You can just
- 8 think about this from the general state of the
- 9 commercial market. People expect high quality
- 10 content. They expect high quality video and high
- 11 quality audio, and there's no reason why remix
- 12 artists or why a critic or another type of individual
- 13 or video creator that is reusing content should be
- 14 relegated to low quality copies or to some kind of
- 15 secondary class of creativity simply because they
- 16 want to reuse content but do it in a way that's fair
- 17 use.
- 18 A filmmaker we work with, John Monday, has
- 19 stated regarding video quality, "It is extremely
- 20 important as the video quality directly translates to
- 21 the watchability of the final product. American
- 22 consumers are very quality conscious and will pay
- 23 more attention to well-produced documentaries which
- 24 include high quality video." So copyright law
- 25 shouldn't limit creators to only low quality clips,

- 1 and essentially when you're talking about the fair
- 2 use argument, if you're talking about a video such as
- 3 you'll see from Jonathan or some of these other remix
- 4 creators that have a great transformative argument,
- 5 other great fair use arguments, the fact that the
- 6 video is of a little bit better quality or the audio
- 7 is of a little bit better quality does really not
- 8 fundamentally change the fair use argument. It
- 9 really doesn't have -- so this analysis of whether --
- 10 they shouldn't be -- remix artists shouldn't be sort
- 11 of have to choose between violating law to use high
- 12 quality content or not violating the law to use
- 13 substandard content.
- 14 The next point is about timely criticism,
- 15 and this really goes to the exemption for online
- 16 sources of video content, (7)(C). This is essential
- 17 because obviously we're switching away from physical
- 18 media to an online distribution system of video.
- 19 This is things like Amazon Unbox, iTunes store,
- 20 Hulu.com, legally streaming websites. What you may
- 21 not realize about some of these remix artists is that
- 22 some of these folks are the biggest fans of some of
- 23 the work that they are actually commenting on or
- 24 working on but depending on the circumstances. A lot
- 25 of these artists want a legal way of accessing this

- 1 work. So this exemption allows them a way of legally
- 2 accessing the work and, frankly, in a small way
- 3 provides even a small boost to the legal market for
- 4 those works as well because these folks will pay for
- 5 access to the work.
- 6 So it's necessary to provide access to
- 7 online content because humor, criticism, commentary
- 8 that we're talking about relies on timeliness. It
- 9 has to be viewed in the backdrop of current events.
- 10 We talk to a gentleman name Martin Leduc, who's a
- 11 video remix creator. He says, "Sometimes my online
- 12 remixes respond to very specific events that are
- 13 being covered in the media. In these cases I need to
- 14 get my clips in as timely a manner as possible so I
- 15 can contribute to the discussion about these events
- 16 while they still are taking place."
- So if the requested exemption is not
- 18 extended to non-DVD material, I think in many ways
- 19 creators can be precluded because of the delay in
- 20 releasing DVDs from actually discussing current
- 21 events, affecting current public discourse. In this
- 22 century public discourse over the Internet about
- 23 current events that's communicated through
- 24 audiovisual needs is every bit as important as
- 25 meeting up in a public space and discussing issues of

© 2012

- 1 the day was in past centuries. I think it's
- 2 highlighted by the fact that we have a political year
- 3 coming up and the fact that people are going to want
- 4 to use timely content to comment on what's going on
- 5 in the election that's coming up.
- 6 So in sum, I'd like to say that the (7)(B)
- 7 and (7)(C) exemptions are critical safety valves to
- 8 any circumventions, limitations on fair use.
- 9 MS. PALLANTE: Thank you very much, Art.
- Jonathan.
- 11 MR. McINTOSH: My name is Jonathan McIntosh.
- 12 I'm a video remix artist and transformative
- 13 storyteller. I'm going to be talking about Section B
- 14 and C also, but I think it says D something. Just to
- 15 clarify, B and C.
- 16 I've been producing remix videos and
- 17 transformative works that I believe are fair use for
- 18 over a decade. I started with VCRs. Now I've
- 19 obviously moved into digital. That was before
- 20 YouTube. That was a few years before YouTube, in
- 21 fact. I put things on my website, and they were
- 22 about the size of a postage stamp because that was
- 23 all the video I could afford to put online. All my
- 24 works are critical commentary so they all deal with
- 25 some sort of socio-political issue whether that be

141

- 1 gender, race, economics, or the political race. They
- 2 are all meant to foster debate and discussion online.
- 3 I believe many of them do that.
- 4 All my works are noncommercial. I give them
- 5 away for free and let people share them as they see
- 6 fit. I also have people remix them in turn. If they
- 7 don't like my message, they can change it to theirs.
- 8 Many of my works have gone viral. When I say
- 9 "viral," I mean more than a million views. Some of
- 10 them much more. My works have also been covered in
- 11 major media outlets. Stories that have been done
- 12 about remix videos I've made have appeared in
- 13 Entertainment Weekly, NPR, New York Times, L.A.
- 14 Times, Boston Globe, Vanity Fair, Forbes Magazine,
- 15 Wired Magazine, and many more. My video works are
- 16 also used in high school and college programs in
- 17 studies, media studies, and law schools as examples
- 18 of fair use.
- 19 I'm also part of many other remix
- 20 communities that do both image and video work. So I
- 21 thought the way that I look at what I'm doing is I
- 22 see we're having this -- the language we use to talk
- 23 to each other is more and more audio/video language,
- 24 audiovisual language. As citizens I think it's
- 25 important to be able to speak in that audiovisual

© 2012

- 1 language, and that's what I think remixing and
- 2 transforming and quoting from mass media does or
- 3 helps us do. It helps us participate more fully in a
- 4 public debate.
- 5 I thought I'd show a very short clip, a
- 6 two-and-a-half minute clip of something I made to
- 7 give you a sense what we're talking about here. It
- 8 feels very abstract. This is a piece I made a couple
- 9 of years ago. It is six minutes long, but I'm just
- 10 going to show you a little highlight. It's "Buffy,
- 11 the Vampire Slayer" meets Edward Cullen from
- 12 "Twilight." It's a popular book and movie franchise.
- 13 You're going to see -- I took about four minutes from
- 14 "Buffy," and I pulled from all seven seasons, all 140
- 15 episodes. And then from "Twilight" about two minutes
- 16 from the full film to create an interaction where you
- 17 can see them interact. The idea was to talk about
- 18 the gender dynamics going on in both these two
- 19 series, compare them, and see what would happen if
- 20 someone like Edward in the film tried to woo someone
- 21 like Buffy especially considering that Edward's
- 22 behavior can be classified as stalking. So I'm going
- 23 to try to make this work.
- 24 (Video is played.)
- 25 MR. McINTOSH: So this gives you an idea of

- 1 what I was trying to do. I picked all the parts of
- 2 Edward's performance that I felt were problematic in
- 3 terms of gender dynamics, and I tried to build a
- 4 response from a different source to compare and
- 5 contrast those two sources and messages in those
- 6 sources.
- 7 The two major things I'd like to talk about
- 8 quickly are the importance of quality footage,
- 9 specifically DVD footage, ripping DVDs. So one of
- 10 the major reasons why I and other remixers in the
- 11 communities I'm a part of think that's super
- 12 important is because often there's cropping and
- 13 zooming that happens. You need a large enough piece
- 14 of footage to crop and zoom it and not have it be
- 15 blurry or distorted or pixelated. You still need to
- 16 be able to see what it is if you want to zoom in on
- 17 something. It needs to be big enough to do that.
- 18 Many of the reasons you might want to do
- 19 that is focus on someone's lips. The "Read my Lips"
- 20 is one example of that which has been used over and
- 21 over again. You might want to crop out other people
- 22 in the frame so it's just one person in the frame if
- 23 you're trying to focus on that person and what
- 24 they're saying. Obviously in "Twilight" and "Buffy"
- 25 there are many, many cast members. I cut them all

- 1 out. I often had to cut them out of the actually
- 2 frame because I didn't want it to be about them. I
- 3 wanted it to be about these specific lines and what
- 4 those mean in our conversation. And then you might
- 5 want to focus on a gesture or an action or an object;
- 6 so you might need to crop or zoom on that thing for
- 7 emphasis. So that's very important.
- 8 Also, credibility. What I found in putting
- 9 my work online is that most people in public are very
- 10 accustomed to a very high production quality probably
- 11 because of professional media outlets, and so quality
- 12 has become synonymous with credibility. If you put
- 13 something online that's used with some sort of screen
- 14 capture technique that isn't ripping from a DVD, then
- 15 you lose your quality and you lose your legitimacy
- 16 and you lose your credibility. And actually most of
- 17 the comments tend be about why the quality isn't very
- 18 good and not about the message you are trying to talk
- 19 about or have a discussion about.
- 20 And then to touch on the timeliness part of
- 21 it, when things aren't available on DVD like reality
- 22 TV shows, for instance, or many of the broadcasting
- 23 shows aren't available on DVD and never will be, Lou
- 24 Dobbs or Anderson Cooper, so if you want to use them
- 25 and comment on them, you have to have get that via

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

- 1 only services. In order to be part of that new cycle
- 2 debate, it's also very important to be able to use
- 3 things that you can only get on iTunes or Amazon or
- 4 other streaming service like that.
- 5 Remixers definitely need those things. I
- 6 think what I do and what other remixers do is try to
- 7 engage in a healthy public debate. As a last
- 8 example, this Buffy video I showed, I wanted it to be
- 9 talked about and discussed among young people
- 10 especially between the ages of 13 and 17, and that
- 11 happened. That is the highest level of people that I
- 12 tracked who watched this. It's been seen about
- 13 5 million times online. By far the people watching
- 14 it are young women between the ages of 13 and 17, and
- 15 it's been featured on many, many of the blogs related
- 16 to "Twilight," fan blogs. And so lots of fans of
- 17 "Twilight," even though it's critical of "Twilight,"
- 18 will put it and talk about it and say, "When someone
- 19 breaks into your bedroom without asking, is that good
- 20 or bad?" which is kind of what I wanted to happen.
- 21 So I was very excited.
- 22 So thank you.
- 23 MS. PALLANTE: I think at this point if we
- 24 can have the next group come up.
- MR. DONALDSON: My name is Michael

- 1 Donaldson. I have a small boutique practice here in
- 2 town. Since the '70s it's been focused strictly on
- 3 independent film, everything, financing,
- 4 distribution, production work. In the last few years
- 5 it's increasingly about clearance work, and today we
- 6 write opinion letters on about 100 items a week on
- 7 average, all within whatever propriety it falls
- 8 within. They are almost all documentaries. Our
- 9 letters go to an E&O insurance carrier to get
- 10 insurance to cover these films because nothing
- 11 happens to a film without E&O insurance.
- So I suppose you're a bit surprised that I'm
- 13 here asking for an exemption for fictional films.
- 14 Frankly, three years ago when I was here, I certainly
- 15 didn't expect to be back asking for an exemption for
- 16 fictional films, but I'm not surprised based upon
- 17 what's happening in our own practice in just the last
- 18 three years. In order to understand now, I'd like to
- 19 go up 50,000 feet for just a minute because it's been
- 20 a really amazing shift in attitude.
- 21 Fictional films have always used fair use.
- 22 It's always historically been accidental. "Oops.
- 23 Who didn't clear that? Yikes." Sometimes they could
- 24 settle it, and sometimes they couldn't, and we all
- 25 know the cases that found fair use in fictional

- 1 films. Jackson where Whoopi Goldberg kicked a
- 2 painting on the wall, found to be fair use; Amsinck,
- 3 where there's a mobile over a child's crib full frame
- 4 for quite a while actually, found to be fair use.
- 5 Other cases that lost those. None of them indie
- 6 films that are my client base.
- 7 But in 2005 something began to happen that
- 8 looked like it had nothing to do with fictional
- 9 films, and it turned out, to a lot of people's
- 10 surprise, that it had everything to do with fictional
- 11 film. American University came out with their
- 12 statement of best practices of fair use for
- 13 independent filmmakers. Shortly thereafter I
- 14 negotiated with the insurance companies to give fair
- 15 use riders on E&O policies which sort of made
- 16 everybody aware that this was possible to do in a
- 17 safe way.
- And what they require and what our firm does
- 19 is we watch a film twice, once generally and one with
- 20 a clearance log, and opine on everything that doesn't
- 21 have a license or everything that raises a personal
- 22 rights issue or anything like that, and then that
- 23 letter goes to the insurance company. They look it
- 24 over carefully, very carefully, and issue a policy.
- 25 You know how conservative insurance

- 1 companies are. So after it's gone through that
- 2 process, I can assure you that it's likely to be fair
- 3 use. In fact, more than likely to be fair use
- 4 because these insurance companies are not in the
- 5 business of taking on a lot of risk.
- 6 What's interesting is that that was
- 7 documentary filmmakers, but in the independent world,
- 8 somebody who works on a documentary one week is
- 9 working on a fictional film the next week, back
- 10 working on a documentary the next week, back on a
- 11 fictional film the next week. These are all the same
- 12 peeps. They got used to using fair use in
- 13 documentary films. They knew what their rights were.
- 14 They'd gone to seminars, but then they'd work on
- 15 their feature films, and they'd say, "This certainly
- 16 is something we should be able to access also."
- 17 Since the last hearing when I was before you
- 18 in Washington, our firm has worked on about two dozen
- 19 fictional works that used fair use and received
- 20 insurance coverage. They're all over the place. One
- 21 delightful one, a 25-minute film, used a dozen clips
- 22 to tell the story of a projectionist who lived in the
- 23 projection booth and all of a sudden noticed an extra
- 24 character in a scene, and that extra character showed
- 25 up in the next movie and the next movie. And pretty

- 1 soon they had this relationship, and they started
- 2 talking and a happy end of the story. The whole
- 3 thing liberated her, and she moved out of her
- 4 projection booth to have a real life. \$25,000
- 5 budget.
- 6 Such a budget clearly does not allow for the
- 7 purchase of some expensive machinery or some
- 8 expensive technician, if they can find them, to
- 9 operate that machinery. This kind of a documentary
- 10 or this kind of a fictional film really needs to have
- 11 access to DVDs through the DMCA. We had another one.
- 12 The budgets were just under \$2,000 for little shorts
- 13 about a trailer family that liked to watch films on
- 14 television, and the whole episode would be them
- 15 riffing off the film that they had watched.
- 16 This is a trend that is growing. It's a
- 17 trend that will continue, and the only thing that
- 18 really stands in the way of this becoming a robust
- 19 tool in the tool chest of independent fictional
- 20 filmmakers is the DMCA. I don't think the Copyright
- 21 Act ever intended to say, "If you're making a
- 22 documentary about whatever, you can use fair use, but
- 23 if you're making a similar documentary or a similar
- 24 fictional film, you can't use fair use."
- 25 A great example came into our office last

- 1 year, a film called "Bellflower" where the electrical
- 2 character was obsessed with Lord Humungus. The film
- 3 started with a quote from Lord Humungus. As soon as
- 4 the film starts, the character is making sketches of
- 5 Lord Humungus, does it throughout the film. They
- 6 even build the car from "Mad Max 2" with the flames
- 7 coming out the end of the wings and everything.
- 8 If that had been a documentary, the
- 9 documentary filmmaker could have easily shown why
- 10 this main character was so obsessed with Lord
- 11 Humungus. But it was a fictional film; so we were
- 12 never able to see that. The fictional filmmaker has
- 13 become a second class citizen to the documentary
- 14 filmmaker. That's certainly not what the Copyright
- 15 Act intend. If I read the background, the
- 16 Congressional Reports and things on this act, I don't
- 17 think the DMCA was designed to make second class
- 18 citizens out of fictional filmmakers.
- Thanks.
- MS. PALLANTE: Thank you, Michael.
- 21 Laurence.
- 22 MR. THRUSH: My name is Laurence Thrush.
- 23 I'm a writer and director of TV commercials,
- 24 documentaries, and features. I'm here to talk to you
- 25 about my fictional work. I've written, produced, and

- 1 directed two independent feature films that were
- 2 self-financed, the first of which is called "Left
- 3 Handed" and was a Japanese language film. It was
- 4 based on the condition of "hikikomori," which is
- 5 social withdrawal where teenage children lock
- 6 themselves away in their bedroom and don't come out
- 7 for many years. It's sort of a social phenomena in
- 8 Japan.
- 9 My new film, "Pursuit of Loneliness," is an
- 10 American film that's really about the disintegration
- 11 of the family unit and how more and more people are
- 12 living alone and ultimately what happens when people
- 13 die alone with no next of kin. Both of these
- 14 projects are obviously based on social issues and
- 15 take their inspiration from news items I've read and
- 16 research I conducted almost as a documentary
- 17 filmmaker would, but I created like a script, a
- 18 fictional story with characters that we cast. So the
- 19 films are very much based in reality. We shoot on
- 20 location, and we use real people. In the case of the
- 21 Japanese film, the main actor had been through this
- 22 condition, had suffered from this. In the new film,
- 23 "Pursuit of Loneliness," we cast an elderly lady that
- 24 lived alone.
- 25 So the fabric of reality is very important

- 1 to these projects. So obviously when it comes to the
- 2 use of news clips or clips from television shows that
- 3 the characters may watch or films they may watch,
- 4 music they listen to, it's very important because it
- 5 not only helps create this fabric of reality we are
- 6 trying to create, but it also informs the viewer who
- 7 these people are, what type of things they watch.
- 8 And it goes to show what kind of social strata they
- 9 fall into.
- 10 I'm currently working on two projects which
- 11 are in the preproduction stage, the first of which is
- 12 an Indian film called "Vessels," and it's about in
- 13 vitro fertilization and surrogacy in India. And the
- 14 second film is about -- titled "ELR," and it's about
- 15 asylum seekers and the issue of immigration in the
- 16 U.K. In both these films, film clips and news items
- 17 play a very pivotal role in addressing the
- 18 characters' plight that they face and helps me to
- 19 conduct criticism on the society and on these issues.
- For example, there's one very pivotal scene
- 21 in the India project in "Vessels" where the main
- 22 character in the film, a U.S. woman, has gone to
- 23 Mumbai for the purposes of this in vitro
- 24 fertilization treatment, and it's a very difficult
- 25 process for her. It's all really about going to a

- 1 country as a tourist for one specific purpose. It's
- 2 almost like medical tourism, and it's an ordeal for
- 3 her. There's a very pivotal scene towards the end of
- 4 her stay where in the hotel room she watches an
- 5 American film on the hotel TV, and she gets very
- 6 emotional. It's a film that she's watched many times
- 7 previous; so it really needs to be a very popular,
- 8 instantly recognizable Hollywood film with a bona
- 9 fide movie star, and it's something that's familiar
- 10 to the woman, the character clings to, watches, and
- 11 gets emotional over.
- 12 Additionally there's another scene in the
- 13 film where the U.S. couple are on the airplane going
- 14 to India, and they're both watching the same movie on
- 15 the in-flight entertainment system. It's really
- 16 designed to show how even something you would think
- 17 as communal as watching a movie together can be made
- 18 quite isolated when they have their own personal
- 19 screen and their own headset, and they're watching it
- 20 perhaps at different times so you see different bits
- 21 of the film they're watching. It's a device I'm
- 22 using to comment on the type of isolation that the
- 23 couple has and sort of what's happened to their
- 24 relationship due to not being able to have a child
- 25 together.

1 Also, the clip I would like to use in that scene is from a blockbuster "Mission Impossible," which has a scene that's set in Mumbai. A large part 3 of that film is set in Mumbai. The version of Mumbai 5 that they present is very kind of grotesquely glossy 6 and glamorous and completely at odds with the 7 experience the couple is going to have in India. using that clip very specifically as commentary for 9 this. 10 The only way that I really know how to get 11 access to these clips is through DVD or DVR because, 12 for example, on the airplane it would be incredibly 13 difficult to control what we're seeing on that 14 It would be very difficult to control that 15 type of entertainment system. The only way to really 16 do it successfully is to drop that clip in after 17 photography and to do that in editing. Plus when 18 you're seeing that screen very close up if that's 19 filling frame on those in-flight screens, it's not 20 ideal for us to control. 21 And the purposes of the "ELR" script, the 22 London script, I'm using a lot of news footage, news 23 material from the BBC to sort of give the audience a 24 sense of the political climate and how the public

opinion is shaped based on asylum seekers.

- 1 of using the nationalistic news such as BBC and
- 2 Capital Radio as sort of the voice of the empire.
- 3 Again, using that for commentary and for how the main
- 4 character in the film, who's an asylum seeker from
- 5 Zimbabwe, sort of feels public opinion and how the
- 6 U.K. thinks about this issue.
- 7 So in sort of conclusion and summary, it's
- 8 important for me to be able to use these clips, and
- 9 the DMCA ruling is harming me in that because I'm not
- 10 able to film these scenes practically whether it's
- 11 because of needing a special technician to help me
- 12 control the TV monitors to overcome phasing issues
- 13 which typically happens when filming these things on
- 14 film. And also sometimes I want to re-edit the clips
- 15 obviously with the news footage. I want to have the
- 16 ability to shorten and condense those items and
- 17 re-edit them for purposes of legibility and for time.
- The quality of the material obviously has to
- 19 be the highest source if I'm going to be putting it
- 20 into screens such as an in-flight entertainment
- 21 system. I need to have the best possible image I can
- 22 have to put it in there when the lighting on a plane
- 23 is typically going to be pretty grim, or in situation
- 24 filming these scenes in a very independent guerilla
- 25 fashion, sometimes you're not perfectly set up to get

- 1 the best registration from the monitors. So putting
- 2 those screens in in post is the ideal way to do it.
- 3 So I would urge you to make the exemption
- 4 for fictional filmmakers.
- 5 MS. PALLANTE: Laurence, thank you so much.
- I think at this point we now have Clarissa,
- 7 Dan, and Steve.
- 8 MS. WEIRICK: I'm Clarissa Weirick. I'm
- 9 executive vice president and general counsel of
- 10 Warner Brothers Home Entertainment Group. It's the
- 11 legal group that provides services across home video,
- 12 digital distribution, and our gaming group. I'm here
- 13 as an opponent of Classes 7 and 10. I'd like to
- 14 touch briefly upon clips and then upon the space
- 15 shifting issue.
- 16 With respect to clips we have a department
- 17 this is devoting to licensing clips and stills, four
- 18 full-time people, and they handle all requests for
- 19 clip licensing other than promotional and
- 20 merchandising uses that are handled by our consumer
- 21 products group. So this department is the department
- 22 that handles requests for educational use,
- 23 documentaries, talk shows, museums, feature films,
- 24 and television shows. They get about 80 or 90
- 25 requests per week, and most of them they answer in

© 2012

- 1 about 48 hours unless additional research is
- 2 required.
- 3 For educational and scholarly uses,
- 4 classroom uses, uses by students and their projects,
- 5 they issue no objection letters, and we've never
- 6 denied such a use. Normally it's notable that the
- 7 people requesting materials don't ask -- requesting
- 8 to use our clips do not ask for materials which means
- 9 that they do have access to these clips that they
- 10 plan to use in their classrooms and their projects.
- 11 This group also licenses documentary uses. That
- 12 comes to about 10 percent of the requests that they
- 13 get, and we deliver clips to documentary filmmakers
- 14 in broadcast quality, HD.
- We also have a digital clip licensing
- 16 business. Several years ago we created a database
- 17 with Partner Deluxe of 4,000 clips from over 400
- 18 motion pictures. We licensed those to online
- 19 ad-supported clip services such as AnyClips,
- 20 MOVIECLIPS, and YouTube. We have also licensed to
- 21 Hark for audio clips and, U-Star is a company that
- 22 permits users to buy clips and insert themselves into
- 23 the video.
- 24 A lot of materials made available through
- 25 these services that can be used for educational

- 1 purposes and for creative uses like mash-ups because
- 2 when you're viewing clips on a service like AnyClips
- 3 or MOVIECLIPS there are tools right in the viewing
- 4 box that allows users to shorten the clips, to post
- 5 them on Facebook and Twitter, e-mail them to friends,
- 6 or embed links to the clips in materials like
- 7 PowerPoint. So, for instance, a teacher could create
- 8 a PowerPoint for educational use and embed links to
- 9 these clips in their PowerPoint, and as long as the
- 10 classroom had an Internet connection, then when they
- 11 went through their PowerPoint, the clip could be
- 12 streamed and viewed by the classroom.
- This is a growing business area for us.
- 14 It's a new channel that was created over the last
- 15 three years. All of these licenses are in the last
- 16 several years, and we're doing more research to add
- 17 more titles to our clips database, hundreds of new
- 18 titles. It's free to users and convenient to use.
- 19 We encrypt our content, but we do not require any
- 20 kind of access controls in our licenses with these
- 21 clips providers.
- 22 So now moving on to digital distribution of
- 23 our film and television content, we have a lot of
- 24 digital distribution models that permit space
- 25 shifting. I know that's not been the topic so far,

- 1 but I'm addressing that here as well. Just to back
- 2 up and make sure that we're on the same page with all
- 3 the nomenclature, we enter into digital distribution
- 4 licenses for our film and TV product that enable the
- 5 following business models: One is what we call EST,
- 6 Electronic-Sell-Through, which is the basically
- 7 ownership business model. There's Video-On-Demand,
- 8 which is the rental business model. There's
- 9 Subscription Video-On-Demand, which is the payment of
- 10 a monthly fee for access to content like on Netflix,
- 11 and then there's something we call
- 12 Manufacture-On-Demand, which is a product where we've
- 13 taken very old films that were never put out on DVD
- 14 and made them available to customers. We burn them
- 15 on demand and deliver DVDs to them.
- We have many many licenses in the U.S. with
- 17 various large and small partners companies like
- 18 Apple, Amazon, VUDU, Netflix, all of the cable
- 19 companies. We also license to lesser known start-up
- 20 companies like Whodi, Flick.me, Digiboo, Project
- 21 Concord, who are developing new business models. So
- 22 we regularly work with companies that come to us. We
- 23 have a business development team that actively seeks
- 24 to find opportunities to license our content. We've
- 25 done it through kiosks, advertising-supported models,

- 1 Facebook models, et cetera.
- 2 All of our licenses allow our content to be
- 3 delivered by streaming or download; so the rental or
- 4 purchase model depends on what the service supports.
- 5 ITunes until very recently was solely a download
- 6 model. Then they came out with iCloud, and now they
- 7 allow streaming as well. Amazon's has always been
- 8 streaming and downloading, and VUDU is a streaming
- 9 model. But we make it available in both streaming
- 10 and download, and we allow our content to be
- 11 delivered to abroad away, consumer electronic devices
- 12 including set-top boxes, personal computers, gaming
- 13 consoles like PS3, Xbox, and Wii, Internet-connected
- 14 televisions, Internet-connected Blu-ray players,
- 15 DVRs, and an array of mobile devices including
- 16 cellphones, tablets, and personal media players.
- 17 We license all of our content in these
- 18 different business models using access control
- 19 technologies, and we constantly are adding new, what
- 20 we call, DRMs, digital rights management solutions
- 21 that are proposed by our licensees. So we have
- 22 license through MS-DRM, FairPlay, Widevine, Verbix,
- 23 Dolby Flash, Dolby RTMPT, Marlin, AAC, et cetera, and
- 24 we're adding more all the time as our licensees are
- 25 coming up with new forms of access control.

So far we've made about 3,000 film titles 1 available to our digital licensees. All of our new release films are made available digitally when they are released, and we have about 2,850 catalog titles 5 available as well. We have made about 8,000 television episodes available including 490 seasons of 212 different series. Just real briefly, three different business 8 models which we have been supporting and working on 10 for a while, I think, offers to demonstrate the 11 ability to facilitate space shifting. One is Digital 12 Copy. You may be familiar with the program whereby 13 you buy the disk, and it comes with the right to have 14 an electronic version of that movie. We first 15 offered that in 2007. We've been adding titles ever The offer has sort of evolved over time. 16 since. 17 We've released about 220 titles with Digital Copy offers, and the titles are available through iTunes, 18 19 Windows media for the PC and for portable devices. 20 Commencing last quarter of 2011 we started 21 releasing UV-enabled, ultraviolet-enabled, digital 22 copies with our DV titles, and that will allow 23 streaming as well as downloading -- before, it was a 24 download model to obtain your digital copy. 25 So ultraviolet, as a nice seque, is the next

- 1 initiative I wanted to mention. I know you've heard
- 2 something about that in prior hearings. But it's
- 3 basically a consortium initiative that we've been
- 4 working on for many years designed to enhance
- 5 intraoperability and sharing of electronic ownership
- 6 among family and friends by allowing consumers to
- 7 purchase content from multiple retailers and use it
- 8 consistently. Right now the ecosystem is divided by
- 9 the retailer, and each retailer, like Apple or
- 10 Amazon, determines what the usage rules are for the
- 11 content purchased there, which is confusing to
- 12 consumers. So we're trying to create an ecosystem
- 13 where the content you buy from one retailer is
- 14 intraoperable across all of them.
- We also feel like this UV will enhance
- 16 consumer confidence in the digital product because it
- 17 enables ownership rights in the cloud, and so people
- 18 don't have to worry about storing large quantities of
- 19 content on a hard disk that could crash, or they
- 20 could lose all the value of the content that they
- 21 have collected.
- 22 UV was designed to be easy to use. You
- 23 register for a free account. You can include up to
- 24 six friends and family members and register 2 devices
- 25 to which content can be streamed down to. The

© 2012

- 1 consortium is composed of 60 companies, a little over
- 2 60 and growing, that are online retailers, CE
- 3 companies, IT companies, and content providers.
- 4 Again, because there were no digital retailers in the
- 5 market when we initially launched our product last
- 6 fall on the Digital Copy, now there is a retailer in
- 7 the market, Wal-Mart VUDU, and we hope to see many
- 8 more this year. Currently there have been over 2,000
- 9 UV accounts established to date since it was
- 10 released.
- 11 And the final business model that really
- 12 demonstrates our support for space shifting is the
- 13 Disc-to-Digital model. This was just recently
- 14 announced by Wal-Mart. You may have seen some
- 15 advertising as it's started to hit the prime time
- 16 media blitz. It's an initiative that allows
- 17 consumers to convert their physical DVDs into digital
- 18 ownership. It provides a way for consumers to
- 19 convert their physical film and television history
- 20 into the digital realm. We've released about 3,500
- 21 DVDs to date, and we're working to make them all
- 22 available on this Disc-to-Digital service.
- 23 The current way the service is being
- 24 provided through Wal-Mart is what we call in-store
- 25 redemption where a consumer brings disks into the

- 1 store and goes to the Wal-Mart photo kiosk and gets
- 2 copies -- signs up to have copies delivered to an
- 3 online account that they registered with VUDU. In
- 4 the next coming months, certainly later in the year,
- 5 we hope that -- we're negotiating and hope that there
- 6 will be online services available so that consumers
- 7 can do in-home redemption by taking their DVDs and
- 8 inserting them into either their PC or connected
- 9 Blu-ray player and then having an offer made to them
- 10 to have a digital copy of that film or television
- 11 show be placed in a UV account.
- 12 And then the final way that we have
- 13 envisioned this service rolling out and we're in
- 14 discussions with various partners about is through
- 15 conversion of an order history. So that would be
- 16 with a partner like Amazon who has a record of all of
- 17 your DVD purchases, and they would be able to make an
- 18 offer saying, "Here's the 20 films you've purchased
- 19 from Amazon over the last several years. If you
- 20 would like a digital copy of these films, we're happy
- 21 to put one in our Amazon locker for you."
- 22 So anyway that's a very -- something we're
- 23 very excited about. 2 million UV accounts were
- 24 created today, not 2,000. Thank you. Sorry about
- 25 that. Got my numbers wrong. A little off. Thank

- 1 you.
- 2 And let's see. So I guess in conclusion
- 3 really a key to support all of these varying business
- 4 models is that they have access controls as I
- 5 mentioned earlier. We require all of our licensees
- 6 to complete a technical questionnaire and negotiate
- 7 with them about what DRMs will enable the business
- 8 models they want to support and the devices to which
- 9 they want to deliver content. But we think that if
- 10 we didn't have access controls to support the
- 11 flexible uses of our content, that there might be
- 12 that same kind of mass piracy we've seen with
- 13 unprotected music.
- 14 We support, as I said earlier, a larger
- 15 array of access controls and are constantly
- 16 investigating new ones as they're developed. We
- 17 believe that DRM-free is not a viable business model
- 18 for us or for any other partners in the chain, the
- 19 online retailers, us or our participants, and we
- 20 think that too many exemptions being created will
- 21 sort of lead to the perception that content is
- 22 DRM-free. But in the meantime we believe these
- 23 access controls help us to deliver a broader array of
- 24 more flexible uses like incremental versus inertia.
- That concludes my remarks.

1 MS. PALLANTE: Thank you. 2 MR. MACKECHNIE: Good afternoon. My name is Dan Mackechnie. I'm the senior VP of finance for 3 20th Century Fox Home Entertainment. I'm filling in 5 for Simon Swart today who was scheduled to speak but unfortunately had a serious medical issue. present his testimony and do the best to answer questions. However, if I'm unable to do so, I'll try to follow up after the hearing. 10 My job at Fox is to oversee the finance 11 function for the home entertainment division. division is the distributor of Fox movies and 12 13 television shows via physical distribution such as 14 DVD and Blu-ray and digital distribution such as 15 Pay-Per-View, Video-On-Demand and Electronic 16 Sell-Through. 20th Century Fox is a major 17 entertainment studio that produces and distributes 18 major mainstream movies such as "Avatar," "Alvin and 19 the Chipmunks," "Ice Age," and "X-men." 20 And also through our Searchlight division we 21 produce and acquire indie motion pictures typically 22 with a smaller budget. We've distributed "The 23 Descendants, " "Slumdog Millionaire, " "Little Miss

www.CapitalReportingCompany.com

Sunshine, " and "Juno." We produce and distribute

television content such as "Simpsons," "Glee,"

24

25

(866) 448 - DEPO

- 1 "Family Guy," "Modern Family" and "The New Girl."
- 2 Right now we're faced with a really
- 3 challenging business model as our production costs
- 4 are increasing and the marketing costs associated
- 5 with releasing our content are increasing. One
- 6 aspect of this, as a media company Fox must pay for
- 7 all the content we feature in our shows, for example,
- 8 any third-party music used in our shows or any clips,
- 9 which must be -- those fees must be negotiated with
- 10 the appropriate licensor and rights-holder.
- We can only have 2,400 active titles on DVD,
- 12 463 titles on Blu-ray including our movies and our
- 13 television shows. We also evaluate new technologies
- 14 and develop new business models based on our
- 15 evaluations of new means of distribution. So we use
- 16 the primary criteria of consumer experience, is it
- 17 reliable, quality and ease of use, scale, will there
- 18 be enough consumers to consume media in a new way,
- 19 will it be accepted, and also protection. Does the
- 20 model or technology adequately protect the content
- 21 thereby preserving its value.
- 22 In the media distribution world the
- 23 landscape is changing quickly, and our business
- 24 models are changing to meet the demand. Consumer
- 25 access has changed. For example, in 2004 when the

- 1 physical DVD market was close to its peak, there were
- 2 6.7 million households with DVRs and TIVOs. Now
- 3 there are more than 55 million. There were
- 4 5.1 million HDTVs. Now there are 80 million. There
- 5 were no Blu-ray households. Now there are more than
- 6 35 million. There were no smartphones. Now there
- 7 are over 100 million. There were no tablets or
- 8 iPads. We now have over 30 million. Movies On
- 9 Demand had an estimated 45 million paid transactions,
- 10 and now we see in excess of 330 million paid
- 11 transactions.
- 12 So in this rapidly changing environment, Fox
- 13 is always seeking ways to distribute our content via
- 14 digital methods while at the same time preserving a
- 15 reasonable rate of return on our investment. Our
- 16 goal is to provide the consumer with legal access for
- 17 our content for whatever device they choose to use.
- 18 In order to do so, we need to use content protection
- 19 to prevent unauthorized and viral distribution which
- 20 would undermine the value of the content and the
- 21 consumer experience. We now offer different
- 22 technical specs and configurations that will appear
- 23 to many consumers.
- For example, in 2007 with the release of
- 25 "Live Free or Die Hard" we launched Digital Copy.

- 1 When the consumer purchased the disk, they would get
- 2 a bundled digital copy, and they could transfer that
- 3 film to any Microsoft compatible device within
- 4 minutes. With our next release we added Digital Copy
- 5 with Apple iTunes, and today we've released 126
- 6 titles with the Digital Copy feature, sold 30 million
- 7 disks with that feature and of which 5 million have
- 8 been redeemed.
- 9 Today almost all of our movies can be
- 10 purchased as a basic DVD, a feature-enhanced DVD, a
- 11 basic Blu-ray, a feature enhanced Blu-ray, or a
- 12 complete bundle with all features that include the
- 13 DVD, Blu-ray, and Digital Copy. The range in cost
- 14 the consumer -- which allows each consumer to choose
- 15 the combination or price and features that suits them
- 16 best. The multiformat bundle has been well received
- 17 by consumers so far and still makes up the majority
- 18 of our Blu-ray sales. We also offer a single-copy
- 19 option for consumers who do not want to pay for
- 20 access of multiple services or multiple levels of
- 21 quality. So access controls allow us to
- 22 technologically implement these choices. We'd have
- 23 to charge more for one-size-fits-all offerings that
- 24 many consumers would not prefer.
- 25 For the past three years 100 percent of our

- 1 release titles have been made available digitally and
- 2 usually at the same time as our physical disks. We
- 3 currently have 700 titles available to our digital
- 4 services including Apple, Amazon, VUDU, CinemaNow,
- 5 cable operators, and we also plan to add an
- 6 additional 125 titles this year. In addition, we
- 7 just launched a program that we just heard about with
- 8 Wal-Mart. Their VUDU service, Disc-to-Digital where
- 9 consumers can bring in an authenticated disk they own
- 10 for a nominal fee, have the rights instantly unlocked
- 11 to the movie so they can access it freely from any
- 12 Internet-connected device through VUDU. Right now we
- 13 have 400 titles that are included in that service,
- 14 and we plan to add at least 300 more in the coming
- 15 year.
- 16 We also have ultraviolet which is already
- 17 available via a few retailers like VUDU and Flickster
- 18 with many more to come that offers consumers the
- 19 ability to store an access or to license content in
- 20 data cloud. Our goal is to provide more consumers
- 21 with more access to more content in more formats as
- 22 the rapidly changing technology enables us to do
- 23 while maintaining copyright protections and obtaining
- 24 adequate returns on significant investments made. We
- 25 require all licensees to provide industry-leading DRM

- 1 for downloads including FairPlay and PlayReady and
- 2 also streaming including Widevine, PlayReady,
- 3 Silverlight, and Flash Access. We require
- 4 geo-filtering which ensures customers are within the
- 5 license territory to prevent misuse. We also require
- 6 stream download and register device limits that,
- 7 again, prevents misuse and piracy.
- Finally, we require output protection to
- 9 ensure content does not get illegally recorded.
- 10 We're able to negotiate these deals based on the
- 11 value of our content and an assurance to all of our
- 12 partners that the consent's value will be maintained.
- 13 For example, we are the first studio to make HD
- 14 content available to the PC in a secure manner by
- 15 partnering with Intel and cutting-edge,
- 16 hardware-based DRM called Intel Insider. Access
- 17 controls are so important to successful content
- 18 delivery that Fox would be stymied in its licensing
- 19 practices if online services could not promise
- 20 adequate security measures would be in place. We
- 21 must ensure that paying customers get full benefit of
- 22 the content services provided and to exclude free
- 23 riders. In scenarios in which we are distributing
- 24 the content of others, our licensors demand this of
- 25 us as well.

1 So the trend is toward broader availability and more interactive availability. This trend is supported by the availability of access controls and the legal protection thereof. It is also supported 5 by the ability to charge consumers for access to content because it costs money to create content and to roll out new methods of distribution. control technologies are an integral part of our 9 efforts to offer consumers the widest possible choice 10 of platforms and terms at a corresponding range of 11 price points to enjoy our movies and TV programs. 12 hope the Office will bear this in mind as it carries 13 out the job Congress assigned to it and is receiving. 14 At some point the proliferation of broad exceptions 15 allowing a broad range of users to circumvent these 16 access controls for a long list of ostensible 17 purposes undermines the security and predictability 18 that we and our numerous licensees depend on to do 19 our job. 20 The end result is the consumers would enjoy 21 less access to high quality content, not more. 22 know there are a number of complex legal issues and 23 agreements involved, and I cannot speak to those 24 issues, but I hope this statement helps provide some 25 of the real and practical business contexts that will

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

173 better inform your recommendations. 2 MS. HOFMANN: Thank you, Dan. Steve? 3 MR. METALITZ: Good afternoon. I'm Steve Metalitz, here representing the joint creators and 5 6 copyright owners, seven national and global groups 7 that are listed in our filing. This is a little bit of an asymmetric panel. 8 I'm not going to add much on the space shifting, 10 No. 10 issue. I think Dan and Clarissa have really 11 outlined how if space shifting were ever a 12 justifiable basis for an exemption, it's not today 13 when the industry is really meeting the demand for 14 such a diversity of methods for accessing their 15 Obviously, there will be more discussion of 16 this back in Washington next month. 17 So I'm going to focus mostly on No. 7. I 18 think one of the advantages of a de novo proceeding, 19 which this is, is that you don't have to unscramble 20 an egg when you're presented with a scrambled egg on 21 your plate, and that's what we've got right now in 22 exemption 7. We've got really three exemptions in 23 We've got one for the educational usage, 24 classroom usage. We've got one for documentarian,

and we've got one for noncommercial video, and these

- 1 are very different in a lot of critical ways. So
- 2 they should actually be treated separately, we
- 3 believe.
- 4 I think the most important way is in
- 5 deciding do they meet the standard that the Office
- 6 applies, which is whether the use that would be made
- 7 through circumvention is, in fact, non-infringing.
- 8 It's not a question of whether it's likely to be
- 9 infringing. That's a temporal question about uses
- 10 that are coming in the future. The standard is, is
- 11 it, in fact, non-infringing. For the classroom uses
- 12 we can pretty clearly say yes. This is specific
- 13 provision Section 110. Obviously, there could be
- 14 questions around the edges, but there's a lot of area
- 15 where we can say, yeah, that's non-infringing.
- 16 For the documentarians I think Michael
- 17 Donaldson's presentation said it better than I could.
- 18 It's more than likely to be fair use because it's
- 19 insured. A lawyer's looked at it, given an opinion
- 20 letter. Errors and omissions insurance has been
- 21 issued. When that's the case, I think we can -- it's
- 22 not always going to be non-infringing, but it
- 23 certainly gives us a high level of confidence.
- 24 For the world of noncommercial video as it
- 25 stands in the current exemption, particularly as it

- 1 would be expanded, I don't think we can have any such
- 2 confidence. Corynne said at the outset it's
- 3 indisputable that this is all non-infringing. I'm
- 4 here to dispute it. It is not all non-infringing. A
- 5 lot of it perhaps is, but a lot of it isn't as well.
- 6 I mean misconceptions and ignorance about the nature
- 7 of fair use that's replete in their filing in the
- 8 discussions that people have about whether
- 9 noncommercial uses, per else, non-infringing, whether
- 10 criticism and commentary, per else, are
- 11 non-infringing -- there's a lot of misconceptions
- 12 there, and I don't think we can have quite that high
- 13 degree of confidence that we can have certainly in
- 14 the classroom area and to a great extent with the
- 15 documentarians. So that's one big difference that I
- 16 think requires some different treatment for these
- 17 three areas. That's not the only one.
- 18 Take also the threat of litigation, for
- 19 example. Michael knows. They cited a number of
- 20 cases, and all those cases some filmmaker got sued
- 21 for infringement because the right-holder thought
- 22 there was an infringing use. In many cases the
- 23 right-holder lost. In some cases -- and we cited
- 24 some in our brief including documentarians -- the
- 25 right-holder wins. That's why people get insurance,

© 2012

- 1 right, because there's a risk of litigation.
- I don't think you can find anything in the
- 3 record that shows that kind of risk for the
- 4 noncommercial videos. And without going through the
- 5 entire issue about how this part of the DMCA relates
- 6 to the other part of the DMCA, Section 512, and the
- 7 notice of takedown process, I think a lawyer who's
- 8 advising the client that it's better to go to bat for
- 9 to get something is not just being counterintuitive.
- 10 They're committing malpractice. If that's the kind
- 11 of advice that people are getting, then it's not
- 12 surprising that they don't really understand fair use
- 13 of the DMCA.
- 14 Finally, on the issue of quality, again, I'm
- 15 not going to go into this a lot because the
- 16 documentarians presented a tech demo and there will
- 17 be further hearings on this. But their argument is
- 18 that they have a gatekeeper that requires very high
- 19 quality, and they can't get their -- they can't
- 20 really serve their market without very high quality.
- 21 Now, I do have a little trouble reconciling
- 22 this with the statement in the legislative history
- 23 that says, "Adverse impacts that flow from other
- 24 sources, including changes in the roles of libraries,
- 25 distributors, or other intermediaries, are outside

- 1 the scope of the rulemaking." So maybe that isn't a
- 2 relevant consideration, but it certainly makes sense
- 3 to me that that's why -- it's some objective
- 4 justification for the need for high quality.
- 5 In the noncommercial video area, of course,
- 6 the creators want the highest possibly quality. We
- 7 expect that from people that take their craft
- 8 seriously. But taking your craft seriously is not
- 9 coextensive with avoiding copyright infringement and
- 10 it's not coextensive with demonstrating a need to
- 11 circumvent in order to make the use that you want to
- 12 make. No one wants to say, "Oh, it's good enough to
- 13 do screen capture" or "It's good enough to do
- 14 recording off the screen" or all the different
- 15 methods that were shown to you in the technical
- 16 demonstration. It's not surprising that no one wants
- 17 to say that but because of that -- and I don't think
- 18 you'll find a single instance in the filings in
- 19 support of this where somebody says, "Oh, yeah, that
- 20 would be fine. I don't really need to rip it from a
- 21 DVD." I think inevitably you have a limitation that
- 22 doesn't really act as an limitation.
- 23 So those are some of the problems with the
- 24 existing exemption. I just want to talk about a few
- 25 of the proposed expansions, particularly having to do

Capital Reporting Company Section 1201 Rulemaking Hearing 05-17-2012

178

- 1 with the formats, the eBook authors, the expansion of
- 2 fictional films, and the expansion of primarily
- 3 noncommercial video, quote, unquote.
- 4 The format expansion is disturbing. I think
- 5 Corynne and the others were correct that if you look
- 6 at how this panel approached the DVD situation in
- 7 2000, 2002, and in that time period when it was a
- 8 fledgling medium, I think they appropriately said
- 9 we've got to give it time to establish itself. I
- 10 think a lot of the online services and streaming
- 11 services and all the things that Dan and Clarissa
- 12 talked about are in a comparable position now. That
- 13 needs to be taken into account.
- 14 Basically if you look at all these together,
- 15 audiovisual material in every single format that is
- 16 protected by access controls would be subject to
- 17 circumvention. I don't know of one that isn't
- 18 included somewhere in this list. I notice one of the
- 19 people quoted in the EFF submission says, "I really
- 20 need to get access to what's in the theaters today."
- 21 So I guess she's going in with a camcorder to get
- 22 that. It's probably not a circumvention involved; so
- 23 it's outside the scope of this proceeding. Every
- 24 single format is subject to this.
- We're really getting very close to an

© 2012

- 1 exemption where the class of work says, "Audiovisual
- 2 works." And we're also getting very close to a class
- 3 where the user is just about everybody that's putting
- 4 together some type of video. Again, some of these
- 5 will be non-infringing. Some people will take their
- 6 responsibility seriously, but a lot of them certainly
- 7 won't, and we're back to the problem we talked about
- 8 this morning of whether you've designed an exemption
- 9 that is roughly commensurate with the likelihood that
- 10 non-infringing uses will be made.
- I just want to stick to this question of
- 12 primarily noncommercial video. As that's defined in
- 13 the EFF submission, it is everything but an
- 14 advertisement. Everything. It's an informercial
- 15 because that does more than simply propose a
- 16 commercial transaction. It includes a lot of brand
- 17 awareness things, material that you see on
- 18 television. It's the kind of thing you get up and
- 19 leave because it's the ad, or you want to skip it
- 20 because it's the ad. It's not commercial speak by
- 21 their definition because it doesn't -- it does
- 22 something beyond propose a commercial transaction.
- 23 So basically this expansion would bring
- 24 virtually every video production of every kind that
- 25 isn't itself an ad -- "Go to Joe's and buy this for

- 1 2.99" -- within the scope of this. That really
- 2 brings us to the points that I think the witnesses
- 3 from the studios were stressing here. At some point
- 4 you get exemptions that are so broad and get to so
- 5 many aspects of this that you really start to
- 6 undermine the system that depends on access controls
- 7 in order to reach so many people.
- 8 I'm not going to talk much about the
- 9 alternatives to circumvention here. I've already
- 10 mentioned -- that is something worth discussing, and
- 11 probably when we get back with the documentarians in
- 12 Washington, we should talk about that because I'm not
- 13 sure that the situation is quite as dire as they
- 14 presented it. I think the important point for this
- 15 hearing is simply it's just not a -- it doesn't seem
- 16 to be a viable method of cabining the exemption for
- 17 noncommercial video because there will always be the
- 18 view that you need higher quality, you need better,
- 19 and so forth.
- 20 And finally on the point that Corynne also
- 21 mentioned about that this only applies to
- 22 non-infringing uses, fair use is built into the
- 23 exemption, we talked about that this morning. I
- 24 think there's only so much you can accomplish by
- 25 defining it in that way if you have a situation where

- 1 you're going to have a big range of uses that are, in
- 2 fact, infringing where you can't be confident in
- 3 advance that they will all be, in fact,
- 4 non-infringing. Unlike the classroom use and to some
- 5 extent unlike the documentary use. So it's really
- 6 certainly a logical stopping point for this.
- 7 We seem to be -- if we are broadening the
- 8 particular classes -- for example, we're now talking
- 9 about every form of audiovisual material that is
- 10 protected by access controls in the U.S. market and
- 11 if we start talking about, well, we can say anything.
- 12 We can allow any circumvention for any purpose as
- 13 long as we exclude the infringing uses. We're really
- 14 getting very close to saying all works can be
- 15 circumvented for non-infringing use. If there's one
- 16 thing that we know that Congress did not want, it's
- 17 that. Because they were offered that. They were
- 18 presented with that. They debated with that, and
- 19 they rejected that. So that's clearly beyond the
- 20 scope of what this proceeding can do, and I think we
- 21 need to be careful as we unscramble this egg or put
- 22 the eggs in a little better arrangement on the plate,
- 23 whatever your metaphor, that we not step cross that
- 24 line.
- Thank you.

1 MS. PALLANTE: Thank you, Steve. I think we would like to consult for a few minutes. We're going to take a break. When we come back, we're going to ask Corynne, Art, Jonathan, Laurence, and Michael to come back. But we can take ten minutes and come 5 back. That would be great. 7 (Recess taken.) MS. PALLANTE: Corynne, I'm going to start 8 with you. You did a nice job of explaining the criticism and commentary that goes into commercial 10 11 The question is very basic. How do you 12 respond to the observation that was made just before 13 the break that just because some films have comments, 14 criticism, and non-infringing standard, not all will 15 especially those that have not yet been made? 16 would you respond to that? 17 MS. McSHERRY: Of course, there are some 18 uses that are infringing. We know this. I feel like 19 I'm being a bit of a broken record that if it's 20 non-infringing, it doesn't apply. I'm sorry. If it 21 is infringing, it doesn't apply. One of the things 22 that the previous exemption cleared the way for and 23 the renewed exemption will clear the way for to the 24 extent that's contested, we'll have a chance to have 25 a court weigh in on that and have further development

- 1 if there is jurisprudence which I think would be
- 2 great. I know Mr. von Lohmann talked about this last
- 3 time -- and it hasn't happened yet, and I will
- 4 concede that probably because so many of these uses
- 5 are so obviously fair that no one wants to litigate
- 6 over them. Nonetheless it's only been a couple of
- 7 years, and I think it's actually quite important to
- 8 keep the door open.
- 9 It seems to me I really have to respond to
- 10 this idea that there's this whole world of
- 11 non-infringing issues that this exemption would clear
- 12 the way for. First of all, I would defy any
- 13 copyright lawyer to look at the uses that we've put
- 14 in the record and tell me that those were infringing.
- 15 I think it's extremely telling that we haven't had a
- 16 presentation of evidence. Let's look at this. Let's
- 17 talk about that. I'm not seeing that. So I'm very
- 18 concerned about that. I have more things I could
- 19 say, but I'm focused on responding to your question.
- 20 MR. RUWE: Corynne, you requested the
- 21 exemption for the creation of primarily noncommercial
- 22 videos. You state that's needed in order to copy the
- 23 commission's work. How do you react to the
- 24 proposition that the examples that are cited -- and
- 25 that's, as far as I can tell on the record, is Joe

- 1 Sabia's videos for the Lear Center -- that those
- 2 could be accurately described as documentary works
- 3 that are the subject of a separate exemption, one
- 4 that at least in part is for nonprofit standards?
- 5 MS. McSHERRY: I'm happy to have Joe's work
- 6 covered by whatever it can be covered by so it's
- 7 legal. That's a good thing.
- 8 MR. RUWE: But it's enough --
- 9 MR. KASUNIC: Yeah --
- 10 MR. GOLANT: -- for primarily
- 11 noncommercial --
- 12 MS. McSHERRY: Understood. I'm not sure it
- 13 would fall under documentary. I'm not sure that that
- 14 would be true. I think part of what we're here to do
- 15 is to try to remove legal clouds where it's
- 16 appropriate to do.
- 17 I'm also worried about situations where
- 18 you've got a video maker who wants -- their videos
- 19 might have a smack of commerciality in some way or
- 20 another. They're commercial artists. I pointed to
- 21 another commissioned work done for Greenpeace where,
- 22 again, it was a commissioned work. Someone's getting
- 23 paid somewhere. The fact there's simply some
- 24 commercial aspect doesn't seem to me that it should
- 25 create a presumption that would exclude it from this

- 1 exemption.
- That's really what we're talking about. I
- 3 would say we are really talking here about works that
- 4 are focused very much on criticism, commentary, and
- 5 education. We figured our exemption request was long
- 6 enough, but if it made everyone more comfortable, we
- 7 could build that in. We wouldn't have any objections
- 8 to building that language in as an additional
- 9 limitation to make it very clear that's the kinds of
- 10 uses we're talking about.
- MS. PALLANTE: Thank you.
- To our filmmakers, tell us about your
- 13 experiences in trying to license clips frustrations,
- 14 experiences, expense, haven't tried. Give us some
- 15 context on that.
- 16 MR. THRUSH: The most obvious example that
- 17 springs to my mind is during the Japanese film I was
- 18 working with a producer on that film. I wanted to
- 19 use a TV show that one of the characters was
- 20 watching. It was kind of a key point in the film
- 21 where she's waiting for her son to come down. It's
- 22 in the early stages where he's started to shut
- 23 himself away in his room. She's waiting for him to
- 24 come down; so she's watching this program for a long
- 25 time.

186 1 The producer was too nervous about trying to license a show so I had to shoot around that and not see the show she was watching. It was very awkward and didn't -- I wasn't able to construct the scene as I wanted to, and I think it suffered because of it. 5 6 MS. PALLANTE: Just to be clear, your 7 producer didn't want to go down the road of exploring --8 9 MR. THRUSH: Exactly. MS. PALLANTE: Do you think it was because 10 11 of the complexity? The cost? 12 MR. CARSON: I think it was just the uncertainty of whether he would be able to get the 13 14 rights, and it was not something that he wanted to 15 explore. It was my first film; so I was a little 16 less experienced and less insistent than I think I would be now. 17 MS. PALLANTE: It affected your creative --18 19 MR. THRUSH: Oh, absolutely. 20 MS. HOFMANN: Jonathan, have you had that 21 happen? 22 MR. McINTOSH: All my works are done -- some 23 of them take a long time. Buffy -- that took six

just my time. It's a lot of my time, but I'm not --

months to make, but I work on a budget of zero.

24

- 1 I don't have a budget; so there's no way I can clear
- 2 anything, any clips.
- 3 MS. PALLANTE: So to put you in the hot seat
- 4 for just a moment, suppose there was a royalty-free
- 5 license available for what you do. How would you do
- 6 it?
- 7 MR. McINTOSH: For clips that are owned
- 8 by --
- 9 MS. PALLANTE: I think you said your budget
- 10 is zero. Therefore, exploring licenses can't enter
- 11 into your business plan for what you do. I think we
- 12 also heard that the market is changing rapidly. The
- 13 consumer friendly models and licensing options are
- 14 changing, pressure from those who want them.
- 15 Conceivably, I suppose even with a budget of zero
- 16 permission might be possible and maybe -- I'm just
- 17 extrapolating here. Maybe there would be some
- 18 agreement, some kind of access on your films in
- 19 return, a transaction that might make sense, for
- 20 example.
- 21 MR. McINTOSH: I think what I do is a
- 22 critical part of discourse. What I do is an
- 23 important part of being -- engaging citizens in
- 24 media, and I think it's fair use; so I would ask
- 25 permission. I don't think they would give it in many

- 1 cases because they're very hypercritical of the
- 2 media.
- 3 MR. DONALDSON: Could I weigh in just
- 4 because we work with so many -- I'm not a filmmaker,
- 5 but we work with so many. In the documentary area
- 6 we, I would say, almost weekly obtain "no objection"
- 7 letters. You'll never obtain a permission. That's
- 8 not going to happen. But, you know, no objection is
- 9 just as good. The problem often is that the clips
- 10 are simply not available. Take "This Film is Not Yet
- 11 Rated," which criticized the rating system. All
- 12 studio films have -- license agreements have in them
- 13 that you can't use this clip to criticize the
- 14 industry or this film or the studios, a long list of
- 15 things you can't criticize. Beyond that many things
- 16 are not available.
- 17 Yoko Ono never would have agreed to license
- 18 15 seconds of "Imagine" in the film "Expelled." We
- 19 used it pursuant to fair use, and that case turned
- 20 out well as you know. There are a lot of simply
- 21 unavailable, but the conversation is always worth
- 22 having.
- What's interesting is we do have a case in
- 24 the office now where we're seeking permission, and
- 25 there's a lot of pushback because it's a fictional

- 1 film. That's what we do for a living, and if we want
- 2 to use these clips in a fictional film, there's just
- 3 a lot of pushback. Who knows how long it will take
- 4 to shift. There's been a shift in clips for
- 5 documentary films. There's been no question the
- 6 studio attitudes have changed immensely over the last
- 7 five years.
- 8 MR. RUWE: To Jonathan, I know you stated
- 9 that the comments -- you're concerned about the
- 10 comments being subsumed by the discussion of low
- 11 quality, but I do want to hear more about any
- 12 experience you've had with screen capturing as an
- 13 alternative and along those lines -- well, I'll let
- 14 you answer first.
- 15 MS. PALLANTE: About screen capturing?
- MR. GOLANT: Yes.
- MR. McINTOSH: So there's much ways to do
- 18 it. Often expensive. So you need software, and you
- 19 need tools.
- MR. RUWE: What kind of expenses?
- 21 MR. McINTOSH: Software that captures and
- 22 records your screen, that can be between \$50 and
- 23 \$700. If you need to record it from camera onto a
- 24 screen, that also can be -- the expense of a camera,
- 25 the flat screen, and all that. There's all that

- 1 expenses. I think even when you do that and you do
- 2 it the best way you can, my experience has been it's
- 3 not usable because even when you're screencapping
- 4 with the screencapping software, it's choppy. It
- 5 doesn't come through. The audio is -- you'll lose
- 6 quality. Then your computer has to go really, really
- 7 fast to connect to a fast connection, and you lose
- 8 that. It drops, and you have to start all over
- 9 again. There's a whole bunch of them. I've tried
- 10 it. It doesn't work. I don't know any remixers that
- 11 use that.
- 12 MR. RUWE: You did mention the notion of
- 13 wanting to capture a particular portion of the frame
- 14 and degradation coming along in that process. With
- 15 screen capture, as I understand the tech
- 16 demonstration, you can choose the particular portion
- 17 up front to capture so you're not starting with a
- 18 larger portion that's been captured. You can focus
- 19 on that character from the point of capture.
- Do you follow that I'm saying?
- 21 MR. McINTOSH: Yes, but again, the quality
- 22 of the capture itself would be bad.
- 23 MR. RUWE: You've used the screen capturing
- 24 material?
- 25 MR. McINTOSH: I have used screen capture.

- 1 It doesn't work. It's choppy. You lose frames. It
- 2 skips. When you do it up front and rip from a DVD --
- 3 let's say you make a project. Projects are rarely
- 4 the size of DVDs; so web projects are smaller often
- 5 because they want to be able to crop. You have
- 6 854 by 480 frame pixels. I would use 700 by 360, and
- 7 then I can crop things out. So I'm actually using a
- 8 smaller piece than the DVD is because I want to be
- 9 able to crop something out of the frame.
- 10 MR. RUWE: I follow that. That's what I was
- 11 getting at, but the degradation of quality with
- 12 screen capture, if you were to initially take the
- 13 focused portion, say, the bottom right-hand third of
- 14 the screen --
- 15 MS. PALLANTE: But you're saying not -- so
- 16 it's the process of taking it through the screen
- 17 capture system that creates degradation. So it
- 18 doesn't matter you do. You'll always come out with a
- 19 bad.
- MR. RUWE: I thought you were saying there's
- 21 another layer of degradation when you're cropping out
- 22 and enlarging. I thought that was part of the
- 23 problem.
- MR. McINTOSH: When you need to zoom in on
- 25 someone's lips or something like, then yes. Then, of

- 1 course, you want the highest quality video you can
- 2 get so you can do that and zoom with less
- 3 degradation. That's pixelation. That's just an
- 4 argument for trying to start with the best footage
- 5 you can so you do those effects.
- 6 MS. PALLANTE: You spoke about the
- 7 timeliness. Actually i forget which one of you did
- 8 or maybe both of you did.
- 9 MR. McINTOSH: I mentioned it.
- 10 MS. HOFMANN: Raise your hand if you spoke
- 11 about timeliness.
- 12 Could you just follow up on that, both of
- 13 you, if you don't mind. Here's the question: As we
- 14 understood it because DVDs are not often released
- 15 quickly enough, that affects your ability to comment
- 16 and criticize a number of online published
- 17 (unintelligible) as you described it, in an effective
- 18 way. Is that something that could be -- that gap,
- 19 could that be closed in the future? And if so, would
- 20 it change your view?
- 21 MR. NEILL: I think there's two steps.
- 22 There's situations where the content will eventually
- 23 be on DVD, but it's still needed in a more timely
- 24 manner for the criticism and commentary that's taking
- 25 place. Also, if you back up a little bit, there's

- 1 more and more content that simply doesn't become
- 2 available on DVD. I think that's going to be more
- 3 and more true over time. You can see them popping up
- 4 on services like Netflix now. You can see series
- 5 that have gone directly from YouTube directly to
- 6 Netflix. So it sort of deals with that idea that
- 7 there are many shows and news programs and other
- 8 kinds of work that will never be available on DVD.
- 9 MR. McINTOSH: Just add to that, I think
- 10 things are probably moving in the direction of not
- 11 being on DVD. That's especially true for shows that
- 12 are canceled because then they're obviously never
- 13 going to be on DVD or rarely are as well as
- 14 newscasting and reality TV. Reality TV never goes to
- 15 DVDs.
- 16 MR. KASUNIC: If it's not available on DVD,
- 17 how are you capturing it?
- MR. McINTOSH: For my projects? I think I
- 19 feel a little uncomfortable answering that question
- 20 because of the legal confusion. I try to be as legal
- 21 as I can possibly be.
- MS. PALLANTE: I guess the question is you
- 23 have found a way to capture it?
- MR. McINTOSH: No capturing. It doesn't
- 25 work. But otherwise.

194 1 MR. LERNER: I was going to ask if we can speak to the licensing issue but if you want to follow that up. 3 MR. RUWE: 4 Absolutely. 5 MS. PALLANTE: I think that would be great. State your name so we can put it 6 MR. RUWE: 7 on the record. 8 MR. METALITZ: My name is Brendan Charney. I'm with the USC Intellectual Property Clinic in 10 support of (7)(D) and (7)(E). We would submit that licensing should not be 11 12 considered by the Copyright Office to be an alternative to circumvention for several reasons. 13 14 First, this rulemaking was created by Congress 15 expressly in order to prevent what they call a 16 pay-for-use regime in which rights-holders would 17 essentially be able to monetize fair use by requiring 18 payment for use that has been considered 19 non-infringing unless outside of the exclusive right 20 of the copyright applicant to the rights-holders. 21 Second, as Mr. Donaldson stated and as our 22 clients submitted in the comments, licensing 23 agreements are restrictive and do not provide the

freedom of expression that our creators are entitled

to, and the Supreme Court recognized this in Campbell

24

- 1 versus Acuff-Rose when they said that rights-holders
- 2 unlikely to license for critical purposes unless
- 3 there is no critical market. There is no driven
- 4 market for critical uses.
- 5 Finally, even if licensing were to be
- 6 considered an alternative, it would not be sufficient
- 7 to remove a potential liability for fair users
- 8 because any individual licensor can't necessarily
- 9 convey all of the rights against circumvention that
- 10 might be held by other parties, for instance, guilds
- 11 and others.
- So for those reasons we would request,
- 13 again, that licensing not be considered as an
- 14 alternative to circumvention.
- 15 Thank you.
- MS. HOFMANN: Thank you very much.
- 17 MR. RUWE: Can I follow up? How do some
- 18 people obtain content that is not available on DVDs,
- 19 in other words, streaming material?
- 20 MR. McINTOSH: There are a number of
- 21 programs that will allow you to circumvent the DRM.
- 22 You can take a file and pretty much losslessly remove
- 23 what prevents you from -- you bought the file. You
- 24 downloaded it. It's yours. The question is how do I
- 25 then edit this? It's locked. It's lock in the

- 1 player. You can't get it out of the player that it's
- 2 locked to. So if it's Apple's player, it's iTunes,
- 3 it has to be there. It can't move. It can't be
- 4 played anywhere else. I certainly can't bring it
- 5 into my edit program. It won't do it. There are
- 6 programs that will remove that block and say, okay,
- 7 now this video file is already purchased. You can
- 8 now do it.
- 9 MR. KASUNIC: What if it's not downloaded
- 10 material? What if it's streaming content?
- 11 MR. McINTOSH: There are also ways you can
- 12 capture the stream. It happens in the back end.
- 13 It's not like it shows it on your screen and you grab
- 14 if. It's not like -- there's data coming through,
- 15 and you can decrypt that data and then create the
- 16 file which is coming through without showing it and
- 17 recording it. Does that make sense?
- MR. KASUNIC: So we might be dealing here
- 19 with a whole host of different type technological
- 20 protection measures. In the current exemption, for
- 21 instance, there's an exemption for DVDs protected by
- 22 a content scrambling system. Are any of these other
- 23 forms of downloaded or streaming content? There's a
- 24 whole host of --
- 25 MR. McINTOSH: There are many, and there

- 1 are -- I can't speak to them. I'm sure the industry
- 2 folks could. As far as I understand, there are
- 3 various different kinds. I think many people are
- 4 afraid to even do that.
- 5 MR. KASUNIC: So in order to include that
- 6 into an exemption, one of the ways the previous
- 7 exemption or the existing exemption has been tailored
- 8 with respect to the type of technological protection
- 9 measure that was employed, that would seem to not be
- 10 possible in order to grant an exemption that you're
- 11 talking about since this -- you couldn't refer to a
- 12 specific type of protection measure; right?
- MS. McSHERRY: Can I answer that? I think
- 14 that that's right. I think that that's right. I
- 15 think that the proposed classes are tailored in many,
- 16 many ways, but there's a practical reality which
- 17 there isn't sort of just one TPM that we can point
- 18 to. Believe me if there was, that would be nice
- 19 because we could tailor it even more, but that is the
- 20 practical reality.
- 21 MR. KASUNIC: So then that, by necessity,
- 22 becomes an enormously larger exemption since that
- 23 tailoring is not being done in terms of relating it
- 24 to a particular type of content.
- 25 MS. McSHERRY: I still think we're thinking

198

- 1 about a Jack Russell terrier. It's going to be -- I
- 2 think that that's right. That particular form of
- 3 tailoring does not apply with respect to Class C. I
- 4 would suggest that many, many other forms of
- 5 tailoring do still apply such as, for example, that
- 6 the work not be available on DVD which worked
- 7 perfectly well for our community because the remix
- 8 community not only would like to buy the original
- 9 DVD, they'd like to buy the DVD with the extra
- 10 features. They'd like to buy the DVD set. This is
- 11 their best customers.
- MR. COHEN: Hi there. My name is Alex
- 13 Cohen. I'm also with the USC IP and Technology Law
- 14 Clinic. We wanted to briefly speak to the question
- 15 of functional definitions of the format classes.
- We have the opportunity to speak to the
- 17 Class (7) (D) that we are proposing. What we have
- 18 done in that to limit the functional definition is
- 19 that we've clearly delineated two tests that allow a
- 20 reasonable user to understand what is going to be
- 21 circumvented. There has to be either encryption or
- 22 an authentication protocol. Both those tests have
- 23 been affirmed by various top courts to be considered
- 24 covered by the DMCA.
- 25 Secondly, the librarian actually granted

© 2012

199

- 1 multiple exemptions the last time around. They were
- 2 considered functional in the sense they did not
- 3 specify a specific format, and if the panel is
- 4 interested, we can submit those specific exemption
- 5 classes. They covered things that are very similar
- 6 to what we're talking about, in particular, two
- 7 classes that related to computer programs and related
- 8 to wireless telephone applications and handsets and
- 9 something that related to video games.
- 10 And in both those cases, similar to what is
- 11 happening right now, it had to do with software in
- 12 which there was a wide range of software that was
- 13 constantly changing, and, in fact, earlier the
- 14 opposite side mentioned a wide range of ways in which
- 15 they are licensing their content and that those types
- 16 of technologies are rapidly changing.
- 17 To conclude, with digital locks at every
- 18 turn and with the need to be able to access materials
- 19 that are only available on digitally transmitted
- 20 video sources such as news content, a functional
- 21 definition, we believe, would be very appropriate.
- Thank you.
- MS. PALLANTE: Thank you.
- 24 Could the studios come forward again.
- MR. NIMMER: I have one question.

© 2012

200 1 MS. HOFMANN: Nobody should move very far. Question for Mr. Thrush. 2 MR. CARSON: I'm a little confused by the two examples 3 you gave of the cases where you say you need to be 5 able to circumvent in order to get high quality video 6 Two cases you mentioned, one where you're 7 showing what's on the video screen on the back of chair in front you on an airplane and the other where 8 you're showing people watching television. 9 10 as I'm understanding it, and really clarify this, 11 what you're saying is you need the best possible 12 quality image so you can present in your film an 13 image that in real life is going to be much lower 14 So why do you need such great than that quality. 15 quality image to show something that, in fact, in 16 everyday experience is not going to be such great 17 quality? 18 MR. THRUSH: Yeah, it's quite bizarre, but 19 it comes down to sort of a post process in post 20 production where, for example, if you're shooting on 21 an airplane, it's dark. The screen actually might 22 almost be indecipherable. You might not be able to 23 see what is on that screen. If you get the right 24 exposure for the subject sitting in the seat, the

screen might be so dim you don't really get any good

- 1 recognition on this. Whereas in post if they put the
- 2 clip you want, if they take a high resolution clip,
- 3 they can adjust it so that you're kind of cheating
- 4 what you would shoot naturally but make it sharper
- 5 than it is so you get recognition of that.
- 6 MR. CARSON: Why can't they do that with a
- 7 clip that is used with a free sample screen capture?
- 8 That is still going to be pretty good quality.
- 9 MR. THRUSH: It kind of, you know -- that's
- 10 one example I'm giving you, like, if you're in a
- 11 wider shot and it's dimly lit. But another example
- 12 might be -- for example, I was imagining that scene
- 13 would be you'd open with that filling frame so it
- 14 looks huge so that it looks as if you're in an IMAX
- 15 theater on screen, and then you pull back, and you
- 16 realize they're watching it very small. So to get
- 17 something that's really big, and we might want Tom
- 18 Cruise's face as he's going through an explosion or
- 19 something like that, some detail within the scene,
- 20 then you would need the highest possible quality
- 21 source so that you can zoom in without it becoming
- 22 just mush really.
- 23 Without access -- essentially without access
- 24 to the highest possible quality source, there are
- 25 many countless instances where your options on what

- 1 you can do with that scene are inherently limited.
- 2 MR. DONALDSON: I was laughing when you
- 3 asked the question because I asked that same question
- 4 to a QC guy in Germany last year, and finally we got
- 5 it straightened out, but we had to get completely out
- 6 of the quality control people and get executives
- 7 talking to each other because their television
- 8 standards say it doesn't meet our standards. And
- 9 then to make matters worse, a lot of CIS countries
- 10 and smaller countries tend to defer to Germany, and
- 11 if it doesn't pass QC in Germany, they don't bother.
- 12 They don't even bother testing it. It's very
- 13 frustrating. That was the reason for my laughter
- 14 when you were asking the question. Identical
- 15 wording.
- 16 MR. THRUSH: Even with some of the
- 17 commercial projects I've done recently where we were
- 18 trying to shoot something that looked very
- 19 old-fashioned, it looked like it was shot years ago,
- 20 still the effects company ask for the very best
- 21 quality original material, and then they put effects
- 22 on it and gray and degrade that, and it gives them
- 23 just more control than if they're working from
- 24 something which you shot on an old camera or with old
- 25 lenses.

203

1 So it is something from the effects side of things people are always asking for the highest resolution, highest quality source material to work for no matter what you end up doing with it, no 5 matter even if you do want it to look fuzzy and kind of crappy on a motel room TV screen. 7 MR. CARSON: If I were Steve Metalitz, I probably would say, "Well, of course, people always 9 say they want the best quality." What I'm not sure 10 I've heard from you is that you need the best 11 quality. 12 MR. CARSON: They insist. They insist. 13 MR. RUWE: Their insistence -- is this about 14 the broadcast requirement? Because we heard about in 15 the tech hearing about upconverting material that 16 wasn't the highest resolution. Even some of the 17 original material was produced in the '50s. So it was not to the standard originally. 18 If that's what 19 we're talking about, what do you respond to, both of 20 you, about the possibility of just upconverting 21 material so it does meet the broadcast standards? 22 MR. CARSON: It's twofold really. One is a 23 creativity standpoint and how you want your work to 24 look and what you want to be able to do with this 25 footage and your options, you know, having the full

- 1 range of options. From a directorial point of view,
- 2 that's my strongest suit.
- 3 And the second part is more of a technical
- 4 standard which is not something I profess to
- 5 understand entirely. It's to meet broadcast stands
- 6 which Michael spoke about.
- 7 MR. DONALDSON: Upconverting is way beyond
- 8 me, but as I understand it, it requires expensive
- 9 equipment, and there are not all that many people
- 10 that can operate it anyway which puts it way past
- 11 many independent filmmakers. Not all of them but
- 12 90 percent of them.
- MR. THRUSH: On the last film I did at
- 14 Sundance we actually did that. Some of the material
- 15 I shot at low resolution, they upraised it. When it
- 16 was screened, when it was exhibited, you could really
- 17 tell. There was a softness to that material which
- 18 doesn't appear on the material that was shot properly
- 19 at high res.
- Obviously, because I'm an independent
- 21 filmmaker and self-financing these projects, that was
- 22 not -- that was sort of not a way I wanted to go, but
- 23 I had to go. Moving forward in the future, it's
- 24 certainly not -- I don't want to keep having my work
- 25 compromised like that because it does put you at an

- 1 extreme disadvantage to your colleagues and other
- 2 people in the festival.
- 3 MS. PALLANTE: What is your point?
- 4 MR. CHARNEY: I'd like to just amplify what
- 5 was said and reiterate that in this sort of context
- 6 when a filmmaker is commenting on an original work,
- 7 audience recognition is key. It's very important
- 8 that there be a level of quality in the first
- 9 instance that allows the editor in post production to
- 10 edit it down so the work is still recognizable.
- If, in the case of Laurence's film, if he is
- 12 using a scene from MI2 or whatever the most recent
- 13 "Mission Impossible" film is that shows Mumbai, the
- 14 audience needs to recognize that that is the film or
- 15 else the whole criticism and commentary that the fair
- 16 use involves will not be understood. As we saw in
- 17 the May 11 hearing, the screen capture and
- 18 upconversion processes are not sufficient to allow
- 19 that.
- Screen capture, even with video enhancement
- 21 software, is not going to remove the poor black
- 22 levels and poor contrast. When you take that and
- 23 edit it further and shrink it down, you're going to
- 24 end up with an audience that's not recognizing that
- 25 clip.

1 And, finally, with upconversion when you're commenting on an original work, you want use that original work. You want to use something that has 3 fidelity to that work just as you want to use an 5 actually quote from Shakespeare if you were 6 commenting on Shakespeare. Upconversion creates a process called interpolation as Mr. Morris had talked That creates a different work that does not have fidelity to the original. It's putting 10 basically fake lines in between. 11 And so in addition to all the quality 12 issues, in addition to all the broadcast standards 13 hat cannot be met, we're also talking about changing 14 the filmmaking progress to commenting on an original 15 to commenting on something different, and so that's 16 not going to be sufficient in order to allow for this 17 creative vision and this commentary process. 18 MS. McSHERRY: Can I speak very briefly to 19 quality? I just want to be clear because it seems to 20 me there is a suggestion that remix artists are in a 21 special class, and they don't need as high quality as 22 everybody else, and I have to take umbrage at the 23 notion that these folks are somehow second class 24 citizens. I think that's fundamentally wrong as many 25 of them have -- there's plenty of testimony in the

- 1 record from a variety of remix artists who will
- 2 explain we have an increasingly sophisticated
- 3 cultural context. If people do not take your video
- 4 seriously, if you're commenting on mainstream media,
- 5 you need to match it with quality. That's how you
- 6 are taken seriously by an audience. So they have the
- 7 same need for high quality source material as
- 8 documentarians do and as mainstream filmmakers do.
- 9 Thank you.
- 10 MS. PALLANTE: Steve and Clarissa and Dan.
- 11 The IP clinic has said that the Copyright Office
- 12 should not be considering licensing, and Jonathan,
- 13 our remix artist, has said that licensing is
- 14 restrictive and affects free speech especially in
- 15 what he does criticizing and commenting on society
- 16 and work. What's your response to that?
- 17 MR. METALITZ: I think licensing is part of
- 18 the solution. It's certainly not the whole solution.
- 19 What we tried to present from the studios was the
- 20 fact that they both -- well, I think it was mostly
- 21 from Warner Brothers who explained how the licensing
- 22 process works. First, there can be an expense
- 23 involved; so if you have a budget of zero, then
- 24 clearly clip licensing is not an option for you.
- 25 There's a lot of other things that probably are not

- 1 options for you either.
- I think it's also worth stressing the fact
- 3 there are now a lot of secondary clip licensing
- 4 services or indirect licensing, I guess is the best
- 5 way to put it, where the studio makes available a
- 6 whole library of clips that's distributed through
- 7 AnyClip or MOVIECLIPS and these other services that
- 8 Clarissa mentioned. Those are free to the user, and
- 9 to the extent those -- and there's the ability to
- 10 edit those down. So that may be part of the solution
- 11 also in some cases. Obviously, not every film is
- 12 available through one of those services, but I think
- 13 if you look at the trend, it's getting to be more and
- 14 more films.
- 15 I think the reaction -- for example, I think
- 16 Michael mentioned this. The reaction to fictional
- 17 filmmaking from a lot of the studios is "Wait a
- 18 minute. That's our business and what we do." While
- 19 I recognize they don't always license everything and
- 20 they make fair use determinations and they also make
- 21 omissions where something gets through that maybe
- 22 should have been licensed, but that's the business
- 23 they are in and part of the cost they have.
- I think Dan's testimony mentioned this is
- 25 part of the cost of making a film where you're

- 1 re-using material from another work is the licensing
- 2 of that. So it's not just for the studios, of
- 3 course. I think Clarissa and others can give more
- 4 detail about this, but it also has to do with the
- 5 residuals that are paid to talent, to the actors and
- 6 other guild members, and so all the activities that
- 7 we're talking about that would be covered by the
- 8 exemption, they would see zero. So it's not just the
- 9 studios that have an interest.
- 10 MS. HOFMANN: And to the other point that
- 11 was made that if one is criticizing or a license is
- 12 not going to be proffered, what would you say?
- MR. METALITZ: As far as I know, at least
- 14 the studios I'm familiar with, some of them do have
- 15 that provision in their licensing agreements, that it
- 16 doesn't include criticism of the studio, for example.
- 17 MR. CARSON: It does?
- 18 MR. METALITZ: It does not. They would not
- 19 license on that basis. I don't know if that's
- 20 universally true, but it's certainly true in some
- 21 cases.
- 22 MR. McINTOSH: I just wanted to respond to
- 23 this notion there are these free clip archive things
- 24 out there which, as far as I know, there are really
- 25 not. One of the projects I worked on was to take the

© 2012

210

- 1 entire "Transformers 2" movie and pull out every clip
- 2 with a female transformer in the movie and put them
- 3 back to back. It's called super cut.
- 4 MR. KASUNIC: Are there any?
- 5 MS. PALLANTE: Are there any?
- 6 MR. KASUNIC: Are there any other female
- 7 transformers?
- 8 MS. PALLANTE: There is one. Her name is
- 9 RC. She was supposed to star but they reduced her --
- 10 this is what the criticism was about -- they reduced
- 11 her role to 38 seconds. You needed to look at the
- 12 entire film to grab those little bits -- one second
- 13 here, one second here, one second here -- to make the
- 14 38 seconds and then put it up. So it wouldn't be
- 15 okay just to take one clip. To make it work, you
- 16 need to say here's the entire time she's on screen.
- 17 MR. COHEN: We just want to make one quick
- 18 clarifying point. Our understanding is that AnyClip
- 19 is a streaming-only service that that allows
- 20 consumers to view online and that it would actually
- 21 be completely not appropriate for filmmakers or
- 22 people who are creating new works because in order to
- 23 do that, you actually would need to then take the
- 24 piece of work and then incorporate it into a
- 25 completely different format. And our understanding

© 2012

- 1 from our research and from what has been discussed,
- 2 this is meant to be linked or embedded in the sense
- 3 that it's embedded in another website with Internet
- 4 access and would not be appropriate for creating a
- 5 new audiovisual work such as a film which has to be
- 6 self-standing and cannot rely on Internet access or
- 7 access to other third-party websites.
- 8 MR. CARSON: Let me ask Clarissa.
- 9 Clarissa, you heard what Laurence would like
- 10 to do with motion pictures produced by studios, and
- 11 you heard what Jonathan would like to do. Do you
- 12 license those kind of uses?
- MS. WEIRICK: It is my understanding that we
- 14 do license those kind of uses. That's what I meant
- 15 by we license for films and television uses.
- MR. CARSON: Would you ever do it without
- 17 any royalty charge at all?
- MS. WEIRICK: We charge a royalty for those
- 19 uses. We do not charge any royalty for educational
- 20 uses. We charge a reduced rate for documentary
- 21 films, but we charge our standard royalty, which I
- 22 don't know what that is, for fictional film uses.
- 23 MR. CARSON: What would the neighborhood be
- 24 of what Laurence would have to pay?
- 25 MS. WEIRICK: I really don't know. I'm not

212

- 1 a member of the clip license department. I could get
- 2 back to you on that point.
- 3 MR. CARSON: That might be helpful. The
- 4 same for the kind of uses that Jonathan is making.
- 5 MS. WEIRICK: I think, just briefly, because
- 6 we were having a discussion with the clip licensing
- 7 person, it depends on the length of the clip and
- 8 number of clips, but I think -- I don't know exactly
- 9 what the rates are.
- 10 MR. RUWE: Would you include a criticism
- 11 clause in that?
- 12 MS. WEIRICK: I do believe that in our film
- 13 licenses there is generally -- but this is for
- 14 fictional film use. There is a no disparagement
- 15 clause.
- 16 MR. KASUNIC: You said there is different
- 17 pricing for certain uses versus documentary use in a
- 18 documentary film. How do you define that line?
- 19 MS. WEIRICK: Again, I don't know. She has
- 20 standard -- our clip licensing department has
- 21 standards for what they consider documentary versus
- 22 feature films.
- 23 MR. KASUNIC: Can I put that to you, Steve,
- 24 because you mentioned with education and documentary
- 25 films and the non-infringing uses that would be one

© 2012

- 1 thing, but this is something else. Where is that
- 2 line between the two, between documentary filmmakers
- 3 and noncommercial or --
- 4 MS. WEIRICK: I am sorry. I quess I do know
- 5 that documentary means non-fiction. We're talking
- 6 about fictional uses on the one side and documentary
- 7 is non-fiction. That's my understanding of the
- 8 difference. I don't know what exact rules that are
- 9 applied, but I think there's pretty clear --
- 10 MR. KASUNIC: So we don't have a line
- 11 between noncommercial --
- 12 MS. WEIRICK: I don't know what
- 13 "noncommercial" means in the context of this.
- 14 MR. KASUNIC: That's a new issue as well
- 15 now.
- 16 MS. WEIRICK: This is no such distinction in
- 17 our clip licensing department.
- 18 MR. KASUNIC: Would it be between --
- MS. WEIRICK: Documentary.
- 20 MR. KASUNIC: -- non-fiction and fiction.
- 21 MS. WEIRICK: Correct.
- MR. RUWE: Okay.
- MS. WEIRICK: And educational, again, is
- 24 fair use and no charge.
- MR. CARSON: One quick question to Mike, and

- 1 then I want to get to Steve's response.
- I think it's implicit in what you said, but
- 3 I just want to make sure. The kinds of uses that
- 4 Laurence said he'd like to make of motion pictures
- 5 produced by major studios are uses you think are fair
- 6 use; is that correct?
- 7 MR. DONALDSON: Yes.
- 8 MR. CARSON: Steve, any response?
- 9 MR. METALITZ: I'm afraid I haven't seen any
- 10 of these pictures.
- 11 MR. CARSON: But as described. You've heard
- 12 a description.
- MR. METALITZ: Yeah. Oh, no, I think in a
- 14 lot of cases they will be fair use, and I think as
- 15 Michael described, increasingly -- obviously not all
- 16 the time -- there is going to be sort of an
- 17 independent validation of that or at least validation
- 18 it's likely to be fair use for insurance. If you
- 19 look at that category of users, I think it's very
- 20 different than the broader category of users that are
- 21 not seeking that type of validation.
- 22 MR. DONALDSON: You have to work with the
- 23 filmmaker and see how it turns out finally. You
- 24 can't just blanket say it's going to be without
- 25 seeing an application. But I'm pretty sure that

- 1 we're going to end up with Laurence being well within
- 2 the law.
- 3 MS. PALLANTE: Michael, I have a question
- 4 for you as well. You obviously work with business
- 5 transactions in your experience and you have known
- 6 insurers. What advice would you give the remix video
- 7 artist who may not even be thinking about what an
- 8 insurer has to say about his work and is going to do
- 9 what he does because it's commentary? How do you get
- 10 out of the insurer box?
- MR. DONALDSON: When he was testifying, I
- 12 was trying to think if any of the vidders had been
- 13 into the office, and they haven't. We would,
- 14 however, if someone did come in, we'd analyze it
- 15 under the fair use standards like we'd analyze
- 16 anything else. Even if they weren't going to get
- 17 insurance or didn't think they needed it, we would
- 18 apply the same rigorous standard because we don't --
- 19 then it would even be -- if anything, we would
- 20 probably be more cautious in our analysis because
- 21 they're going naked and don't have insurance to cover
- 22 the "oops." So we'd have to be very cautious about
- 23 it.
- MR. LERNER: Could I supplement?
- MS. HOFMANN: Certainly.

216

- 1 MR. LERNER: I haven't written any letters
- 2 for remixers, but I have been approached and had
- 3 conversations with remixers who were concerned about
- 4 the same things and thinking about the same things.
- 5 The analysis isn't actually that different. If you
- 6 look at transformative use, if you look at criticism
- 7 and commentary and how they're used, was the
- 8 appropriate amount used, the analysis is not
- 9 necessarily that far off.
- 10 We feel that our clients and these classes
- 11 are highly qualified in terms of the amount of rigor
- 12 they've gone through, the amount of counsel they
- 13 customarily go through, and also the amount of
- 14 education that they go through and the amount of
- 15 outreach there is to these communities.
- So we feel good about those, but that
- 17 doesn't mean that remixers don't consider the same
- 18 factors, don't seek counsel -- you may disagree.
- 19 Many don't obviously, and kids are doing what they're
- 20 doing. I'll let those folks talk about that, but I
- 21 will say -- the point of coming up here is to tell
- 22 you we do have -- I have been approached by folks who
- 23 have looked into this and considered getting
- 24 insurance who would quantify as a remix or vidder.
- 25 MR. DONALDSON: We did have one feature

© 2012

- 1 documentary that was a remix and had 10,000 items.
- 2 So we used a little different approach in terms of
- 3 the insurance company. It was about video games, and
- 4 they used video games to talk about all their
- 5 subjects. It actually turned out it had about
- 6 12,000. The standards were the same, and they
- 7 actually had no problem getting insurance for that.
- 8 Very low deductible and low premium.
- 9 MR. KASUNIC: Just briefly, as we've said in
- 10 our testimony, I think the bad news is many folks in
- 11 the room and in the studio community don't have
- 12 access to counsel. We're talking about often
- 13 immature folks who can't afford it. But that doesn't
- 14 mean there isn't a commitment to fair use. I think
- 15 quite the contrary. I think there is a strong
- 16 commitment and strong belief that their activities
- 17 are and should be sheltered by the fair use doctrine,
- 18 and I think there's an effort to make that happen.
- 19 What we've talked about is what happens if they do go
- 20 and seek legal counsel if they have used the wrong
- 21 technology to make their fair use.
- Just by the way, I'm not suggesting that any
- 23 counsel will tell them go back to BitTorrent.
- 24 Obviously no one is going to do that. I'm suggesting
- 25 something quite different. One thing I would say it

- 1 goes to the issue of I think you've heard a lot about
- 2 confusion out there. I will tell you EFF and the
- 3 Organization of Transformative Works and a number of
- 4 other nonprofits work very hard to educate people
- 5 about these issues that are here today and also about
- 6 the limits of fair use. There are resources out
- 7 there that are available, and I know that people work
- 8 very hard to take advantage of those.
- 9 MR. CARSON: Steve, you observed a couple of
- 10 years ago we expanded some of these classes relating
- 11 to use of video material in ways you think went too
- 12 far. I think that's a fair characterization, isn't
- 13 it? So in the past two years have you learned of any
- 14 issues that have arisen because of that that created
- 15 any problems for your clients that you'd like to
- 16 bring to our attention?
- 17 MR. METALITZ: Well, I think one of the
- 18 issues we've encountered has been there is a lot of
- 19 misinformation in public about what these exemptions
- 20 mean, not just in this area, but also I think you'll
- 21 concede this in the one up to your decision on the
- 22 video console area. There's a lot of material out
- 23 there that says this is great because pretty soon
- 24 we're going to be able to use all these tools to hack
- 25 the operating systems. I think there certainly has

- 1 been that kind of effect.
- 2 If you're talking about instances of --
- 3 first of all, we don't know -- I'm not sure how we
- 4 would know how much people are using this exemption,
- 5 the existing exemption for the noncommercial videos,
- 6 allowing the hack of CSS for that purpose. I'm not
- 7 sure there's any way that we would know how much that
- 8 is happening. I assume from some of what we've seen
- 9 here that it is happening a lot. I think there is
- 10 evidence in the record that says it is being used a
- 11 lot.
- I think it's also clear on the record, and I
- 13 think this is an important distinction between the
- 14 documentarian and the feature film issue and the
- 15 noncommercial video is that there are not lawsuits
- 16 being filed about this, and people say there's a
- 17 threat of risk or risk of a threat of liability under
- 18 Section 1201. I think that is -- I don't see the
- 19 practical evidence of that.
- 20 MR. CARSON: Corynne pointed out that no
- 21 opponents of the proposed exemption pointed to any
- 22 examples that they have brought forward of cases of
- 23 non-infringement which you contested in terms of
- 24 whether or not --
- MR. METALITZ: I think we contested in our

© 2012

- 1 comments. We cast out on some of them. We're not
- 2 trying to make a definitive determination of whether
- 3 a particular use is fair use or not. Our view is
- 4 that's obviously a decision for courts on a
- 5 case-by-case basis, and people can have different
- 6 opinions about that. I think you will find some
- 7 examples in our filing where we question whether
- 8 stringing together a lot of material from different
- 9 James Bond films, I believe it was, and adding a
- 10 musical soundtrack is fair use. It's obviously a
- 11 compilation of copyrighted materials and a
- 12 copyrighted sound track, and it wasn't evident to us.
- 13 Reasonable minds can differ on that, but that was
- 14 certainly our view. The idea that it's incumbent on
- 15 us to come forward with examples of uses that are
- 16 being made that are not fair I think kind of puts
- 17 the -- turns the burdens here on their head.
- 18 MR. CARSON: I'm not trying to tell you who
- 19 has any burden. I'm just wondering whether you had
- 20 any observations you can give us that might help us
- 21 out.
- 22 MR. METALITZ: I thought we had a couple in
- 23 our comments. I think they were responded to.
- MR. CARSON: We'll look at it.
- One more thing. I've got several places in

- 1 my notes from when you were talking about the various
- 2 kinds of activities we've been hearing about. You
- 3 say a lot of it is non-infringing. At the end of the
- 4 day, my impression of what you're saying is "Yeah,
- 5 there's all sorts of stuff that's non-infringing, but
- 6 that shouldn't be enough to lead to an exemption."
- 7 I'm with you there.
- I guess where I'm not sure where you're
- 9 leading me to is -- or leading us to is, is it just
- 10 that there's so much non-infringement going on that
- 11 we should stop issuing exemptions? That can't be the
- 12 answer; so what's our task here?
- When we see there are various areas in which
- 14 non-infringing activities are going on and where -- I
- 15 think you probably accept the fact that if people
- 16 take the prohibition on circumvention seriously,
- 17 they're not going to be able to do all of this
- 18 non-infringing activity. Maybe you don't accept
- 19 that. If not, tell me why you don't. But if that is
- 20 the case, then how are we to evaluate when the
- 21 non-infringing activity is something that -- I hate
- 22 to use the word but deserves, shall we say, an
- 23 exemption when it is?
- MR. METALITZ: That's a good question. Let
- 25 me respond in two points. First, the whole issue of

- 1 alternatives which has come up here as to whether
- 2 this type of activity could go on without
- 3 circumvention, we think a lot of it could. I
- 4 understand why the creators in this case or the remix
- 5 artists in this case want the best quality material
- 6 or the filmmakers want the best quality material. It
- 7 completely stands to reason.
- 8 I think what we just heard was that it would
- 9 reduce our options, it would be more difficult, it
- 10 would mean only certain ways to do things. The
- 11 standard that you have set in the preceding
- 12 rulemakings is that there is no entitlement to access
- 13 to a particular work on a particular platform of your
- 14 choosing or of our preference that would be most
- 15 convenient to you. All these things -- that's not
- 16 real the touchstone.
- 17 The touchstone is, is there a practical
- 18 ability to use alternatives and alternative
- 19 technologies, alternative sources to make these kinds
- 20 of uses. I think our view is that there is a lot
- 21 more of that. Of course, the proponents of the
- 22 exemption say that that's obviously a decision, you
- 23 know, you have to be persuaded one way or the other
- 24 on that.
- 25 In terms of the standard, the standard you

© 2012

- 1 set is, is the use, in fact, non-infringing? When
- 2 you're talking about a huge range of uses and
- 3 particularly when it's -- the touchstone is fair use,
- 4 which is inherently case by case rather than another
- 5 exception like 110, classroom use, where you have a
- 6 little more specificity, let's say, in the statute, I
- 7 think you do have a balancing job to perform. And I
- 8 think to treat the documentarians with insurance,
- 9 people who have had it validated, the same way as
- 10 people who haven't is actually not the way you should
- 11 proceed.
- I don't know what -- you have to decide what
- 13 the point is, but at some point the proportion of
- 14 potentially infringing uses or likely infringing
- 15 uses -- I should put it the other way. The
- 16 proportion of uses that are, in fact, non-infringing
- 17 is sufficiently small that it's not justified to
- 18 issue an exemption even though you say it only
- 19 applies if you're making a non-infringing use. I
- 20 just don't think that will save the validity of an
- 21 exemption where so much of the use is going to be
- 22 infringing. I can't put a percentage on it or
- 23 anything like that.
- But I can say when it involves fair use,
- 25 which is inherently case by case, and when it

- 1 involves a vast range of activity, any video
- 2 production literally would be under the exemption as
- 3 proposed to be expanded except an actual commercial.
- 4 Everything else would be covered in every format in
- 5 which access controls are used. I think it's
- 6 unmanageable for you to make that decision.
- 7 So I would encourage you to focus it more on
- 8 the areas where this is the strongest case that a
- 9 significant, quantum, non-infringing use is being
- 10 prevented by the prohibition, and that's the job
- 11 Congress gave you.
- MR. RUWE: Steve you spoke to the
- 13 alternatives available. Is the use of screen capture
- 14 software a violation of 1201?
- MR. METALITZ: Our view, as I think we've
- 16 expressed, is we're not going to opine on a
- 17 particular technology, but when it records an
- 18 unprotected output, an unencrypted output, we don't
- 19 see that that's necessarily circumvention.
- 20 MR. GOLANT: You did point to a specific
- 21 piece of software.
- MR. METALITZ: We did?
- 23 MR. RUWE: I believe you did. The software
- 24 you presented last week.
- 25 MR. METALITZ: We didn't present that. The

- 1 DVD-CTA presented that.
- 2 MR. RUWE: I think we're going to ask a
- 3 direct question about it. So whether you're prepared
- 4 to answer it today, they're not here.
- 5 MR. METALITZ: I don't represent them.
- 6 MR. RUWE: You might get a direct question
- 7 about that.
- 8 MR. METALITZ: Well, I think I did get a
- 9 direct question, and I think I gave you a direct
- 10 answer. The best answer I can give today is if it is
- 11 recording unencrypted output, then I think it's
- 12 circumvention.
- MR. RUWE: Maybe you can give a direct
- 14 question to this point. There is a serious question.
- 15 What size dog door is this, and what I'm saying is it
- 16 goes to a serious point. It goes to what the
- 17 potential harm may be in the Class 7 proposals. You
- 18 did present a useful analogy, followed up on Class 7
- 19 proposals here.
- 20 MR. METALITZ: Pardon?
- 21 MR. RUWE: How big is the door?
- 22 MR. METALITZ: I think the door is a lot
- 23 better sized in some areas, classroom use and the
- 24 documentarians and professional filmmakers that are
- 25 getting insurance, I think it's better sized there

- 1 than it is for the broad category of noncommercial
- 2 video and certainly even the broader category of
- 3 primarily noncommercial video.
- 4 MR. KASUNIC: Is there some other way that
- 5 you would suggest that would more properly tailor
- 6 what -- I think what we were thinking about last time
- 7 around in terms of noncommercial. You seem to be
- 8 suggesting now this has been interpreted in an
- 9 extremely broad way. Is that just the nature of that
- 10 realm?
- MR. METALITZ: Well, it's not a very clearly
- 12 defined category the way you decided it or the way
- 13 you recommended it, and the proposal is to broaden it
- 14 even further which, of course, is of great concern to
- 15 us. I'd be glad to consult with my clients and see
- 16 if we can give you any proposals for narrowing it.
- 17 I do think one element that I think has been
- 18 very well presented here today is that we now have
- 19 some -- this is actually similar to one thing that we
- 20 discussed in the last cycle and not adopted by the
- 21 Office which is some type of credentialing through
- 22 this type of independent validation. I think that's
- 23 a very -- it's a reasonable factor to take into
- 24 account.
- 25 MR. NIMMER: Could I follow up on that with

- 1 Michael?
- 2 MS. HOFMANN: Yes.
- 3 MR. NIMMER: If I understand Steve's
- 4 proposal -- and we did -- last time around we tried
- 5 to figure out how do you decide what is or isn't a
- 6 documentary film and who is or isn't documentary a
- 7 filmmaker? Is there some credential or something,
- 8 and we were very uncomfortable with that. Steve
- 9 seems to be suggesting, well, if you sort of go
- 10 through the E&O process and you've got E&O insurance
- 11 and agree to insurers, that's sort of like you've got
- 12 a seal of approval of someone who's probably done a
- 13 pretty decent job of figuring out whether there's
- 14 likely to be infringement there. That might be good
- 15 enough.
- 16 As a practical matter -- I don't know
- 17 whether we go for this or not but I'm just putting it
- 18 out to get your reaction. If we were to say, in
- 19 respect to whether we're talking about a documentary
- 20 film or a fictional film, to make a requirement to
- 21 enter into this class that you obtained E&O
- 22 insurance, would that be a practical problem, or is
- 23 that too late in the process for you, for example, or
- 24 is that something that could be workable?
- 25 MR. DONALDSON: I'll think about it and, of

© 2012

- 1 course, see you in Washington in two weeks. That's
- 2 the very last thing that happens.
- 3 MR. NIMMER: That's why I'm asking.
- 4 MR. DONALDSON: Some -- like in "This Film
- 5 is Not Yet Rated" we got insurance real early. There
- 6 are other films we do, but it hardly ever happens.
- 7 It always happens as soon as you get some sort of
- 8 distribution, and part of the distribution agreement
- 9 is you have insurance. It received to be very
- 10 standard, three years, \$10,000 deductible. Now the
- 11 deductabilities are shifting, and sometimes the
- 12 length is being required a little differently under
- 13 contracts. So it's the last thing that happens. My
- 14 gut is that that's not going to work, but let me
- 15 think about it a bit, and I'll see you in Washington.
- 16 MS. PALLANTE: Jonathan, just to follow up
- 17 with that, do you want to talk for just 30 seconds
- 18 about how you disseminate work?
- 19 MR. McINTOSH: I put things for free on the
- 20 Internet to download and watch on YouTube. I think
- 21 many, many and more and more of us are not producing
- 22 films for distribution through distribution platforms
- 23 that are difficult. We're producing films to be seen
- 24 by peers, seen by the Internet, e-shared, YouTube,
- 25 video, and many other places. The insurance thing.

1 MS. PALLANTE: Before we close, I'd like to give our artists and then our students the last word. So if any of you have anything to say and thank you for participating. 5 I just think there's a MR. McINTOSH: reality here which is that many, many young people They're using the media 7 are learning these tools. that is the language that they speak whether that be 9 the TV shows or movies that they're watching or video 10 games, and they want to speak back to it. 11 notice something, and they want to talk about it. 12 think in many cases they're very careful about fair 13 Again, the more we can do to make them feel 14 okay that their criticism and their commentary and 15 they're entering into a public debate about mass media, make them feel comfortable with that and that 16 17 it's legally okay, the better. 18 MR. CARSON: I just want to say thank you 19 for listening to my testimony. I think this whole 20 question of what defines a fiction film and a 21 documentary film is really tricky, and I think it's 22 going to continue to get more murky as the means of 23 production for making films becomes more accessible 24 for more people. You're going to have more people 25 out on the street making films, and they're not going

- 1 to adhere to those traditional genres. I think
- 2 you're seeing that all over the world, and I think
- 3 one of the more interesting aspects of modern cinema
- 4 is that blend of using more real people and using
- 5 real locations. And I think that's going to be
- 6 something that continues, and I think any
- 7 clarification you can get on this issue would be
- 8 enormously helpful.
- 9 MS. PALLANTE: Does the IP clinic have
- 10 anything?
- 11 MR. COHEN: I think our last point we just
- 12 want to go to the question about how does the -- how
- 13 could the Copyright Office decide whether a class is
- 14 deserving, as Mr. Carson said, or not. Our view is
- 15 that Copyright Office should continue with the
- 16 standard they that announced in the 2010
- 17 recommendation that the non-infringing use is likely
- 18 to be non-infringing and the substantial adverse
- 19 effect is or is likely to be a substantial adverse
- 20 effect and that the statute as a way to evaluate that
- 21 is to look at how narrowly tailored is both the class
- 22 definition and the uses in practice.
- We feel that by both of those standards both
- 24 documentary and fictional filmmakers well exceed that
- 25 standard by having a narrowly tailored class that

		231
1	includes an incremental approach that distinguishes	
2	between DVD and Blu-ray and digitally transmitted	
3	video and furthermore, as you've discussed	
4	extensively today, a very widespread and growing	
5	practice of errors and omission insurance that	
6	involves rigorous vetting of the fair use process by	
7	multiple third parties.	
8	And thank you for your time.	
9	MS. PALLANTE: Thank you. That concludes	
10	our hearing.	
11	(Whereupon at 4:30 p.m. the Rulemaking	
12	Hearing was concluded.)	
13		
14	00	
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
Ī		

1	CERTIFICATION OF DEPOSITION OFFICER	232
2	CERTIFICATION OF DEPOSITION OFFICER	
3	I, LISA MOSKOWITZ, RPR, CSR, hereby	
4	certify that said Rulemaking Hearing was taken at the	
5	time and place therein stated; that the testimony of	
6	said panelists was thereafter transcribed by means of	
7	computer-aided transcription; and that the foregoing	
8	is a full, complete, and true record of said	
9	testimony.	
10	I further certify that I am not of	
11	counsel or attorney for either or any of the parties	
12	in the foregoing Rulemaking Hearing and caption named	
13	or in any way interested in the outcome of this cause	
14	named in said caption.	
15		
16		
17	Lisa Moskowitz	
18	CSR No. 10816, RPR, CLR	
19		
20		
21		
22		
23		
24		
25		

	Ι με		
\$	57:3 62:24 64:9	2.99 180:1	30,000 90:23
\$10,000 228:10	70:8,14 71:5	20 38:14 83:18	300 170:14
\$100 21:14	93:19 94:24 95:8 122:5 130:20,23	164:18	31 83:21
\$2,000 149:12	132:8 219:18	2000 133:4 178:7	32 76:13 110:25
\$200 84:17	224:14	2002 129:8 178:7	330 168:10
\$25 17:19	1201(3 8:12	2003 133:4	35 168:6
\$25,000 149:4	1201(5 75:14	2004 167:25	360 46:3 191:6
\$50 189:22	1201(7)(A 126:5	2005 147:7	37 32:14
\$500 84:19	1201(a 93:5,9	2006 133:8	38 210:11,14
\$600 84:17,19	1201(f 13:10	2007 161:15	3D 11:24 63:6
\$700 189:23	27:18,21 28:3,21	168:24	02 11.21 05.0
	29:2 31:8,14,15 38:24 65:8	2009 76:15 82:4,8	4
1	66:9,20,21	120:6	4 15:22
1 5:23 15:20 20:23	73:1,7,10,11	2010 10:8 75:20 82:5,11 92:19	4,000 157:17
29:16,17 51:17 65:20,21 90:23	74:12,15 91:9 108:9 109:1	110:7 133:8	4:30 231:11
109:16	1201(f)(1 29:9	230:16	400 157:17 170:13
1:30 4:20 125:1	30:10,11	2011 161:20	405 1:20
126:2	39:9,10,25 65:25	2012 1:16 7:3	45 168:9
10 38:14 156:13	1201(f)(2 65:10	20:25 126:2	463 167:12
157:12 173:10	1201's 18:24	20th 3:2 166:4,16	48 157:1
10)(A 126:5	1242 1:21	212 161:7	480 191:6
10)(B 126:5	125 170:6	220 161:17	490 161:6
10,000 217:1	126 4:20 169:5	25 76:14 107:13	
10:30 4:11 75:13	13 127:6 145:10,14	250 20:24 73:25	5
100 146:6 168:7	140 142:14	25-minute 148:21	5 4:13 75:19 79:8 83:13 84:17
169:25	15 108:13 188:18	27,000 79:5	114:3 145:13
102 42:11	17 1:16 7:3 42:11	28 21:17	169:7
107 130:20,22	126:2 145:10,14	29 21:16	5.1 168:4
10816 1:24 232:18	18 76:25		50 76:10,12 78:21
10A 6:20	1999 120:5	3	83:16,17 111:16
10B 6:23		3 4:7 8:4,18 17:5 18:3,4 19:21	124:4
11 205:17	2 5.24 0.0 15.20	23:19 37:11 79:6	50,000 146:19
11:53 125:2	2 5:24 9:9 15:20 16:25 127:8	97:7 113:25	50s 203:17
110 174:13 223:5	150:6 162:24	130:24 131:9 135:12	512 176:6
117 65:3	164:23 210:1	3,000 161:1	55 168:3
12,000 217:6	2,000 163:8 164:24	3,500 161.1 3,500 163:20	56 24:21
1201 1:8 7:8,21	2,400 167:11	30 76:22 168:8	6
28:24 31:10 55:5,22 56:1	2,850 161:4	169:6 228:17	6,000 127:8
33.3,44 30.1		= = = = = = = = = = = = = = = = = = = =	-, 127.0

	Ι αξ	, - <u> </u>	
6.7 168:2	80s 113:12	153:24 155:8,10	199:18 201:23
60 163:1,2	854 191:6	164:17 171:10	211:4,6,7 217:12
· ·	034 171.0	186:4,13 191:5,9	222:12 224:5
68 106:18	9	194:17 199:18	accessed 88:3
	9:00 1:18 4:5 7:3	200:5,22 203:24	93:18
7	8:3	218:24 221:17	accessible 229:23
7 7:16 16:6 156:13		abroad 61:16	
173:17,22	90 156:24 204:12	160:11	accessing 20:1 138:25 139:2
225:17,18	90095 1:21	Absinthe 77:21	138:25 139:2
7(B 126:16		78:6,16 104:20	
7(C 126:17	A	absolutely 122:1	accidental 146:22
7)(B 126:5	a)(1 29:10 65:13	186:19 194:4	Accolade 31:9,16
134:6,17,18	a)(2 29:11	abstract 142:8	accommodate
140:6	65:12,18		19:5 23:20 30:14
7)(C 126:5	a.m 1:18 4:5,11	accept 32:4 35:14	129:18 131:12
134:6,17,18	7:3 75:13	92:6 221:15,18	accomplish 4:24
136:1 138:16	AAA 21:12	accepted 167:19	6:10,21 48:8,10
140:7		access 5:17 6:25	58:9 60:1 128:19
7)(D 126:5 194:10	AAC 160:23	8:20 15:8,9,17	180:24
198:17	Aaron 12:6 61:12	16:18 17:10	accomplished 4:23
7)(E 126:5 194:10	ability 9:13 10:13	21:12 24:13	5:20
´`	11:7,12 21:25	29:18 33:21 34:3	6:4,10,17,21
7)(F 126:5	56:4 79:10 80:20	36:20 40:25 41:1	17:8 58:2 128:7
7)(G 126:5	88:7,15 89:23	42:2 44:5,7 62:23 71:2,3	according 127:10
7,999,950 111:15	90:2 92:5	72:13 77:18 82:1	account 33:13
70 115:11	93:6,19 98:25	83:22 84:5	57:13,16,20,22
	103:10 134:24 155:16 161:11	86:12,15 89:2	58:1 97:12
700 170:3 191:6	170:19 172:5	93:6,13 96:10	110:12,23
70s 113:12 146:2	192:15 208:9	99:11,12,16	119:10 120:4
75 4:11	222:18	101:14	126:24 132:19
7A 4:22	able 9:18 11:5	103:4,21,23,24,2	135:6 162:23
7B 5:5	19:8 23:24 26:2	5 104:9 107:23	164:3,11 178:13
	44:24 47:20,21	116:13 121:23	226:24
7C 5:10	48:21 52:2 57:5	122:4 133:13 139:5,6 148:16	accounts 163:9
7D 5:16	59:11 71:20 72:6	149:11 154:11	164:23
7E 6:1	73:6 79:20	157:9 158:20	accurate 41:6
7F 6:8	80:1,3,16,19	159:10	accurately 184:2
7G 6:15	84:8 86:2,3,12	160:18,25	accustomed
/ U 0.13	94:2 106:13,14 107:23 108:5	165:4,10,15,23	144:10
8	115:20,25	167:25 168:16	achievable 25:7
8 4:5 16:6 112:21	116:16 117:13	169:20,21 170:11,19,21	
113:9 124:5	118:16	170.11,19,21	achieve 29:6 36:23 37:10,19
	123:8,15,19	172:3,5,7,16,21	,
8,000 161:5	124:15 141:25	178:16,20 180:6	achieving 27:19
80 156:24 168:4	143:16 145:2	181:10 187:18	29:19 30:12,17
	148:16 150:12		

	Ι αξ	, ,	
acknowledge	actual 54:24 82:9	185:8	advertising 163:15
54:12	134:22 224:3	Additionally	advertising-
acknowledged	actually 30:2	153:12	supported
25:13	36:25 37:2,18		159:25
	44:25 47:2 48:25	address 39:14 45:3	
acknowledgment	51:14,17 54:18	64:19 108:14,20	advice 86:10
51:2	55:16 59:2	addressed 30:12	176:11 215:6
acknowledgments	62:9,19 63:11	66:1,5	advising 176:8
50:25	66:13 73:6 76:21	addressing 17:2	advisor 7:25
acquire 26:8	81:13 82:7,25	152:17 159:1	
166:21	83:5,25 84:24		advocate 87:2
	85:1,14 87:5	adequate 48:25	affect 118:8
acquired	88:8,19,21	170:24 171:20	121:6,19
4:7,8,14,22	89:16,19,20	adequately 167:20	affected 9:13
5:5,11,16	90:3,11 101:6	adhere 230:1	11:15 26:25
6:1,9,16,20,23	112:12 113:11		186:18
8:22 12:20,21,25	120:8 134:24	adjudicate 40:3	
13:14	138:23 139:20	adjust 201:3	affecting 139:21
across 69:10	144:1,16 147:4	administrative	affects 66:2 192:15
156:11 162:14	174:2 183:7	8:20 103:20,23	207:14
act 1:1 14:25 15:5	191:7 192:7	104:9 107:22	affirmed 128:23
24:3 54:19	198:25 200:21	121:22	198:23
55:3,4 65:16,17	204:14 206:5		
109:12 113:8	210:20,23 216:5	admission 46:3	afford 140:23
149:21	217:5,7 223:10	adopted 108:9	217:13
150:15,16	226:19	226:20	afraid 103:12
177:22	Acuff-Rose	ads 130:1 131:7	128:13,16,17
	130:10,20,25		129:5 197:4
action 144:5	195:1	ad-supported	214:9
actions 60:20		157:19	afternoon 4:18
66:16	acute 101:18	adults 127:6	126:2,18 134:10
active 12:24 13:12	ad 179:19,20,25	advance 181:3	166:2 173:4
167:11			
	adaptation 111:13	Advanced 5:17	against 12:2
actively 26:16	add 41:3,13 65:1	advantage 9:18	60:7,16,20
159:23	70:22 75:21	62:21 77:2 218:8	61:13,14 81:4
activities 13:6 25:6	121:5 158:16	advantages 173:18	118:1 131:1,6
26:22 51:24 52:6	170:5,14 173:9		195:9
209:6 217:16	193:9	adverse 19:25	age 43:17 166:19
221:2,14	added 77:5 169:4	24:17 28:1 43:11	agency 110:15
activity 26:6,24	adding 14:2 121:5	45:14,22 46:22	
27:23 28:3,20	160:19,24	51:3 64:5 100:11	ages 145:10,14
30:9 31:12 35:1	161:15 220:9	121:16 132:24	ago 7:7 30:25 62:7
65:20 66:2 137:4		176:23	70:25 86:25
221:18,21 222:2	addition 47:15	230:18,19	108:13 111:12
224:1	61:23 122:15	adversely 9:12	115:9 126:20
actor 151:21	170:6 206:11,12	26:25	142:9 146:14
	additional 49:6	advertisement	157:16 202:19
actors 43:1 209:5	157:1 170:6	179:14	218:10
		1,7.1.	

	Ι με)	
agreed 188:17	alone 19:13 70:7	among 10:6 12:3	163:14 230:16
agreement 187:18	151:12,13,24	47:1 61:22 64:6	answer 28:9 45:3
228:8	already 17:8 20:19	75:24 98:17	46:11 69:10
	23:10 24:1 27:13	145:9 162:6	117:16 156:25
agreements	31:13 33:16	amount 81:15	166:7 189:14
64:15,24 172:23			
188:12 194:23	54:10 56:11	111:18	197:13 221:12
209:15	119:21 121:18	216:8,11,12,13,1	225:4,10
ahead 50:23 85:24	133:5,12 135:23	4	answered 43:14
aid 47:25 49:4	137:3 170:16 180:9 196:7	amplify 205:4	answering 27:7
	alternate 10:10	amply 127:2	28:5,6 193:19
airplane 153:13 154:12 200:8,21		Amsinck 147:2	anti-
	alternative 26:5	analogized 18:9	circumvention
alarm 11:23	58:3 60:17 84:21	_	13:7 18:24 50:6
Alex 3:5 126:10	85:12 86:14,17	analogy 35:16	61:25 83:10
198:12	101:21,22	225:18	135:18,21
	114:20 115:21	analysis 13:20	ŕ
alleged 22:12 23:5	131:23 189:13	· ·	anti-copyright
allegedly 25:6	194:13 195:6,14	27:16 29:1,24,25	114:8
"	222:18,19	31:17 32:7,23,25	anti-piracy 20:22
alleging 12:3	alternatives 21:15	38:24 39:12,16	- · ·
Alliance 91:1	25:8 45:15,22	51:1,7,13 91:13 109:16 110:7,24	anti-utilities 22:22
all-in-one 22:18	52:1 57:8 58:6,8	111:2,11,21	anybody 84:7
allow 12:17 20:5	91:23 92:10,16	112:8 122:13,22	AnyClip 208:7
29:15 51:19 53:8	98:19 102:20,22	130:19 131:2	210:18
	103:8 128:25	132:14 138:9	AnyClips 157:19
90:14 95:21	129:1 180:9	215:20 216:5,8	158:2
101:13 107:1,15	222:1,18 224:13	ŕ	136.2
133:13 134:4	, i	analyze 30:2	anyone 55:2 81:13
149:6 160:2,7,10	Alvin 166:18	215:14,15	121:8
161:22 169:21 181:12 195:21	am 60:19 75:17	analyzed 73:10	anything 40:2 41:3
198:19 205:18	76:6 113:11	analyzing 36:22	55:10 66:22
206:16	126:14 213:4	, c	95:18 98:8 112:3
	232:10	Anderson 144:24	116:5 124:24
allowed 75:25	amazing 146:20	Andrew 63:18	147:22 176:2
87:3,16 99:24		79:4	181:11 187:2
100:21	Amazon 131:25		215:16,19
allowing 52:7 67:2	138:19 145:3	Android 76:12	223:23 229:3
83:14 162:6	159:18 162:10	79:13 80:16 81:8	230:10
172:15 219:6	164:16,19,21	88:16,17,20	
	170:4	90:3,8 92:4	anyway 10:18
allows 37:11,13,18	Amazon's 160:7	98:16,17,20 99:5	28:16 38:6
56:9 62:5 83:11		102:18,21,23	164:22 204:10
84:22,23 85:21	American 18:2	104:8 105:18	anywhere 25:14
90:1 99:5 103:20	24:21 137:21	107:16,18	53:16 196:4
139:1 158:4	147:11 151:10	112:13 114:14	
163:16 169:14	153:5	120:19	apologize 106:7
205:9 210:19	Americans	Angeles 1:21	app 75:24 77:15
alluded 52:17	76:10,22 83:18	announced 76:13	78:18 83:2
	127:7	announced /0.13	85:11,12,16

		<u> </u>	
87:1,3,4,5,7,9	109:20,22 112:3	121:2,5	165:15,23
114:14 121:4,7	114:9 119:19	123:8,15,19	art 2:15 75:15
apparently 87:12	121:2,9 199:8	apt 67:17	82:19 90:18
appear 46:8	applied 50:3 55:16	arbitrary 86:24	112:22 126:7
168:22 204:18	66:9 213:9	archival 15:23	129:6 134:9,10
appeared 141:12	applies 29:10,11		140:9 182:4
**	66:10 78:14	archive 209:23	article 112:21
appearing 17:15	119:20 174:6	archivist 16:2	113:9 120:5
appears 41:14	180:21 223:19	area 34:24 70:24	articles 82:3
47:1,4	apply 12:23 13:11	94:11 103:7	articulate 27:14
Apple 76:13,17	35:11 37:23	112:7 158:13	41:12
77:15 78:20,25	38:6,22 39:25	174:14 175:14	artificial 10:5
80:9 81:7 85:21	46:8 50:2,6	177:5 188:5	
86:2,7 87:5,13 88:8,13,14 95:19	53:12,23 54:1,2,17	218:20,22	artist 2:19 140:12 207:13 215:7
101:5 104:25	55:1,8,18 58:25	areas 175:17	
105:17 106:15	66:12 67:6 73:17	221:13 224:8	artistic 63:2
107:1,14,15	74:12 112:15	225:23	126:21 127:4
114:17 124:4	118:20,21	aren't 10:19 123:6	artists 10:23 63:9
159:18 162:9	182:20,21	130:13	129:19 131:22
169:5 170:4	198:3,5 215:18	144:21,23	134:14 136:7
Apple's 85:10,16	appreciate 62:18	arguably 56:11	137:12
87:16,19 88:7	86:11	116:10 118:5	138:10,21,25 184:20 206:20
98:17 196:2	appreciated 48:24	argue 35:23	207:1 222:5
applicable 58:24	approach 217:2	argued 123:21	229:2
	i approacii 21/.2 i		
91:9	231:1	arguing 114·3	aside 56:3 124:14
91:9 applicant 194:20	231:1	arguing 114:3	aside 56:3 124:14
applicant 194:20	231:1 approached 49:2	argument 20:13	aspect 93:24 113:3
applicant 194:20 application	231:1 approached 49:2 111:11 178:6	argument 20:13 39:13,14 40:1	aspect 93:24 113:3 120:21 123:24
applicant 194:20 application 33:19,22 34:5	231:1 approached 49:2 111:11 178:6 216:2,22	argument 20:13 39:13,14 40:1 98:19 122:23	aspect 93:24 113:3 120:21 123:24 124:9 129:17
applicant 194:20 application	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6	argument 20:13 39:13,14 40:1	aspect 93:24 113:3 120:21 123:24
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14 92:1,6,8,11	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20 92:15	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11 117:16 Army 80:6,11	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13 assist 49:16
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14 92:1,6,8,11 95:23 96:11	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20 92:15 approved 92:7	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11 117:16	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13 assist 49:16 assistance 82:22
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14 92:1,6,8,11 95:23 96:11 99:1,4	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20 92:15 approved 92:7 apps 26:10 46:2 76:14 83:1 84:22 85:15	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11 117:16 Army 80:6,11 arrangement 181:22	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13 assist 49:16
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14 92:1,6,8,11 95:23 96:11 99:1,4 101:4,21,22	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20 92:15 approved 92:7 apps 26:10 46:2 76:14 83:1 84:22 85:15 87:14,16,25 88:3	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11 117:16 Army 80:6,11 arrangement 181:22 array 17:17	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13 assist 49:16 assistance 82:22
applicant 194:20 application 33:19,22 34:5 74:5 82:23 86:16 87:23 92:15,17 95:21 99:19 106:24 107:1,3,5,21 114:4 117:9,13 214:25 applications 4:8,9,14,15 14:18 22:20,24 26:12 77:14 78:19 79:14 92:1,6,8,11 95:23 96:11 99:1,4	231:1 approached 49:2 111:11 178:6 216:2,22 appropriate 74:6 167:10 184:16 199:21 210:21 211:4 216:8 appropriately 178:8 approval 85:16,17 227:12 approve 35:20 92:15 approved 92:7 apps 26:10 46:2 76:14 83:1 84:22 85:15	argument 20:13 39:13,14 40:1 98:19 122:23 128:5 138:2,4,8 176:17 192:4 arguments 40:6 59:16 116:11 132:12 138:5 arise 120:23 arisen 70:23 218:14 arises 30:11 117:16 Army 80:6,11 arrangement 181:22	aspect 93:24 113:3 120:21 123:24 124:9 129:17 130:7,15 167:6 184:24 aspects 18:7 74:2 180:5 230:3 assert 34:15 asserting 56:15 assertion 65:5 93:8 asserts 22:5,21 assigned 172:13 assist 49:16 assistance 82:22 134:13

	1 αξ	ze 6	
assistants 6:18 Associate 3:8 associated 167:4 association 2:13 17:15 20:10 27:5 assume 70:13 73:3	132:17,25 139:24 141:24,25 178:15 179:1 181:9 211:5 authenticated 170:9	195:18 198:6 199:19 208:5,12 218:7 224:13 Avatar 166:18 Avenue 1:20 average 146:7	136:6 146:16 151:4,14,19 154:25 167:14 171:10 basic 40:7,12 104:8 112:20 169:10,11
74:14 105:16 114:23 219:8 assumed 39:13 assumes 39:12 assurance 171:11 assure 148:2 astrophysics 10:5 asylum 152:15	authentication 5:20 6:4 44:4,8 45:1 53:25 61:20 70:5 198:22 authority 95:6 authorization 25:20 authorize 13:5	avoid 25:4 31:12 avoided 28:5 avoiding 177:9 aware 16:1 47:23 48:13 49:13 57:7 60:13,15,19 78:10 108:8 121:15 147:16	182:11 basically 37:11 43:21 59:13 65:16 71:1 72:5 77:11 82:8 111:15 115:9 116:4 117:8,12 159:6 162:3 178:14 179:23 206:10
154:25 155:4 asymmetric 173:8 atmosphere 118:10,11 attempt 23:3 attempting 60:17	14:24 42:25 authorized 13:9 25:22 28:3 51:21 authorizes 36:18,24,25 37:8 authors 178:1	awareness 179:17 away 34:11 96:12 138:17 141:5 151:6 160:11 185:23 awkward 186:3	basis 27:24 31:10 34:1 55:3 65:4 74:4 77:9 93:21 136:20,22 137:6 173:12 209:19 220:5
attempting 00:17 attempts 25:22 attendance 27:6 attention 109:8	authorship 6:7 automatically 90:8 availability 15:22 23:14 34:14,23	B backdrop 139:9 background	bat 176:8 battery 79:19 90:1 BBC 52:21 154:23
132:21 137:23 218:16 attitude 146:20	172:1,2,3 available 5:15,18 6:2,3 16:20 25:8 26:6 51:16,22	150:15 backup 22:23 back-up 6:25 bad 145:20 190:22	155:1 bear 13:21 91:21 172:12 bears 41:8
attitudes 189:6 attorney 7:25 8:16 232:11 attract 32:15	52:1,5 54:4,19 57:9 58:6,7 59:8 85:13,15 94:24 113:14	191:19 217:10 balance 26:20 57:4 86:1 balanced 57:19	beast 101:12 beauty 28:12 became 15:25 become 81:1
attractive 11:14 audience 154:23 205:7,14,24 207:6	114:10,13 120:18 128:25 131:13,15,17,19 133:5 136:3,17 144:21,23	balancing 57:4,12 223:7 barrier 62:24	144:12 150:13 193:1 becomes 96:1 197:22 229:23
audio 70:11 137:7,11 138:6 157:21 190:5 audio/video	157:24 159:14 160:9 161:2,3,5,6,18 163:22 164:6 170:1,3,17	barriers 23:7 base 80:6,11 147:6 based 20:14 34:22 60:14 71:18	becoming 90:12 149:18 201:21 bedroom 145:19 151:6
141:23 audiovisual 5:5,10,19 6:3,15	171:14 187:5 188:10,16 193:2,8,16	82:3,21 122:13,19,20 133:15 134:12	begin 7:17 beginning 65:10

	1 a	,	
103:16 113:22	181:22	blurry 143:15	27:14
begs 46:11	225:23,25	body 62:6	briefly 45:3 50:22
behalf 17:15 27:11	229:17	bomb 22:15	76:7 81:3 91:3
behavior 142:22	beyond 19:25	bona 153:8	117:6 134:18
	41:18 95:12 108:25 132:23		156:14 161:8 198:14 206:18
behind 88:22	179:22 181:19	Bond 220:9	212:5 217:9
beholden 88:23	188:15 204:7	book 142:12	bring 52:11
belief 217:16	bigger 51:10	books 117:8 119:3	112:23 137:1
believe 51:12 53:8	biggest 47:1	boost 139:3	170:9 179:23
54:24 64:18	138:22	boot 99:20,21,23	196:4 218:16
72:10 83:13 97:23 100:6	billion 17:19	100:1 107:19	brings 23:18
102:17 105:20	76:14,16	booth 148:23	163:25 180:2
140:17 141:3	bit 9:7 13:22 21:17	149:4	broad 34:23 40:22
165:17,22 174:3	36:15 62:3 86:25	booting 40:25 44:5	45:18 118:6
197:18 199:21	92:24 96:18	72:14	172:14,15 180:4
212:12 220:9 224:23	97:25 117:2	Boston 141:14	226:1,9
	118:5 122:23	bother 202:11,12	broadcast 53:14
believes 4:25 5:8,13,22 6:6,12	138:6,7 139:24 146:12 173:8	bottom 191:13	109:7 157:14 203:14,21 204:5
	182:19 192:25	bought 49:6	206:12
believing 5:1,9,14 6:12	228:15	195:23	broadcasting
Bellflower 150:1	bits 153:20 210:12	boutique 146:1	144:22
Ben 2:8 7:24 58:21	BitTorrent 132:9	box 19:5 48:9	broaden 226:13
	217:23	53:13,15 54:12	broadening 181:7
beneficial 10:13 15:2 69:14 79:10	bizarre 200:18	55:25 58:16,21	broader 45:4,11
80:13,25 128:10	black 205:21	59:2 70:10 72:6	88:14 165:23
benefit 22:21	blank 113:16	158:4 215:10	172:1 214:20
51:11 109:14	blanket 214:24	boxes 47:24 59:25 160:12	226:2
171:21	blend 230:4		broadly 51:24
benefits 10:14		Brad 99:10	69:14
47:13 67:25 85:3	blinking 113:17	brand 118:24 179:16	broken 54:11
best 23:19 35:17	blitz 163:16		63:19,21 182:19
48:8 86:5 131:23 147:12 155:21	block 70:12 196:6	BRANDON 126:10	Brothers 2:23 156:10 207:21
156:1 166:7	blockbuster 154:2	breached 121:19	
169:16 190:2	blog 129:25		brought 93:11,12 219:22
192:4 198:11	blogs 145:15,16	break 75:10 133:5,12	browser 107:12,14
200:11 202:20	Blu-ray 5:17,18,19	182:3,13	·
203:9,10 208:4 222:5,6 225:10	160:14 164:9	breaks 145:19	browsers 107:15
better 84:23 103:4	166:14 167:12	Brendan 3:3 194:8	browsing 77:11
107:3 138:6,7	168:5 169:11,13,18	brief 86:23 126:19	budget 149:5,6
173:1 174:17	231:2	175:24	166:22 186:24 187:1,9,15
176:8 180:18			10/.1,7,13
		briefed 13:21	

	ι με	,	
207:23	179:25	193:17,24	94:18 101:5,7
budgets 21:13	198:8,9,10	car 18:10 150:6	122:25 151:20
149:12	buying 68:5 77:1	care 99:25	174:21
Buffy	bytes 32:14	118:12,13	188:19,23 205:11 221:20
142:10,14,21	111:15,16 124:4	careful 96:2 119:5	203.11 221.20 222:4,5 223:4,25
143:24 145:8	,	181:21 229:12	224:8
186:23	C		case-by-case 220:5
build 129:15 143:3	cabin 56:19	carefully 147:24	•
150:6 185:7	cabining 180:16	carried 65:17,22	cases 13:24 14:20
building 1:21	cable 53:13,14	91:22 96:16	24:1,19 31:5,18 32:7,10 33:25
35:18 185:8	59:1,25 93:15	carrier 79:15	48:3,13 54:13
builds 131:11	159:18 170:5	88:19,24 90:5,6,10 146:9	60:11,15 64:7
built 135:8 180:22	calculations 68:12	<u> </u>	69:5 71:19 84:25
bunch 40:20 190:9	69:22	carriers 81:11 86:19 105:3	124:17 139:13
	calculators 11:23		146:25 147:5
bundle 169:12,16		carries 25:5	175:20,22,23 188:1 199:10
bundled 22:17	California 1:12,21	172:12	200:4,6 208:11
169:2	camcorder 178:21	carry 45:14 77:8	209:21 214:14
bunnie 79:4	camera 62:14	carrying 45:21	219:22 229:12
burden 19:12	189:23,24	cars 8:24	cast 23:3 143:25
23:15 27:21	202:24	Carson 2:7	151:18,23 220:1
28:6,19 30:8	campaign 9:20	7:11,24 48:13	casting 35:16
33:6 41:8	Campbell	49:5,8,12,20	catalog 161:4
45:14,21 51:1 74:10,13	130:9,19,25	54:6 71:7,16	e
91:14,22 105:13	194:25	72:4,11,16,25	categories 46:22
133:1 220:19	canceled 193:12	73:18 74:14 112:9 114:22	category 106:22
burdens 220:17	capabilities 83:25	112.9 114.22	214:19,20
burn 159:14	capability 102:17	119:12,21	226:1,2,12
	capable 9:16	120:5,10 186:12	causal 93:4
Bush's 87:11	_	200:2 201:6	cause 133:8
business 68:12,22	Capital 155:2	203:7,12,22	232:13
86:7 91:1 92:20	caption 232:12,14	209:17 211:8,16,23	cautious 95:17
94:12,25 148:5 157:16 158:13	capture 40:23	211.8,10,23	215:20,22
157:10 138:13	144:14 177:13	214:8,11 218:9	CE 163:2
160:18 161:8	190:13,15,17,19, 22,25 191:12,17	219:20	cease 130:2 136:19
163:11	193:23 196:12	220:18,24	ceiling 38:10
165:3,7,17	201:7 205:17,20	229:18 230:14	cell 83:22
167:3,14,23	224:13	case 19:3 21:18	
172:25 187:11 208:18,22 215:4	captured 190:18	30:8 31:4,19	cellphones 160:16
· ·	captures 189:21	32:4 48:17 49:14	cellular 83:20
button 89:16,19,21	_	51:11 54:4 60:12 66:19 67:23	120:18
<u> </u>	capturing 189:12,15	73:17,18 74:23	censorship 85:1
buy 48:25 157:22	190:23	81:4 83:10 92:13	86:18 95:14,20
161:13 162:13	170.23		

96:1	challenges 16:4	chart 24:22 52:19	circumstance
Center 128:2	challenging 167:3	cheating 201:3	13:12
129:22 184:1	chance 182:24	check 117:11	circumstances
central 33:11	change 31:20	checks 44:5,8	19:2 30:16,18 127:12 138:24
centrality 33:9	38:16	chest 149:19	circumstantial
centuries 140:1	89:13,14,20 111:16 114:17	Chevy 106:11	133:4
century 3:2 139:22	129:7 138:8	Chihuahua 35:17	circumvent 29:3
166:4,16	141:7 192:20	Chihuahuas 35:24	36:19 39:4
certain 41:17 43:16 45:19 48:3	changed 38:13	child 153:24	54:7,10 59:7,11 71:10 93:15 96:9
50:17 58:9,10,15	76:3,9,19 89:19 129:11 167:25	children 11:25	115:22 122:4
59:24 60:1 68:2	189:6	63:10 151:5	172:15 177:11
84:9 86:11	changes 38:12	child's 147:3	195:21 200:5
104:22 107:18 109:13,15	176:24	chill 12:4 61:7	circumvented
120:23 122:8	changing	chilling 102:5	55:21 181:15 198:21
123:13 212:17	167:23,24	Chipmunks	circumventing
222:10	168:12 170:22 187:12,14	166:19	54:21 55:13,17
certainly 16:13	199:13,16	choice 12:18 20:2	82:1
41:23,25 61:3 72:15 86:23	206:13	82:13 89:9 90:16	circumvention
94:11 97:10	channel 22:19	103:2 172:9	4:8,14,23,25
100:24 109:15	26:17 56:7	choices 169:22	5:1,6,8,9,11,13,1 4,20,22
112:15 114:4 117:5 120:1	158:14	choose 24:14 86:4	6:4,6,7,10,12,13,
135:21 136:24	channels 52:5	88:11 98:20 114:8,9,13	16,21 12:3 13:4
146:14 148:15	character 13:24	114.8,7,13	20:16 21:4 27:25
150:14 164:4	14:3 32:6 109:17 148:24	168:17 169:14	29:18 33:19 34:17 35:2,9
174:23 175:13 177:2 179:6	150:2,4,10	190:16	44:25 45:2 53:9
181:6 196:4	152:22 153:10	choosing 103:2	55:4,8,22
204:24 207:18	155:4 190:19	222:14	56:5,11 60:21
209:20 215:25	characteristics	choppy 190:4 191:1	65:16,17,21 70:17 91:23,25
218:25 220:14 226:2	100:18 116:22 118:23		92:11 96:16
CERTIFICATIO	characterization	chose 100:15	135:5 174:7
N 232:1	52:12 218:12	chosen 7:10	178:17,22 180:9 181:12 194:13
Certified 1:23	characters 151:18	Christian 2:12 8:13 17:13 27:8	195:9,14 221:16
certify 232:4,10	152:3,18 185:19	32:2 33:8,16	222:3 224:19
cetera 160:1,23	charge 169:23	35:6 41:2 44:10	225:12
chain 86:20	172:5	50:21 60:5 134:2	circumventions 140:8
165:18	211:17,18,19,20, 21 213:24	cinema 230:3	
chair 200:8	Charney 3:3	CinemaNow 170:4	circumvents 12:24 13:12 53:24
challenge 81:23,24 82:1 130:3	126:10 194:8 205:4	circumscribed 81:22	CIS 202:9

	1 ag	0 10	
cited 22:25 25:10	197:15 198:15	client 147:6 176:8	cloud 80:24
46:6 51:3 56:23	199:5,7 216:10		126:21 127:19
58:24 60:12 65:9	218:10	clients 57:14	128:10 162:17
69:15,19		75:2,3 82:10	170:20
175:19,23	classic 129:20	194:22 216:10	
183:24	classified 142:22	218:15 226:15	clouds 184:15
citizen 150:13	classroom 157:4	climate 154:24	CLR 1:24 232:18
	158:10,12	clings 153:10	code 7:16 15:14
citizens 134:4	173:24 174:11	clinic 3:4,6,9 194:9	32:16 42:5
141:24 150:18	175:14 181:4	198:14 207:11	codify 31:8
187:23 206:24	223:5 225:23	230:9	·
claim 31:11 61:24	classrooms 157:10		coextensive
65:3 124:2	clause 212:11,15	Clinical 3:8	177:9,10
claims 12:4 20:13	ŕ	clip 142:5,6	cogent 40:6
60:9	clean 72:7	154:1,8,16	Cohen 3:5 126:10
clarification 40:8	clear 11:11 13:2	156:19	198:12,13
43:10 103:18	18:24 19:19	157:15,19	210:17 230:11
230:7	20:17 24:24	158:11 188:13	collaborative
	25:18,21 26:11	201:2,7 205:25	25:20
clarified 97:4	29:13 34:8 39:1	207:24 208:3	
clarify 52:15 97:23	44:17 49:12,21	209:23 210:1,15	colleagues 205:1
100:6 122:22	51:20 53:21	212:1,6,7,20 213:17	collected 162:21
140:15 200:10	55:17 61:24		college 5:2,3
clarifying 210:18	71:8,9 73:3,9	clips 5:7,12 137:25	6:13,14,17 60:16
Clarissa 2:23	92:24 93:2 95:11	139:14 148:21	141:16
· -	105:17 108:2	152:2,16 154:11	
126:9 156:6,8	113:20 117:18	155:8,14	color 127:14
173:10 178:11	118:7 127:21	156:14,16,17	128:21
207:10 208:8	129:17 133:7	157:8,9,13,17,21	combatting 33:11
209:3 211:8,9	146:23 182:23	,22	85:1
class 4:6,12	183:11 185:9	158:2,4,6,9,17,2	combination
8:11,18 17:5	186:6 187:1	1 167:8 185:13	169:15
18:3,4 19:21	206:19 213:9	187:2,7 188:9	
23:19 41:15	219:12	189:2,4 208:6	comes 25:11 57:23
42:18 73:5,8,13	clearance 146:5	212:8	76:11 87:22 92:4
75:13,19 77:5	147:20	clock 87:10	110:3 112:20
79:8 81:14 83:13	cleared 182:22	clocks 11:23	115:16 152:1
104:13 107:18			157:12 161:13 200:19
115:13 131:10	clearer 39:7	close 28:17 30:19	
137:15	clearest 28:24	60:22 154:18	comfortable 185:6
150:13,17	clearing 127:19	168:1 178:25	229:16
179:1,2 198:3,17	S	179:2 181:14	coming 97:9
206:21,23	clearly 24:19	229:1	140:3,5 150:7
225:17,18	25:15 26:5 38:20	closed 83:12	160:25 164:4
227:21	70:16 109:1	100:19 101:8	170:14 174:10
230:13,21,25	111:2 119:14	192:19	190:14
classes 4:21	149:6 174:12	closing 109:4	196:14,16
126:4,16 134:6	181:19 198:19	124:24	216:21
156:13 181:8	207:24 226:11		

175:10 182:10		0	E 11	
161:20	Commencing	commerciality	company 42:21 23	4.7 9 13 15
commended commercials 133:22 150:23 114:8 147:23 25:16 27:20 29:5 30:13 37:7 30:13 37:7 41:16;12 22 20:20 20:217:3 30:13 37:7 41:16;12 22 42:2,10 45:8 52:3,4 58:13				
137:18				
commensurate 179-9 153.22 150.23 commensioned 184:21,22 202:20 217:3 comparable 20:20 178:12 41:16.21,22 42:2,10 45:8 52:3,4 58:13 62:12 75:22 comment 4:25 6:11,19 24:5,7 32:8 131:19 134:5 140:4 144:25 153:22 192:15 commit 22:6 commit 22:6 committent 84:18 130:21 217:14,16 compare 142:19 143:4 41:16.21,22 42:2,10 45:8 52:3,4 58:13 62:12 75:22 84:8,10 94:3,11 96:11 97:1 103:22 113:20 109:6 199:7 commentary 60:22 127:8 130:21 131:2,4 139:71 40:24 154:8 155:3 175:10 182:10 205:15 206:17 225:15 206:17 229:14 committed 130:23 175:10 competing 10:3 85:11 computer-aided 232:7 computer-aided 232:7 commenters 138:23 205:6 206:2,6,14,15 207:4,15 communities 139:23 competition 82:13 83:6,11 85:7,20 competitive 92:12 completies competition 82:13 83:6,11 85:7,20 competitive 92:12 completies computing 9:16 10:17 52:15 67:10 10:12 comments 18:6,8 19:10 20:12 21:5 22:7,21,25 25:15 31:22 22:7,21,25 25:15 31:22 23:18 16:20 128:21 12:15,6,17 46:9,17 47:2,5 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 46:4,10,13,17,25 47:3,7,10 61:10 64:19 51:2,10 57:17,18 20:225 114:11 83:18 189:9 216:3 concede 183:4 20:12 20:11 compents concede 183:4 20:12 20:11 compents concede 183:4 20:12 20:11 compents concede 18:3 commercial 129:17 130:6,15 139:22 20:1,23 129:1 136:21 components 103:25 conclude 33:15 compents				
commentsurate 179:9	127.18	133:22 130:23		
179-9	commensurate	commissioned		
comment 4:25	179:9	184:21,22	-	
132:4 131:19 134:5 140:4 143:5 140:4 143:5 130:21 131:2 131:3 141:2 131:3 141:2 131:3 141:2 131:3 141:2 131:3 141:2 131:3 141:2 131:3 141:2 131:3 141:3 141:3 14	comment 4.25	commission's	1/8:12	,
132:8 131:19 134:5 140:4 144:25 153:22 152:15 127:14,16 160:22 127:8 130:21 121:24 139:7 140:24 154:8 155:3 175:10 182:10 185:4 192:24 120:5:15 206:17 229:14 139:23 120:20 120:	· ·		compare 142:19	
134:5 140:4 144:25 153:22 192:15 217:14,16 commentary 60:22 127:8 130:21 131:2,4 139:7 140:24 176:10 competing 10:3 26:8 \$8:9,10 175:10 182:10 185:4 192:24 205:15 206:17 215:9 216:7 229:14 communicated 139:23 commenting 138:23 205:6 206:2,6,14,15 207:4,15 141:20 143:11 207:4,15 227:7,21,25 25:15 31:22 44:11,15,16,17 22:25 21:7,21,25 25:15 21:10,64:19 79:8,12,2,125 93:8 104:2 20:19:17 130:6,15 128:21 20:19:17 130:6,15 129:21 122:5 129:17 130:6,15 129:17 130:6,15 139:23 20:10 63:15 20:10 63:15 20:10 63:15 20:10 63:15 20:10 63:15 20:10 63:15 20:10 63:15 20:11 130:0,15 20:12 21:5 22:7,21,25 23:28 23:28 22:11 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 22:25 23:28 22:21 23:29 23:28 22:21 23:29			143:4	
144:25 153:22 192:15 84:18 130:21 217:14,16 commentary 60:22 127:8 130:21 131:2,4 139:7 140:24 139:7 140:24 139:7 140:24 154:8 155:3 175:10 182:10 185:4 192:24 205:15 206:17 229:14 135:13 commenters 81:20 commenting 138:23 205:6 206:2,6,14,15 207:4,15 207:4,15 216:15 207:4,15 216:15 227:2,21,25 25:15 31:22 44:11,15,16,17 22:25 21:15 52:18 46:9,17 47:2,5 51:15 52:18 46:9,17 47:2,5 51:15 52:18 46:9,17 47:2,5 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 20mmercial 129:17 130:6,15 139:23 217:11 20mments 20:10 21:25 21:21 20:21 2		commit 22:6	compares 32:16	
Second		commitment	<u>-</u>	
commentary 217:14,16 compelling 116:15 compendent 116:15 compendent 116:15 computers 17:9 130:21 131:2,4 176:10 compendent 10:3 232:7 computers 17:9 19:7 23:25 24:11 139:7 140:24 176:10 compendent 10:3 85:11 26:8 58:9,10 67:16 77:11 84:2 26:8 58:9,10 67:16 77:11 84:2 90:13,17 94:9,14 139:23 90:13,17 94:9,14 133:13,18,19,21 160:12 133:13,18,19,21 160:12 computing 9:16 10:17 52:15 67:10 10:12 computing 9:16 10:17 52:15 67:10 10:12 10:17 52:15 67:10 10:12 computing 9:16 10:17 52:15 67:10 10:12 10:17 52:15 67:10 10:12 computing 9:16 10:17 52:15 67:10 10:12 10:13 52:15 22:21 computing 9:16 10:17 52:15 67:10 10:12 10:13 52:15 116:9 computing 9:16 10:17 52:15 10:17 52:15 67:10 10:12 10:13 52:15 116:9 22:28:8 218:21 20:12		84:18 130:21	compatible 169:3	
Commutating 132:3 Competition 132:3 Competition 132:3 131:2,4 176:10 132:3 Competing 10:3 132:5 132:		217:14,16	compelling 116:15	<u>-</u>
130:21 131:2,4 139:7 140:24 154:8 155:3 175:10 182:10 185:4 192:24 205:15 206:17 215:9 216:7 229:14 139:23 communicate 133:23 83:6,11 85:7,20 67:16 77:11 84:2 205:15 206:17 229:14 135:13 communicate 133:23 communicate 135:13 communicate 138:23 205:6 206:2,6,14,15 141:20 143:11 216:15 227:7,2,1,25 25:15 31:22 227:7,2,1,25 25:15 31:22 44:11,15,16,17 22:25 22:7,2,1,25 25:18 46:9,17 47:2,5 51:15 52:18 47:3,7,10 61:10 64:19 79:8,12,21,25 93:8 104:2 62:10 63:15 79:8,12,21,25 29:13 128:21 20:11 20:12 138:29 20:11 20:12 138:29 20:11 20:12 138:29 20:11 20:12 138:29 20:11 completed 14:11 completed 14:11 complex 32:19 172:22 complex 32:19 172:22 complex 32:19 172:22 complex 42:10 20:12 13 189:9,10 129:9 136:21 129:17 130:6,15 49:2 57:21 91:2 129:17 130:6,15 49:2 57:21 91:2 137:9 129:9 136:21 137:9 179:16,20,22 147:14 148:1,4 182:10 184:10 183:13 20:0000000000000000000000000000000000		committed 132.2	compensated	232.7
139.7 140.24 176:10 competing 10:3 85:11 26:8 58:9,10 67:16 77:11 84:2 205:15 206:17 215:9 216:7 229:14 135:13 communicate 139:23 communicate 139:23 communicate 206:2,6,14,15 206:2,6,14,15 216:15 227,21,25 25:15 227,21,25 25:15 227,21,25 25:15 31:22 44:11,15,16,17 22:25 46:9,17 47:2,5 51:15 52:18 61:10 64:19 51:2,10 57:17,18 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 129:17 130:6,15 137:9 179:16,20,22 184:20 24:18:21 137:9 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 179:16,20,22 184:20 183:13 189:9,17 183:13 189:9,17 189:17,19,20,22 184:20 24:25 183:13 189:17,19,20,22 183:20 183:13 189:17,19,20,22 183:20 183:13 189:17,19,20,22 183:20 183:13 189:17,19,20,22 183:20 183:13 183:16 133:13 183:16 133:13 183:16 133:13 183:16 133:13 183:16 133:13 183:16 133:13 183:16 133:13 183:16 133:13 133:16 133:18 133:16 133:18 133:19 133:19 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:18 133:1			-	
154:8 155:3 175:10 182:10 77:24 115:16 77:24 115:16 205:15 206:17 215:9 216:7 229:14 135:13 communicated		l e		19:7 23:25 24:11
175:10 182:10 185:4 192:24 205:15 206:17 215:9 216:7 229:14 135:13 229:14 206:26,14,15 206:26,14,15 207:4,15 141:20 143:11 2207:4,15 22:7,21,25 25:15 31:22 22:7,21,25 25:15 31:22 44:11,15,16,17 22:25 46:4,10,13,17,25 46:9,17 47:2,5 51:15 52:18 47:3,7,10 61:10 64:19 79:8,12,21,25 93:8 104:2 129:17 130:6,15 139:23 217:11 20mperior omponents 18:22 129:17 130:6,15 137:9 179:16,20,22 183:20 163:13 182:10 182:10 183:11 183		17/6:10		
185:4 192:24 205:15 206:17 205:15 206:17 215:9 216:7 229:14 135:13 220:11 232:8 2		commonalities	85:11	67:16 77:11 84:2
205:15 206:17 215:9 216:7 229:14 communicate 135:13 competitive 92:12 competitive 92:12 computing 9:16 10:17 52:15 67:10 101:2 commenting 138:23 205:6 206:2,6,14,15 207:4,15 communities 16:20 128:21 141:20 143:11 complete 110:14 165:6 169:12 232:8 computing 9:16 10:17 52:15 67:10 101:2 comments 18:6,8 19:10 20:12 21:5 22:7,21,25 25:15 31:22 141:20 143:11 216:15 completely 14:21 58:24 66:21 70:6 154:6 202:5 210:21,25 22:7 complex 32:19 172:22 complex 32:19 172:22 complex 32:19 172:22 complex 32:19 172:22 complex 42:10 66:10 64:19 51:2,10 57:17,18 51:2,10 57:17,18 59:38 104:2 complex 42:10 62:10 63:15 99:17 component 52:22 99:17 component 52:22 103:25 component 52:22 114:11 183:18 103:25 component 52:22 144:14 87:12,13 103:25 component 52:22 147:14 148:1,4 159:17,19,20,22 component 63:1 124:16 concerns 20:14 70:20 75:7 118:1 commercial 129:17 130:6,15 134:1 199:17 component 52:22 129:9 136:21 component 52:22 129:9 136:21 component 52:22 129:9 136:21 concerns 20:14 70:20 75:7 118:1 components 139:23 components 103:25 concerns 20:14 70:20 75:7 118:1 concluded 231:12 concerned 61:7 70:17 92:25 concluded 231:12 concluded 231:12 concerned 62:7 73:4 133:16 concluded 231:12 concluded 231:12 concluded 231:12		77:24 115:16	competition 82:13	90:13,17 94:9,14
commenters 120 135:13 communicate 135:13 compositive 92:12 computing 9:16 10:17 52:15 67:10 101:2 107:13 115:18 116:9 206:2,6,14,15 206:2,6,14,15 216:15 22:7,21,25 25:15 31:22 44:11,15,16,17 22:25 46:4,10,13,17,25 51:15 52:18 47:3,7,10 61:10 64:19 79:8,12,21,25 93:8 104:2 106:15 106:12 107:13 115:18 116:9 conceded 139:23 computing 9:16 10:17 52:15 67:10 10:12 107:13 115:18 116:9 232:8 completely 14:21 232:8 completely 14:21 58:24 66:21 70:6 154:6 202:5 210:21,25 222:7 12:2,5 16:16 22:25 210:21,25 222:7 22:25 22		communal 153:17	83:6,11 85:7,20	
Commenters 81:20			competitive 02:12	160:12
commenters 81:20 communicated 220:11 10:17 52:15 commenting 139:23 complete 10:10 20:12 10:17 52:15 206:2,6,14,15 16:20 128:21 232:8 16:56 169:12 107:13 115:18 207:4,15 141:20 143:11 completely 14:21 232:8 concede 183:4 19:10 20:12 21:5 216:15 58:24 66:21 70:6 154:6 202:5 210:21,25 22:7 22:7,21,25 25:15 11:15,16,17 210:21,25 22:7 20:21,25 22:7 20:21,25 22:7 31:22 44:11,15,16,17 22:25 20:21,25 22:7 complex 32:19 172:22 46:9,17 47:2,5 46:4,10,13,17,25 46:4,10,13,17,25 complex 32:19 172:22 51:15 52:18 47:3,7,10 complexity 186:11 complex 42:1 61:10 64:19 51:2,10 57:17,18 complex 42:20 79:8,12,21,25 59:21 61:15 component 52:22 93:8 104:2 62:10 63:15 71:14 87:12,13 182:13 189:9,10 128:22 198:7,8 217:11 components 137:9 179:16,20,22 147:14 148:1,4			<u> </u>	computing 9.16
commenters 81:20 communicated 139:23 complete 110:14 67:10 101:2 107:13 115:18 138:23 205:6 206:2,6,14,15 16:20 128:21 165:6 169:12 232:8 16:20 128:21 16:56 169:12 232:8 concede 183:4 218:21 comments 18:6,8 19:10 20:12 21:5 community 10:21 58:24 66:21 70:6 154:6 202:5 210:21,25 222:7 conceivably 50:17 187:15 31:22 11:15,16,17 22:25 complex 32:19 172:22 concern 25:17 56:2,3 96:18 226:14 concern 25:17 56:2,3 96:18 226:14 concerned 61:7 70:17 92:25 concerned 61:7 70:17 92:25 114:1 183:18 189:9 216:3 component 52:22 99:17 component 52:22 99:17 components 189:9 216:3 concerns 20:14 70:20 75:7 118:1 concerns 20:14 70:20 75:7 118:1 concluded 33:5,7 73:4 133:16 134:1 199:17 concluded 231:12 concluded 231:12 <td< th=""><th>229:14</th><th>135:13</th><th></th><th></th></td<>	229:14	135:13		
commenting 139:23 complete 110:14 107:13 115:18 138:23 205:6 206:2,6,14,15 16:20 128:21 165:6 169:12 232:8 207:4,15 141:20 143:11 232:8 concede 183:4 comments 18:6,8 216:15 completely 14:21 58:24 66:21 70:6 19:10 20:12 21:5 community 10:21 154:6 202:5 210:21,25 222:7 22:7,21,25 25:15 11:15,16,17 12:2,5 16:16 complex 32:19 172:22 44:11,15,16,17 22:25 46:4,10,13,17,25 complexity 186:11 concern 25:17 51:15 52:18 47:3,7,10 complexity 186:11 complexity 186:11 concerned 61:7 61:10 64:19 51:2,10 57:17,18 complexity 186:11 component 52:22 114:1 183:18 93:8 104:2 62:10 63:15 component 52:22 99:17 189:9 216:3 129:17 130:6,15 137:9 129:9 136:21 components 103:25 conclude 33:5,7 137:19 129:9 136:21 compromised 204:25 conclude 231:12 182:10 184:20 24 159:17,19,20,22 compromised	commenters 81:20	communicated	220:11	
138:23 205:6 206:2,6,14,15 16:20 128:21 232:8 232:2 232:8 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:2 232:3 232:2 232:3	commenting	139:23	complete 110:14	
206:2,6,14,15		communities	165:6 169:12	
207:4,15 141:20 143:11 216:15 completely 14:21 58:24 66:21 70:6 154:6 202:5 22:7,21,25 25:15 22:7,21,25 25:15 31:22 44:11,15,16,17 46:9,17 47:2,5 51:15 52:18 61:10 64:19 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 commercial 129:17 130:6,15 137:9 179:16,20,22 182:10 companies 42:20 49:2 57:21 91:2 189:7, 19,20,22 188:21 completely 14:21 58:24 66:21 70:6 154:6 202:5 210:21,25 222:7 210:21,25 222:7 210:21,25 222:7 20mplex 32:19 172:22 20:14 complex 32:19 172:22 20:14 concern 25:17 56:2,3 96:18 226:14 concerned 61:7 70:17 92:25 114:1 183:18 182:10 189:9 16:31 170:20 75:7 118:1 component 52:22 99:17 20mponents 103:25 20mponents 103:25 20mponents 129:9 136:21 147:14 148:1,4 159:17,19,20,22 182:10 companies 42:20 49:2 57:21 91:2 129:9 136:21 147:14 148:1,4 159:17,19,20,22 163:13 compromised 204:25 231:9 conclude 231:12 concludes 165:25 231:9 204:25 204:25 204:25 204:25 204:25 204:25 204:25 204:25 204:25 204:25 201:9 204:25 201:9 204:25 201:9			232:8	
comments 18:6,8 216:15 58:24 66:21 70:6 210:21 conceivably 50:17 19:10 20:12 21:5 22:7,21,25 25:15 11:15,16,17 210:21,25 22:7 187:15 conceivably 50:17 31:22 12:2,5 16:16 22:25 complex 32:19 172:22 56:2,3 96:18 226:14 46:9,17 47:2,5 46:4,10,13,17,25 47:3,7,10 complexity 186:11 complexity 186:11 61:10 64:19 51:2,10 57:17,18 59:21 61:15 complexity 186:11 component 52:22 114:1 183:18 93:8 104:2 62:10 63:15 71:14 87:12,13 component 129:17 130:6,15 189:9 216:3 concerns 20:14 194:22 220:1,23 217:11 components 103:25 conclude 33:5,7 197:16,20,22 147:14 148:1,4 compromised 124:16 conclude 231:12 182:10 159:17,19,20,22 20:25 20:25 231:9 20:25			completely 1/1·21	
19:10 20:12 21:5 22:7,21,25 25:15 31:22 44:11,15,16,17 12:2,5 16:16 22:25 46:9,17 47:2,5 46:4,10,13,17,25 47:3,7,10 51:2,10 57:17,18 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 129:17 130:6,15 137:9 179:16,20,22 184:20	1			218:21
22:7,21,25 25:15 11:15,16,17 12:2,5 16:16 22:25 46:9,17 47:2,5 46:9,17 47:2,5 51:15 52:18 61:10 64:19 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 129:17 130:6,15 137:9 179:16,20,22 182:10 182:10 182:10 184:20 24 163:13 182:10 184:20 24 163:13 182:10 184:20 24 163:13 182:21 182:15 182:15 182:15 187:15 210:21,25 222:7 complex 32:19 172:22 complex 32:19 172:22 complexity 186:11 complicated 44:1 complex 42:10 component 52:22 99:17 14:11 183:18 189:9 216:3 14:11 183:18 189:9 216:3 concerns 20:14 70:20 75:7 118:1 components 103:25 composed 163:1 comprehensively 124:16 comprehensively 124:16 compromised 204:25 231:9 concludes 165:25 231:9 2				•
31:22 44:11,15,16,17 46:9,17 47:2,5 51:15 52:18 61:10 64:19 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 commercial 128:22 198:7,8 179:16,20,22 182:10 182:10 184:20 24 182:10 182:10 184:20 24 182:10 182:13 182:10 182:13 182:10 182:14 182:13 182:14 182:15 182:15 182:15 182:15 182:15 182:15 182:16 182:16 182:16 182:16 182:16 182:16 182:16 182:16 182:16 182:17 182:18 182:18 182:18 182:18 182:19 172:22 172:21 172:22 172:21 172:22 173:23 182:19 172:22 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:18:11 173:22 173:4 133:16 134:1 199:17 173:4 133:16 134:1 199:17 173:4 133:16 173:23 173:2				187:15
31.22 44:11,15,16,17 22:25 56:2,3 96:18 46:9,17 47:2,5 46:4,10,13,17,25 22:25 226:14 51:15 52:18 47:3,7,10 51:2,10 57:17,18 complexity 186:11 concerned 61:7 79:8,12,21,25 59:21 61:15 complex 32:19 concerned 61:7 93:8 104:2 59:21 61:15 component 52:22 114:1 183:18 93:8 104:2 71:14 87:12,13 128:22 198:7,8 103:25 concerns 20:14 194:22 220:1,23 217:11 components 103:25 conclude 33:5,7 comprehensively 124:16 concluded 231:12 179:16,20,22 147:14 148:1,4 compromised 204:25 concludes 165:25 184:20 24 163:1 3 204:25 231:9				concern 25·17
1/2:22 226:14 226:14			-	
46:9,17 47:2,5 51:15 52:18 61:10 64:19 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 compercial 129:17 130:6,15 137:9 179:16,20,22 184:20 24 184:20 24 26:4,10,13,17,25 47:3,7,10 complicated 44:1 complicated 44:1 component 52:22 99:17 components 103:25 components 103:25 composed 163:1 composed 163:1 comprehensively 124:16 compromised 204:25 231:9		· -	172:22	
61:10 64:19 79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 commercial 129:17 130:6,15 137:9 179:16,20,22 184:20 24 61:10 64:19 51:2,10 57:17,18 59:21 61:15 62:10 63:15 71:14 87:12,13 128:22 198:7,8 217:11 components 103:25 comclude 33:5,7 73:4 133:16 134:1 199:17 concluded 231:12 concluded 231:12 concluded 165:25 231:9			complexity 186:11	
79:8,12,21,25 93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 commercial 129:17 130:6,15 137:9 179:16,20,22 184:20 24 182:10 183:17,18 59:21 61:15 62:10 63:15 71:14 87:12,13 128:22 198:7,8 217:11 component 52:22 99:17 components 103:25 conclude 33:5,7 73:4 133:16 134:1 199:17 concluded 231:12 concluded 231:12 concluded 231:12			complicated 44.1	
93:8 104:2 126:19 144:17 182:13 189:9,10 194:22 220:1,23 commercial 129:17 130:6,15 137:9 179:16,20,22 182:10 189:9 216:3 components 103:25 components 103:25 composed 163:1 composed 163:1 129:9 136:21 129:9 136:21 189:9 216:3 components 103:25 composed 163:1 composed 163:1 comprehensively 124:16 comprehensively 124:16 compromised 204:25 231:9			-	
126:19 144:17 71:14 87:12,13 182:13 189:9,10 128:22 198:7,8 194:22 220:1,23 217:11 commercial companies 42:20 129:17 130:6,15 49:2 57:21 91:2 137:9 129:9 136:21 179:16,20,22 147:14 148:1,4 182:10 159:17,19,20,22 184:20 24 163:13 71:14 87:12,13 components 103:25 conclude 33:5,7 73:4 133:16 134:1 199:17 concluded 231:12 concluded 231:12 concludes 165:25 231:9				
182:13 189:9,10 194:22 220:1,23 128:22 198:7,8 217:11 components 103:25 commercial 129:17 130:6,15 137:9 179:16,20,22 182:10 182:10 184:20 24 companies 42:20 49:2 57:21 91:2 129:9 136:21 147:14 148:1,4 159:17,19,20,22 163:13 components 103:25 composed 163:1 comprehensively 124:16 comprehensively 124:16 comprehensively 124:16 comprehensively			99:17	
182:13 189.9,10 128:22 198:7,8 103:25 70:20 75:7 118:1 194:22 220:1,23 commercial companies 42:20 composed 163:1 conclude 33:5,7 137:9 129:9 136:21 129:9 136:21 124:16 comprehensively 124:16 concluded 231:12 182:10 159:17,19,20,22 204:25 concludes 165:25 231:9			components	
commercial companies 42:20 composed 163:1 129:17 130:6,15 49:2 57:21 91:2 comprehensively 137:9 129:9 136:21 124:16 179:16,20,22 147:14 148:1,4 compromised 182:10 159:17,19,20,22 204:25 184:20 24 163:1 3		,	-	70:20 75:7 118:1
commercial companies 42:20 comprehensively 73:4 133:16 129:17 130:6,15 49:2 57:21 91:2 comprehensively 134:1 199:17 137:9 129:9 136:21 comprehensively 124:16 179:16,20,22 147:14 148:1,4 compromised concluded 231:12 182:10 159:17,19,20,22 204:25 concludes 165:25 184:20 24 163:1 3 231:9		21/:11	composed 163·1	conclude 33:5.7
129:17 130:6,15 137:9 179:16,20,22 182:10 184:20 24 129:9 136:21 147:14 148:1,4 159:17,19,20,22 163:1 3 124:16 comprehensively 124:16 comprehensively 124:16 comprehensively 124:16 comprehensively 204:25 204:25		companies 42:20	<u> </u>	-
137:9 179:16,20,22 182:10 184:20 24 159:17,19,20,22 163:13 124:16 compromised 204:25 concluded 231:12 concludes 165:25 231:9	-	49:2 57:21 91:2		
182:10 184:20 24 183:13 159:17,19,20,22 163:13 159:17,19,20,22 163:13 163:13 163:13		129:9 136:21	124:16	
182:10		147:14 148:1,4	compromised	
184:20,24 163:13 231:9		159:17,19,20,22		
/ A A A A A A A A A A A A A A A A A A A	_	163:1,3	computer	231:9
202:17 224:3 conclusion 155:7	202:17 224:3		Computer	conclusion 155:7

	1 ag		
165:2	150:16	52:2,5,20 55:20	169:1,14 187:13
conclusive 94:16	conjecture 20:15	56:5 58:12,14	consumer-based
108:22	connect 190:7	63:20,23	113:13
conclusively 65:24	connected 164:8	68:12,20 121:13 218:22	consumers 8:23
Concord 159:21			17:19 18:2
concrete 45:23	connection 62:13 158:10 190:7	consoles 4:7 8:21 9:12,14,15 10:18	67:14,15 82:22
		11:1,6,19,20,21	83:1,14,21
condense 155:16	Connectix 14:20 31:4 32:4	12:19,21 16:22	84:15,21,22,24 88:1 103:2
condition 151:4,22		17:8 18:15 19:9	137:22 162:6,12
conditions 39:8	cons 118:3	20:7	163:17,18 164:6
conduct 50:11	conscious 137:22	24:2,10,22,24	167:18 168:23
73:5 152:19	consent's 171:12	26:13,22 33:10 38:18 41:17	169:17,19,24
conducted 7:8	conservative	42:18 43:16,24	170:9,18,20
151:16	147:25	45:10,12,24	172:5,9,20 210:20
conducting 54:16	consider 212:21	46:2,11 47:21	
conference 61:19	216:17	48:15,21,23 51:5	consumption 18:16 24:25
confidence 162:16	consideration 36:7	52:19 59:24 60:8,14 61:9	68:18
174:23 175:2,13	39:24 177:2	63:19 64:14,16	Contact 129:5
confident 73:10	considerations	67:24	
181:2	116:7	68:1,4,7,16	contain 130:21
configurations	considered 100:8	69:3,4 71:20	contained 6:22
168:22	110:1 124:6	120:13 160:13	64:13 121:2
configured 94:4	194:12,18	console's 17:6	contains 41:22
	195:6,13 198:23 199:2 216:23	21:25 72:1	content 4:23
confined 32:5		consortium 162:3	5:6,17 6:2,9,21
confirmation	considering 28:7 47:15 142:21	163:1	9:14 20:6 27:2 52:25 54:1 57:21
114:24	207:12	conspicuous 81:6	59:12 68:21
confused 200:3		constantly 160:19	78:23 86:13 88:1
confusing 162:11	consistent 34:19,20	165:15 199:13	121:25 122:3
confusion 12:15	consistently 17:9	constitute 29:7	128:16 132:1,2,5
50:15 135:24	162:8	constituting 37:23	134:23 135:4,13,23
193:20 218:2	console 4:9	construct 186:4	136:2,5,10
Congress 16:3	13:13,25 14:4,6	consult 182:2	137:2,5,10,13,16
18:23 24:3 28:13	15:15,25 11:1,0	226:15	138:12,13,16
30:12 31:7 33:3 38:9,11,16	19:12		139:7 140:4
39:14,17	20:16,18,20,24	consume 52:23 167:18	158:19,23
66:21,24	21:5,15,19,24		159:10,24
67:10,18 92:25	22:1,16 23:6,12	consumed 34:10	160:2,10,17 162:7,11,13,19,2
93:20	24:8,9 25:25 26:5,14,16,21,25	consumer 82:12	0,25 163:3
108:8,9,12,15,19	31:25 42:23	88:7 105:9,13 156:20 160:11	165:9,11,21
172:13 181:16 194:14 224:11	43:18 44:2	162:16 163:25	166:25
	46:9,13 48:7	167:16,24	167:5,7,20
Congressional	49:15 51:25	168:16,21	168:13,17,18,20

	1 46		
170:19,21	93:13 122:4	168:25	copyrights 136:23
171:9,11,14,17,2	154:13,14,20	169:2,4,6,13	core 23:22 70:20
2,24 172:6,21	155:12	183:22	
173:15 192:22	160:18,25 172:8	copying 27:1	correct 49:18
193:1 195:18	202:6,23	31:18,20,23	91:10 115:2
196:10,22,23	controlled 36:20	31.18,20,23	120:7 178:5
197:24			213:21 214:6
199:15,20 200:6	controller 62:7	copyright 1:1,9	correctly 94:4
content-holders	controlling 31:16	2:14 5:8,13	
54:2	controls 16:18	7:8,12 14:14,25	corresponding 172:10
	21:12 33:22 34:4	15:5 17:23,24	
contested 182:24	40:25 44:7,19	18:5,21 19:4,22	Corynne 2:17
219:23,25	72:13 77:18 82:2	20:17 22:8,9	126:6,12,14
context 23:4 30:24	93:6 96:10	27:12 32:15 41:9	134:22 135:16
56:24 61:4 64:22		50:5 54:19 55:6	175:2 178:5
121:1 123:7	116:13 158:20	67:19 70:20 74:2	180:20 182:4,8
127:17 185:15	165:4,10,15,23 169:21 171:17	82:2 90:22	183:20 219:20
205:5 207:3		92:21,25	cost 68:7 84:19
213:13	172:3,16 178:16	93:1,10,17 94:20	169:13 186:11
	180:6 181:10	95:5,16 96:4	208:23,25
contexts 64:12	224:5	97:13 98:6	, ,
172:25	convenience 17:11	109:12 111:10	costs 167:3,4 172:6
continue 10:13	23:21	112:20 113:8	counsel 2:20
12:10 21:8 24:4	convenient 158:18	114:5,7 118:1	7:23,24,25 17:14
32:1 51:21,23	222:15	134:24	27:14 44:15
127:9 149:17		136:16,20	130:18 156:9
229:22 230:15	conversation	137:1,24 149:20	216:12,18
Continued 3:1	144:4 188:21	150:14 170:23	217:12,20,23
	conversations	173:6 177:9	232:11
continues 100:25	95:16 216:3	183:13	counsel's 8:1
127:3 230:6	converse 46:18	194:12,20	
continuing 10:22		207:11	counted 87:10
continuum 70:16	conversion 164:15	230:13,15	counterintuitive
	convert 163:17,19	copyrightable	130:11 132:11
contours 9:3	convey 195:9	42:11	176:9
contract 88:18	convoluted 30:6	copyrighted 17:17	counternotify
contracts 228:13		18:13,17,23	128:14
contrary 93:7	Cooper 144:24	21:19 24:5,8	countless 201:25
217:15	coordinates 72:14	25:1,16 33:18	
	copied 32:20	34:8,9,15,16,18	countries 202:9,10
contrast 143:5	<u> </u>	52:9,24 53:2	country 131:5
205:22	copies 6:25 15:24	68:18 120:15	153:1
contribute 139:15	16:12 56:10	121:10 134:5	couple 9:5 27:15
contributed 79:23	137:14 161:22	220:11,12	33:7 50:24 54:8
	164:2	copyright-holder	62:7 64:10 70:25
control 12:24	copy 15:7,16 32:13	113:2	83:5 86:25 89:4
13:13 29:18 42:2	111:15		91:19 106:3
44:5 62:23	161:12,17,24	copyrighting	114:22 142:8
71:2,4 84:16	163:6 164:10,20	111:22	153:13,23 154:7
88:11 89:5 90:1	,		100.10,40 104./

	1 ag		
183:6 218:9	142:16 152:5,6	144:8,12,16	Cube 43:3
220:22	158:7 162:12	crib 147:3	Cullen 142:11
course 7:19 23:3	172:6 184:25 196:15	cries 23:16	cultural 16:11
28:10,15 30:21		criminal 60:20	207:3
39:9 49:24 54:17	created 12:22		culture 127:15
62:24 88:14	16:22 19:6 24:2	criteria 39:22	129:19
90:24 101:18	29:5	167:16	
119:11 129:11	37:2,7,18,20	critic 137:12	curiosity 25:3
133:1 177:5	38:9,19 40:21	critical 18:11,22	current 24:22
182:17 192:1 203:8 209:3	57:13,14,23	19:17 40:15	45:21 88:22
203.8 209.3 222:21 226:14	62:23 63:5,10 67:11 75:21	91:12 140:7,24	120:1,2 131:16
228:1	85:15 92:19	145:17 174:1	139:9,20,21,23
	108:13 112:15	187:22 195:2,3,4	163:23 174:25
court 32:16 40:4	128:2 151:17	critically 27:4	196:20
54:23,24 55:15	157:16 158:14		currently 16:8
75:4 112:25 130:19 131:1	164:24 165:20	criticism 4:25	83:19 127:16
182:25 194:25	194:14 218:14	6:11,19 123:23	130:17 152:10
	creates 19:21 62:4	127:8 130:22	163:8 170:3
Courtroom 1:21	191:17 206:6,8	131:3,5 138:14 139:7 152:19	customarily
courts 74:3 198:23	,	175:10	216:13
220:4	creating 14:17	182:10,14 185:4	customers 159:14
cover 12:19 19:24	47:11 67:9 83:6 210:22 211:4	192:24 205:15	171:4,21 198:11
61:2 65:12		209:16 210:10	·
108:21 146:10	creation 18:16,23	212:10 216:6	customize 89:24 90:2
215:21	67:2 85:11	229:14	
coverage 148:20	183:21	criticize 24:5,7	customizes 89:25
	creative 44:12,13	134:5 188:13,15	cut 143:25 144:1
covered 13:9 20:9 27:23,24 28:3,20	75:25 109:21,23	192:16	210:3
30:4 31:13 45:9	158:1 186:18	criticized 85:17	cutting 113:6
58:23 65:25	206:17	188:11	cutting-edge
66:16,18 134:18	creativity 80:22		171:15
139:13 141:10	137:15 203:23	criticizing 207:15	2, 2, 2
184:6 198:24	creator 131:7	209:11	cycle 91:13 145:1
199:5 209:7	137:13 139:11	critics 128:4	226:20
224:4	creators 2:14	critiques 122:22	cycles 70:25
craft 177:7,8	27:11 82:24	crop 143:14,21	Cydia 78:18,21
crappy 203:6	90:21 132:3	144:6 191:5,7,9	85:11,14,20
	134:14 135:12	cropping 143:12	86:16
crash 162:19	137:2,25 138:4	191:21	102:10,21,23
create 14:3,10	139:19 173:5		
22:3 26:3,9	177:6 194:24	cross 181:23	D
37:9,14 50:7,9	222:4	Cruise's 201:18	damage 23:6
56:24 63:6	credential 227:7	crunch 69:21	Dan 3:2 103:19
66:14,22 67:13	credentialing	CSR 232:3,18	126:9 156:7
71:24 80:16	226:21	ŕ	166:3 173:2,10
134:15		CSS 219:6	178:11 207:10
136:24,25	credibility		

	ı ag		
Dane 36:2 97:9	230:13	definitely 47:6	demonstrates
Dan's 208:24	decided 226:12	145:5	163:12
dark 200:21	decides 84:10,11	definition 96:25	demonstrating
data 170:20	105:14 106:16	114:25 116:22	101:17 177:10
196:14,15	118:19	179:21 198:18 199:21 230:22	demonstration
database 157:16	deciding 174:5	definitional 40:10	22:11,15 24:23 26:7 52:18
158:17	decimated 21:7	definitions 103:18	177:16 190:16
date 1:16 163:9,21	decision 32:9,12	198:15	denied 48:16,18
David 2:7	86:7 87:6 93:3	definitive 220:2	157:6
7:6,11,18,19,23	94:19,20 95:17,20 218:21	defy 183:12	deny 74:17
118:23	220:4 222:22	degradation	denying 25:19
day 43:17 56:8,22	224:6	190:14	department
75:1,4 79:21 103:19 104:12	decisions	191:11,17,21	156:16,21
115:17 127:9	114:15,16	192:3	212:1,20 213:17
140:1 221:4	declaration 12:6	degrade 202:22	depend 18:1
days 78:9,12	48:19 61:11	degree 35:15	172:18
day-to-day 77:9	declarations 11:9	175:13	depending 63:24 138:24
136:20,22 137:6	decrease 121:16	degrees 92:5	
de 28:12 33:4	decrypt 196:15	98:15,18	depends 63:21 160:4 180:6
51:13 111:25 173:18	dedicated 102:6	delay 139:19	212:7
deaf 79:13	deductabilities	delighted 7:10	DEPOSITION
deal 63:2 80:22	228:11	delightful 148:21	232:1
95:16 108:9	deductible 217:8	delineated 198:19	depth 135:14
135:16 140:24	228:10	deliver 157:13	deputy 7:23
dealer 106:12	defamatory 87:15 95:23	159:15 165:9,23	derived 68:22
dealing 97:8	default 22:17 67:3	delivered 160:3,11	Descendants
196:18	defend 95:10		166:23
deals 171:10 193:6	128:17	delivery 171:18 Deluxe 157:17	describe 110:5
dealt 108:19	defense 136:25		described 30:16
debate 96:3 141:2	defer 202:10	demand 53:14 159:15 167:24	65:20 92:9 116:3
142:4 145:2,7	define 45:16	168:9 171:24	184:2 192:17 214:11,15
229:15	96:20,22 115:4	173:13	describes 32:2
debated 181:18	116:9 119:9	demise 16:14	description 41:6
debug 99:14	122:15 212:18	demo 99:10	214:12
decade 133:3 140:18	defined 92:23 93:1 96:23 115:7	103:11 107:21 176:16	deserves 221:22
	179:12 226:12		deserving 230:14
decent 227:13	defines 229:20	demonstrate 161:10	design 62:21
decide 48:4,6,9 54:8 115:15	defining 34:25	demonstrated	designate 73:8
223:12 227:5	35:10 180:25	26:7 100:12	designed 11:3
	l		5-5-5-11.J

12:17 18:11,20	development	101:1,9	228:23
20:8 53:1,3 69:7	12:10 52:5 67:9	102:1,8,13	Digiboo 159:20
70:18 94:9 111:5	100:3 101:22	104:8,13,19	<u> </u>
118:9 150:17	103:11 114:5	107:20	digital 1:1 6:23
153:16 162:4,22	159:23 182:25	115:5,12,18	16:1 19:23 53:4
179:8	davalanmanta	116:3 118:16	130:4 132:4
desirable 60:1	developments	119:19 122:11	140:19 156:12
	132:19,20	160:11,15	157:15
desire 25:1 90:15	develops 80:18	161:19 162:24	158:22,24 159:3
desist 130:2	107:16	165:8	160:20
136:19	device 10:18 14:7		161:2,11,17,21,2
	23:8 24:14 32:11	devoting 156:17	4 162:16
detail 9:11 13:21	42:6,7,8,18 54:3	dictating 110:16	163:4,6,17,20
72:24 91:7	59:5,13 64:17	die 151:13 168:25	164:10,20
128:12 201:19	69:17,25		166:14
209:4	70:2,6,11,19	Diego 82:21	168:14,25
details 19:14 64:1	71:11 77:1,6	134:13	169:2,4,6,13
80:3 91:16	80:21 81:7	differ 220:13	170:3 199:17
determination	84:3,23	difference 32:17	digitally 5:19 6:3
93:20 220:2	86:1,3,19	41:19 84:1 104:4	161:3 170:1
	88:12,19 89:24	175:15 213:8	199:19 231:2
determinations	98:23,25 99:1		
208:20	100:23 101:6	differences 64:12	dim 200:25
determine 73:16	104:1,10,18	different 14:3	diminished 21:7
determines 162:10	105:6,10,15,18	28:16 40:21	22:1,4
	108:1 115:24	43:24 44:2,3,18	dimly 201:11
determining 74:5	116:7,10,12	61:21 62:12 66:7	-
109:6	117:14,20	69:20 70:6 74:1	dire 180:13
dev 77:20 78:6	118:8,19	78:21 92:4,5	direct 14:9 15:18
104:22	121:11,23,25	94:16 107:4	225:3,6,9,13
develop 26:13 37:5	123:3 153:21	112:1,14 116:6	directed 123:23
39:17 80:19 83:3	168:17 169:3	118:25 122:7	151:1
99:19 106:13	170:12 171:6	123:17 130:14	
107:17,23		143:4 153:20	direction 89:18
167:14	devices 9:16,21	160:18 161:7,8	193:10
	10:3,9 11:22,24	168:21 174:1	directly 29:12 62:1
developed 62:11	15:13 19:21	175:16 177:14	82:24 137:20
165:16	25:12 40:21	196:19 197:3	193:5
developer 29:24	42:15,17	206:8,15 210:25	director 2:22
80:14 87:7 99:18	52:14,15,23	212:16 214:20	
106:10	53:11 59:9,25	216:5 217:2,25	126:15 134:12
	61:21 64:12,13	220:5,8	150:23
developers 11:17	68:17,25 75:22	differential 68:3	directorial 204:1
26:17 75:25 79:2	77:8,13,19,25		disabled 51:18
83:2 87:18,20,21	78:11,20,22	differently 40:21	55:23
99:9,11 103:4,9	79:11 80:16	228:12	
108:4,24,25	83:15 84:16,24	difficult 32:23	disabling 52:8
109:2	85:13 89:5 90:14	33:5 56:17 99:22	disadvantage
developing 14:12	98:17 99:15	135:17 152:24	205:1
115:8 159:21	100:14,17,20	154:13,14 222:9	disagree 113:19
		10 1.10,1 1 222.7	disagree 113.19

0		
dispute 128:16	divergence 53:11	229:21 230:24
175:4	diversity 173:14	dog 35:18,20 36:2
disseminate	divided 162:8	97:9 225:15
	dividing 97:3	dogs 80:12
	G	Dolby 160:23
	division	dollars 25:4
	166:11,12,20	dominant 50:1
93:21 120:16	DMCA 12:3 18:20	Donaldson 2:20
213:16 219:13	23:9 27:19 34:14	126:8 145:25
distinctions		146:1 188:3
120:17 122:14		194:21 202:2 204:7 214:7,22
distinguish 94:15	136:18 137:3	215:11 216:25
distinguished	149:11,20	227:25 228:4
120:12		Donaldson's
distinguishes		174:17
231:1		done 23:6 30:10
distinguishing		35:12 76:18 78:4
•		81:18 141:11 159:25 184:21
		186:22 197:23
		198:18 202:17
· ·		227:12
		doom 16:13
		door 7:9 35:18,20
	175:15,24	36:2 97:9 183:8
	176:16 180:11	225:15,21,22
S		doubt 11:7 12:12
		download 56:10
13:7 18:16		160:3,5,10 161:24 171:6
129:14 131:24	137:23 146:8	228:20
	150:24 156:23	downloaded 19:6
	documentary	21:16 22:17 78:8
158:22,24 159:3	5:3,23	105:2 195:24
166:13,14		196:9,23
_	· · ·	downloading
	151:16	104:16 160:8 161:23
ŕ	157:11,13 181:5	downloads 6:16
		20:19,23 21:23
		78:15,21 171:1
	213:2,5,6,19	dozen 148:18,21
MISSMIDING 1/0.T	217:1 227:6,19	
	dispute 128:16 175:4 disseminate 228:18 distinct 16:18 36:18 distinction 31:17 34:3,6 92:20 93:21 120:16 213:16 219:13 distinctions 120:17 122:14 distinguish 94:15 distinguished 120:12 distinguishes 231:1 distorted 143:15 distribute 37:12,16 66:15 166:24 168:13 distributed 104:16 166:22 208:6 distributes 166:17 distributing 27:2 61:25 171:23 distribution 5:11 13:7 18:16 129:14 131:24 132:24 136:4 138:18 146:4 156:12 158:22,24 159:3	disseminate 228:18 distinct 16:18 36:18 distinction 31:17 34:3,6 92:20 93:21 120:16 213:16 219:13 distinctions 120:17 122:14 distinguish 94:15 distinguished 120:12 distinguishes 231:1 distinguishing 122:11 distorted 143:15 distribute 37:12,16 66:15 166:24 168:13 distributed 104:16 166:22 208:6 distribution 5:11 13:7 18:16 129:14 131:24 132:24 136:4 138:18 146:4 156:12 158:22,24 159:3 166:13,14 167:15,22 168:19 172:7 228:8,22 distributors 176:25 distributing 178:4 divided 162:8 dividing 97:3 divine 56:4 division 166:11,12,20 DMCA 12:3 18:20 23:9 27:19 34:14 130:5,7 135:5 136:18 137:3 149:11,20 150:17 155:9 176:5,6,13 198:24 DMCA's 21:25 Dobbs 144:24 documentarian 173:24 219:14 documentarian 173:24 219:14 documentarians 174:16 175:15,24 176:16 180:11 207:8 223:8 225:24 documentary 5:3,23 148:7,8,10,13 149:9,22,23 150:8,9,13 151:16 157:11,13 181:5 184:2,13 188:5 189:5 211:20 212:17,18,21,24 213:2,5,6,19

	1 ag		
Dr 11:10,11 48:18	191:2,8 192:23	eBook 95:3	219:1 230:19,20
drafted 66:21	193:2,8,11,13,16 198:6,9,10 231:2	112:4,11 120:22 178:1	effective 68:4,7
drafting 28:22	DVD-CTA 225:1	e-Book 59:10	96:21 192:17
135:6		e-books 6:24	effectively 36:20
draw 93:21	DVDs 4:22 5:5,16 6:1,8,20 132:15		effects 43:11 46:22
drawing 92:20	133:5,15 135:23	eBooks 116:5,13	50:8 100:11 121:17 122:16
drawn 22:13 58:22	139:20 143:9	economics 141:1	192:5 202:20,21
59:20 98:9	149:11 159:15 163:17,21 164:7	economy 17:19	203:1
DreamBoard 89:25	191:4 192:14	ecosystem 113:5,6,24	efficient 68:14
drive 26:4 68:6	193:15 195:18	113.3,0,24	effort 217:18
driven 68:19 195:3	196:21	162:8,12	efforts 172:9
driver 62:11 63:16	DVR 154:11	edges 174:14	EFF's 22:10,25
	DVRs 160:15 168:2	edit 195:25 196:5	25:12 52:18
drives 111:21 DRM 170:25	dwarfs 20:20	205:10,23 208:10	egg 173:20 181:21
171:16 195:21	DX 116:4		eggs 181:22
DRM-free	dying 112:4	editing 154:17 editor 205:9	eight 42:5
165:17,22	dynamic 17:21		either 39:11 75:4
DRMs 160:20		educate 218:4	106:25 116:18 120:16 164:8
165:7	dynamics 142:18 143:3	education 131:3 185:5 212:24	198:21 208:1
Droid 123:9	dynamism 83:6	216:14	232:11
drop 154:16	u j	educational 5:2	elaborate 119:14
dropped 97:22	E	6:13 15:24	elderly 151:23
dropping 98:2	E&O 146:9,11	127:12 156:22 157:3,25 158:8	election 140:5
drops 190:8	147:15 227:10,21	173:23 211:19	electrical 150:1
dual 21:20	earlier 77:21	213:23	electronic 2:11,17
due 48:1 63:14	96:15 100:16	Edward 142:11,20	8:17 75:18 126:15 160:11
85:16 87:12	106:7 108:7	Edward's 142:21	161:14 162:5
153:24	124:17 165:5,14 199:13	143:2	166:15
during 24:23 185:17		EFF 12:14 18:4	Electronic-Sell-
DV 161:22	early 113:12 185:22 228:5	20:13 22:5,8,21 24:23 25:7	Through 159:6
DV 161:22 DVD 5:15,18,19	ease 167:17	26:15,22 28:4	element 15:6 42:1
6:3 131:13	easier 84:3	31:22 93:8	93:5 123:10 226:17
133:9,17,18	easily 150:9	178:19 179:13 218:2	elements 15:6,9,17
136:3 143:9	East 80:7	effect 10:11 47:9	36:22 44:18
144:14,21,23 154:11 159:13	easy 94:6	64:5 82:1 102:5	elevate 70:11
164:17 166:14	104:11,12	108:3 110:17	eliminate 105:1
167:11 168:1	162:22	114:1 121:23 128:10 132:24	eloquent 103:14
169:10,13 177:21 178:6	e-book 6:7	133:7,9,17,23	ELR 152:14

	1 ag		
154:21	29:4 37:6 39:5	205:20	equipment 204:9
else 14:11 37:19	82:12 123:15	enjoy 117:7	equivalent 21:18
54:22 68:6,9	enacting 31:8	172:11,20	25:8 101:10
95:24,25 97:1 114:2 116:5	encompassed	enjoyed 90:16	e-Reader 76:22
175:9,10 196:4	112:2 115:6	enlarging 191:22	eReaders 102:7,9
205:15 206:22	encounter 80:12	enormously	errors 174:20
213:1 215:16	encountered 33:20	197:22 230:8	231:5
224:4	218:18	ensure 12:8 53:1	ESA 52:13 91:11
elucidate 44:14	encourage 11:8	171:9,21	ESA's 20:22
e-mail 117:9,11,20	20:6 26:14 28:17 30:19,25 33:2	ensures 171:4	e-shared 228:24
119:2 158:5	36:6 52:6 53:8	entangled 22:12	especially 25:5
embed 158:6,8	56:20 79:11	enter 159:3 187:10	99:9 100:2
embedded	111:24 224:7	227:21	142:21 145:10
130:22,23 211:2,3	encourages 14:14	entering 229:15	182:15 193:11 207:14
embraced 62:25	encrypt 158:19	entertain 17:18	essential 40:17
embraces 14:14	encryption 5:20	entertaining 109:9	127:3 138:16
	6:4 44:4,8 53:24	entertainment	essentially 8:23
emergency 63:9	61:20 133:5,12 198:21	2:13,23 3:2	54:13 68:1 83:5
emerging 129:20	enforce 22:1 93:19	17:14 52:14	118:8 138:1
emotional	94:25	57:21 141:13 153:15 154:15	194:17 201:23
153:6,11	enforced 95:8	155:20 156:10	EST 159:5
emphasis 144:7	enforcement 62:17	166:4,11,17	establish 178:9
empire 155:2	enforcing 94:21	entire 176:5	established 163:9
employ 21:3,11 29:2 37:5	_	210:1,12,16	establishing 41:9
39:2,3,4 65:9	engage 44:25 145:7	entirely 73:3	estimated 168:9
employed 58:4	engaging 4:25	101:13 204:5	et 160:1,23
197:9	5:8,13,22 6:6,12	entities 136:21	ethically 132:2
employing 16:12	47:12 187:23	entitled 194:24	ethnographer
enable 4:7,13	engine 44:19	entitlement 222:12	127:10
12:20,24 17:7	engineer 37:9,14	environment	evaluate 167:13
26:21,23 34:4	engineering	100:20 101:1 108:5 110:20	221:20 230:20
35:8 36:4 40:23 41:16 43:1 50:10	36:13,24	168:12	evaluations
69:23 96:10	37:1,6,15	environments 63:6	167:15
159:4 165:7	38:6,7,21 66:12,14 67:8	envisioned 164:13	event 25:18 131:16
enabled 63:1	123:21 124:12	envy 127:10	events
119:18 121:5	engineers 80:15	, and the second	139:9,12,15,21,2
enables 34:8 44:20	enhance 162:4,15	episode 149:14	3
92:2 109:24	enhanced 169:11	episodes 142:15 161:6	eventually 87:5 133:18 192:22
162:17 170:22	enhancement	epithet 95:15 96:3	everybody 7:5
enabling 4:9,15	omancement .	epithet 93.13 90.3	Cvci ybbuy 7.5

	1 ag	20	
15:25 78:24	116:1,3	exempt 73:13	133:1,6,7,8,9,16,
81:18 147:16	129:21,24	-	20,24 135:22,25
179:3 206:22	143:20 145:8	exempted 56:12	136:9,13,24
		exemption 8:19	2 2
everyday 200:16	149:25 152:20	9:2,3,6,10,23	138:15 139:1,17
everyone 117:2	154:12 167:7,25	10:16	146:13,15 156:3
185:6	168:24 171:13	12:8,14,17,19	173:12,22
	175:19 181:8	2 2 2	174:25 177:24
everything 9:21	185:16 187:20	13:11,19 14:22	179:1,8
49:4 68:14 70:1	198:5 200:20	16:15,23 17:6	180:16,23
117:25 146:3	201:10,11,12	18:3 19:13,21	182:22,23
147:10,20,21	208:15 209:16	20:5,9 21:4	183:11,21 184:3
150:7 179:13,14	227:23	22:6,22	185:1,5
208:19 224:4	avammlas 24.10	23:3,16,20	196:20,21
	examples 24:18	24:7,20 25:24	197:6,7,10,22
evidence 10:1	25:9 86:5 127:24	26:1 27:17,19,25	199:4 209:8
20:15 22:7 24:16	128:6 141:17	28:7,12,16 34:1	219:4,5,21
49:1,25 56:13	183:24 200:3	35:10 36:3,7	221:6,23 222:22
81:17 82:6,9	219:22 220:7,15	38:20 39:11 41:8	
97:10 101:19	exceed 230:24	42:13 43:4,20	223:18,21 224:2
108:20 119:23		44:24 45:9,18	exemptions 18:24
128:5,8,9 129:12	except 224:3	46:8 49:23 50:2	50:12 51:8 83:7
132:23 133:4	exception 20:3		128:4
183:16	36:13,17 66:16	51:4,11	134:3,17,20,21
219:10,19	67:11 136:25	53:7,12,22	135:2 140:7
	223:5	54:17,25 55:7,16	165:20 173:22
evident 220:12		56:19,21,25	180:4 199:1
evolved 161:16	exceptional 19:1,2	58:2,23 59:19	218:19 221:11
	exceptions 172:14	60:24 64:6 66:11	
evolving 126:24	_	67:17 74:17	exercised 86:21
exact 56:3 59:9	excess 168:10	75:20 76:4,5,8	Exhibit 22:6
213:8	excited 145:21	78:1 79:3,6	
exactly 12:16	164:23	80:24 81:2,4,16	exhibited 204:16
1	ovoiting 62:14	82:5,7,11,14	exist 96:8 109:23
29:13,21 40:13	exciting 63:14	83:10,12 88:12	133:12
43:5 73:11	75:6 77:2	91:5,10,20	existed 70:1
74:15,16 95:4	exclude 171:22	96:7,21	existed /0:1
99:3 108:14	181:13 184:25	97:2,7,10,21	existing 72:4,5
120:20 122:16	excludes 87:16	98:9 100:5	119:15 127:2
128:18 134:6		101:18 102:12	129:13,16
186:9 212:8	exclusive 194:19	101:18 102:12	177:24 197:7
examined 55:11	exclusively 22:9	103.8	219:5
		108.3,24,23	
example 14:5	excuse 22:8		exists 69:4 113:6
20:22 29:22 32:9	excused 56:12	112:14 113:5,25	expanded 76:6
45:23 60:15 63:4		114:3,18,19	82:14 126:24
65:21 70:24	excusing 18:13	116:25 118:15	175:1 218:10
77:15,19 79:11	execute 4:7,14	119:15 121:21	224:3
85:8,9 86:23	12:21	122:1,19 123:20	
87:9 90:5 92:14	executive 16:6	124:2 126:23	expansion
95:2 98:16,21	134:12 156:9	129:3,13,16	178:1,2,4 179:23
101:5 104:19		130:6,17 131:11	expansions 177:25
106:15 107:11	executives 202:6	132:25	*

	ı ag		
expansive 43:13	224:16	faces 16:17	44:3 50:11 59:16
expect 70:2 133:23	expression	facilitate 161:11	65:4 81:24 91:12
134:2 137:9,10	47:13,14 126:22	facilitated 48:2	109:16 110:7
146:15 177:7	127:4 194:24		111:2,6,16 124:7
expecting 67:6	expressive 15:7	facing 30:15 59:22	127:21,23 128:3,6,17
Expelled 188:18	17:17	fact 11:6 12:7	129:22
	expressly 194:15	21:15 25:21	130:11,16,19
expense 185:14 189:24 207:22	extend 41:17 85:3	28:13 57:8 63:14 77:18 81:6,18	131:2,6
		90:24 92:14	135:3,6,7,20
expenses 189:20 190:1	extended 32:10 83:14 139:18	93:10 94:15	136:14 137:16
		100:20,22	138:1,5,8
expensive 149:7,8	extending 43:22	103:1,3 121:8	140:8,17 141:14,18
189:18 204:8	extension 23:13	122:6 123:11,12	141.14,16
experience 85:23	extensive 32:20	124:8 131:13	147:2,4,12,14
86:2,11 88:8,9	extensively 231:4	132:1 134:23	148:2,3,12,19
89:13 133:3,15	_	138:5 140:2,3,21 148:3 174:7,11	149:22,24
154:7 167:16 168:21 189:12	extent 68:2 115:3,22 118:19	181:2,3 184:23	174:18 175:7
190:2 200:16	120:14,24	199:13 200:15	176:12 180:22
215:5	175:14 181:5	207:20 208:2	183:5 187:24
experienced	182:24 208:9	221:15 223:1,16	188:19 194:17
186:16	extra 148:23,24	factor 9:9 13:23	195:7 205:15 208:20 213:24
	198:9	15:4,20,22 16:25	214:5,14,18
experiences 185:13,14	extracting 5:7,12	33:12 34:14	215:15
<u> </u>		108:23 109:16	217:14,17,21
experiencing 75:8	extrapolating 187:17	110:2 111:8	218:6,12
explain 19:16 30:9		124:10 130:24	220:3,10,16
74:15 135:14	extreme 205:1	131:9 226:23	223:3,24 229:12
207:2	extremely 32:6,19	factors 9:5 13:18	231:6
explained 19:10	111:12 115:11	33:2 57:3,12	fairly 94:11
21:5 207:21	137:19 183:15	81:25 91:12 97:13 216:18	fairness 107:6
explaining 182:9	226:9		FairPlay 160:22
explains 32:25	eye 60:22	facts 32:5 74:6 95:18 112:1	171:1
explanation 30:15			fake 206:10
exploded 76:20	F F F F F F F F F F F F F F F F F F F	factual 54:23 74:4	fall 30:9 39:8,10
exploit 22:16	f)(1 66:2	faculty 6:17	90:4 152:9 163:6
_	f)(2 29:11,13	fail 132:4	184:13
explore 186:15	fabric 151:25	failed 130:7	fallen 96:12
explored 28:8	152:5	fails 63:22	falls 34:6 73:6
exploring 186:8	face 40:20 137:3	failure 19:24	146:7
187:10	152:18 201:18	fair 5:21 6:6 9:5	false 129:4
explosion 201:18	Facebook 158:5	15:4,8,19	
exposure 200:24	160:1	31:5,17	familiar 90:3 153:9 161:12
expressed 74:1	faced 167:2	32:11,23,25	209:14
		33:2,6 38:3,4	2 √7.11
L			

	1 48	E 22	
family 149:13	felt 143:2	149:10,15,24	182:13 187:18
151:11 162:6,24		150:1,2,4,5,11	188:12 189:5
167:1	female 210:2,6	151:3,9,10,21,22	208:14
	fertilization	152:12,14,16,22	211:15,21
fan 127:11 145:16	152:13,24	153:5,6,8,13,21	212:22,25 220:9
fans 129:10 138:22	festival 205:2	154:4	228:6,22,23
145:16		155:4,10,14	229:23,25
fantastic 79:10	fiction 16:5,10	158:23 159:4	· ·
	213:20 229:20	161:1 163:19	final 137:21
fashion 155:25	fictional 5:24	164:10 169:3	163:11 164:12
fast 190:7	146:13,16,21,25	182:11	finally 9:7 15:1,21
favor 16:25	147:8,10	185:17,18,20	25:24 26:11
	148:9,11,19	186:15	34:25 37:15 81:3
favored 14:10,25	149:10,19,24	188:10,14,18	96:5 97:5 132:22
47:9	150:11,12,18,25	189:1,2 200:12	171:8 176:14
FCC 109:6	151:18 156:4	204:13	180:20 195:5
	178:2 188:25	204.13	202:4 206:1
fear 64:6	189:2 208:16	208:11,25	214:23
feature 51:16,17	211:22 212:14	210:12 211:5,22	finance 166:3,10
89:7,12,14	213:6 227:20	210:12:211.3,22	•
148:15 151:1	230:24	219:14 227:6,20	financing 146:3
156:23 167:7	fide 153:9	228:4 229:20,21	finding 33:24 77:2
169:6,7,11		,	111:18 124:18
212:22 216:25	fidelity 206:4,9	filming 155:13,24	fine 98:7 101:11
219:14	field 79:22	filmmaker 137:18	177:20
featured 145:15		150:9,12,14	
	figure 76:11,23 106:17 227:5	151:17 175:20	finger 56:3
feature-enhanced 169:10		188:4 204:21	finished 124:22
169:10	figured 185:5	205:6 214:23	Fire 112:11,12
features 150:24	figuring 227:13	227:7	119:1
169:12,15		filmmakers	
198:10	file 195:22,23	147:13 148:7	Firebox 80:18
federal 7:16 73:9	196:7,16	149:20 150:18	Firefox
	filed 12:1 19:10	156:4 157:13	107:12,14,16
fee 159:10 170:10	21:6 60:14,16	185:12 204:11	firm 147:18
feel 74:19,23	79:8 219:16	207:8 210:21	148:18
75:2,3 86:9	filing 22:10 44:16	213:2 222:6	
98:21 100:16	173:7 175:7	225:24 230:24	firmware 10:8
101:8 162:15			13:25 14:2,9
	220:7		
182:18 193:19		filmmaking	15:12,16 18:7,18
216:10,16	filings 177:18	5:4,23,24 206:14	19:16 24:8 31:21
216:10,16 229:13,16		S	19:16 24:8 31:21 32:11,13,20
216:10,16	filings 177:18 filled 22:7	5:4,23,24 206:14	19:16 24:8 31:21 32:11,13,20 40:13,24
216:10,16 229:13,16 230:23	filings 177:18	5:4,23,24 206:14 208:17 films 146:10,13,16,21	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21
216:10,16 229:13,16 230:23 feeling 74:18	filings 177:18 filled 22:7 filling 154:19 166:4 201:13	5:4,23,24 206:14 208:17 films	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25
216:10,16 229:13,16 230:23 feeling 74:18 feelings 74:22	filings 177:18 filled 22:7 filling 154:19 166:4 201:13 film 2:20,22 5:3	5:4,23,24 206:14 208:17 films 146:10,13,16,21 147:1,6,9 148:13,15	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25 42:1,4,9,10
216:10,16 229:13,16 230:23 feeling 74:18	filings 177:18 filled 22:7 filling 154:19 166:4 201:13 film 2:20,22 5:3 6:14 142:16,20	5:4,23,24 206:14 208:17 films 146:10,13,16,21 147:1,6,9 148:13,15 149:13 151:1,19	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25 42:1,4,9,10 43:23
216:10,16 229:13,16 230:23 feeling 74:18 feelings 74:22 feels 142:8 155:5	filings 177:18 filled 22:7 filling 154:19 166:4 201:13 film 2:20,22 5:3 6:14 142:16,20 146:3,11	5:4,23,24 206:14 208:17 films 146:10,13,16,21 147:1,6,9 148:13,15 149:13 151:1,19 152:3,16 156:23	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25 42:1,4,9,10 43:23 44:3,12,18,24
216:10,16 229:13,16 230:23 feeling 74:18 feelings 74:22 feels 142:8 155:5 fees 167:9	filings 177:18 filled 22:7 filling 154:19 166:4 201:13 film 2:20,22 5:3 6:14 142:16,20 146:3,11 147:11,19	5:4,23,24 206:14 208:17 films 146:10,13,16,21 147:1,6,9 148:13,15 149:13 151:1,19 152:3,16 156:23 159:13 161:3	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25 42:1,4,9,10 43:23 44:3,12,18,24 45:1,10 53:25
216:10,16 229:13,16 230:23 feeling 74:18 feelings 74:22 feels 142:8 155:5	filings 177:18 filled 22:7 filling 154:19 166:4 201:13 film 2:20,22 5:3 6:14 142:16,20 146:3,11	5:4,23,24 206:14 208:17 films 146:10,13,16,21 147:1,6,9 148:13,15 149:13 151:1,19 152:3,16 156:23	19:16 24:8 31:21 32:11,13,20 40:13,24 41:7,14,16,20,21 ,23,25 42:1,4,9,10 43:23 44:3,12,18,24

	1 ag		
72:5,9,11,13,17	floor 38:9 97:23	foresee 66:25 67:1	franchise 142:12
91:25 111:3 124:4	126:12	foreseeing 67:18	frankly 9:25 12:11
	flourish 12:10	foreseen 38:17	64:23 98:3 139:2
first 9:1,10 13:23 19:19 20:5,24	flourished 75:24	108:16	146:14
25:10 27:18	flourishing	forget 192:7	fraught 81:1
32:15 33:16	101:20,21	form 19:23 98:13	free 43:21 141:5
36:18 40:12	flow 176:23	126:21 127:4,15	158:18 162:23 168:25 171:22
55:22,24 57:11 62:15 68:1 70:23	focus 18:6 29:25	181:9 198:2	201:7 207:14
81:5 89:5,15	42:24 47:8 67:24	formal 137:3	208:8 209:23
91:6,20 95:2	100:15,19	format 6:25	228:19
100:24 103:13	115:14 136:8,11 143:19,23 144:5	178:4,15,24	freedom 87:10
106:5 107:8	173:17,23 111.3	198:15 199:3 210:25 224:4	90:15 194:24
112:10 114:22 124:10 127:1,21	224:7		freely 170:11
129:5,16 136:12	focused 134:21,22	formats 170:21 178:1	Freeman 78:17
151:2 152:11	136:13 146:2	former 92:22	85:12 102:20
161:14 171:13	183:19 185:4		freer 108:4
183:12 186:15 189:14 194:14	191:13	forms 160:25 196:23 198:4	frequently 21:16
205:8 207:22	folks 82:24 83:17 86:20 88:21	forth 112:5 180:19	38:16
219:3 221:25	89:19,20 114:21		friendly 187:13
first-party	127:6 129:24	forums 127:12	friends 158:5
68:20,23	131:25 134:14	forward 17:2 27:6 40:9 68:16 82:15	162:6,24
fit 71:4 141:6	135:17,19,23 137:6 138:22	96:24 117:17	front 36:14 96:9
fits 35:19	137:0 138:22	199:24 204:23	118:2 135:24
five 189:7	206:23	219:22 220:15	190:17 191:2 200:8
flag 128:16 132:6	216:20,22	foster 13:5 141:2	Frontier 2:11,17
flames 150:6	217:10,13	Foundation	8:17 75:18
	follow-up 122:8	2:11,17 8:17	126:15
Flash 86:6,9,12,13,14,	footage 143:8,9,14	75:18 126:15	frustrated 31:10
15 160:23 171:3	154:22 155:15 192:4 203:25	founder 82:19 134:11	frustrating 202:13
flashlight 80:8	footnote 32:24	fourth 135:15	frustrations
flat 189:25	110:25	Fox 3:2	185:13
flavor 112:12	Forbes 141:14	166:4,10,12,16	fulfill 5:1,9,14 6:13
flavors 92:4	forbid 49:5	167:6 168:12	
flaws 88:25	forcing 114:17	171:18	fulfilling 79:24
fledgling 178:8	Ford 106:11	frame 143:22 144:2 147:3	full 8:20 54:3,20 99:16 103:24,25
flesh 117:2	foreclosed 51:25	154:19 190:13	104:9 107:22
flexible 165:11,24	foregoing 232:7,12	191:6,9 201:13	126:18 142:16
Flick.me 159:20	foremost 81:5	frames 191:1	147:3 171:21 203:25 232:8
Flickster 170:17	foresaw 67:12	framework 124:14	203:25 232:8 full-time 156:18
	•		1un-time 130.18

	0	E 24	
fully 84:24 111:10	games 9:24 11:19	52:17 56:2 57:15	goals 109:13
142:3	14:6,13	60:12 64:18	God 74:18
function 50:10	16:4,9,17,22 18:1	68:11 70:9 134:2	God-given 106:11
166:11		Genetski's 75:1	- C
functional	20:11,20,21,24	genres 230:1	Golant 2:8 7:24
15:5,9,12,16	21:2,9,11,13,17, 21 22:20 23:9	o l	40:5 41:2,19
18:6 111:20	24:9 25:25 26:12	gentleman 139:10	42:4,9,13
198:15,18		geo-filtering 171:4	43:2,6,10,22
199:2,20	32:1 33:12 36:4	George 60:10	44:9 45:5 46:15
ŕ	43:6 44:20 46:5 47:12 52:24	61:13,23	50:20,23 51:6
functionality		ĺ	52:11 53:10,19
49:11,13 56:9	53:13 54:11,14	Germany 61:19	60:4 61:6 63:17
functions 40:25	56:11 57:23 70:3 86:14 199:9	202:4,10,11	64:4 100:11
101:3		gesture 144:5	102:6 103:16
fundamental	217:3,4 229:10	gesturing 63:7	104:2,11,24
112:18 113:8	gaming 4:9		105:8,25 109:3
	10:18,22,24	gets 87:7 153:5,11	110:4 124:25
fundamentally	11:1,21 12:19	164:1 208:21	184:10 189:16
138:8 206:24	14:6 16:21 38:17	getting 15:9 68:8	224:20
furtherance	42:20,21 47:25	78:23 113:3	Goldberg 147:1
123:14	48:7 60:6 156:12	122:18 176:11	gone 76:17 132:9
furthermore 14:23	160:12	178:25 179:2	141:8 148:1,14
231:3	gap 37:21 192:18	181:14 184:22	152:22 193:5
	.	191:11 208:13	216:12
future 38:18 43:6	gatekeeper 176:18	216:23 217:7	
86:8 174:10	gatekeeping 86:21	225:25	Google 79:1 81:8
192:19 204:23	gathering 135:23	Girl 167:1	105:3,4,23
fuzzy 203:5	Gee 107:3		go-round 28:11
		given 9:11 57:1,7	65:2
G	gender 127:13	64:4 78:2 84:21	gotten 49:3
gain 84:22 98:8	131:19 141:1	85:3 88:19 92:23 122:21 174:19	
S	142:18 143:3	122:21 1/4:19	government 110:15
gaining 83:24	general 2:20	gives 111:12	
gains 76:18	7:23,24,25 8:1	142:25 174:23	grab 127:25
game 4:7 8:21	17:14 34:18 41:5	202:22	196:13 210:12
9:12,15 10:11	91:18 109:14	giving 89:4 201:10	grade 80:20
12:21	124:14 137:8	glad 35:3 74:22	grading 110:17
17:6,7,16,21,23,	156:9	113:23 226:15	
25 18:15 19:9	generally 14:24		grant 133:6
20:7,15 21:6,15	41:7 68:16	glamorous 154:6	197:10
24:2,10,22	147:19 212:13	Glee 166:25	granted 18:3 36:3
26:2,4,17,25		global 55:3 173:6	49:24 60:24
27:2 34:24	generated 17:19 68:22	S	75:20 76:4
42:18,22 43:3		Globe 141:14	81:2,17 82:7
45:10,24 52:2,4	generation 24:22	glossy 154:5	132:25 198:25
54:9 57:2,7,9	Genetski 2:12 8:13	goal 69:3 92:16	granting 20:3 21:4
58:12 59:24 66:4	17:5,13 41:5	112:24 114:5	27:25 34:1 45:17
104:14 114:1	44:14 45:6	168:16 170:20	51:8
120:13 121:13	50:22,24 51:12	100.10 1/0.20	

	Pag	C 25	
granular 121:14	213:4 221:8	happens 55:10	230:25
graphics 44:19	guidance 130:18	143:13 146:11	HBO 52:22
gray 202:22	guild 209:6	151:12 155:13 196:12 217:19	HD 157:14 171:13
great 9:11,17	guilds 195:10	228:2,6,7,13	HDTVs 168:4
10:23 34:8 36:2 63:1 74:19 80:22 91:7 92:8 95:15	gut 17:6 228:14 guy 167:1 202:4	happy 28:23 64:3 149:2 164:20 184:5	head 33:2 43:21 116:9,14,19 220:17
97:9 106:12,14,24	<u>——</u>	hard 31:12,15	headset 153:19
100.12,14,24 107:2,8 138:4,5 149:25 175:14	hack 23:5 26:9 30:3 51:19	68:6 70:15 71:1,4 84:7	healthcare 87:2 healthy 145:7
182:6 183:2	218:24 219:6	131:20 162:19 168:25 218:4,8	hear 35:3 110:8
194:5 200:14,16 218:23 226:14	hacked 23:6 33:22 hacking 18:14	harder 94:14	128:24 136:7 137:6 189:11
greater 84:16 88:11 128:12	20:8 28:11 30:24 34:3	hardly 228:6 hardware 67:25	heard 18:8 20:12 27:13 28:2 36:11
Greenpeace 184:21	Hackmii 22:16 half 78:15	68:9 69:4,6,17,20 70:7 72:12	48:17 49:18 50:24 51:1 59:20
grim 155:23	hand 8:8 36:1	107:25	64:11 66:8 80:14
grotesquely 154:5	85:21 123:18	hardware-based	92:3 104:11 108:7 112:3
ground 83:1	192:10	171:16	116:1 119:13,15
111:23	Handed 151:3	Hark 157:21	162:1 170:7
grounds 5:1,8,13 6:12	handheld 77:8 101:2 115:18	harm 19:22 20:4 81:15,18	187:12 203:10,14 211:9,11 214:11
group 51:7 91:2 145:24	handle 156:18 handled 156:20	82:6,8,10 101:17 117:20 225:17	218:1 222:8
156:10,11,12,21 157:11	handles 156:22	harming 155:9 harness 44:21	hearing 1:8,12 7:8 26:1 53:21 79:23 116:21 120:9
groups 173:6	hands 67:14 88:21	harnessing 25:15	128:12,25
growing 149:16 158:13 163:2	handset 4:16 96:23	hat 206:13	148:17 166:9 180:15 203:15
231:4 growth 17:21	handsets 4:13 199:8	hate 221:21 haven't 49:18 66:5	205:17 221:2 231:10,12
guarantee 75:3	handshake 70:4	81:10,12 112:3	232:4,12
guarantees 75:1 guerilla 155:24	hanging 127:20	119:22 183:15 185:14 214:9	hearings 162:2 176:17
	happen 49:10 106:25 136:19	215:13 216:1 223:10	heartland 18:20
guess 34:5 39:2 64:14 67:25	142:19 145:20		heavy 19:12
87:18 90:23	147:7 186:21 188:8 217:18	having 19:6 28:1 78:1 86:15 87:3	he'd 64:3 214:4
91:18 103:6,13 113:24 120:24	happened 62:20	122:14 141:22	held 195:10
165:2 178:21 193:22 208:4	87:2 145:11 153:23 183:3	164:9 177:25 188:22 203:25 204:24 212:6	help 38:8 47:25 49:3 71:14
		201.21212.0	73:20,22 116:18

127:13 133:24 155:11 165:23	15:1,12,15 17:17	136:16,20 137:1	150:2,3,5,11
155:11 165:23	4440404040	130.10,20 137.1	130.2,3,3,11
220.20	44:12,13 133:19	Hollywood 153:8	hundred 79:7
220:20	216:11	home 2:23 3:2	hundreds 17:18
helped 79:22	high-quality 21:13	58:18 89:25	158:17
helpful 72:25 75:6	hikikomori 151:4	156:10,11	hurt 113:5
85:1 117:4 212:3 230:8	Hilgard 1:20	166:4,11	hypercritical
	historically 146:22	homebrew 11:16	188:1
helps 85:7 118:3 142:3 152:5,18	history 28:18	12:2,5 20:21 22:19,25 25:25	
172:24	29:16,17 65:19	26:10	I
Henry 7:15	90:7 113:19,20	46:2,4,17,23,25	Ice 166:19
hereby 232:3	163:19 164:15 176:22	47:3 51:1,2 56:7	iCloud 160:6
		57:6,17 60:15 61:15 62:10	I'd 7:6,10 8:8 9:1
here's 164:18 192:13 210:16	hit 8:25 127:5,16 130:1 132:5	63:15 71:14	15:3 27:15 36:10
	163:15	honest 64:1	54:9 81:3 91:18 103:6 110:7
he's 48:8 80:11 129:20 185:22	hobbyists 19:6		119:14 140:6
201:18	Hofmann 2:11	hood 18:9	142:5 143:7
hesitation 33:24	8:9,13,15,16	hoods 8:23	146:18 156:13
133:6	28:2 35:1 36:12	hope 33:14 163:7	205:4 226:15
Hi 198:12	40:18 41:21	164:5 172:12,24	229:1
high 8:5 41:6	42:7,12,16	hoping 119:7	ID 128:16 132:5
60:10 80:19	43:5,9,15 44:1 46:24 48:17	host 85:14	idea 46:21 48:22
107:23 135:12	49:7,9,18,22	196:19,24	59:18 99:24
136:9	53:18,20 54:15	hosting 7:19	104:8 135:7 142:17,25
137:5,6,9,10,24 138:11 141:16	55:7 57:11 58:7	hosts 85:14	183:10 193:6
144:10 172:21	61:11 63:24	hot 187:3	220:14
174:23 175:12	66:10,24 67:5 69:8,18 71:13,18	hotel 153:4,5	ideal 154:20 156:2
176:18,20 177:4	72:9,12,19 74:21	Hotz 60:10	Identical 202:14
200:5 201:2	75:15,17 97:24	61:13,23	identically 77:19
204:19 206:21 207:7	99:3 100:10,15	hours 7:14 157:1	identification
high-budget 21:13	102:9,14,22 103:24 104:5,15	households 24:21	29:24
	105:7,12,20	168:2,5	identified 20:22
higher 21:21,22 180:18	107:10 108:12	HTC 81:10	26:15
	109:12 115:3	HTML5 86:8	identify 19:25 30:2
highest 145:11 155:19 177:6	117:5 118:14	Huang 79:4	45:7
192:1 201:20,24	119:7,11,25 121:21 173:2	S	identifying 36:21
203:2,3,16	186:20 192:10	huge 201:14 223:2	ignorance 175:6
highlight 27:15	195:16 200:1	Hughes 79:25	ignores 18:10
142:10	209:10 215:25	Hulu.com 138:20	ii 5:3
highlighted 140:2	227:2	humanity 10:15	
highlighting 124:8	Hold 109:3	humor 139:7	iii 5:4
highly 13:25 14:21	holders 134:24	Humungus	I'll 19:24 25:8

	1 46		
40:12 76:5 85:2	200:3,10 201:10	importance 143:8	includes 91:2
166:8 189:13	203:9 204:20	important 13:19	100:8 110:14
216:20 227:25	209:14 211:25		179:16 231:1
228:15	214:9,25	14:15,19 27:4,16 29:23 32:7	including 6:17
illogally 171.0	217:22,24		including 6:17
illegally 171:9	219:3,6	40:11,23	44:19 160:12,15
illegitimate 55:14	220:18,19	42:19,24 44:23	161:6 167:12
illusory 23:4 56:23	221:7,8 225:15	47:7 50:8 51:6	170:4 171:1,2 175:24 176:24
illustration 63:18	227:17 228:3	63:1 80:10 84:13	
	image 141:20	98:1,22 99:11 101:20 111:8	inclusion 5:7,12
I'm 7:6,21 8:16,25	155:21	115:14	inconsistent 114:7
9:2,4,7 13:17,19			
17:13,15 19:15	200:12,13,15	116:16,23	inconveniences
27:10,11 28:23	imagine 70:9 84:8	117:25 120:21	20:1 24:18
29:9,10 31:1	94:1,6 116:6	124:9 126:21	incorporate 5:21
35:3,18 36:14	188:18	128:20 131:14	6:5,18 210:24
40:6 45:13	imagining 201:12	132:16 136:8	incorporation
47:17,22,23		137:20 139:24	4:24 6:10
48:24 60:13,15	IMAX 201:14	141:25 143:12	
62:2 63:17 64:2	immature 217:13	144:7 145:2	incorrect 61:3
65:24 71:8	immensely 189:6	151:25 152:4	increases 85:7
76:2,3 82:19,24		155:8 171:17	increasing 97:11
91:6,24,25	immigration	174:4 180:14	119:16 167:4,5
94:4,7 95:10	152:15	183:7 187:23	,
97:6,25 103:12	impact 18:12	205:7 219:13	increasingly 52:25
106:1,20 107:3	19:25 24:17 28:1	importantly 51:24	124:8 146:5
108:22 110:11	34:22 35:7 36:5	impossible 10:9	207:2 214:15
113:23 117:17	41:10 45:15	154:2 205:13	incredibly 9:22
118:4 124:7,15	47:14 51:13		75:5 77:2 154:12
127:23 130:5	97:5,11 106:9	impression 221:4	incremental
134:11 136:10	108:6 119:16	improvements	
140:12,13	120:3	88:25 89:2	165:24 231:1
141:19,21	impacts 45:22	inability 16:10	incumbent 41:12
142:9,22 143:11	51:3 176:23	· ·	220:14
146:12,16		inappropriate	indecipherable
150:23,24	impaired 10:12	86:10	200:22
152:10 153:21	impeded 129:13	Inc 2:23	independent 2:20
154:7,22,25	impediment 25:11	incentive 22:2	11:18,19 12:9
155:9,19	-		14:12,17
156:8,12 159:1	implement 169:22	incentives 21:8	26:10,17 46:1
166:3,4,8	implicate 55:25	include 76:6 82:15	47:12 52:4 58:17
173:4,9,17 175:3	70:14,20	129:17 137:24	71:21 75:24
176:14 180:8,12	implicated 72:2	162:23 169:12	78:18,19 79:2
182:8,19,20	120:15	197:5 209:16	82:23 87:21
183:17,19		212:10	118:17 146:3
184:5,12,13,17	implicates 70:8	included 43:7	147:13 148:7
186:25 187:16	implications 35:6	61:24 90:8	149:19 151:1
188:4 190:20	117:18	102:11 106:21	155:24
191:7 194:9		170:13 178:18	204:11,20
197:1 198:13	implicit 214:2	1/0.13 1/0.10	40 4 .11,40

	1 ag	1	
214:17 226:22	inform 173:1	109:25	147:14,23,25
independently	information 9:8	inoperative 55:5	148:4,20 174:20
12:22 16:22 29:5	64:2 120:2,17	input 62:13	175:25 214:18 215:17,21
37:7,20 55:11 57:22 75:21 83:3	informercial	insert 157:22	216:24 217:3,7
85:15 112:15	179:14	inserting 164:8	223:8 225:25
India 152:13,21	informs 152:6	Insider 171:16	227:10,22
153:14 154:7	infringe 5:7,13	insist 203:12	228:5,9,25 231:5
Indian 152:12	54:18	insistence 203:13	insured 174:19
indication 95:14	infringement 13:3 18:19 20:7 22:10		insurer 215:8,10
indications 81:19	29:8 37:24 38:4	insistent 186:16	insurers 215:6
indie 46:5 147:5	53:22 93:4,5	insisting 94:22	227:11
166:21	98:12 118:20	inspiration 151:15	integral 172:8
indirect 208:4	137:1 175:21	install 12:18 19:8	Intel 171:15,16
indisputable	177:9 227:14	23:8 24:10 56:7 71:23 84:9 85:24	intellectual 3:4,6,8
127:22 175:3	infringers 134:25 135:1	94:5 99:3,6	16:7 126:14 194:9
individual 19:12		100:21 107:20	
24:19 37:12 48:6	infringing 13:6 19:17 20:20,23	109:19 117:9,13	intelligence 10:6
53:24 55:13,17	21:17,23 32:13	installed 25:12	intend 108:21 150:15
58:12,16 62:8,20 66:17 67:16	35:1,2,11,22	79:15 107:2	intended 23:22
72:21,22	39:9,11,12	108:1 113:17	24:3 32:22
129:6,10 137:12	55:5,18 56:10 174:9 175:22	installing 10:3 25:11	109:13 123:3
195:8	181:2,13		149:21
individuals 24:4	182:18,21	instance 49:19 55:22,24 57:5	intensive 79:14,18
47:16 57:15 58:8	183:14	121:3 144:22	intent 56:4
59:23 60:7 66:13 67:6	223:14,22	158:7 177:18	interact 63:11
	inherently 202:1	195:10 196:21	142:17
industries 83:21	223:4,25	205:9	interaction 142:16
industry 17:22 67:10 136:4	inhibiting 40:2 127:20	instances 5:2,23 25:19 201:25	interactions 80:4
173:13 188:14	in-home 164:7	219:2	interactive 16:5,10
197:1	initial 89:6 118:5	instantly 153:8	17:17 172:2
industry-leading		170:10	interest 10:22 20:2
170:25	initially 69:7 163:5 191:12	instead 24:9,11,17	24:15 82:12
industry's 60:7	initiative 162:1,3	34:7	93:17 109:5,9
ineffectual 66:22	163:16	in-store 163:24	110:12,13,14,24 112:17,18,19
inertia 165:24	innards 70:10	instructed 28:14	113:7 209:9
inevitable 35:3	innovate 26:13	instructions 22:18	interested 20:21
inevitably 177:21	innovation 75:24	insufficient 24:19	199:4 232:13
in-flight 153:15	80:23 82:12	129:1	interesting 10:21
154:19 155:20	innovative 62:22	insurance	40:19 76:23
	·	146:9,10,11	77:24 81:21

	1 ag		
83:19 148:6	invented 43:18	iSingle 87:1	104:23
188:23 230:3	invested 87:22	isn't 10:17 16:15	it's 9:19 10:20
interests 17:24	investigating	38:7 58:23 67:24	14:6,15 15:8
18:5 23:22 82:2	165:16	80:24 81:2 100:2	18:21 27:20
92:20,21 93:2		117:3 123:9,17	30:4,8,10
intermediaries	investment 18:22	144:14,17 175:5	31:11,15
176:25	168:15	177:1 178:17	32:8,20,22 33:5
	investments	179:25 197:17	34:20,22
intermediate	170:24	216:5 217:14	35:3,14,18 37:22
31:18 32:6	invoked 93:9	218:12 227:5,6	38:3
internal 121:7		isolated 24:18	39:2,3,9,10,12,1
Internet 23:12	involved 47:8,16	153:18	7 40:2,4,16,18
82:22 83:22	94:20 172:23		41:11,16 44:3
139:22 158:10	178:22 207:23	isolation 153:22	45:21 46:14 47:7
211:3,6	involves 205:16	issue 11:2	48:2 50:16
228:20,24	223:24 224:1	18:11,17 27:4	51:12,21 52:22
	231:6	30:12 33:17 41:9	54:10 55:12
Internet-		44:7 57:2 62:16	56:23 58:22 62:3
connected	involving 19:20	81:7 89:6,9	65:15 66:21,24
160:13,14	iOS 85:10,13	93:25 108:20	67:21
170:12	86:18	116:24	70:11,12,15,23
interoperability	IP 198:13 207:11	122:24,25	71:1,4,8 72:16
4:9,15	230:9	123:11 140:25	73:2 74:6 78:13
interpolation	iPad 77:16 84:19	147:22,24	80:4 81:5,21
206:7		152:15 155:6	83:9 84:3,7
	89:15,17 99:7 102:2 104:23	156:15 157:5	88:5,14 90:14,23
interpreted 226:8	102.2 104.23	166:6 173:10	91:10 92:13,24
interrupt 117:11	,	176:5,14 194:2	93:2,7,16
intraoperability	iPads 77:22	213:14 218:1	94:14,16,18
12:25 14:10	78:14,16 100:8	219:14 221:25	95:5,11,25 99:11
15:19 27:20	102:15 168:8	223:18 230:7	100:7,25 101:11
29:4,7,20	iPhone 50:1,3	issued 174:21	102:3 103:1
30:13,17 31:5	64:21 77:16,20		104:15 105:8
36:23	78:6 80:2,8	issues 64:11	107:2
37:7,10,15,20	84:17,20 86:6	91:4,6,8,19 99:9	108:2,21,23
38:1,2 39:6	89:5 90:8 99:7	100:5 120:23	110:18 112:13
50:11 65:23	101:15 102:3,16	123:22 124:13 139:25 151:14	113:1,2 114:23
67:9,15 74:24	104:22,23	152:19 155:12	116:4,16,22
96:11 98:11,22	106:15 107:2,4	172:22,24	118:14 119:18
123:11,16,17,22	114:14 120:18	183:11 206:12	123:5,12
124:13,17 162:5	123:8	218:5,14,18	124:18,19
	iPhones 77:22	r r	130:22,23
intraoperable 8:21 11:4 13:14 15:10	78:14 100:18	issuing 221:11	133:1,16,19,22
33:20 48:10	102:7,11,15	items 146:6 151:15	134:12
58:16 71:21,25	104:7	152:16 155:16	136:4,5,13,22
118:17 162:14	IQ 90:5,6	217:1	139:6 140:1 141:24
	- /	iTouch 77:22	141:24 142:10,12
introduce 7:22	irrelevant 94:18	78:15 102:15	143:22
introductory 18:8			

	- 0	E 30	
145:2,12,15,17	I've 15:24 35:16	151:3,21 185:17	102:10,24
146:2,5,19,22	103:13 116:1	ŕ	105:16 120:11
148:1,2 149:16	140:16,18	Jay 78:17 85:12	122:6 124:11,19
151:7	141:12 150:25	102:19	184:9 193:16
152:4,12,14,24,2	151:15 180:9	jeopardize 118:11	196:9,18
5	190:9 202:17	job 59:12 73:16	197:5,21 210:4,6
153:1,2,6,9,15,2	203:10 220:25	127:11 166:10	212:16,23
1 154:19	203.10 220.23	172:13,19 182:9	213:10,14,18,20
155:7,10 156:10		223:7 224:10	217:9 226:4
157:6 158:14,18	<u>J</u>	227:13	
162:2 163:15,16	Jack 3:7 35:20		Kevin 79:12
173:12	97:8 126:11	Joe 127:25 129:20	key 65:19 165:3
174:8,18,21	198:1	183:25	185:20 205:7
175:2 176:8,11	Jackson 147:1	Joe's 179:25 184:5	key-logged 90:6
177:3,10,12,13,1	jailbreak 13:25	John 137:18	keys 51:22
6 178:22,23	56:6 63:20	joint 2:14 16:1	· ·
179:14,18,19,20	66:14,18 67:22	27:11 81:20	Khanna 11:10
180:15 181:5,16	77:20 78:14	90:21 173:5	48:18
182:19	79:11 83:15		kicked 147:1
183:6,7,15	90:11 100:13	Jonathan 2:18	kids 216:19
184:6,8,15	101:11	126:7 135:13	
185:21	104:12,13,18,20	138:3 140:10,11	kin 151:13
186:24,25	105:5,17 113:4	182:4 186:20	Kindle 100:9
187:24 188:25	116:17	189:8 207:12	112:5,11,12
190:2,4 191:1,16	118:16,19	211:11 212:4	116:2,3,4 117:7
192:23 193:16	121:22	228:16	118:25 119:1
195:24,25	jailbreaking 19:20	jot 129:12	121:4,7
196:1,2,9,10,13,	37:3 46:10,12	judgment	kinds 65:21
14 198:1	60:7,14,25 64:22	87:17,20 95:24	127:8,12,22
200:18,21	75:23 77:18	·	185:9 193:8
201:11 202:12	78:5,7 83:4,8	jump 97:17	197:3 214:3
203:22 204:5,23	84:13,15,21,25	Juno 166:24	221:2 222:19
205:7 206:9	85:6,9	jurisprudence	
207:18 208:2,13	89:3,14,22,23	111:7 183:1	Kinect 10:25
209:2,8,20 210:3	92:1 103:20		62:5,12,22
211:3	104:3,6,17	justifiable 173:12	63:3,5,13
214:2,18,19,24	117:19,24	justification 96:14	kiosk 164:1
215:9 219:12 220:10,14	121:19	177:4	kiosks 159:25
223:3,17 224:5	jailbroken 20:18	justified 134:19	knew 148:13
225:11,25	31:25 56:5,6	223:17	knowledge 40:9
226:11,23	78:11,20,22		120:25
228:13	80:2,8 85:13	K	
229:17,21	105:2,10 121:19	Kasunic 2:7	known 20:10
itunes 160:5	James 220:9	7:12,23 38:23	75:23 159:19 215:5
iTunes 131:24	January 76:21	55:2,19 57:1,25	215:5
138:19 145:3	78:7 104:21	58:20 64:10 65:7	
138:19 145:3		66:6,19 67:1,23	<u>L</u>
196:2	Japan 151:8	69:2,12,24 97:19	L.A 141:13
170.4	Japanese 11:23	98:24 100:4	

	1 ag	C 31	
lack 45:15,22	227:4 228:2,13	183:13	legislative 28:18
lacking 24:16	229:2 230:11	lawyer's 174:19	29:16,17 65:19
lady 151:23	late 80:11 113:12	lay 115:5	176:22
laid 91:15	227:23	layer 191:21	legitimacy 144:15
lamp 32:18	lately 95:16	lead 111:17 165:21	legitimate 9:13
landscape 167:23	later 23:8 31:2	221:6	14:18 15:18 55:9,14 58:15
language 11:23	41:4 164:4	leading 31:5 221:9	60:1 61:8 67:21
65:8	latter 92:21	leads 110:4	98:11 128:23
141:22,23,24	laughing 202:2	Lear 128:2 129:21	length 212:7
142:1 151:3	laughter 202:13	184:1	228:12
185:8 229:8	launched 163:5	learn 127:13 133:3	lenses 202:25
lapse 106:8	168:25 170:7	learned 104:24	LERNER 3:7
large 47:10 136:21 143:13 154:3	Laurence 2:21 126:8 150:21,22	218:13	126:11 194:1 215:24 216:1
159:17 162:18	156:5 182:4	learning 11:23	less 26:18 51:16
largely 21:10	211:9,24 214:4	229:7	65:6 92:24
68:22	215:1	least 47:23 51:4	116:15 172:21
larger 47:9 165:14	Laurence's 205:11	104:25 170:14 184:4 200:9	186:16 192:2
190:18 197:22	law 1:20,21	209:13 214:17	lesser 159:19
largest 92:3	3:4,6,8,9 7:7,9 32:5 48:11 55:6	leave 19:15 115:1	lets 11:21
Lassey 99:10	62:17 73:20,21	179:19	let's 7:22 12:13
last 17:20 22:11	74:2 111:14	leaving 34:7	14:5 20:17 46:24 69:12 71:16 73:3
24:24 25:13	112:20 137:24	led 85:10	74:14 75:10 79:3
28:11 29:1 30:1 33:1 39:16 49:24	138:11,12 141:17 198:13	ledger 34:7	84:17 86:6
52:18 65:2 73:25	215:2	Leduc 139:10	88:15,17 100:4
76:9,15 78:5,9	lawful 12:25 25:8	legal 50:15 54:4	103:16 127:1 129:14 165:2
80:14 83:5 85:4 90:4 91:13 97:20	26:12	60:25 62:16 75:7	183:16 191:3
99:10 101:17,19	lawfully	80:20 84:5	223:6
102:12 103:17	4:7,8,14,22 5:5,10,16	85:14,25 86:13 88:2 101:24	letter 22:15 147:23
104:24 107:21 110:4 111:2	6:1,9,16,20 8:22	110:19 126:20	174:20
110.4 111.2 112:8 113:10	12:20,21	127:19 130:2,8	letters 136:19
120:13	13:13,14 58:13	134:23 135:3 138:25 139:3	146:6,9 157:5 188:7 216:1
122:12,24 124:1	laws 16:8 50:5,6	156:11 168:16	letting 8:6,23
128:15 145:7 146:4,17 148:17	74:5 83:10	172:4,22	level 41:6 79:22
149:25	lawsuit 12:1 61:13,18,24	184:7,15 193:20 217:20	145:11 174:23
158:14,15	137:2	legally 6:23 81:1	205:8
161:20 163:5 164:19 183:2	lawsuits 60:13	84:25 102:3	levels 169:20
189:6 199:1	219:15	137:2 138:20	205:22
202:4 204:13	lawyer 130:3	139:1 229:17	Lexmark 32:9,16
224:24 226:6,20	132:6,7 176:7	legibility 155:17	LGBT 128:22

	ı ag		
liability 101:24	life 79:24 149:4	47:20 48:22	99:16,23 100:1
195:7 219:17 liberated 149:3	200:13 lifeblood 52:10	49:10 lips 143:19 191:25	loaders 99:8,20,21 107:19
librarian 75:20	light 20:3 23:11	Lisa 1:23 232:3,17	location 1:20 90:7
126:20 198:25	124:3	list 2:10 3:1	151:20
libraries 16:10 176:24	lighting 155:22	116:22 172:16 178:18 188:14	locations 230:5
library 16:3 208:6	lights 130:1 131:8	listed 27:13 173:7	lock 99:24 151:5 195:25
license 1:24	179:9	listen 152:4	locked 89:17,18
147:21 159:19,24	likely 50:14 105:21 133:16	listening 124:25 229:19	99:21,23 115:19 195:25 196:2
160:17,22 170:19 171:5	148:2,3 174:8,18 214:18 223:14	lit 201:11	locked-down 47:24
185:13 186:2 187:5 188:12,17	227:14 230:17,19	literacy 130:4,5 132:4	locker 164:21
195:2 208:19 209:11,19	likewise 22:3	literally 224:2	locking 123:13
211:12,14,15	limit 45:10,12 107:19 137:25	literary 117:22 118:9	lockout 15:14 32:16
licensed 157:18,20	198:18	literate 103:22	locks 43:23 100:22 199:17
208:22 licensees	limitation 177:21,22 185:9	litigate 183:5	log 147:20
160:21,24 161:2	limitations 140:8	litigation 93:11 175:18 176:1	logical 90:14
165:5 170:25 172:18	limited 11:7	little 9:7 13:22	130:12 181:6 Lohmann 183:2
licenses 157:11	43:13,15 91:11 103:8 111:12	25:5 33:24 36:15 58:22 62:3 63:5	London 154:22
158:15,20	133:14,20,21	71:4 77:11 85:6	Loneliness
159:4,16 160:2 187:10 212:13	134:20 136:13 202:1	110:13 122:23 138:6,7 142:10	151:9,23
licensing 25:4	limits 171:6 218:6	149:12 163:1	long 26:22 142:9 158:9 172:16
26:19 64:15,20,24	line 9:21 22:13	164:25 166:23 173:8 176:21	181:13 185:5,24
68:24 156:17,19	97:3 181:24 212:18 213:2,10	181:22 186:15	186:23 188:14 189:3
157:15 171:18 187:13	linear 53:14	192:25 193:19 200:3 210:12	longer 11:13 55:23
194:2,11,22	lines 42:5 60:6	217:2 223:6	71:3 128:13
195:5,13 199:15 207:12,13,17,21,	61:6 116:25 144:3 189:13	228:12 live 61:16 168:25	Lord 150:2,3,5,10
24 208:3,4	206:10	lived 148:22	Los 1:21
209:1,15 212:6,20 213:17	linked 211:2	151:24	lose 18:2 144:15,16
licensor 167:10	links 119:24	lives 77:3	162:20 190:5,7
195:8	158:6,8	living 70:13	191:1
licensors 171:24	Linux 10:3 11:12 19:7 23:24	151:12 189:1 loaded 121:3	losslessly 195:22
lieu 7:14	25:11,14 46:1	loader 98:21	lost 23:10 87:25 103:13 147:5
	<u> </u>		

	Pag	2 33	
175:23	141:14,15	manufacturer	94:9 115:10
lot 41:14 50:15	main 36:3 67:24	43:21 50:6,13	marketing 116:12
52:1 53:21 73:24	92:16 150:10	84:10 88:4 92:14	167:4
74:1 78:23	151:21 152:21	105:23 108:1	marketplace 46:5
79:7,19 82:21	155:3	110:2 119:4	60:20 78:18 83:6
87:22,25 89:9	mainstream	manufacturers	85:7 86:15 92:12
94:7 110:22	127:5,16 129:19	42:21 47:25 54:3	112:14 114:18
119:2 122:12,13	166:18 207:4,8	78:25 81:9 84:4	marketplaces
131:4 135:16	maintain 85:22,23	86:20	77:15 78:24
136:2 138:24 147:9 148:5	86:2 88:7 110:19	manufacturer's	84:22 85:9 86:17
154:22 157:24	maintained 88:8	105:22	114:16,20
158:23 174:1,14	171:12	manufactures	115:19,21
175:5,11 176:15		101:6	markets 94:15
178:10 179:6,16	maintaining 170:23	manufacturing	133:17,18
186:25		118:24	Marlin 160:23
188:20,25 189:3	maintains 86:1	maps 11:24 63:6	Martin 139:10
202:9 207:25	major 141:11	Marcia 2:11	
208:3,17 214:14 218:1,18,22	143:7,10	8:9,13,16 36:10	Marybeth 127:18
219:9,11 220:8	166:16,18 214:5	41:6 75:15,17	mash-ups 158:1
221:3 222:3,20	majority 88:9	83:16 97:19	mass 127:14 142:2
225:22	93:12 169:17	109:4 112:17	165:12 229:15
lots 77:1 145:16	maker 84:11	114:23	match 207:5
	184:18	Marcia's 45:3	material 93:18
Lou 144:23	makers 17:25	102:25	133:13 139:18
love 103:22	26:14,16,21 52:6	marginalized	154:23 155:18
low 137:14,25	68:20 84:4	128:21	178:15 179:17
189:10 204:15	86:18,19	Maria 2:4 7:11,21	181:9 190:24
217:8	malpractice	ŕ	195:19 196:10
lower 200:13	176:10	Maria's 106:7	202:21
Luncheon 125:2	man 79:13	market 18:7,13	203:3,15,17,21
	manage 128:5	21:6,10 23:13	204:14,17,18
lying 56:15	S	50:2,8,16,19	207:7 209:1
	management 160:20	53:2 76:4,12,17 92:3 94:10,18,19	218:11,22 220:8 222:5,6
M machine 24:14		95:9 98:19 100:2	ŕ
32:22 41:1 42:3	managers 22:23	101:20	materials 16:12,14
44:6	mandate 35:19	106:9,10,18,20,2	157:7,8,24 158:6 199:18 220:11
	manifested 100:24	3,25 107:14	
machinery 149:7,9	manner 139:14	108:3,5 109:21	matter 11:6 17:11
machines 63:3	171:14 192:24	114:14 115:8	23:5 26:24 35:15 104:15 191:18
80:17	man's 96:25	133:10 137:9	203:4,5 227:16
Mackechnie 3:2		139:3 163:5,7 168:1 176:20	matters 202:9
126:9 166:2,3	manufacture	181:10 187:12	
Macs 113:12	57:21	195:3,4	Max 150:6
Mad 150:6	Manufacture-On-	marketed 9:20	may 1:16 7:3
Magazine	Demand 159:12	markettu 7.20	14:11 28:25 29:2
Magazine			

	1 u ₅	1	
30:6 37:1,4	67:4 87:25	166:6	met 19:11 28:19
39:2,3,8 45:20	88:24,25 95:2	medium 178:8	33:6 39:8 74:10
47:10 53:20	98:24 103:23		206:13
56:13 63:25	104:4 111:19	meet 39:22 46:21	Metalitz 2:14 8:14
64:19 66:16	115:9 141:9	74:12 167:24	19:15 27:10,11
86:5,8 87:17,25	144:4 175:6	174:5 202:8	38:25 41:13
95:9 96:25	216:17 217:14	203:21 204:5	65:1,14 70:22
107:3,10,24	218:20 222:10	meeting 139:25	73:15,24 75:16
110:13 118:12	meaning 103:20	173:13	81:21 90:20,21
122:16 126:2	_	meets 142:11	103:6 106:6
129:6,24 135:20	meaningful 22:13 34:2 45:15		108:7,17 110:9
138:20 152:3		member 63:15	113:23
161:12 163:14	means 29:3,6	212:1	119:18,24 120:6
205:17 208:10	36:16 37:5 39:4	members 2:6 7:12	123:25
215:7 216:18	40:17 43:2 44:13	12:2 17:16 27:5	124:15,21
225:17	51:7,19 83:23	61:15 62:10 91:1	173:4,5 194:8
maybe 28:8 35:21	87:18,20,21,23	143:25 162:24	203:7 207:17
59:1 63:21 66:4	88:1,23 92:15	209:6	209:13,18
71:8 84:17,19	103:24 106:17	memory 16:11	214:9,13 218:17
94:6 107:3 112:5	112:24 113:24	mention 49:22	219:25 220:22
117:16 119:21	114:2,6 157:8	96:5 113:10	221:24
121:17 177:1	167:15 213:5,13	162:1 190:12	224:15,22,25
187:16,17 192:8	229:22 232:6		225:5,8,20,22
208:21 221:18	meant 14:6 52:16	mentioned 45:25	226:11
225:13	110:6 141:2	78:6,13 83:16	Metalitz's 37:25
McCleod 79:12	211:2,14	100:16	57:14 75:2
mcintosh 2:18	meantime 165:22	104:18,20 135:16 136:16	metaphor 181:23
126:7 140:11	measure 20:21	165:5 180:10,21	-
142:25 186:22	21:23 29:3 30:3	192:9 199:14	method 180:16
187:7,21	36:19 39:5 55:24	200:6	methods 20:9 22:8
189:17,21	115:23 121:24	208:8,16,24	168:14 172:7
190:21,25	197:9,12	212:24	173:14 177:15
191:24 192:9	measures 16:13		metronomes 11:22
193:9,18,24	33:10 61:21	mentioning 134:22	MI2 205:12
195:20	117:21 171:20	mentions 48:20	
196:11,25	196:20	61:12	Michael 2:20
209:22 228:19		merchandising	126:8 127:11
229:5	media 2:16 5:3	156:20	145:25 150:20
McIntosh 140:11	6:14,16,23 82:20	mere 19:25 24:18	174:16 175:19
	127:14 134:11	132:23	182:4 204:6
mcsherry 2:17 126:6,13 182:17	136:21 138:18		208:16 214:15
184:5,12	139:13 141:11,17 142:2	message 87:4	215:3 227:1
197:13,25	144:11,17 142:2	89:7,8,10 135:13	Microsoft
206:18	161:19 163:16	136:8 141:7 144:18	62:4,19,25 169:3
McSherry 126:14	167:6,18,22		Microsoft's 62:15
1	187:24 188:2	messages 89:11 143:5	Middle 80:7
MDY 93:3	207:4 229:7,16		Mike 213:25
mean 36:24 43:18	medical 153:2	messaging 77:12	1.1110 210.20

	1 ag	C 33	
military 10:6	mixed 55:12 74:21	Moot 1:21	136:4 158:22
militating 118:1	mobile 82:23 83:2	mooted 60:24	193:10 204:23
MILLENNIUM 1:1	101:2 102:8 116:9 147:3 160:15	morning 7:5 8:2,15,25 20:13 27:4,6,10 31:2	Mozilla 80:15,18 107:11,12,16,17, 21
million 20:23 21:14	model 94:8,13	76:3 82:18 108:8	MS-DRM 160:22
78:8,10,12,21 124:5 141:9	95:1,11 159:7,8 160:4,6,9 161:24	118:15 134:3 179:8 180:23	multiformat 169:16
145:13 164:23 168:2,3,4,6,7,8,9	163:11,13 165:17 167:3,20	Morris 12:6 61:12 206:7	multiMAN 22:24
,10 169:6,7	models 50:17	Moskowitz 1:23	multimedia 6:7
Millionaire 166:23	158:24 159:5,21,25	232:3,17	multiplayer 21:11
millions 17:18 18:1 21:14	160:1,18 161:9 165:4,8	mostly 49:25 173:17 207:20	multiple 41:22 99:20 104:19 162:7 169:20
mind 14:15 91:21	167:14,24	motel 203:6	199:1 231:7
172:12 185:17 192:13	187:13 moderately 126:24	motion 4:22,24 5:16,18,21,23	multipurpose 56:9 116:9
minds 220:13	Moderator 2:3	6:1,2,5,7,8,11,20	Mumbai 152:23
minimis 51:13	modern 111:7	,22,24 10:25 129:14 157:18	154:3,4 205:13
minimize 18:5	167:1 230:3	166:21 211:10	murkiness 75:7
minor 81:22	modest 124:3	214:4	murky 229:22
minute 85:2 142:6 146:19 208:18	modification 19:16 124:3	motion-sensing 62:6	museums 156:23
minutes 8:5,7	modified 10:8 80:7	motivated 86:25	mush 201:22
36:10 142:9,13,15	modify 15:14	motivation 45:20	music 59:10 95:4 129:10 152:4
169:4 182:2,5	modifying 13:24	Motorola 81:10	165:13 167:8
mirror 22:2	14:9	move 23:24 196:3	musical 220:10
misconceptions	moment 13:17 15:3 56:5 187:4	200:1	muster 128:5
175:6,11	Monday 137:18	moved 140:19 149:3	mute 89:19
misheard 28:4	monetize 194:17	movie 52:25	myself 109:5
misinformation 218:19	money 87:23	142:12 148:25 153:9,14,17	N
Miss 166:23	172:6	161:14 170:11	naked 215:21
Mission 154:2	monitors 155:12 156:1	210:1,2	narrative 41:18
205:13	monopoly 113:2	MOVIECLIPS 157:20 158:3	narrow 13:11 17:7 136:12
mistake 93:22 mistaken 111:23	month 76:24 90:25	208:7	narrowing 226:16
misuse 171:5,7	173:16	movies 166:12,18	narrowly 58:22
·	monthly 159:10	167:12 168:8 169:9 172:11	93:1 98:9
misused 95:15 MIT 63:4	months 164:4 186:24	229:9	230:21,25
1 15/11 1 6 4 1 / 1	180°24		narrowness 136:9

		e 30	
national 173:6	152:2,16 154:22	non-infringing	206:23 209:23
nationalistic 155:1	155:1,15 193:7	9:14 12:23 13:15	Notwithstanding
naturally 201:4	199:20 217:10	20:21 25:6 30:23 31:11 55:3,10,21	65:11
nature 15:4	newscasting	59:6 65:4 91:15	novo 28:12 33:4
100:19 111:19	193:14	118:18 122:21	111:25 173:18
124:3 175:6	nice 161:25 182:9	123:20 133:21	NPR 141:13
226:9	197:18	136:14	numerous 172:18
nearly 76:12	Nielsen 76:11	174:7,11,15,22	nurse 80:1
78:8,21	night 80:11	175:3,4,9,11	
necessarily 74:25	Nimmer 7:5,6,19	179:5,10 180:22 181:4,15	nutshell 126:23
114:6 121:6	199:25 226:25	182:14,20	0
130:14 195:8	227:3 228:3	183:11 194:19	object 144:5
216:9 224:19	Nintendo 42:15	212:25	· ·
necessary	nobody 81:6	221:3,5,14,18,21	objecting 108:22
5:1,9,14,23	114:17 200:1	223:1,16,19	objection 157:5
6:7,13 15:10 19:14 29:6 36:23	nomenclature	224:9 230:17,18	188:6,8
38:20 63:20,25	159:3	nonprofit 15:23	objectionable
134:17,19 136:5	nominal 170:10	82:20 134:12 184:4	87:17 88:5
137:7 139:6	non-Apple 106:19		objections 82:3
necessity 197:21	1	nonprofits 218:4	185:7
negative 34:6	noncommercial 5:4,7,12 6:22	Nook 100:9 112:4	objective 177:3
111:18	14:24 136:14,15	Nooks 112:11	obliterate 105:5
negotiate 165:6	141:4 173:25	noon 8:3	obscene 87:14
171:10	174:24 175:9	nor 133:25	observation
	176:4 177:5	Normally 157:6	182:12
negotiated 147:14 167:9	178:3 179:12	· ·	observations
	180:17 183:21	Nostrand 80:6	220:20
negotiating 164:5	184:11 213:3,11,13	notable 157:6	obsessed 150:2,10
neighborhood	219:5,15	note 10:21 51:15	,
211:23	226:1,3,7	noted 131:1	obstacles 16:9
Neill 2:15 75:15	non-DVD 139:18	notes 89:4 221:1	obtain 5:23 6:7
82:18,19 94:1,7 114:11 126:7	none 24:6 37:22	nothing 23:19 32:2	67:15 84:22 98:10 132:14
134:10,11	47:20 133:10	114:19 134:23	98:10 132:14 161:24 188:6,7
192:21	147:5	146:10 147:8	195:18
Neilsen 52:20	Nonetheless 183:6	notice 73:9 128:14	obtained 227:21
neither 46:7		132:5 136:18	
133:25	non-exploitive 14:18	176:7 178:18	obtaining 170:23
		229:11	obvious 46:12
nervous 186:1	non-fiction 213:5,7,20	noticed 148:23	92:25 185:16
Netflix 159:10,18		notices 137:3	obviously 27:24
193:4,6	non-infringement 22:12 219:23	noting 37:22 78:13	44:15 56:16 61:1 71:5 80:13 111:5
newer 116:2	22.12.219.23	e	138:17 140:19
news 151:15		notion 190:12	143:24 151:14
	I		

	1 ag	-	
152:1 155:15,18	177:12,19	113:21 117:24	76:8 81:22 94:22
173:15 174:13	186:19 214:13	183:8 201:13	opt 23:8
183:5 193:12 204:20 208:11	old 113:11,16	opening 18:9 47:5	optical 6:15
214:15 215:4	131:17 159:13	52:17 66:9	option 131:14
216:19 217:24	202:24	openness 92:5	169:19 207:24
220:4,10 222:22	older 94:7 127:6	98:15,18,22,24	options 114:17
occur 53:9	old-fashioned	operate 11:21	187:13 201:25
occurred 17:22	202:19	149:9 204:10	203:25 204:1
34:17	omission 231:5	operating 10:3,10	208:1 222:9
occurs 131:5	omissions 174:20	32:17 33:10,18	orchestrating
	208:21	41:1 42:3 44:6	119:5
odd 39:17,19	ones 49:6 102:11	60:17 63:22	ordeal 153:2
odds 90:24 154:6	165:16	69:20,22 71:23 72:1,5,7 77:17	order 4:23 5:21
offensive 87:15	one's 117:16	84:4,11 85:10	6:5,10,18,21
offer 94:23 118:9	one-size-fits-all	86:18 88:4,15	21:22 54:7 58:17
161:16 164:9,18	169:23	89:1 94:3 104:22	63:20 64:7 69:21
168:21 169:18		111:3,9,14,20,22	71:10 79:13
172:9	one-tenth 51:16	218:25	80:16 92:11
offered 114:24	one-to-one 82:21	operative 55:23	94:24 96:21
161:15 181:17	134:13	operators 170:5	111:6 145:1
offerings 169:23	online 5:11 21:11	opine 58:25	146:18 164:15 168:18 177:11
offers 26:17	53:13 77:14	147:20 224:16	180:7 183:22
161:10,18	131:24 134:15	opinion 74:7 146:6	194:15 197:5,10
170:18	136:4 138:15,18 139:7,11 140:23	154:25 155:5	200:5 206:16
office 1:9 7:8,12	141:2 144:9,13	174:19	210:22
8:1 14:14 17:9	145:13 157:18	opinions 74:1	organization 8:17
19:4,11 20:17	163:2 164:3,6	220:6	82:20 128:11
21:3,6 22:8	165:19 171:19		218:3
24:12 35:12	178:10 192:16	opponent 156:13	organizations
67:20 74:7 91:13	210:20	opponents 9:23	16:11 27:12
92:23 93:20 94:20 95:5 97:13	Ono 188:17	10:16 40:16 129:3 219:21	original 14:2
98:6 108:18,22	onto 76:20 121:3		69:22 72:1 89:21
110:12	189:23	opportunities	113:11,13
111:1,11,14	oOo 1:2 8:10	159:24	123:18 132:3
112:7 149:25	75:12 125:4	opportunity 26:18	135:6 198:8
172:12 174:5	126:1 231:14	116:21 126:17	202:21 203:17 205:6
188:24 194:12	oops 146:22	198:16	205:6 206:2,3,9,14
207:11 215:13	215:22	oppose 117:17	
226:21 230:13,15	open 8:23 11:3	opposed 43:1	originally 203:18
	19:4 54:13	59:24 68:5,8	OS 10:11 51:15,22
OFFICER 232:1	62:11,13,21	81:6,7,9,10,12,2	88:24
official 85:16	63:16 98:17	0 110:11	ostensible 96:16
oftentimes 105:1	103:3 105:10	opposite 199:14	172:16
Oh 74:18	107:24 110:17	opposition 34:21	others 46:14 50:7

	Pag	C 30	
61:22 171:24	owns 13:13 58:12	132:12	104:17 110:16
178:5 195:11		paradigm 71:5	pass 43:21 130:4
209:3	P	paragraph	202:11
otherwise 80:9	p.m 4:20 125:2	29:16,17	past 9:15,20 10:4
83:12 84:5 85:25	126:2 231:11	Pardon 225:20	12:1 17:11 33:13
86:13 88:2 90:4	package 22:18		36:5 47:19 78:22
101:14 109:23	123:23	participants 167.13	81:16 108:18
110:1 135:3 193:25	page 4:4 159:2	165:19	133:3 140:1
	pages 16:6 73:25	participate 142:3	169:25 204:10
outcome 94:17	• 0	participating	218:13
232:13	paid 129:21	229:4	patients 80:4
outcry 87:6,7	168:9,10 184:23 209:5	particular 24:14	Patrick 7:15
outlet 70:12 84:13		25:3 33:23 36:20	pay 132:1,2
outlets 141:11	painting 11:24	43:12 44:10	137:22 139:4
144:11	147:2	48:14 53:17 57:9	167:6 169:19
outlined 173:11	Pallante 2:4	59:13 61:9	211:24
	7:11,18,22 17:4	64:15,25 65:20	Payer 87:1
output 171:8	27:8 36:9 58:5	67:20 69:8,24,25	·
224:18 225:11	75:9 90:18 97:16 102:25 107:6	74:5 92:15 94:2,5 95:10	pay-for-use 194:16
outreach 216:15	102:25 107:6	94:2,5 95:10 100:13 105:6	
outset 175:2	124:22 126:12	108:20 109:7	paying 109:8
outside 13:8 31:15	134:8 140:9	110:18 116:7,13	132:21 171:21
70:21 109:10	145:23 150:20	120:12 121:1	payment 159:9
176:25 178:23	156:5 166:1	122:16 123:14	194:18
194:19	182:1,8 185:11	181:8 190:13,16	Pay-Per-View
overall 51:6	186:6,10,18	197:24 198:2	166:15
121:11	187:3,9 189:15	199:6 220:3	PC
overcome 155:12	191:15 192:6	222:13 224:17	21:2,6,10,12,17,
	193:22 194:5 199:23 205:3	particularly 9:6	18,21 22:2 26:3
overriding 56:23	207:10 210:5,8	13:18 16:17,21	161:19 164:8
oversee 166:10	215:3 228:16	23:16 60:9 67:17	171:14
overwhelmingly	229:1 230:9	78:2 93:3,15	PCs 113:12
24:25	231:9	97:22 109:16 128:20 132:14	peak 168:1
owned 58:14 59:5	Pandora's 19:5	136:1,14 174:25	peeps 148:12
69:25 76:22,24	panel 1:9 2:6 8:4	177:25 223:3	• •
187:7	75:10 91:6 95:2	parties 195:10	peers 79:23 228:24
owner 93:10 98:25	96:15 108:17	231:7 232:11	people 15:18 22:5
owners 2:14 27:12	110:5 173:8		23:24 35:25
90:22 92:25 93:2	178:6 199:3	partner 157:17 164:16	43:17 47:8,11
101:23 102:1	panelists 2:10 3:1		51:14 61:7,14 62:9 63:7 64:7
129:5 173:6	8:13 75:15 126:6	partnering 171:15	68:3 70:25 74:15
ownership	232:6	partners 159:17	77:1,6,10
64:11,20 65:5	panels 8:2	164:14 165:18	78:10,12,18,23
83:17 159:7	-	171:12	79:8 89:11 90:2
162:5,17 163:18	papers 41:14 69:19 115:4	party 101:5,6	93:14,17 96:2
i	ロノ.1フ 11J.4	i l	

	1 ag		
98:10 99:5,24	143:2	135:15	224:21
100:12 104:3,6,7	performing 10:4	persuade 39:23	Pinto 11:11
106:15 107:3 115:20 117:13	14:16 47:11 67:7	persuaded 222:23	piracy 17:6 19:23
118:16 121:22	perhaps 7:15	pertaining 68:15	20:10,14,15,18
128:21 129:8	30:3,15 32:10	pertinent 73:23	21:1,7,20
130:9 133:13	52:21 58:9 65:18	-	22:2,6,12,22
137:9 140:3	97:7 108:21	Peters 127:18	23:2,7,12 25:2
141:5,6 143:21	110:1 116:20 120:14 153:20	petition 79:4	26:23 33:11 46:14 51:20 52:9
144:9	175:5	phased 132:16	53:22 56:20
145:9,11,13 151:11,12,20		phasing 155:12	57:2,7 82:4
151.11,12,20	period 178:7		93:16 97:5,11
157:7 162:17	peripheral 11:1	phenomena 151:7	116:14 119:16
175:8,25 176:11	permanent	philosophical	165:12 171:7
177:7 178:19	31:19,20	45:18	pirate 20:11 23:9
179:5 180:7	permissible 59:19	phone 79:13,18,19	27:2 32:1 34:9
195:18 197:3	permission 48:16	83:22 88:4,16,17	119:18
200:9 202:6	49:15 187:16,25	98:20 99:12,13,17,23	pirated 20:6 22:19
203:2,8 204:9 205:2 207:3	188:7,24	100:1 103:2	36:4 53:3,5
210:22 218:4,7	permit 13:3 48:11	107:5 109:25	54:1,9,11,14
219:4,16 220:5	158:24	phones 76:1 81:9	70:19
221:15 223:9,10	permits 29:18,23	88:17,20 99:8,20	pirates 133:24,25
229:6,24 230:4	73:11 74:15	107:17,18,24	pivotal 152:17,20
people's 89:11	157:22	109:20 120:18	153:3
147:9	permitted 20:17	photo 164:1	pixelated 143:15
per 41:25 69:17	30:17 71:10	photography	pixelation 192:3
156:25 175:9,10	person 4:25	154:17	pixels 191:6
percent 24:21	5:8,13,22 6:6,11	phrase 29:23 96:3	<u> </u>
51:17	29:2 36:19	-	placed 164:11
76:10,12,13,22,2	37:2,4,9 39:2,3	physical 138:17 163:17,19	places 35:13
5 83:16,17,18,21	48:18 54:18 58:14 143:22,23	166:13 168:1	101:21 220:25 228:25
106:18 107:13	58:14 143:22,23 212:7	170:2	
127:6 157:12 169:25 204:12		pick 33:8	plain 70:13
	personal 6:24 17:8 19:5 23:21	-	plainly 20:2 26:20
percentage 223:22	84:2,8 90:13,16	picked 143:1	plan 157:10
perception 61:3	94:11 97:1	picture 5:18,23	170:5,14 187:11
165:21	107:13 113:20	6:2,7,22 110:22	plane 155:22
perfectly 28:23	147:21 153:18	pictures 4:22,24	plate 173:21
74:6 131:25	160:12,16	5:16,21	181:22
155:25 198:7	persons 103:21	6:1,5,8,11,20,24 129:14 157:18	platform 20:1
perform 14:8 26:9	person's 58:13	166:21 211:10	21:2,20 22:1
37:1,5 48:23	97:1	214:4,10	23:13,15 25:3
50:9 66:13,18 223:7	perspective 73:14	piece 142:8 143:13	26:5 33:23 34:4
	119:4 132:8	191:8 210:24	44:21 52:10
performance 80:3		1,71.0 210.21	68:19,25 81:8

	ı ag	-	
92:2 94:6 99:5	70:2 71:15	pornographic	219:19 222:17
103:3 107:25	76:10,12,20,21	87:15 95:23	227:16,22
		67.13 93.23	,
110:17 114:9	78:2,11 86:22	portable 115:18	practically 155:10
222:13	92:18 98:14	161:19	practice 78:5
platforms 17:11	103:1,12,13	mantian 20.22	1
18:15 22:3 25:25	107:7,9,10	portion 28:22	146:1,17 230:22
58:3 59:8 68:21	108:20 122:4	29:10 36:20	231:5
92:13 93:25	127:25 128:4	190:13,16,18	practices 114:18
94:22 172:10	138:14 145:23	191:13	126:25 147:12
228:22	156:6 172:14	portions 4:24 5:21	171:19
	180:3,14,20	6:5,10,18 133:21	
platform-shifting	181:6 185:20		preamble 130:23
23:20 33:17,25	190:19 197:17	position 38:1 48:9	preceding 222:11
plausible 30:7,15	204:1 205:3	105:22,24	precisely 18:21
1 -	209:10 210:18	178:12	
39:20,21	212:2 216:21	positive 35:24	111:4 128:15
play 11:19 18:2		-	precluded 139:19
20:6 22:19	223:13 224:20	possibility 203:20	predate 82:4 120:7
26:10,12 32:1	225:14,16	possible 20:19	•
36:4 54:9,14	230:11	38:17 62:11	predated 120:8
56:10,13 57:5	pointed 119:25	66:24 72:16,20	predecessor
59:10 70:3,19	184:20	109:19 139:14	127:18
87:24 95:3	219:20,21	147:16 155:21	
123:8,19 152:17	l '	172:9 187:16	predictability
<u> </u>	pointing 63:7		172:17
playable 26:3	points 8:25 19:17	197:10 200:11	predominant 94:8
played 21:2 57:10	27:15 32:9	201:20,24	•
142:24 196:4	33:8,15 50:24	possibly 28:1,4	preeminent 85:8
	118:25 119:5	44:13 177:6	prefer 169:24
player 50:1,17	172:11 180:2	193:21	•
164:9 196:1,2	221:25	mag4 22:19 156:2	preference 222:14
players 160:14,16		post 32:18 156:2	preferences 19:5
1 ' '	policies 147:15	158:4 200:19	23:21
playing 9:24 14:6	policing 136:23	201:1 205:9	musformed 17.10
27:1 54:11 79:22	•	postage 140:22	preferred 17:10
PlayReady	policy 96:4 147:24	•	premium 217:8
171:1,2	political 87:4,9	potential 9:17 20:4	prepared 64:25
, i	126:22 127:4,17	122:16 195:7	65:24 225:3
plays 53:13	140:2 141:1	225:17	03.24 223.3
pleadings 40:16	154:24	potentially 16:19	preproduction
•		72:19 121:13	152:11
please 36:16 110:5	politically 86:25	223:14	present 32:8 45:14
plenty 206:25	politics 127:13		56:4 99:9 154:5
plight 152:18	131:20	power 25:16 79:19	
		86:21	166:7 200:12
plug 62:12	Pong 19:7 26:2	powerful 90:13	207:19 224:25
Plus 154:17	57:5	*	225:18
	poor 205:21,22	PowerPoint	presentation 61:18
point 11:13 12:11		158:7,8,9,11	92:9 174:17
23:18 34:12,25	popping 193:3	practical 26:23	183:16
41:7 47:21 52:11	popular 21:24	135:15 172:25	
53:19 58:11 63:8	142:12 153:7	197:16,20	presentations 40:6

	1 ag		
presented 49:25	184:10 226:3	38:3,11 45:17,24	156:21
119:21 173:20	primary 45:25	61:2 70:21 74:3	profess 204:4
176:16 180:14	53:1 69:3 117:22	76:15 88:13	-
181:18 224:24	167:16	92:22 95:6,12	professional 79:24
225:1 226:18		108:11,14	80:19 129:19
preservation	prime 163:15	109:11 111:25	144:11 225:24
15:23	Primetime 128:1	173:18 178:23	Professor 3:8
16:4,9,12,20	principal 51:3	181:20	professors 5:3
preserving 127:1	principled 77:25	proceedings 24:3	6:14 60:16
167:21 168:14	101:10	70:24 128:19	proffered 25:7
		process 25:5 26:19	56:14 64:22
president 87:11	principles 31:9	75:22 85:17	209:12
156:9	prior 19:20 34:19	104:5 134:3	
pressure 107:1	162:2	148:2 152:25	profile 60:11
187:14	privacy 89:6	176:7 190:14	profit 88:1 131:4
presumption	-	191:16 200:19	program 15:11
131:1,6 184:25	private 14:24	206:7,17 207:22	22:17 29:5 36:22
,	58:18 110:16	227:10,23 231:6	37:3,8,21
pretty 67:7 106:23 108:2 111:22	probably 35:19	processes 205:18	41:20,22 42:10
113:20 148:25	43:7 54:14	•	77:20 78:7
155:23 174:12	70:3,14,20 71:14	processor 68:6	90:5,6,7,11
195:22 201:8	85:21 93:12	produce 17:16	94:2,5
213:9 214:25	94:10 111:23	103:4 166:21,24	99:13,14,22
218:23 227:13	122:7 131:18	produced 104:21	104:17,20
	132:6 144:10	113:1,4 150:25	161:12 170:7
prevent 18:19 20:8	178:22 180:11	203:17 211:10	185:24 196:5
52:8 70:18 116:14 168:19	183:4 193:10	214:5	programmers
171:5 194:15	203:8 207:25	producer 185:18	67:13
	215:20 221:15 227:12	186:1,7	
prevented 224:10		,	programming 52:21
preventing 74:11	problem 33:21	produces 42:22	
prevents 171:7	49:8 62:24 69:25	107:12 166:17	programs
195:23	73:14 92:19 98:6	producing 140:16	4:7,9,13,15
	99:7,8,25	228:21,23	11:24 12:20,22
Preview 89:7	100:18,24	product 57:23	13:1 15:13 19:8
previous 92:9	101:16,23	62:18,21	23:25 27:20 29:6
96:23 102:25	108:10,11 179:7 188:9 191:23	106:12,14	30:13 37:8 41:16,23 42:2
131:11 153:7	217:7 227:22	107:24 137:21	41:16,23 42:2 45:8 72:13 75:22
182:22 197:6		159:4,12 162:16	77:18 84:5,6
price 68:3 118:25	problematic 143:2	163:5	85:25 96:12
119:5 169:15	problems 16:16	production 144:10	100:21 104:19
172:11	40:19 43:19	146:4 167:3	141:16 172:11
pricing 212:17	56:18 121:12	179:24 200:20	193:7 195:21
	177:23 218:15	205:9 224:2	196:6 199:7
primarily 5:7,12 26:1 52:24 123:1	proceed 223:11	229:23	progress 112:22
133:22 178:2	proceeding 11:3	productive 61:15	206:14
179:12 183:21	23:22 25:18	- I	
177.12 103.21	28:12 29:12 33:4	products 119:1	prohibition 27:25
	20.12 27.12 JJ.4		

	- 0	E 42	
40:1,3 67:3	95:22 96:24	18:12,20 23:23	provides 24:17
74:11 221:16	113:25 114:3	24:9 93:6 117:21	81:8 84:15 139:3
224:10	124:1 126:16	121:10 135:2	156:11 163:18
project 152:21	222:21	167:20	providing 86:17
159:20 191:3	proportion	protected 4:22	114:20 136:23
projection 148:23	223:13,16	5:5,16,17,19	province 70:21
149:4	proportionality	6:1,4,9,20 15:7	•
	51:9	16:17 24:15	proving 19:12
projectionist		77:17 111:10	provision 18:25
148:22	proposal 39:25	118:10,11 122:3	30:1,6 36:25
projects 151:14	41:15 46:16	128:3 130:10	37:13,16,17
152:1,10	118:5,7,10	178:16 181:10	38:6,7,21 39:18
157:4,10 191:3,4	120:12 126:22	196:21	65:11,15 135:18
193:18 202:17	226:13 227:4		174:13 209:15
204:21 209:25		protecting 53:25	174.13 209.13
204:21 209:23	proposals	59:12 71:4 113:2	provisions 37:23
proliferation 85:8	225:17,19	130:21	65:11 66:7 74:8
172:14	226:16	protection 16:13	135:5
promise 126:19	propose 179:15,22	32:15 33:9 34:10	proxies 23:2
171:19		52:8 55:24	•
	proposed	115:23 117:21	prudent 97:20
promote 94:25	4:6,12,21	121:11,14,24	PS2 43:3
114:5	8:11,18 9:3 11:10 17:5 18:3	167:19 168:18	
promoting 112:21	19:21 20:5,9	171:8 172:4	PS3 9:20 10:9,17
1 -	24:6 27:16	196:20 197:8,12	11:18 25:23
promotional		·	42:15 43:25
156:19	28:7,16 36:7	protections	46:18,19
prompt 113:16,17	41:15 43:20	17:7,23 18:22	47:4,17,18 49:10
promptly 131:15	75:13,19 79:8	23:9 25:2 121:7	61:22 68:15
1	81:13 83:13	127:2 170:23	160:13
proof 56:17	91:20 96:7 108:25 126:4,16	protective 30:3	PS3s 11:11
properly 99:15,23	·	⁻	PS4 43:6
204:18 226:5	128:4 131:10 134:6 160:21	protects 121:24	
property 3:4,6,8		protocol 5:20 6:4	public 15:2 62:16
16:8 126:14	177:25 197:15	198:22	79:7,9 82:12
194:9	219:21 224:3	provide 64:3 72:24	87:6,7
	proposing 133:20	82:21 88:9,10	109:5,9,14
proponent 8:18	198:17	113:4 134:13	110:12,13,14,24
18:4 19:11 23:23	proposition	135:10 139:6	112:16,18,19
25:24 41:8 45:7	183:24	168:16	113:7
75:19		170:20,25	139:21,22,25
proponents	proprietary 93:25	170.20,23	142:4 144:9
19:4,24 23:15	94:22 95:7		145:7 154:24
25:10 27:22	110:20	provided 15:24	155:5 218:19
28:19 29:14,21	propriety 146:7	23:9 85:20 89:23	229:15
30:8,22 31:3		163:24 171:22	published 23:14
33:5 39:23 40:16	pros 118:3	provider 92:7	44:21 68:24
56:19 64:23 66:1	prosecutions	95:18,21,24	192:16
68:15 71:6 73:5	60:23	· · ·	
74:10 91:8,22	protect 15:5	providers 93:13	publishers
74.10 71.0,22	protect 13.3	158:21 163:3	17:16,23,25 21:8

_	Pag	E 43	
68:20 118:13	61:8 65:22 67:8	206:11,19,21	210:17 213:25
publisher's 21:22	69:6 71:17 72:2	207:5,7 222:5,6	quickly 49:23 80:9
*	80:2 100:3	quantify 216:24	90:12 143:8
pull 135:21 201:15	118:20		167:23 192:15
210:1	133:14,21	quantities 162:18	
pulled 83:20	152:23 154:21	quantum 224:9	quite 51:4 73:9 81:19 91:10
142:14	155:17 158:1	quarter 20:24	96:13 97:24 98:3
puppet 63:10	172:17 195:2	161:20	117:17 147:4
puppets 63:11	pursuant 188:19	question 5:15	153:18 175:12
	pursue 134:25	28:5,8,10	180:13 183:7
purchase 101:4 149:7 160:4	135:1	30:11,20,21,24	200:18
162:7	Pursuit 151:9,23	31:12 34:13	217:15,25
	, in the second	40:12,19	quote 7:15 150:3
purchased 84:16	pushback 188:25 189:3	43:14,22 44:2,11	178:3 206:5
162:11 164:18		45:4 46:11,15	quoted 178:19
169:1,10 196:7	puts 204:10	54:20,23 55:12	_
purchases 164:17	220:16	56:17 58:5,21	quoting 94:4
purpose 4:8,15,24	putting 26:3 94:21	60:5 65:6 66:2	134:1,2 142:2
5:1,6,9,12,14,21	122:8 124:14	69:9 70:23 73:1 74:9 92:10 95:13	
6:5,11,13,18	144:8 155:19	106:7,10	R
13:23	156:1 179:3	110:5,15 111:25	race 105:8 141:1
14:3,9,10,11	206:9 227:17	117:15 119:12	Radio 155:2
15:19 23:5 25:23	puzzling 65:15	122:20 128:2	raise 52:12 60:4
29:4,19 36:21		129:22 174:8,9	91:5 95:13 99:6
37:6 39:5,13 50:10	Q	179:11 182:11	192:10
54:16,21,24	QC 202:4,11	183:19 189:5	raised 91:4 95:19
55:9,14,18 56:24	qualified 216:11	192:13	100:6
68:13 70:7	_	193:19,22	
96:10,17	quality 5:19 6:3 80:19 103:4	195:24 198:14	raises 147:21
98:3,4,11 103:10	107:24 135:12	199:25 200:2	rampant 20:16
109:17 111:4	136:10	202:3,14 213:25	ran 135:7
112:20 117:23	137:5,7,9,10,11,	215:3 220:7	range 34:23
123:3,5,7,10,12,	14,19,20,22,24,2	221:24 225:3 6 9 14	54:3,20 169:13
14,18,19 131:9	5 138:6,7,12	225:3,6,9,14 229:20 230:12	172:10,15 181:1
135:4 153:1	143:8		199:12,14 204:1
181:12 219:6	144:10,11,15,17	questionnaire	223:2 224:1
purpose-driven	155:18 157:14	165:6	rapid 16:14
56:21	167:17 169:21	questions 8:7 17:2	•
purposes 6:24	172:21	27:7 28:15 40:8	rapidly 168:12
10:6 11:8,14	176:14,19,20	41:3 50:21 63:18	170:22 187:12 199:16
12:23 13:5,15,19	177:4,6 180:18	64:10 82:16	
14:13,16,19	189:11 190:6,21 191:11 192:1	91:19 96:6 97:17 106:2,4 114:22	rarely 129:6,7
15:24 16:21 23:7	200:5,12,14,15,1	106.2,4 114.22	191:3 193:13
38:2 40:10 42:25	7 201:8,20,24	124:23 166:8	rate 168:15 211:20
45:19 46:19 48:7	202:6,21	174:14	Rated 188:11
49:6,17 53:25	203:3,9,11 205:8		228:5
58:10,15 60:2	203.3,7,11 203.0	quick 112:10	

	ı ag		
rates 21:1,20 22:2	realized 62:19	87:17,19 168:15	recommended
212:9		198:20 220:13	226:13
	really 9:23	226:23	
rather 30:6 97:8	10:17,20 24:17		recommending
111:17 223:4	32:14 33:8,14,23	reasonably	98:6
rating 188:11	39:18 40:15,17	5:18,22 6:2,3,6	reconciling 176:21
rationale 35:13,14	48:24 49:4 50:7	reasoning	record 9:11,25
59:14,17 64:23	56:23 63:13 66:1	58:24,25	12:7,15 19:20
	73:15,19	reasons 56:21 64:4	24:15,17
RC 210:9	79:9,21,23 80:10	116:15,16	25:18,21
re 5:5	94:23 95:4,15	132:18 134:16	26:11,20 45:23
	99:25 100:2	136:1 143:10,18	46:3 51:20 60:13
reach 42:1,23	103:1 110:3	194:13 195:12	62:3 68:15 80:3
106:18 122:2	111:12 112:10		
180:7	124:15 127:15	received 148:19	81:1,18 100:12
reaches 69:10	134:18	169:16 228:9	106:1 112:5
react 183:23	138:7,9,15	receiving 172:13	118:2 119:22,25
	146:20		122:12 126:13
reacting 123:25	149:10,18	recent 205:12	127:2,24 128:6
reaction 208:15,16	151:10 152:25	recently 10:24	129:2,9,12
227:18	153:7,15	15:25 83:20	164:16 176:3
reader 44:14	154:10,15	160:5 163:13	182:19
59:10 120:22	163:11 165:3	202:17	183:14,25
	167:2	recess 75:11 125:2	189:23 194:7
readers 100:8	173:10,13,22	182:7	207:1 219:10,12
112:4,11	176:12,20		232:8
readily 5:15 25:7	177:20,22	recognition	recorded 90:6
	178:19,25	201:1,5 205:7	171:9
reading 29:9,10	180:1,5 181:5,13	recognizable	recording 177:14
30:5 38:5	183:9 185:2,3	153:8 205:10	196:17 225:11
39:20,21 116:5	190:6 200:10,25	recognize 110:20	
117:8,11	201:17,22	205:14 208:19	recordings 6:24
real 18:12 19:22	203:22 204:16		records 189:22
23:11,15 35:5	209:24 211:25	recognized 36:5	224:17
45:22 74:9	229:21	38:11 92:22	redeemed 169:8
134:25 149:4	realm 163:20	194:25	
151:20 161:8	226:10	recognizing	redemption
172:25 200:13		205:24	163:25 164:7
222:16 228:5	reason 12:8		redistribution
230:4,5	38:10,15 42:18	recollection	53:5
realistic 100:2	47:19 48:11 53:6	124:20	reduce 222:9
	56:22 61:17 68:7	recommend 73:12	
reality 18:10 35:5	77:4,25 79:16	82:14	reduced 21:10
36:5 129:18	85:22 86:9 95:25	recommendation	210:9,10 211:20
131:12 144:21	100:15 101:10	73:25 92:19	re-edit 155:14,17
151:19,25 152:5	112:23 130:12	97:14 120:8	refer 34:16 197:11
193:14	137:11 202:13	230:17	
197:16,20 229:6	222:7		reference 31:23
realize 135:19	reasonable	recommendations	references 116:2
138:21 201:16	5:1,8,13 6:12	34:20 173:1	

	1 ag		
referred 91:3	169:4 170:1	216:2,3,17	represents 16:8
refers 34:17	released 77:20	remixes 139:12	57:15
reflects 12:15	78:7 104:21 161:4,17	remixing 142:1	request 9:6 11:10 14:22 16:15,24
refused 92:14	163:10,20 169:5	remote 10:25 90:9	19:20 23:19
regard 21:24	192:14	remotely 89:19	53:17 98:9 185:5
42:13 43:12	releasing 139:20	remove 71:1,2,10	195:12
46:18 51:4 97:7 110:7 112:10	161:21 167:5	75:7 79:14 90:10	requested 42:14
	relegated 137:14	184:15 195:7,22	139:17 183:20
regarding 97:21 137:19	relevant 9:8 14:21	196:6 205:21	requesting 116:25
	62:1 65:6	removed 11:12	121:21 157:7
regardless 65:18	109:15,18 177:2	49:11,13 51:23 70:10 90:9	requests 17:10
regards 113:7	reliable 167:17	126:20	109:10
regime 194:16	reliably 82:6	removing 127:19	156:18,22,25 157:12
register 73:9 82:13	reliance 31:3	128:9	require 147:18
162:23,24 171:6	relied 82:6	render 95:9	158:19 165:5
registered 164:3	relies 131:7 139:8	123:15	170:25 171:3,5,8
registration 25:5	re-look 31:1 112:7	rendered 94:10	required 70:3
156:1		renewed 76:5 79:4	157:2 228:12
regularly 159:22	rely 18:17 22:5 211:6	80:24 82:14	requirement
Regulations 7:16	remarks 7:15	83:13 126:23	203:14 227:20
rehash 132:12	165:25	182:23	requires 175:16
reinjections 86:24	remedies	renewing 129:3	176:18 204:8
reiterate 205:5	54:4,19,20	rent 59:2	requiring 194:17
reiterated 24:12	136:22	rental 159:8 160:3	reread 73:3
112:25	remedy 136:17	repair 63:20,25	res 204:19
rejected 17:9	remember 103:19	repairing 63:19	research 6:17
87:12,25 181:19	112:19 113:15	replace 69:5	10:5,13,14,18
rejection 87:22	124:4	replete 175:7	11:8,14 12:9 14:5,8,12,17
related 92:18	remix 2:19 127:3,7	reply 20:12 31:22	25:14,20
93:24 145:15	129:18,19 130:13 131:6,22	32:8 47:6 93:8	46:1,6,19
199:7,9	130:13 131:0,22	report 15:25 16:7	47:18,24
relates 176:5	138:3,10,21	24:5,7 97:20	48:3,4,15,20,23
relating 65:9	139:11	REPORTED 1:23	51:23 54:8,17,22,25
197:23 218:10	140:12,16	Reporter 1:23	57:17,24 61:20
relationship 93:4	141:6,12,19 198:7 206:20	-	63:2 67:23
149:1 153:24	207:1,13 215:6	Reports 150:16	68:5,8 69:13
relatively 25:1	216:24 217:1	represent 59:21 75:8 97:6 225:5	71:16 151:16
relay 79:17	222:4		157:1 158:16 211:1
release 105:4	remixers 128:13	representing 72:22 90:21	
161:3 168:24	143:10 145:5,6	173:5	researcher 11:5 48:6 63:4 69:19
	190:10	1,5.5	TO.U U.J.# U7.17

	1 ag		
researchers	rest 47:10	rights 2:16 82:20	rounds 96:24
10:2,12,19,23 25:23 47:23 49:2	restrict 42:20 86:7	128:17 134:11 137:1 147:22	route 26:12
51:21 60:16	100:21,23	148:13 160:20	royalty
68:12 69:16	restricted 41:25	162:17 170:10	211:17,18,19,21
71:20	restrictions 107:25	186:14 195:9	royalty-free 187:4
reside 24:1	restrictive 194:23	rights-holder	RPR 1:24 232:3,18
residing 64:16	207:14	167:10	RTMPT 160:23
residuals 209:5	result 16:23 71:2 172:20	rights-holders 194:16,20 195:1	rug 135:22
resolution 201:2	resume 125:1	rigor 216:11	rule 67:3
203:3,16 204:15		J	rulemaking 1:8
resolved 28:15 121:1	retailer 162:9,13 163:6	rigorous 26:19 215:18 231:6	7:17,21 13:8 38:11,13 60:23
resource 79:18	retailers 162:7	rip 177:20 191:2	76:9,15 78:5,10
resources 218:6	163:2,4 165:19	ripping 143:9	95:6 122:12
	170:17	144:14	128:18 177:1
respect 48:1 49:15,23 56:18	return 7:10 113:23	risk 21:3 54:12	194:14 231:11 232:4,12
57:12 64:16	168:15 187:19	130:8 148:5	· ·
72:21,23 98:2	returns 170:24	176:1,3 219:17	rulemakings 222:12
112:16 116:7,11	reuse 136:5 137:16	road 186:7	·
118:6 119:4,16 130:13 133:11	reuses 134:23	Rob 7:23	rules 109:7 162:10 213:8
156:16 197:8	reusing 137:13	Robert 2:7 7:11	ruling 73:23 155:9
198:3 227:19	re-using 209:1	robot 63:5	rulings 34:19
respond 36:11	revenues	robust 61:15 64:21	run 10:9 11:12
40:14 50:22	68:19,21,24	149:18	12:18 19:8 32:22
53:20 91:3	reverse 36:13,24	role 27:18 28:22	33:23 47:20
97:20,25 98:14 103:5,6 106:4,6	37:1,6,9,14	152:17 210:11	48:21 49:10
103.3,6 106.4,6	38:5,7,21	roles 176:24	58:17 60:14,17
119:7 124:16	66:12,14 67:8	roll 172:7	71:23 72:12
139:12	87:5 123:21 124:12		78:19 79:20 92:6,11,16 94:2
182:12,16 183:9	•	rolling 164:13	99:2 114:9
203:19 209:22	review 19:14	room 7:9 70:13 84:7 153:4	running 15:15
221:25	reviewing 83:8	185:23 203:6	25:25 34:4 46:1
responded 220:23	revisit 28:25	217:11	47:24 54:1 92:1
responding 118:22	revisited 93:23	root 80:16,20	99:13,15 104:17
183:19	riders 147:15	99:12 103:24,25	130:1
response 62:15 112:9 143:4	171:23	rooted 79:13	runs 15:13 78:17 99:22 107:5
207:16 214:1,8	riffing 149:15	rooting 75:23	
responsibility	right-hand 191:13	79:19 104:3,7	Russell 35:20 97:8 198:1
88:18 179:6	right-holder	roughly 60:9	Ruwe 2:8 7:25
responsive 63:6	175:21,23,25	179:9	183:20 184:8
	rightly 128:3	round 126:22	189:8,20

	ı agı		
190:12,23	171:23	205:17,20	94:24 95:8
191:10,20		210:16 224:13	112:21 113:9
194:4,6 195:17	scene 76:20 148:24		126:5
203:13 212:10	152:20 153:3,12	screencapping	130:20,22,23
213:22	154:2,3 186:4	190:3,4	140:13 174:13
224:12,23	201:12,19 202:1	screened 204:16	176:6 219:18
225:2,6,13,21	205:12	screens 154:19	
223.2,0,13,21	scenes 155:10,24	155:20 156:2	secure 171:14
	scheduled 166:5		security 70:24
S S 120 20		script 151:17	88:24 171:20
Sabia 129:20	scholarly 157:3	154:21,22	172:17
Sabia's 128:1	school 1:20 7:7,9	se 41:25	seeing 68:3 121:12
184:1	141:16	seal 227:12	127:15 128:22
safe 87:24 121:18	schools 141:17		154:13,18
147:17		Searchlight	183:17 214:25
	science 112:22	166:20	230:2
safer 132:10	scientific	Sears 32:18	
safety 24:4 83:8,9	10:1,19,21,23	season 131:17,19	seek 45:9 216:18
84:14 86:18 88:5	12:9	ŕ	217:20
108:13 134:4	14:5,8,12,17	seasons 142:14	seeker 155:4
135:10 140:7	47:18,22	161:6	seekers 152:15
sale 68:23,25	54:7,16,22,25	seat 187:3 200:24	154:25
sales 169:18	57:17,23 63:2	second 9:2 15:4	seeking 8:19 12:14
	69:13,16,21 72:2	19:24 23:18	14:23 18:9
salient 9:6 50:25	scope 12:13 13:8	34:12 37:4 76:4	30:2,3 41:8
51:12	53:16 58:6,23	92:18 96:19	45:16 66:11 71:6
sample 201:7	59:19 60:6 73:6	114:11 135:25	168:13 188:24
Samsung 81:10	74:7 97:21 99:7	150:13,17	214:21
_	100:5 109:10	152:14 194:21	
San 82:21 134:12	117:3 120:20	204:3 206:23	seeks 17:5 18:4
sanction 13:6 53:8	177:1 178:23	210:12,13	26:22 44:24
satellite 93:15	180:1 181:20	secondary 137:15	159:23
satisfied 28:19	scorpions 80:12	208:3	seem 95:22 121:4
71:9	scrambled 173:20	Secondly 135:2	180:15 181:7
		198:25	184:24 197:9 226:7
satisfy 25:3 27:22	scrambling 4:23		
saturation 133:19	5:6,17 6:2,9,21 196:22	seconds 188:18	seemingly 46:4
save 25:4 223:20	screen	210:11,14 228:17	seems 29:13 32:6
savvy 63:23	89:8,10,17,18,25	secret 70:4	36:17 59:13
saw 22:15 25:25	144:13 153:19		69:13 122:25
205:16	154:14,18	Section 1:8	127:17 131:8
	177:13,14	4:7,13,22	132:13,17,22
SBSettings 90:1	189:12,15,22,24,	5:5,10,16	133:2 183:9
scale 87:24 94:21	25 190:15,23,25	6:1,8,15,20,23	206:19 227:9
167:17	191:12,14,16	7:8 8:12	seen 46:16
scenario 54:7 70:9	196:13	27:18,21 28:24	71:19,22 82:25
117:7	200:7,21,23,25	31:10,14 42:11	83:4 89:12
	201:7,15 203:6	57:3 65:3 66:20	145:12 163:14
scenarios 96:14	201.1,13 203.0	75:14 93:19	165:12 214:9

	1 ug	e 48	
219:8 228:23,24 SEGA 14:19 31:4,9,16 32:4 segue 161:25 select 20:24 self-financed 151:2 self-publish 26:18 self-repair 63:23 self-standing 211:6 sell 106:11,14 Sell-Through 166:16 seminars 148:14 send 105:1 136:18,19 sending 122:9,14 senior 8:16 166:3 sense 50:4 58:8 87:14 105:11 110:11 130:9	225:14,16 seriously 177:8 179:6 207:4,6 221:16 serve 109:13 176:20 served 82:11 service 145:4 158:2 160:4 163:22,23 164:13 170:8,13 210:19 services 5:11 88:2 131:24 133:11 145:1 156:11 157:19,25 164:6 169:20 170:4 171:19,22 178:10,11 193:4 208:4,7,12 session 4:18 103:17 126:2 setting 16:3 33:1 56:3	107:14 115:16 134:15 141:5 sharing 127:7 162:5 sharper 201:4 sheltered 217:17 she's 80:1 120:7 153:6 178:21 185:21,23,24 210:16 shift 146:20 189:4 shifting 6:22,25 25:3 156:15 158:25 161:11 163:12 173:9,11 228:11 shoot 151:19 186:2 201:4 202:18 shooting 200:20 short 4:24 5:21 6:5,10,18 133:21 142:5 shorten 155:16 158:4 Shorthand 1:23	127:3 144:22,23 152:2 156:23,24 166:13 167:7,8,13 176:3 193:7,11 196:13 205:13 229:9 shred 81:17 shrink 205:23 shut 185:22 signatures 79:5 significant 57:2 96:6 170:24 224:9 significantly 21:21 signs 164:2 Silverlight 171:3 similar 17:10 43:24 52:21,23 77:6,7 100:17 102:16 149:23 199:5,10 226:19 similarly 106:12 131:6 133:12 Simon 166:5 simple 11:25 25:4
142:7 154:24 177:2 187:19 196:17 199:2 211:2 sensing 10:25 sensitive 108:9 sentence 123:1 separate 16:18	settings 90:2 settle 146:24 set-top 53:13,15 58:21 160:12 seven 21:22 27:12 142:14 173:6 several 7:7 12:2 16:2 21:23	Shortly 147:13 shorts 149:12 shot 201:11 202:19,24 204:15,18 showcase 79:9 showed 52:19 99:10 145:8	42:4 89:12 simply 13:3,8 19:2 34:7 38:7,21 54:1,2 71:10 83:8,9 86:14 88:5 113:17 114:20 118:20 128:1 135:2 136:3 137:15
184:3 separately 121:25 174:2 sequence 45:1 72:14 series 83:12 142:19 161:7 193:4 serious 16:9 166:6	25:21,22 61:14,21 73:4 79:7 157:16 158:16 164:19 194:13 220:25 Shakespeare 206:5,6 shape 98:13 shaped 154:25 share 76:13	148:24 showing 28:20 33:6 45:14,21 74:10 91:14,23 196:16 200:7,9 shown 10:1,22 47:5 91:8 103:11 150:9 177:15 shows 9:11,25 26:20 63:10	179:15 180:15 184:23 188:10,20 193:1 Simpsons 166:25 single 46:6 177:18 178:15,24 single-copy 169:18 single-payer 87:2 single-purpose

	Pag	C 47	
116:12 118:8	85:4 94:17	189:18,21 190:4	52:13 61:23
sit 70:12	101:12 106:19	199:11,12	62:9,10
	123:9	205:21	Sony's 44:11,15
sitting 200:24	smartphones 4:13	224:14,21,23	64:18
situation 30:14	49:24 50:3 77:6	sold 76:14,16	sophisticated
50:5,9,14 54:15 55:12 58:11	78:1 83:14,18,23	169:6	9:16,22 10:5
59:1,4 62:8	84:2,13 90:12	sole 29:19 36:21	14:8 67:7 207:2
66:25 67:12,20	92:3 94:13	96:10,12 97:22	sorry 47:17 49:20
88:20 94:1 95:4	100:25 101:16 102:1 119:20	98:3	103:15 130:5
97:7 101:9,25	122:13 168:6	solely 4:23 5:20	164:24 182:20
122:2 155:23		6:5,10,18,21	213:4
178:6 180:13,25	SMS 89:7	50:3 102:11	sort 51:9 54:23
situations 37:23	sneak 98:12	113:1 160:5	55:15 101:14
53:23 63:9 66:13	so-called 21:12	solution 100:1	105:5 109:6
69:18 71:22	100:13	207:18 208:10	112:12,13
93:16 98:10	social 35:24	solutions 160:20	114:25 115:23
108:15 184:17 192:22	151:5,7,14 152:8	solve 16:16 108:11	135:7 138:10
	socially 10:13	somebody 36:25	140:25 144:13 147:15 151:7
six 142:9 162:24	47:13 48:4 60:1	37:19 118:19	153:23
186:23	69:14	122:3 148:8	154:23,25
size 35:20 36:2	society 152:19	177:19	155:2,5,7 161:16
140:22 191:4	207:15	somehow 111:16	165:21 193:6
225:15	socio-political	114:7 206:23	197:17 200:19
sized 225:23,25	140:25	someone 48:14	204:22 205:5
sketches 150:4	softness 204:17	49:14 55:20	214:16 227:9,11 228:7
skip 179:19	software 2:13	56:14 63:22	
skips 191:2	4:8,14 8:22	69:25 70:5 95:3	sorts 60:23 77:9 221:5
Slayer 142:11	11:18,21	111:15 116:12	
	12:9,18,22,25	134:1 142:20	sound 6:24 220:12
sliver 17:7	13:15 14:17	145:18 215:14 227:12	sounds 45:6 69:5
slowly 132:16	15:13,14		soundtrack
Slumdog 166:23	16:19,21 17:14 19:7 23:25 24:10	someone's 143:19 184:22 191:25	220:10
smack 184:19	26:8,9 29:20,23		source 62:11 63:16
small 11:25 47:4	31:5 40:24 41:1	somewhat 31:6 120:25	71:25
51:4,7,8 77:8	44:5,19 48:10		131:13,14,23
139:2,3 146:1	57:1 58:17	somewhere 68:6,9	132:17 133:13
159:17 201:16	64:13,16 67:8	74:20 178:18 184:23	143:4 155:19 201:21,24 203:3
223:17	69:5 70:1		207:7
smaller 76:24 96:6	71:1,11,21,23 72:1 79:17,20	son 185:21	sources 138:16
136:21 166:22	80:17,20 82:23	Sony 9:19 10:8,17	143:5,6 176:24
191:4,8 202:10	84:9 88:23 90:15	12:1 21:5	199:20 222:19
smartphone 28:11	91:1 105:2	25:19,21 31:4 48:20,22	space 6:22 43:1
30:24 33:1 75:21	111:10 113:18	49:3,5,10,11,12,	107:13 139:25
76:11 82:7 84:6	118:18	16 51:15,20	156:14 158:24

	- 4.8	e 50	
161:11 163:12	square 14:21	183:22 194:6	227:3
173:9,11	staff 8:16	stated 137:19	stick 179:11
speak 8:4 44:16	stage 152:11	189:8 194:21	stills 156:17
64:25 68:11 76:7 126:17 141:25	stages 185:22	232:5	stimulates 109:21
166:5 172:23	stake 17:25 18:5	statement 66:9 147:12 172:24	stop 221:11
179:20 194:2	stalking 142:22	176:22	stopping 181:6
197:1 198:14,16 206:18 229:8,10	stamp 140:22	statements 109:4	store 77:15
speaking 68:16	stand 16:8 18:2	States 112:24	85:11,12,16 87:8
speaks 81:15	standalone 84:19	statistic 83:20	114:14 138:19 164:1 170:19
special 77:24	standard 86:8	statue 28:17 93:22	stores 102:6
155:11 206:21	109:6,7 174:5,10	statute 28:23,25	Stories 141:11
specific 12:17	182:14 203:18 204:4 211:21	29:15 34:20 39:1	storing 162:18
22:20 41:10,11	212:20 215:18	135:8 223:6 230:20	storing 102:16 story 21:25 148:22
50:10,12,13,16 67:21 91:19	222:11,25	statutory 9:8	149:2 151:18
122:9 139:12	228:10 230:16,25	15:22 16:25	storyteller 140:13
144:3 153:1	standards	81:25 91:9	straightened 202:5
174:12 197:12 199:3,4 224:20	87:12,13 184:4	130:24 131:9	strange 50:8
specifically 11:2	202:8 203:21	stay 79:22 153:4	strata 152:8
18:18 23:23	206:12 212:21 215:15 217:6	stays 31:25	stream 171:6
44:21 49:3 92:7	230:23	steep 23:17	196:12
120:22 143:9 154:8	standpoint 203:23	stem 134:24	streamed 158:12
specificity 223:6	stands 149:18	step 181:23	162:25
specify 199:3	174:25 204:5	step-by-step 22:18	streaming 6:16
specify 199.3 specs 168:22	222:7	Stephanie 79:25	138:20 145:4 160:3,7,8,9
spectre 101:24	star 153:9 210:9	STEPHEN 2:8	161:23 171:2
speculate 70:15	start 8:3 36:12	steps 33:19 95:11	178:10 195:19
_	46:24 54:11 59:10 180:5	192:21	196:10,23
speculation 20:14 132:23	181:11 182:8	Steve 2:14 7:25 8:14 19:15	streaming-only 210:19
speculative 82:8	190:8 192:4	27:9,10 36:9	street 229:25
speech 128:22	started 140:18	38:23 41:2 73:2	stressing 180:3
207:14	149:1 150:3 161:20 163:15	75:16 90:19,20 97:16,21 102:25	208:2
spend 19:18	185:22	106:3 112:17	strictly 146:2
spoke 48:20 80:1	starting 190:17	114:23 119:12	stringing 220:8
192:6,10 204:6	starts 42:22 54:18	156:7 173:3,4 182:1 203:7	strive 26:21
224:12	150:4	207:10 212:23	strong 17:22 18:21
springs 113:9 185:17	start-up 159:19	214:8 218:9	87:3 94:12
spyware 90:5,10	state 44:13 88:22	224:12 227:8	217:15,16
spy mare 70.3,10	136:3 137:8	Steve's 214:1	stronger 51:11

	1 ag		
116:10	subsection 29:23	227:9	64:2 71:8 97:24
strongest 204:2	37:11 65:9,12	suggestion 206:20	99:14,22 106:20
224:8	subsequent 23:7	suggests 16:24	117:17 118:4
strongly 15:20	55:4,25	suit 204:2	119:13 132:3 159:2 180:13
struggling 45:13	subset 42:9		184:12,13 197:1
Student 3:4,6	subsidized 68:2	suits 60:7 169:15	203:9 214:3,25
	subsidy 68:10	sum 82:11 140:6	219:3,7 221:8
students 5:3 6:14,17 127:13	substandard	summary 16:6	surf 56:10
157:4 229:2	138:13	155:7	surprise 147:10
studied 64:24	substantial 19:22	Sundance 204:14	surprised
	23:11 24:16	Sunshine 166:24	146:12,16
studies 5:3 6:14 141:17	35:23,24	super 143:11	surprises 65:25
	230:18,19	210:3	•
studio 166:17 171:13 188:12	substantially	superfluous 98:5	surprising 176:12 177:16
189:6 208:5	26:25	supplement	surrogacy 152:13
209:16 217:11	substantive 72:17	215:24	e v
studios 180:3	subsumed 189:10	support 15:20	Survivor 131:18,20
188:14 199:24	subtleties 61:1	16:2 48:5,19	ŕ
207:19 208:17	success 21:25	51:3 79:7,8	sustain 32:23
209:2,9,14 211:10 214:5		133:1 136:1	swallow 131:2
	successful 115:11 171:17	163:12 165:3,8,10,14	Swart 166:5
studying 61:20		177:19 194:10	swept 61:17
stuff 119:22 221:5	successfully 25:22 154:16	supported 172:3,4	switching 138:17
stymied 171:18	sucks 79:18	supporters 23:24	synonymous
subclass 41:24		24:6	144:12
subject 108:19	sudden 148:23	supporting 79:5	system 4:23 5:6,17
115:18	suddenly 81:1	161:9	6:2,9,21 8:5 10:4
178:16,24 184:3	117:24 132:11 135:22	supportive 74:24	32:17 33:10,18
200:24		1	42:3 43:12 44:4,6 57:6
subjective 85:19	sue 129:9 136:17	supports 59:18 160:4	60:18 63:22
subjects 217:5	sued 61:23 62:9,10		69:20,23 71:23
submission 32:24	175:20	suppose 146:12 187:4,15	72:5,7
91:11,16 111:1	suffered 81:16 151:22 186:5	supposed 46:8	84:4,11,12 85:10
178:19 179:13		61:2 109:8	86:19 87:3 88:4 89:1 94:3 95:7
submissions 27:13	sufficient 5:19 6:3 34:1 195:6	128:19 134:4	98:8,15,16,17
submit 194:11	205:18 206:16	210:9	101:8 103:21
199:4	sufficiently 223:17	Supreme 112:25	104:22
submitted 11:10	1	130:19,25	111:4,9,14,22
12:6 48:19	suggest 30:5 129:4 198:4 226:5	194:25	138:18 153:15
79:4,25 194:22		sure 31:1,8 36:12	154:15 155:21 180:6 188:11
Subscription	suggesting 217:22,24 226:8	40:22 45:5 47:22	191:17 196:22
159:9	217.22,27 220.0	48:24 53:3 62:2	systems 10:10,11
	1		0,00001110 10.10,11

	1 ag		
11:4 46:21 52:13	71:16 76:2,3,5	teaching 6:17	199:8
77:17 83:12	81:3 85:6 88:14	team 7:22 77:20	television 52:22,25
88:15 104:14	91:18 118:24	104:22 159:23	149:14 152:2
111:20 218:25	127:1 132:6,7		156:24 158:23
	135:9 137:5	team's 78:6	161:6 163:19
	139:10 141:22	tech 8:5 22:10	164:10
tablet 4:16	142:17 143:7	24:23 26:1,7	166:13,25
76:23,24 83:19	144:18 145:18	52:18 99:10	167:13 179:18
84:7 94:18	150:24 156:23	103:11,19	200:9 202:7
96:19,20,22,25	177:24 180:8,12	104:12 107:21	211:15
101:1,12,23	183:17 216:20	176:16 190:15	
114:25	217:4 228:17	203:15	televisions 160:14
115:1,4,6,10,15	229:11	technical 165:6	temporal 174:9
116:8 119:9	talked 33:8,16		-
	80:7 91:6 112:17	168:22 177:15	ten 8:5,6 182:5
tablets 4:14	128:15 145:9	204:3	tend 77:7 104:6,7
76:6,19 77:4		technically 55:20	121:16 144:17
78:1 82:15	178:12 179:7	technician 149:8	202:10
83:14,24 84:1	180:23 183:2 206:7 217:19	155:11	ten-minute 75:10
85:4 90:12 94:14 100:7,16 102:7,9	talking 38:2 40:20	technique 144:14	tens 21:14
106:21,22	42:14,16,17	technological	term 87:11
112:1,2 117:2	58:11 66:3 72:3	16:13 29:2,3	104:3,6,7 115:7
120:19,20	77:16 78:12	33:9 36:19 37:5	
122:17 160:16	82:4,25 91:24,25	39:4,5 55:23	terms 47:17 52:12
168:7	96:15 98:10	110:21 115:23	57:3,7 58:20
	108:23 112:16	121:24	64:25 69:2 72:1
tag 9:20	115:17 120:22		83:24 97:5 99:1
tailor 197:19	123:6 127:23	132:19,20 196:19 197:8	104:4 105:9
226:5	133:14 138:1,2		106:9 113:21
tailored 197:7,15	139:8 140:13	technologically	120:16 124:12
230:21,25	142:7 149:2	169:22	143:3 172:10
ĺ	181:8,11	technologies 10:24	197:23 216:11
tailoring 197:23	185:2,3,10	29:19 93:13	217:2 219:23
198:3,5	197:11 199:6	126:25 160:19	222:25 226:7
takedown 128:14	202:7 203:19	167:13 172:8	terrier 35:21 97:8
130:2 132:5	206:13 209:7	199:16 222:19	198:1
136:18 137:3,4	213:5 217:12		
176:7	219:2 221:1	technologist 25:13	territory 32:19
taking 57:25 77:1	223:2 227:19	technology 3:4,6,8	171:5
110:18		10:22 11:1,13	Terror 128:1
122:24,25	talks 65:15	38:12,16 50:18	test 80:17 116:21
139:16 148:5	tampering 62:18	62:4,6 167:20	130:5,7 132:4
164:7 177:8	tangential 62:4	170:22 198:13	ŕ
191:16 192:24		217:21 224:17	testifying
	target 129:6	teenage 151:5	81:11,12,14 215:11
talent 209:5	targeted 109:2	Teenagers 127:5	testimony 90:25
talk 9:1,2 12:13	task 221:12	telephone 4:13	128:24 129:2
13:17 31:1	teacher 158:7	83:21 96:23	166:7 206:25
46:19,20 69:12	100.7	05.21 70.23	208:24 217:10
L			∠ ∪∪.∠⊤ ∠1 / .1∪

	1 ag		
229:19 232:5,9	100:23,24	69:1 71:24 121:9	198:9,10
testing 202:12	101:6,7 103:7	151:6 157:22	they're 9:24
tests 198:19,22	104:16,20	theories	11:2,22 18:9
,	105:7,12,22	13:18,20,23	25:16 26:15
text 89:6,8,10,11	106:1,10,23	thereafter 147:13	30:1,2,14 31:13
thank 7:18,19	108:10,20	232:6	45:16 47:11
17:1,4 27:3,8	109:18		51:25 52:6,14
36:8,9 40:5 75:9	110:2,17,20,22	thereby 167:21	53:3,6 59:22
82:17 90:18,20	111:16,23	therefore 29:12	66:3 81:11,12
97:15,16 124:25	114:16	73:12 74:16	86:12 119:25
125:1 126:17	115:8,14,21	108:10 187:10	128:12 130:10
134:7,8 140:9	128:7,17,18	therein 232:5	132:1,4,6,7,16
145:22 150:20	130:5 131:4,23		134:19,20,21,22
156:5 164:24,25	132:11 135:4,7	thereof 172:4	136:21 143:24
166:1 173:2	136:2 137:16	there's 12:4	148:20
181:25 182:1	139:23 140:5	26:5,11,24 27:24	153:14,19,21
185:11	142:1 143:11	32:2 34:2 35:23	165:16 176:10
195:15,16	144:7,13 150:14	39:14 40:1,3	184:20 188:1
199:22,23 207:9	151:10 153:9	46:3,5,9 50:14	193:12 201:16
229:3,18 231:8,9	154:3,18 158:25	51:10 52:20	202:23 215:21
Thanks 150:19	164:22 173:21	53:10 54:9,12	216:7,19 221:17
	174:9,15,21	63:4 73:12,19	225:4
that's 9:25 11:4,15	175:7,15,17,25	80:22	229:7,9,12,15,25
12:11 13:16	176:10 177:3	83:17,19,25 90:4	they've 7:10 45:11
14:1,19 22:16	179:3,12 181:19	101:8,10 108:3	49:3 81:15 87:22
25:17 26:6 27:1	182:24	120:16,24	216:12
31:6,10,24 33:12	183:22,25 184:7	123:19 124:4	
34:18 35:4,20	185:2,9 188:7	129:12 130:6,11	third 93:24 101:4
38:8 39:20,22,24	189:1 190:18	134:16 136:2	131:10 191:13
40:15 42:19 44:9	191:10 192:3,24 193:2,11 197:14	137:11 143:12	231:7
45:1 46:15	193.2,11 197.14	147:3 152:20	third-party 8:22
47:15,18 53:6,15	203:18 204:2	153:3,12	13:15 14:13
55:15 56:2,16	205:24	159:7,8,11	58:17 71:21
58:5 59:11	206:15,24 207:5	174:14 175:11	78:19,24 99:3
60:2,12	208:6,18,22	176:1 180:24	109:20 118:17
61:3,4,9,11	209:19 211:14	181:15 183:10	167:8 211:7
63:1,6 66:4	213:7,14 218:12	184:23 187:1	thousand 42:5
67:4,10,16	220:4 221:5,24	188:25	thousands 25:12
69:8,9,14 71:5,7	220.4 221.3,24 222:15,22	189:2,4,5,17,25	129:9
72:3 73:15,23 74:23	224:10,19	190:9 191:20	
74.23 76:11,19,23	226:22 227:11	192:21,22,25	threat 19:22 23:11
77:23 80:10,13	228:1,3,14 230:5	196:14,21,23	62:16 175:18
81:4 83:11	* *	197:16 206:25	219:17
84:3,10,11,12	theater 201:15	207:25 208:9	threshold 27:21
86:7 91:15	theaters 178:20	213:9 217:18	28:5 30:20,21
93:11,18	theirs 141:7	218:22 219:7,16	91:8
94:7,12,17,18,19		221:5,10 227:13	thriving 46:10,12
95:4,20,25	themselves 16:22	229:5	133:18
98:7,16	26:14 42:2 52:13	they'd 148:14,15	133,10
70.7,10		<u> </u>	

	1 ag	<u> </u>	
throughout 32:7	39:18,21 56:8	230:1	128:10
150:5	66:14,17 94:24	trafficking 60:21	trend 149:16,17
throw 50:18	104:16 110:19,21	trailer 149:13	172:1,2 208:13
Thrush 2:21 126:8	149:19	transaction	tricky 229:21
150:22 185:16	tools 13:7	179:16,22	tried 115:4 142:20
186:9,19	37:2,12,16 60:21	187:19	143:3 185:14
200:2,18 201:9 202:16 204:13	61:25 66:22	transactions	190:9 207:19
	67:2,13,22 93:14	168:9,11 215:5	227:4
thrust 34:21	110:21 133:4,12 158:3 189:19	transcribed 232:6	trouble 64:8 74:18
thumb 94:21	218:24 229:7	transcription	176:21
thus 117:18	top 21:16 59:25	232:7	troublesome 53:7
tied 93:16	70:12	transfer 6:25	true 9:25 12:7 72:8
timeliness 136:6	116:8,14,19	169:2	93:7 98:16
139:8 144:20	198:23	transformative	114:23 124:7 129:6 184:14
192:7,11	topic 158:25	14:1 32:21	193:3,11 209:20
timely 136:10	Torrent 21:17	111:3,6 122:23	232:8
138:14 139:14		123:4,10	truly 93:21 127:5
140:4 192:23	total 32:20	124:2,6,7,18 128:11 136:15	try 56:19,24
Title 7:16 42:11	totality 93:11	138:4 140:12,17	94:23,25 115:15
titled 152:14	totally 62:25 82:8	216:6 218:3	120:1 142:23
titles 21:21,24	touch 62:17 77:10	transformativenes	145:6 166:8
158:17,18	144:20 156:14	s 124:9	184:15 193:20
161:1,4,15,17,18	touchstone	transformed 11:20	trying 48:8 51:14
,22 167:11,12 169:6	222:16,17 223:3	14:7	56:18 63:25 71:7
170:1,3,6,13	tourism 153:2	transformer 210:2	83:1,2 98:8,12 99:18 100:19
TIVOs 168:2	tourist 153:1	transformers	105:25 110:19
today 17:15,24	toward 172:1	210:1,7	143:1,23 144:18
19:14,18 21:10	towards 153:3	transforming	152:6 162:12
64:25 66:1 70:16	tower 32:18	142:2	185:13 186:1 192:4 202:18
78:17	town 146:2	transitory 31:23	215:12 220:2,18
81:11,14,21 82:25 83:8	TPM 62:23 197:17	32:2	Tuesday 56:6
85:12,22 112:6		translates 137:20	turn 9:5 15:3 25:9
126:17 134:2	TPMs	transmitted 5:19	43:20 79:3 80:8
146:5 164:24	18:11,14,17,18 20:8,16	6:3 199:19 231:2	129:15
166:5 169:5,9	21:3,5,24 22:1	treat 133:3 223:8	131:10,22 141:6
173:12 178:20	24:9,16 25:10	treated 174:2	199:18
218:5 225:4,10 226:18 231:4	27:1 34:10	treatment 111:9	turned 89:17
tolerate 35:22	51:19,25 53:1,9 70:18	152:24 175:16	147:9 188:19
Tom 80:6 201:17	track 80:3 220:12	tremendous 9:17	217:5
tomorrow 43:19		10:2 76:18 78:2	Turning 106:3
	tracked 145:12	tremendously	turns 33:1 214:23
tool 37:9,14,18	traditional 84:2	·	220:17

	1 ag		
TV 53:14 144:22	ultimate 14:11,16	understanding	224:6
150:23 153:5	ultimately 23:4	37:25 65:19	unpredictable
155:12 159:4	151:12	71:18 84:23	85:18
172:11 185:19		105:7,23 117:3	
193:14 203:6	ultraviolet 161:25	135:18 200:10	unprotected 15:17
229:9	170:16	210:18,25	165:13 224:18
TVs 59:25	ultraviolet-	211:13 213:7	unqualified 24:13
twice 147:19	enabled 161:21	understood 29:20	unquote 178:3
	umbrage 206:22	184:12 192:14	•
Twilight	unable 88:2 166:8	205:16	unrecognized 84:1
142:12,15		undertaken 4:8,14	unscramble
143:24	unapproved 13:14	5:6,11 55:9	173:19 181:21
145:16,17	unauthorized 99:6	131:3	upconversion
Twitter 158:5	109:20 168:19		205:18 206:1,6
two-and-a-half	unavailable 88:3	undertaking 31:13	upconverting
142:6	135:22 188:21	unencrypted	203:15,20 204:7
		224:18 225:11	
twofold 203:22	Unbox 138:19	unfortunate	update 88:15 90:9 120:9
two-year 84:18	uncertainty	132:15	
88:18	186:13	unfortunately	updates 88:24
type 10:19 95:10	unchanged 34:5	166:6	105:1,4
107:5 135:9	unclear 85:18		updating 88:19
137:12 152:7	102:3	unintelligible	uploaded 127:9
153:22 154:15		192:17	•
179:4 196:19	uncomfortable	unit 151:11	upon 82:6 146:16
197:8,12,24	31:6 193:19 227:8	Unite 112:24	156:14
214:21 222:2		universally 209:20	upraised 204:15
226:21,22	undefined 115:1	· ·	uptake 78:3
types 59:8 66:11	underlying 31:9	universe 43:13	urge 30:4 34:13
77:19 84:9 86:24	42:1 59:14,17	45:8	156:3
115:5 121:17	103:21 122:20	universities 16:2	
122:11,17	undermine 131:8	university 5:2,3	usability 83:24
123:13 135:11	168:20 180:6	6:13,14,17	usable 190:3
199:15		147:11	usage 52:19,20
typical 66:17	undermines 172:17	unlawful 13:4	162:10
typically			173:23,24
155:13,23	underscores 22:11	unless 157:1	USB 26:4 62:13
166:21	79:21	194:19 195:2	
	understand 23:2	unlike 19:19	USC 3:4,6,8 194:9
	31:24 35:13 40:8	181:4,5	198:13
U.K 52:19 152:16	45:13,20 61:1	unlikely 124:5	useful 9:24 11:8
155:6	64:20 111:19	133:19,22 195:2	48:7 63:8 67:13
	118:3 120:21	unlimited 59:13	77:3 80:5 90:13
U.S 17:19 40:4	121:8 146:18		112:22 117:8
52:20 112:20 152:22 153:13	176:12 190:15	unlocked 98:21	122:10 225:18
152:22 153:15	197:2 198:20	99:8,15,20 100:1	useless 53:4
	204:5,8 222:4 227:3	107:18 170:10	user 12:24 13:12
UCLA 1:20 7:7,19	441.3	unmanageable	12.2 i 13.12

	1 u ₅		
14:1 23:8 69:9	84:14 86:18 88:6	165:17 180:16	141:12 176:4
84:5 85:22	108:13 134:4		183:22 184:1,18
86:2,10 88:9	135:10	vice 156:9	219:5
89:13 109:25		vidder 216:24	
179:3 198:20	valves 140:7	vidders 215:12	view 38:23 63:19
208:8	Vampire 142:11		70:13 180:18
	Van 80:6	video 2:19 4:7	192:20 204:1
users 8:19 9:12,18		5:19 6:4,18 8:20	210:20 220:3,14
12:17 24:14 25:2	Vanity 141:14	9:12,15,24 12:20	222:20 224:15
47:1 50:9 51:17	variety 207:1	16:4 17:6,21,23	230:14
67:21 72:21	various 121:17	18:15 19:9	viewed 139:9
75:8,21,25 81:23	159:17 164:14	20:6,15	158:12
82:22 85:4,23	197:3 198:23	24:2,8,10,22	viewer 152:6
86:11 88:10	221:1,13	33:11 34:24	
89:4,9,23	ŕ	42:17,22 52:2,24	viewing 158:2,3
90:7,14,16 92:15	vary 42:6,7	53:14 57:2,7	views 141:9
106:19 109:19	varying 98:15,18	58:12 59:24	vigorous 11:16
114:10 157:22	165:3	79:17 86:13	61·14
158:4,18 172:15		104:13 114:1	01.11
195:7 214:19,20	vast 88:9 224:1	120:13 121:13	vine 112:4
user's 14:9 89:8	VCRs 140:18	127:3 128:2	violating 135:20
Users 15:13 86:2	vendors 20:22	131:22,25	138:11,12
	Verbix 160:22	134:14 136:5	violation 93:9
U-Star 157:21		137:7,10,13,19,2	122:5 224:14
usually 170:2	verdict 94:12	0,24	
utilitarian 113:3	95:10	138:2,6,16,18	violations 12:3
	version 21:18,19	139:11	viral 141:8,9
UV 162:15,22	43:7 53:5 107:16	140:12,23	168:19
163:9 164:11,23	154:4 161:14	141:15,20	virtually 179:24
UV-enabled	versions 20:23	142:24 145:8	· ·
161:21	21:12 53:3 88:22	156:11 157:23	vision 206:17
		173:25 174:24	vitro 152:13,23
V	versus 31:4 42:5	177:5 178:3	voice 155:2
vague 62:16 118:5	52:22 64:20	179:4,12,24 180:17 184:18	
	104:3 120:19	180:17 184:18	void 105:17,21
valid 95:8	130:10,19,25	192.1 196.7	volumes 81:15
validated 223:9	165:24 195:1	205:20 207:3	von 183:2
validation	212:17,21	215:6 217:3,4	
214:17,21	very-well 27:14	218:11,22	VP 166:3
226:22	Vessels 152:12,21	219:15 224:1	VUDU 159:18
validity 223:20	,	226:2,3 228:25	160:8 163:7
	veteran 65:2	229:9 231:3	164:3
valuable 47:13	vetting 231:6	Video-On-	170:4,8,12,17
48:5	via 5:11 144:25		<u></u>
value 35:24 109:24	166:13 168:13	Demand 159:7,9 166:15	W
111:21 162:20	170:17		wait 56:7 208:17
167:21 168:20	viability 23:12	videos 5:4,7,12	waiting 185:21,23
171:11,12	_	127:7,9,11,23	9
valve 24:4 83:9	viable 94:12	129:25 130:13	walk 36:14 74:17
1.1.03.9		131:6 140:16	

	ı ag	,	
walked 66:7	websites 138:20	97:8,17 98:8,12	218:18 219:8
walking 37:2	211:7	100:18 101:13	221:2 224:15
80:11	we'd 169:22	112:16	whatever 72:8
wall 147:2	215:14,15,22	115:17,20,24	86:9 105:1 146:7
	Wednesday 56:8	117:12 118:15	149:22 168:17
Wal-Mart	1	120:22 121:21	181:23 184:6
163:7,14,24	week 22:11 24:24	123:7 124:22	205:12
164:1 170:8	25:13 42:22	126:16 127:15	whatsoever 133:10
Warner 2:23	52:18 80:14	128:16,23 132:23	whereas 47:20
156:10 207:21	99:10 107:22 116:20	132.23	201:1
warrant 20:3	128:12,24 146:6	135:14,20,23	
24:19	148:8,9,10,11	139:8 141:22	whereby 161:12
warranty	156:25 224:24	142:7 154:13	Whereupon
105:18,22		158:16 159:2	231:11
	weekly 141:13	160:24 162:12	whether 30:22
Washington 90:25	188:6	163:21	31:12 34:14
148:18 173:16	weeks 54:8 228:1	164:5,13,20,22	46:21 48:6 51:13
180:12 228:1,15	weigh 182:25	167:2 171:10	54:21 55:13,16
wasn't 67:18 100:7	188:3	178:25 179:2,7	64:8 66:2 73:16
121:14 133:7	weight 25:5 74:3	181:8,13 182:2,3	74:9 91:22 102:4
186:4 203:16	92:23	184:14 185:2,10	110:15 116:21
220:12		188:24 197:25	118:4,6 122:20
watch 147:19	Weirick 2:23	199:6 203:19	128:24 129:8
149:13 152:3,7	126:9 156:8	206:13 209:7	136:20 138:9
228:20	211:13,18,25 212:5,12,19	213:5 215:1	140:25 155:10
watchability	213:4,12,16,19,2	217:12 218:24 220:1 224:16	174:6,8 175:8,9
137:21	1,23	225:2 227:19	179:8 186:13 219:24
watched 145:12	_	228:23	220:2,7,19 222:1
149:15 153:6	welcome 7:6,11,21		225:3
watches 153:4,10	we'll 73:8	Wesch 127:11	227:13,17,19
	122:7,9,14 125:1	we've 9:11 12:6	229:8 230:13
watching 145:13	182:24 220:24	13:20 59:20	
153:14,17,19,21	well-known 22:22	60:10 64:11	Whodi 159:20
185:20,24 186:3	well-produced	69:18 71:19,22	whole 13:20 89:10
200:9 201:16 229:9	137:23	82:25 83:4 85:3	113:5 119:2
	we're 7:10	101:9,18	131:18 135:4
ways 63:14 69:22	8:2,4,19 9:3,4	104:11,24 110:25 113:5	149:2,14 183:10
77:7 103:7	12:16 13:16	110:23 113:3	190:9 196:19,24 205:15 207:18
129:16 139:18	17:24 18:19	132:13 157:5	208:6 221:25
168:13 174:1	32:18 35:1 37:2	159:12,24	208.6 221.23
189:17 196:11 197:6,16 199:14	38:2 40:20	161:1,15,17	
218:11 222:10	42:16,17 49:16	162:3 163:20	whom 27:5 61:16
	50:20 58:11 60:2	165:12 166:22	Whoopi 147:1
web 56:10 77:11	66:11 68:2	169:5	who's 139:10
90:7 191:4	70:16,17 71:7	173:21,22,23,24,	155:4 176:7
website 23:1	72:3 74:17,18	25 178:9 183:13	227:12
140:21 211:3	75:9 77:16 78:12	198:19 217:9,19	wide 17:16
	1	I	11140 1/.10

	1 ag	-	
199:12,14	woo 142:20	24:6,13 25:1,2	111:1 164:25
wider 201:11	wording 202:15	33:18	206:24 217:20
widespread 21:7	work 10:20	34:9,15,18,23	
231:4	15:4,6,9,18	41:9,10,11,15	<u>X</u>
	25:17 34:8,16	52:9,24 53:4,5	Xbox 10:24 42:15
widest 172:9	36:21 44:12 53:2	57:13,14,16 58:4	43:7,25
Widevine 160:22	56:22 76:18	68:18,23,24	46:3,5,18,20
171:2	77:19 79:23 80:2	70:19 73:13	47:3 61:22 62:7
Wii 10:25 11:18	81:13 82:24	77:21 80:6	160:13
22:16,19 26:4	99:19 104:19	104:22 109:24	X-men 166:19
42:15 43:25	105:3 111:19	111:20 113:1,3	7 t men 100.17
46:17,20 47:1	121:10	114:6,10,13	Y
56:11 61:22	129:21,22 130:7	115:19 117:22	
104:12 160:13	131:15,16	118:9 120:15,17	yet 46:2 133:7
	134:15 136:6	121:17 123:13	182:15 183:3
wild 80:12	137:18 138:23	128:11 129:17 131:12	188:10 228:5
willing 132:1	139:1,2,5 141:20	131.12	Yikes 146:23
winding 63:17	142:23 144:9	132:17,23 134:3	Yoko 188:17
Windows 161:19	146:4,5 148:14	141:4,8,10,15	York 141:13
	150:25 159:22	148:8,19 179:2	
wings 150:7	179:1 183:23	181:14 184:2	you'll 32:12 138:3 177:18 188:7
wins 175:25	184:5,21,22	185:3 186:22	190:5 191:18
WinterBoard	186:24 188:4,5	207:22 210:22	218:20
89:24	190:10 191:1	218:3	
	193:8,25 198:6	world 18:12 35:5	young 127:5
wipe 70:1,6 72:7	203:3,23 204:24	45:22 114:12	145:9,14 229:6
Wired 141:15	205:6,10	148:7 167:22	yours 97:23
wireless 4:13	206:2,3,4,8	174:24 183:10	126:12 195:24
86:19 199:8	207:16 209:1 210:15,24 211:5	230:2	yourself 89:2
wish 30:22 115:22	210.13,24 211.3	worried 184:17	121:5
117:14	218:4,7 222:13		
	228:14,18	worry 74:25 129:4	YouTube 127:9,10 140:20 157:20
wished 117:10	workable 227:24	162:18	193:5 228:20,24
wishes 95:21		worse 202:9	ŕ
withdrawal 151:5	worked 110:8 148:18 198:6	worth 37:22 47:15	you've 27:13 36:4 46:16 56:22
witnesses 7:13 8:4	209:25	78:13 112:13	83:23 100:12
124:23 180:2		180:10 188:21	106:12,24
woefully 129:1	working 55:20	208:2	114:24,25
	138:24 148:9,10	wrench 50:18	119:21 162:1
woman 152:22	152:10 161:9	write 11:17,19	164:18 179:8
153:10	162:4 163:21	40:9 146:6	184:18 189:12
women 145:14	185:18 202:23		190:23 214:11
wonderful 48:2	works 4:24	writer 150:23	218:1 227:10,11
128:18	5:5,10,14,21	writing 116:20	231:3
wondering 220:19	6:5,11,15,18	written 150:25	
	15:23 17:10,18	216:1	Z
Wong 63:18 64:2	18:13,17,19,23	wrong 39:24 110:6	zero 186:24
	20:1 22:3 23:14	Wiong 37.24 110.0	

	8	E 39	
187:10,15 207:23 209:8			
Zimbabwe 155:5			
zoom 143:14,16 144:6 191:24 192:2 201:21			
zooming 143:13			