

SIXTH TRIENNIAL
1201 RULEMAKING HEARINGS

PROPOSED CLASSES: 13 - 15,
16 - 18, 24

May 21, 2015
9:00 A.M. - 11:30 A.M.

Reported by

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1 A P P E A R A N C E S

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3 PANEL MEMBERS:

4

5 JACQUELINE CHARLESWORTH

6 General Counsel, Copyright Office

7 SY DAMLE

8 Deputy General Counsel, Copyright Office

9 STEVE RUWE

10 Assistant General Counsel, Copyright Office;

11 REGAN SMITH

12 Assistant General Counsel, Copyright Office;

13 STACY CHENEY

14 National Telecommunications and Information

15 Administration, Department of Commerce

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1 APPEARANCES (continued):

2

3 PROPONENTS:

4 CATHERINE GELLIS

5 Digital Age Defense

6 KYLE WIENS

7 iFixit

8

9

10 OPPONENTS:

11 HARRY M. LIGHTSEY, III

12 General Motors, LLC

13 STEVEN J. METALITZ

14 Alliance of Automobile Manufacturers

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1 P R O C E E D I N G S

2 WESTWOOD, CALIFORNIA; THURSDAY, MAY 21, 2015

3 9:00 A.M.

4 MS. CHARLESWORTH: Good morning and
5 welcome to the third day of the hearings in the
6 Sixth Triennial 1201 Rulemaking process. Thank you
7 for being here.

8 I think all of our witnesses have been
9 here before. So I will spare you my instructional
10 messages. We will just start and go down the panel
11 and introduce yourself and who you represent and we
12 will begin with some opening statements.

13 Ms. Gellis.

14 MS. GELLIS: Catherine Gellis. I am a
15 solo attorney and I am here with my Digital Age
16 Defense project.

17 MR. WIENS: Kyle Wiens representing iFixit
18 and Digital Age Repair Company.

19 MR. LIGHTSEY: Harry Lightsey, General
20 Motors.

21 MR. METALITZ: Steve Metalitz, Mitchell,
22 Silberberg and Knupp for the Alliance of Automobile
23 Manufacturers.

24 MS. CHARLESWORTH: And just for the
25 record, this first panel is actually combined panel

1 Classes 13, 14 and 15. They all involve unlocking
2 of the following: Mobile connectivity devices,
3 wearable computing devices and consumer machines.

4 So we're considering these three classes
5 together this morning.

6 And, of course, you can speak to all of
7 them, I think, if you are sitting here at the table.

8 So, Ms. Gellis, why don't you lead us off
9 with a brief opening statement.

10 MS. GELLIS: One of the points I remember
11 making throughout this testimony is that the objects
12 in the Classes 11 through 27 are essentially all
13 computers with little functional difference to what
14 Congress understood computers to be like back in
15 1998. The only difference is that they changed
16 shape.

17 We now have computers looking like phones
18 and phones looking like cars, but as a general
19 matter, these are all computing devices that have
20 been used by the people who legitimately possess them
21 however they wish to use them.

22 It also means there is no reason to treat
23 them differently for purposes of any 1201 exemptions
24 to the extent that the 1201 process is appropriate
25 to reach them.

1 These Classes 13 through 15 all involve
2 using these computers for the wireless
3 communications they are capable of facilitating.

4 No computer user should be penalized and
5 disallowed from using a particular computer to
6 exploit the wireless communication functionality
7 however they wish to simply because the device most
8 proximate to them when they have the communications
9 needs comes in a specific shape.

10 This point is perfectly supported when we
11 think back to the form computers took in 1998 when
12 Congress passed the DMCA.

13 If Congress had anticipated that 1201
14 might prevent people from changing their Internet
15 provider from Compuserve to America Online simply
16 because someone put a TPM on the computer that would
17 prevent people from choosing a different service, I
18 think they would have written 1201 differently in
19 order to prevent the sort of anti-competitive,
20 anti-consumer consequence.

21 The market choice people made to purchase
22 a computer happens once, but the market choice
23 people make for whom to provide their communication
24 service is ongoing and they should be free to change
25 their minds and choose somebody else.

1 This is particularly true when the
2 implication of being able to make this choice on any
3 copyright interest is so minor. It is minor to the
4 extent that being able to unlock one's device
5 requires, quote/unquote, jailbreaking the device.

6 I am of the view that just as there is no
7 principled reason to grant exemptions covering
8 some types of computing devices and not others,
9 there is no principled reason to allow jailbreaking
10 devices for some purposes and not others, because
11 people should be able to use their computing tools
12 for whatever reason they choose to at any time, but
13 even if we look at the copyright impact of simply
14 jailbreaking in order to unlock a device, we see the
15 impact is minimal.

16 Like with cars and TV's, the full
17 copyright interest implicated is the copyright of
18 the software operating the device and this interest
19 is not adversely affected at all by this unlocking
20 conduct.

21 Also, not all unlocking requires
22 jailbreaking. CCA's petition for this class refers
23 to quote, computer programs in the form of firmware
24 or software or data used by firmware or software.

25 Sometimes unlocking merely requires

1 writing data to the device that the software will
2 then pass to the communication service when it tries
3 to connect with it. This sort of reading and
4 writing data is not something the copyright in the
5 software in any way prohibits.

6 In sum, there should be no barrier to
7 granting these exemptions as applied to unlocking
8 for all the devices proposed in all of these
9 classes.

10 MS. CHARLESWORTH: Thank you, Ms. Gellis.

11 Mr. Wiens.

12 MR. WIENS: In addition to providing
13 repair services, iFixit also is a little bit known for
14 doing product tear-downs where we get new gadgets
15 the day they come out, sometimes before they come
16 out. We take them apart and explore how they work.

17 I would like to offer myself as an expert,
18 at least in terms of the rapid pace of innovation
19 that these devices move. So if you have any
20 questions or are interested in learning more about
21 what kind of devices.

22 I suspect I am also the only person in the
23 room who has taken apart a smart meter. Questions
24 about smart meters, I can happily help.

25 We work very closely with engineering at

1 one of the leading smart meter companies to analyze
2 smart meters.

3 One of the interesting things about smart
4 meters is that the regulatory and the public interest
5 concerning smart meters has to do with how much RF
6 they're putting out. And there has been a lot of
7 controversy, a lot of concern, particularly here in
8 California in the Santa Cruz area, around how much
9 RF is a smart meter putting out.

10 I don't think a smart meter is in a
11 category of something that normally a consumer would
12 want to be unlocking. In the course of normal use,
13 you just want the smart meter to be active. So
14 for the purposes of RF safety engineering or RF
15 testing you very well might want to do that.

16 MR. DAMLE: With smart meters, isn't the
17 RF output of smart meters, isn't that regulated by
18 the Federal Communications Commission? They put
19 rulings on the amount of RF that cellphones can put
20 out and I believe they do the same for other devices
21 that put out RF.

22 MR. WIENS: Correct. They do and there --

23 MR. DAMLE: And they have studied the
24 health implications of RF output.

25 MR. WIENS: And my personal belief is that

1 the RF output is not a problem. That is my
2 technical opinion, but there are communities that
3 have been interested in studying that and want that
4 understanding because they might say well, I don't
5 believe in the FCC's standards, they're too high for
6 my school.

7 So in order to do the RF testing, what you
8 would do is you would pull the smart meter off your
9 house if you get a smart meter and you would modify
10 it to connect to your own network to do your own RF
11 testing.

12 So I am just saying that is a potential
13 reason that somebody -- and honestly, the only
14 reason I can think of, wanting to unlock a smart
15 meter.

16 MR. DAMLE: So that is one of the questions
17 I have. That is as far as you know the only reason
18 that anyone would want to unlock something like that
19 smart meter.

20 MR. WIENS: Correct.

21 And sometimes in certain non-standard
22 conditions, the smart meter might exceed the
23 standard RF requirement.

24 There is also -- there are hubs and spokes
25 of this smart meter network and you don't always

1 know if your smart meter is acting as a hub. If it
2 acts as a hub, it transmits a lot more RF than a
3 spoke would.

4 So that is just kind of interesting on the
5 smart meter question.

6 In terms of categories of devices, it's
7 amazing how fast this market moves. So if you think
8 about in the last rulemaking in 2012, if we had been
9 having this conversation potentially talking about
10 all the different devices we might want to talk
11 about unlocking, smart watches probably wouldn't
12 have been on the list.

13 So the last proceeding was in 2012. Nike
14 introduced the Fuel Band in 2013. And Fuel Band is
15 very widely known as one of the most popular leading
16 early smart devices.

17 In 2014, Nike decided that it wasn't a
18 useful investment and they laid off most of the Fuel
19 Band teams and discontinued the product. And here
20 we are in 2015 talking about whether there should be
21 an exemption.

22 I have concerns that if we do not set a
23 broad standard for this class, we're going to have
24 products that are introduced during the three-year
25 period maybe go away and we won't have the

1 opportunity.

2 MR. DAMLE: This is an unlocking class,
3 which then the premise of this class is that these
4 devices are locked.

5 And cell phones, we know, are locked, and
6 they're locked because the carriers essentially
7 subsidize it and make you sign a contract and you
8 have a two-year contract on that particular service
9 provider, but that's not, I don't think, typical of
10 the many other devices.

11 For instance, the iPad, I think you would
12 agree, is not locked.

13 MR. WIENS: In certain contexts, you can
14 get an iPad that comes from a carrier and it's
15 locked, but in general, frequently no.

16 MR. DAMLE: So what about --

17 MR. WIENS: This is looking forward to
18 what is going to happen in the future.

19 This is a LG Watch Urbane. This is LG's
20 hot new sport watch that just came out last month.

21 Next week, they're introducing the LGB
22 version of this watch.

23 MR. DAMLE: Does that watch have a 3G
24 connection?

25 MR. WIENS: So this watch does not. The

1 one they're releasing next week will. So that is
2 the --

3 MR. DAMLE: Do you know if that device
4 will be locked to a particular carrier?

5 MR. WIENS: I don't know that.

6 MR. CHENEY: But this device is not
7 locked.

8 MR. WIENS: This is not a cellular
9 connected device.

10 MR. CHENEY: That is the distinction we
11 are talking about.

12 MS. CHARLESWORTH: I am going to say let
13 the record reflect that Mr. Wiens is holding a LG
14 watch as a visual aid.

15 MR. WIENS: Yes.

16 MS. CHARLESWORTH: Mr. Cheney.

17 MR. CHENEY: That is the distinction we're
18 trying to make here right, is that the cellular
19 component is what is being locked in a sense, right?

20 MR. WIENS: Right.

21 MR. CHENEY: So that is the distinction,
22 if it doesn't have a cellular component, then it's
23 not being locked.

24 MR. WIENS: Correct.

25 So I don't believe that this class can or

1 would apply to this watch. And I think that
2 honestly, the first cellular connected watch is the
3 one coming out next week.

4 MR. RUWE: To clarify, there is no
5 understanding that the connected watch will be
6 locked.

7 MR. WIENS: I don't know, right, but the
8 question is we're talking about a product that we
9 know is going to come out and it may or may not be
10 locked.

11 If there are going to be things we want to
12 do with it over the course of the next three years,
13 the product will be obsolete. It will not -- the
14 product coming out next week will not be relevant in
15 three years.

16 So if we are ever going to make a decision
17 about whether it can be unlocked or not, we have to
18 make it now.

19 MS. CHARLESWORTH: I thought you made all
20 the old products relevant.

21 MR. WIENS: Let's talk about that.

22 There is a wonderful group called "Rainforest
23 Connection" that takes smart phones and other
24 devices and unlocks them, refurbishes them and sends
25 them to Western Sumatra. And what they are doing

1 with these old phones in Western Sumatra is setting
2 them up in a mesh grid network in the forest and
3 using the microphones in the smart watches to detect
4 illegal logging.

5 So these are U.S. phones. They have to
6 unlock the U.S. phone -- it came from AT&T or
7 wherever else. They are sending it over there
8 saying this is basically an inexpensive device.
9 They don't really care what the device is. It just
10 needs to be a device with a microphone and a
11 cellular connection.

12 They're repurposing products that maybe
13 would have gone into the landfill anyway and using
14 them to detect illegal logging activity. This is a
15 fabulous use. It's gotten a lot of great press.

16 And they're saying mail us your smart
17 device, we will unlock it, refurbish it. Maybe they
18 have to jailbreak it and install their custom code
19 and then set it up in the jungle to protect -- and
20 which this is a really innovative and clever
21 technological solution to a really intractable
22 problem. It's very, very challenging to detect the
23 illegal logging.

24 The idea that we can repurpose these
25 devices is very compelling.

1 And I don't know what products are going
2 to come out that will be locked in the next three
3 years but I do know that every single one of them at
4 some point is going to have the need to be able to
5 unlock it.

6 So this is a challenge because I
7 understand that you come from the world of copyright
8 which traditionally is much slower moving than the
9 work of technology.

10 We are taking apart new devices every
11 single week that shock and surprise us.

12 I have been told that the Samsung Galaxy
13 Gear S watch is locked to AT&T.

14 MR. RUWE: Is it unlocked on any other
15 carrier?

16 MR. WIENS: Is it locked for any other
17 carrier?

18 MR. FREEMAN: You can purchase it
19 unlocked.

20 MS. CHARLESWORTH: Mr. Freeman, why don't
21 we give you a moment to confer with Mr. Wiens and
22 then Mr. Wiens, who is actually a panelist, can
23 report what he wants to.

24 MR. WIENS: So the Galaxy Gear S is
25 subsidized and locked to AT&T and they sell an

1 unlocked version for \$350 and the subsidized version
2 sells for less than that.

3 So this example of the unlocking
4 barrier-to-entry, subsidization model is alive and
5 well in other things and I think it will continue to
6 be because it makes sense -- you have a data plan --
7 and I would expect this model to continue.

8 MS. CHARLESWORTH: And on that point, when
9 have you a subsidy model -- obviously, a lot of the
10 debate over the years is to the role of the
11 anti-circumvention prohibition in protecting the
12 carrier's investment and subsidy.

13 And so do you agree that kind of
14 differentiates some markets from others in this
15 area? I mean in other words, a market for a
16 subsidized device might look a little different and
17 have different concerns than a market for a
18 completely unlocked device.

19 MR. WIENS: Sure. And that is reasonable.
20 And I wouldn't argue that there is no room in the
21 market for locked devices. The question is should
22 you be able to unlock those devices at some point.

23 Our friends at Electronic Recyclers
24 International in Fresno -- I was at their facility
25 just about exactly a year ago right after the

1 Samsung Galaxy Gear had come out. And they had 200
2 of them in their recycling facility. This is a
3 month after the product had come out. The products
4 were purchased by consumers. There was buyer
5 regret. They took them back. The store -- they
6 ended up at the recycler and they are saying all of
7 these are perfectly potentially usable; we have to
8 do something else with them.

9 MR. DAMLE: I just wonder if it -- is
10 there a market for the Samsung Galaxy to connect to
11 carriers beyond AT&T?

12 MR. WIENS: You could connect them to any
13 compatible carrier.

14 MR. DAMLE: Just to go back to
15 Jacqueline's question, so you would agree -- so
16 right as proposed, the word "used" doesn't appear in
17 the proposal and that is something that we have
18 always had for the smartphone exemption.

19 So is that something that we think would
20 be appropriate, saying that to use -- to kind of
21 cover the situation where you're not taking
22 Verizon's subsidy for something that you have opened
23 and then you want to unlock it at some later point.

24 MR. WIENS: I think that would be
25 reasonable.

1 MS. CHARLESWORTH: Did you have anything
2 else to add, Mr. Wiens?

3 MR. WIENS: One other use case I would
4 like to share is the use case of farmers.

5 Modern agricultural equipment is using GPS
6 to a significant degree. It has allowed farmers to
7 get much better utilization from their field.

8 So they have GPS devices in their tractors
9 and there's a really neat, innovative company called
10 Farmobile that takes the GPS data from the tractor
11 and streams it to an iPad and then the farmer can
12 see the information in real time exactly where the
13 tractor is and if they are making their rows right.
14 And just being off by a degree in the size or shape
15 of the field over the size of the field ends up
16 having dramatic ramifications. So they are very
17 interested in modifying this.

18 Intriguingly, the John Deere tractors have
19 wireless connectivity built in but that connectively
20 can only talk to John Deere, so.

21 MR. DAMLE: When you say wireless
22 connectivity exists, what do you mean?

23 MR. WIENS: It's cellular.

24 And it's interesting because there is a
25 lot of discussion around farmers where they say I'd

1 like to use this new tractor but I don't have cell
2 phone reception at my farm. So I have heard farmers
3 say why don't I set up my own cellular network on my
4 farm so I can connect to it.

5 Well, the challenge with that, of
6 course, is if the tractor is locked. And I don't
7 know if the carrier is locked or not, but if the
8 tractor is locked, they wouldn't be able to connect
9 to their own network.

10 What Farmobile had to do is build an
11 additional wireless modem into their logging device
12 in addition to the cellular modem that was in the
13 tractor because they wouldn't be able to modify the
14 cellular interception that was in the tractor.

15 So just to show you -- I mean if you think
16 about the category of mobile device, well, a
17 tractor is a mobile device. And they are -- the
18 connection of the data there is critical.

19 And one concern that farmers and also
20 vehicle owners have is who owns the data, who can
21 control -- who has access to this telemetry data
22 from the tractors.

23 And so what Farmobile is doing is
24 basically replicating a lot of the functionality
25 John Deere had. And they are having to do it in a

1 completely separate device in order to get the
2 farmer access to the same data that the tractor is
3 already logging and sending to John Deere.

4 MS. CHARLESWORTH: Thank you, Mr. Wiens.
5 Mr. Lightsey.

6 MR. LIGHTSEY: Yes. So I will be very
7 brief.

8 I will be happy to respond to any
9 questions about OnStar services or GM, but just very
10 briefly, we filed an opposition in an abundance of
11 caution because as just indicated, the definition of
12 a mobile device is extremely broad.

13 And frankly, we have had experience in
14 various other venues where folks have proposed bills
15 or regulations where they have inadvertently phrased
16 the definitions very broadly so it technically could
17 include the modern automobile, connected automobile
18 and OnStar service as a mobile device.

19 MR. DAMLE: Is the OnStar service a
20 cellular service that's based on cellular network?

21 MR. LIGHTSEY: It is.

22 MS. CHARLESWORTH: And do you have what I
23 would call hot spots installed in the cars?

24 MR. LIGHTSEY: Yes, we began to launch
25 that service last year.

1 MS. CHARLESWORTH: So in the narrower
2 construction of mobile device -- I mean I think one
3 of the devices we are talking about -- I think there
4 is general agreement that what we're talking about is
5 the hot spots whether they move around or not.

6 Usually, they do whether they're in a car or not.

7 So I think in that sense, then are they
8 locked, your hot spots in cars?

9 MR. LIGHTSEY: Yes.

10 So we sell OnStar service. We are
11 affiliated with AT&T. They're our provider.

12 And if you are an AT&T customer, you can
13 have the mobile wifi hot spot as part of your AT&T
14 service in the automobile.

15 If you choose to purchase a data package
16 from us to establish a wifi hot spot and you are not
17 an AT&T customer, we will sell that to you as a white
18 glove service, but if you have a cell phone in your
19 vehicle and you can connect to your established cell
20 phone provider, if that cell phone provides wifi hot
21 spot capabilities, you can utilize that in the
22 vehicle.

23 So it's not -- you have choices as to who
24 or what carrier you want to use.

25 MS. CHARLESWORTH: So for the AT&T

1 example, if I am an AT&T customer already for my
2 phone, my regular cell phone, are you saying that I
3 can go to AT&T and get an added service from AT&T
4 that will allow me to also use my wifi in a GM car?

5 MR. LIGHTSEY: Correct.

6 MS. CHARLESWORTH: So that is one avenue.

7 And you said something about white glove
8 service. Who provides that service? Is that also
9 AT&T?

10 MR. LIGHTSEY: That is also AT&T.

11 MS. CHARLESWORTH: Behind the scenes?

12 MR. LIGHTSEY: So the difference is
13 we're dealing with a modern automobile here. OnStar
14 service, as we discussed the other day, is a service
15 that is designed to be used in the event that the
16 vehicle crashes or there is an emergency, something
17 like that.

18 So we build the OnStar module into the
19 vehicle and in a way to enhance the survivability of
20 the module if there is a dramatic crash event with
21 regard to the vehicle. So frankly, the module is
22 buried as deep into the car as it can possibly be
23 put and the most protected place it can possibly be
24 put so that the likelihood that it'll be able to
25 function in a cataclysmic crash is the greatest.

1 The sim card that makes it function within
2 the module -- and so it's basically hard wired into
3 the module. So if you wanted to change -- basically
4 the module is not engineered to have -- it's not
5 like a cell phone. It's not engineered to have sim
6 cards pulled in and out.

7 MS. CHARLESWORTH: Would it require
8 physically accessing some part of the car? Is that
9 what are you saying?

10 MR. LIGHTSEY: Yes.

11 MS. CHARLESWORTH: And then actually
12 physically changing out the sim card.

13 MR. LIGHTSEY: You really couldn't even do
14 it. It's hard wired into the module.

15 MS. CHARLESWORTH: In theory, assuming you
16 could somehow accomplish that, can OnStar run --
17 could it theoretically run on a different network?

18 MR. LIGHTSEY: No.

19 MS. CHARLESWORTH: So and why is that?

20 MR. LIGHTSEY: Because the service is
21 designed to work with a specific carrier. All of
22 the protocols and the data that is pulled out of the
23 vehicle is engineered to work through a specific
24 carrier.

25 MS. CHARLESWORTH: Through AT&T, you are

1 saying?

2 MR. LIGHTSEY: Correct.

3 MS. CHARLESWORTH: But just the wifi
4 connectivity, is there -- could that be separately
5 carried in theory if you could make the change to
6 the module you are describing or is that not
7 possible?

8 MR. LIGHTSEY: Frankly, it would be in our
9 interest and we would love to be able to provide our
10 customers with the choice of carriers, but until
11 they have electronically addressable sim cards, kind
12 of the global sim card that you hear discussed --
13 and we understand that that may be in the future
14 something that is achievable -- but right now, as
15 long as the sim cards are dedicated to the specific
16 carriers we have, our service is locked into a
17 specific carrier.

18 There isn't any record -- evidence in the
19 record or none of the proponents have specifically
20 said that they designed the exemption to include
21 automobiles. And so if clarifying language was
22 added to the exemption, we would not object to it.

23 On the other hand, if the proponents
24 insist on the current phraseology and say it does
25 include automobiles, then we would ask that the

1 exemption be denied.

2 MS. CHARLESWORTH: I did have another
3 question.

4 Has anyone -- are you aware of anyone
5 actually approaching GM and saying I want to unlock
6 the wifi in my car and change carriers?

7 MR. LIGHTSEY: No, I am not because most
8 people have the choice, as I said previously, if
9 they have a different carrier, they can use the cell
10 phone with bluetooth connectivity through the
11 vehicle.

12 MS. CHARLESWORTH: Thank you.

13 MR. CHENEY: Mr. Lightsey, what sort of
14 language would you be comfortable with as written
15 into the exemption that would exclude your
16 interests?

17 Would it be that -- for example, we talked
18 about a GPS in the tractor.

19 Just talking about the whole tractor as
20 being mobile seems to be maybe over -- if you talk
21 about a separate GPS unit, perhaps could that be
22 something that would be something that is talked
23 about, if there is a separate -- some way to
24 separate the device from the car, would that be a
25 way to write the language that would be helpful in

1 the exemption for you?

2 MR. LIGHTSEY: As I said, we have had
3 experience with this in the past in state bills and
4 other areas and we have suggested language that says
5 that if the device is portable, it could be carried,
6 that kind of language.

7 MR. CHENEY: May I ask Mr. Wiens, in the
8 case of the tractor, did you say that that was a
9 portable device or was that part of the console in
10 the tractor or how was that?

11 MR. WIENS: It's integrated. It's
12 integrated and it's on the tractor.

13 MR. CHENEY: So it's not something
14 portable.

15 In the case of the OnStar, it's part of
16 the console; is that right?

17 MR. LIGHTSEY: It's embedded in the car,
18 correct.

19 MS. CHARLESWORTH: A drafting challenge,
20 how to distinguish tractors from cars.

21 MR. LIGHTSEY: Light duty vehicle.

22 MS. CHARLESWORTH: There may be a way to
23 do it. I'm not sure but it might be possible.

24 MR. RUWE: Mr. Wiens, would that tractor
25 scenario, could it be addressed by the modification

1 exemption that you are also hoping to advance?

2 MR. WIENS: This is where it's fascinating
3 to talk about what -- we're talking about
4 connections to cellular networks. Smart meters
5 don't connect to the cellular network. So smart
6 meters establish their own mesh network.

7 MR. RUWE: So they totally fall outside of
8 any possible --

9 MR. WIENS: I think it comes about by
10 unlocking.

11 MR. DAMLE: Well, by unlocking, I think
12 the way we have defined it in all of our notices and
13 the way it's been understood is -- and in the
14 legislation, is that you connect to a wireless
15 telecommunications or data network like 3G, and then
16 I think it listed out all the potential protocols.
17 And if the mesh network is smart meters, then this
18 would not even fall within.

19 MR. WIENS: Maybe some rural smart meter
20 might but all the smart meters I have analyzed.

21 I'm not sure if I answered your question.

22 MR. RUWE: The question is you mentioned
23 that you could add on a modem to connect to your own
24 network in the tractors situation.

25 Would that qualify -- would that fit

1 within the modification exemption that you are
2 seeking?

3 MR. WIENS: Adding an additional modem use
4 of connecting an additional device -- maybe you have
5 to jailbreak the tractor, modify the tractor, but to
6 change the network that is existing in the tractor
7 so the existing modem can connect to a different
8 network.

9 MR. RUWE: But those would both accomplish
10 the same goal. Different means but the same result.

11 MR. WIENS: Yes, yes.

12 MR. DAMLE: And just to the GPS point that
13 Mr. Cheney pointed out, this would not -- this
14 definition of unlocking has nothing to do
15 with GPS. GPS is an open right, correct?

16 MR. WIENS: Correct. Although there is --
17 I mean one way to enhance the accuracy of GPS is to
18 use the cellular signal to enhance it.

19 So like these devices are using in order
20 for the GPS to be as fast as it is on your phone, it
21 augments that with the cellular network because it
22 can triangulate off where the tele-towers are
23 located in addition to where the satellites are
24 located.

25 MR. DAMLE: But the GPS standard alone is

1 not in locked in any sense.

2 MR. WIENS: Correct.

3 MS. CHARLESWORTH: Mr. Metalitz.

4 MR. METALITZ: Thank you very much. I
5 will also be brief.

6 I think there is a reference in your
7 previous recommendations about the difficulty of
8 deciding issues in a factual vacuum and I think that
9 describes the state of the record right now with
10 regard to the application of any of these proposed
11 exemptions to motor vehicles.

12 Again, I'm not talking about agricultural
13 implements here, but as we pointed out, there really
14 isn't any evidence in the record, I think from -- we
15 can certainly take notice of the testimony from
16 Tuesday on Classes 21 and 22 in. And regardless of
17 where you come out on those points, I think there is
18 ample evidence in the record that the automobile
19 sector is not like other sectors and needs to be
20 looked at individually if you are going to be
21 considering any exemption that applies to it.

22 The wireless connectivity that's involved
23 here, particularly as described by Mr. Lightsey in
24 the example of OnStar, is used for different
25 purposes than the paradigmatic cell phone, tablet,

1 et cetera.

2 And it has a big impact on not only
3 regulatory compliance but in particular on safety
4 issues, which is, as Mr. Lightsey just noted, really
5 the raison d'etre for having OnStar.

6 So there is also, as I think your previous
7 question pointed out, we won't -- I'm not aware of
8 any of the Auto Alliance companies that have
9 detected any consumer demand to switch networks on
10 wireless connectivity that may be offered in their
11 vehicles.

12 So I would think it's clear from the
13 unlocking legislation from last year that the Office
14 and Librarian are going to apply exactly the same
15 standards in determining whether an additional
16 wireless connectivity exemption should be granted as
17 they would for any other proposed exemption in terms
18 of where the burden lies and the extent of evidence
19 that would be required to meet that burden and to
20 show that there is a substantial adverse impact
21 that is imposed by Section 1201(a) and, you know,
22 addressing all of the other criteria.

23 And I would suggest on the record that is
24 before you now, that it's very far from meeting any
25 of that with regard to automobiles.

1 So I would simply concur with what
2 Mr. Lightsey said that this exemption -- any
3 exemption granted in this area should not apply to
4 wireless connectivity involved in automobiles.

5 And we would be glad to suggest language
6 if you would require us for specific language that
7 might accomplish that.

8 We don't take a position on whether in
9 other areas the burden that the statute and your
10 notice of proposed rulemaking imposed on the
11 proponent has been met.

12 Thank you.

13 MS. CHARLESWORTH: Thank you.

14 Ms. Gellis.

15 MS. GELLIS: I just wanted to add a few
16 points that arose during this conversation.

17 The first arose in the context of smart
18 meters. And I realize smart meters may be
19 differentiated in class for other reasons, but one
20 of the thoughts was why would people want to mess
21 with their smart meter.

22 And I was thinking the privacy impact of
23 smart meters may be a reason that people would want
24 to interact with their smart meter. They tend to --
25 because they're transmitting so much data about

1 personal energy usage, they tend to give rather
2 explicit profiles of how people are using their
3 energy and it tends to indicate who is home, when
4 are they home.

5 MR. DAMLE: That is the point of a smart
6 meter, that you don't have to send the person out to
7 read the meter. You just read it remotely. So the
8 whole point of smart meters is really to get data
9 about energy usage.

10 MS. GELLIS: Right. But I don't know if
11 the intent was to remotely necessarily transmit such
12 identifiable in that much detail information about
13 the person. It is supposed to be about the energy
14 usage, not about the human being and their behavior
15 patterns.

16 MS. CHARLESWORTH: Is it your
17 understanding that the smart meter identifies
18 individuals when they're sending information about
19 energy use?

20 MS. GELLIS: There is some evidence that
21 they can be so detailed in the type of information
22 that they're collecting and ultimately transmitting
23 that you're able to go back and look over this
24 mosaic of information and put together some really
25 good guesses of who is there, when are they home,

1 what are they doing when they are home. I believe
2 some people can even make more detailed
3 conjectures than that.

4 I don't want to dwell on that too much
5 because it was more of a launching off point, but
6 the point is that smart meters do raise some privacy
7 concerns. That might be to the extent that they
8 remain on the table for an exemption, that is
9 something to consider, but I wanted to use that as a
10 launching off point for the privacy implications of
11 some of the other mobile carriers and the need to be
12 able to jump from one to the other.

13 And I know you are looking for evidence to
14 warrant why the use cases would justify the
15 exemption.

16 MS. CHARLESWORTH: What we are looking for
17 is specific instances, specific evidence that shows
18 there has been an attempt on or desire to unlock
19 something, what it is and what happened and why the
20 person couldn't do it if it's because of 1201.

21 So do you have any of that to offer?

22 MS. GELLIS: One of the points I wanted to
23 make in the smartphone department was instances of
24 Verizon using super cookies and people objecting to
25 the privacy implications of that behavior and using

1 that as -- this may be a reason why somebody was
2 on one network where all of a sudden their privacy
3 practices are not something that people would find
4 agreeable and they need to have fluidity to be able
5 to move to another carrier.

6 Now whether people have affirmatively
7 tried to make that jump and been stymied by the
8 lock, I don't have that data, but it's a reasonable
9 use case to suspect it's out there of why people
10 would want to change from one carrier to another
11 which may not be something introduced in record
12 before.

13 MS. CHARLESWORTH: You are now talking
14 about smartphones, which is written in a different
15 class but you are using the analogy.

16 MS. GELLIS: You change -- as a mobile
17 device and to the extent that it's locked to a
18 communications carrier -- if Verizon is the
19 communications carrier providing the service and
20 Verizon's data protection practices are something
21 that the consumer discovers are not something
22 consistent with how it values its privacy, that is a
23 market decision that would potentially cause the
24 person to want to look for another carrier.

25 And the fewer barriers that they run into

1 to be able to make that market decision, the better.

2 The fluidity of the market would also
3 encourage the market actors to provide better
4 services that perhaps are more respectful of
5 consumers' privacy interests.

6 And I think in terms of the car -- not in
7 terms of privacy, but Mr. Lightsey discussed that it
8 would be nice if there were other carriers, but we
9 may have a chicken and the egg problem.

10 Would we get other carriers if it's not
11 possible for anybody to shop around and choose
12 another carrier? Who is going to make the
13 investment in developing these other networks?

14 So we may have the barrier -- we may not
15 need to be able to choose now because there is
16 nothing to choose, but the fact we can't choose
17 might be why there is nothing else to choose.

18 MS. CHARLESWORTH: Thank you.

19 Mr. Wiens.

20 MR. WIENS: I have a question for
21 Mr. Lightsey, if I may.

22 MS. CHARLESWORTH: Why don't you raise the
23 question with me?

24 MR. WIENS: So my question is, if it's not
25 possible to change the network the car is connected

1 to, why do you need -- why do the auto manufacturers
2 need the protection of 1201?

3 MS. CHARLESWORTH: I think that is a
4 reasonable question.

5 Mr. Lightsey, did you catch that?

6 MR. LIGHTSEY: Yes.

7 As we have said in the record in our
8 comments, there are lots of good reasons why you
9 wouldn't want to unlock the vehicle and potentially
10 make it more vulnerable for security and safety
11 reasons.

12 Folks would possibly be incentivized or
13 feel that they were less deterred from attempting to
14 breach the vehicle and make it do things that it's
15 not designed to do, obtain information about the
16 persons in the vehicle that they want to keep
17 private, those types of things.

18 And so that is certainly the main
19 consideration of why we would want to be able to
20 maintain the security of the vehicle.

21 MS. CHARLESWORTH: And then you had your
22 placard up already. So did you have something else
23 to add?

24 MR. LIGHTSEY: That was actually what I
25 was going to add.

1 MS. CHARLESWORTH: Mr. Wiens.

2 MR. WIENS: One other thing I would just
3 like to enter into the record is last year,
4 California introduced -- well, it was introduced in
5 the California legislature, Senate bill SB994, which
6 was a bill to require the auto manufacturers to make
7 it possible to switch the wireless carrier.

8 And the reason was that consumers are
9 interested in access to the data and they have the
10 same privacy concerns that Mr. Lightsey is raising.
11 Some consumers have concerns that the very large
12 corporations shouldn't be the ones that have access
13 to telemetry data from their vehicle. So they would
14 like to switch the stream of where that data is
15 going maybe to their own server, to a different
16 network.

17 So the existence of that bill -- there
18 were thousands of letters sent into the California
19 Senate.

20 MS. CHARLESWORTH: Did it pass?

21 MR. WIENS: It did not pass.

22 MS. CHARLESWORTH: Do you know why?

23 MR. WIENS: It died in committee.

24 MS. CHARLESWORTH: It died in committee.

25 MR. DAMLE: Familiar story.

1 MR. WIENS: But I just wanted to bring
2 that bill up in reference to this because there is
3 significant interest and demand in switching
4 networks. I would agree it's not possible at the
5 moment. That bill was to try to make it possible.

6 MS. CHARLESWORTH: So just to be clear,
7 it's not possible in terms of sort of almost
8 physically possible to do now perhaps without
9 destroying your car.

10 Is that what you are saying?

11 MR. WIENS: Correct. Or even in the
12 processes of destroying your car, I'm not sure it's
13 possible.

14 MS. CHARLESWORTH: Thank you. That's a
15 good clarification.

16 Mr. Lightsey.

17 MR. LIGHTSEY: I will just respond to
18 Mr. Wiens' comments.

19 I will say that just as a point of
20 clarification, my recollection of that bill was it
21 was not about the ability to switch carriers but
22 more about access to the telematics data that is
23 generated by the vehicle. And obviously, none of
24 that is in the record. That is a separate debate
25 for another day, I think.

1 MS. CHARLESWORTH: Thank you.

2 MR. DAMLE: So Mr. Wiens, I don't know if
3 you know this, but going back to the sort of typical
4 mobile hot spot that we think of, you know, the
5 little square box and the little dongle, do you know
6 whether those are locked to carriers?

7 MR. WIENS: Frequently, they are.

8 MS. CHARLESWORTH: Some are and some
9 aren't?

10 MR. WIENS: Some are and some aren't.

11 MS. CHARLESWORTH: Are they subsidized?

12 MR. WIENS: Yes, not always, but
13 frequently.

14 MS. CHARLESWORTH: They might be
15 subsidized and locked is what you are saying?

16 MR. WIENS: Correct.

17 MS. CHARLESWORTH: Thank you.

18 Any further additions to the record?

19 MR. RUWE: Mr. Wiens, do you have a
20 position or have you explored the application of
21 1201(i) with regard to this personally identifying
22 information that is part of the car that is stored
23 in the car, stored through the car?

24 MR. WIENS: One moment.

25 So with regards to collection of

1 personally identifying information, there is always
2 a concern when you have a device that is
3 transmitting information that you don't have the
4 ability to either switch off or switch to a network
5 of your choosing.

6 This is -- I mean motor vehicles are an
7 example. There are a number of cases where you
8 have -- where we are buying products that start
9 phoning home that people don't even realize.

10 These base band chips are getting so
11 inexpensive that we're seeing cases where people
12 will buy a Kindle and they won't realize the Kindle
13 is connected to the cellular network. They are not
14 paying on an ongoing basis.

15 Amazon has a relationship with the carrier
16 where the carrier so the carriers get a portion of
17 every sale that happens over the wireless network,
18 but the consumer might not realize that by having
19 the device on as they are moving around -- but if
20 you have a collision, you might not know when you
21 are moving, around all of a sudden, your position is
22 being tracked over the wireless network with a
23 carrier that you didn't necessarily have a
24 relationship with.

25 So I think perhaps you could make a

1 privacy argument for wanting to switch the carrier.

2 MS. CHARLESWORTH: Mr. Lightsey.

3 MR. LIGHTSEY: So just in response to
4 that, I would say that certainly GM -- as we
5 discussed on Tuesday, GM values our customers'
6 privacy very much, and to make it very clear in our
7 privacy statement, when data is collected and when
8 it's not.

9 And the customer always has the choice of
10 whether or not they choose to be an OnStar
11 subscriber. In the event they choose not to be an
12 OnStar subscriber, no data is collected from the
13 vehicle; there is no connection to the vehicle. And
14 the only way a connection to the vehicle could be
15 established is from the vehicle, itself. So GM does
16 not have the ability to create its own connection to
17 the vehicle.

18 And we do -- with regard to the carrier,
19 one of the additional reasons why we are locked into
20 the carrier is because of the security concerns that
21 we referenced today and earlier.

22 It's important for us to know that the
23 carrier -- and also the carrier is reporting
24 information to us about the security of their
25 network and attempts to use the network to breach

1 the security of the vehicle.

2 As we talked about on Tuesday and as
3 Dr. Miller explained, the ability of someone else to
4 gain control of the ECU's in the vehicle and make
5 them do things like apply brakes is something that
6 we are extraordinarily concerned about and don't
7 want to have happen. And that's one of the very
8 important reasons why we work with a particular
9 carrier.

10 MS. CHARLESWORTH: Thank you,
11 Mr. Lightsey.

12 I don't see any more placards. So I think
13 we are going to end this panel, perhaps it's a little
14 early. We will -- although we're going to take the
15 next panel which is proposed Class 24 out of order
16 just immediately following this one. I think we
17 only have one participant in that panel. So we're
18 going to get that one out of the way during our
19 extra time.

20 And then at 10:15, we will convene
21 proposed Classes 16 through 18, which are the
22 jailbreaking classes.

23 So again, I want to thank you for your
24 contributions and this was helpful again to us and
25 we will see some of you back in a little bit.

1 MS. CHARLESWORTH: For the record, we are
2 now proceeding with proposed Class 24, which is
3 titled "Abandoned Software -- Music Recording
4 Software."

5 And we have one panelist, Ms. Gellis.

6 So you don't need to introduce yourself
7 now. We know now who you are.

8 And you're going to be, I think, providing
9 some brief comments for the record on Class 24.

10 So you may proceed.

11 MS. GELLIS: Thank you.

12 My comments on this class synthesize the
13 comments I have made earlier today, well,
14 subsequently also made today.

15 The first point to make is that this is
16 not a proposed exemption seeking liberal access to a
17 copyrighted work for the sake of simply having
18 access to a copyrighted work as a piece of media
19 content.

20 In fact, like with the TV and the car, the
21 copyrighted work at issue here is simply the
22 software that interfaces with the computer hardware
23 it runs on.

24 It doesn't negatively affect the copyright
25 interest of any downstream media the device might

1 ultimately consume. It doesn't particularly
2 implicate the copyright interest in that software
3 necessarily, either.

4 In fact, according to the comments, the
5 effect will actually be a net positive on the
6 copyright interest of the downstream work as it will
7 make already created works remain accessible and
8 enable other people to create new works by using
9 this tool.

10 And I think this is an important point
11 to make. 1201 ostensibly exists to protect
12 copyright interests with the expectation that if
13 these interests are protected, it will incentivize
14 further creativity, but that does not mean that for
15 Section 1201 to serve this role of helping to
16 incentivize creativity, it means that the Copyright
17 Office must say no and deny exemptions.

18 Sometimes the goals and purposes of
19 copyright are best served by saying yes when saying
20 yes fosters the creativity and innovation copyright
21 law is intended to inspire.

22 Thank you.

23 MS. CHARLESWORTH: And since we have no
24 other panelists for this class, we are going to
25 close down the conversation on proposed Class 24 and

1 then resume, as I mentioned earlier, at 10:15 for
2 the jailbreaking classes we will be considering.

3

4 MS. CHARLESWORTH: So some of you have
5 brought various examples of devices with you today.
6 We thought we might take a few minutes and we're
7 going to actually, with your permission, photograph
8 them as individual demonstrative exhibits so we have
9 a record of what you brought with you today.

10 And we had one in the last panel, too,
11 that we should also get a photo of. I think it was
12 a watch.

13 So we're going to start that process now.
14 Mr. Ruwe will be doing that, but we thought that
15 would be helpful for the record to have those
16 photographs. So thank you for your assistance with
17 that process and then we will start the actual
18 discussion.

19 (Off the record.)

20 MS. CHARLESWORTH: Back on the record now.

21 Thank you and I neglected to once again
22 thank UCLA law school for this room and allowing us
23 to be here for much of the week this week. And we
24 are appreciative of that and all of the support we
25 have gotten and we will be thinking of the weather

1 out here when we're back in DC next week.

2 So once again, this is proposed Classes 16
3 through 18.

4 However, I just wanted to make a note for
5 the record that this actually relates back to 13
6 though 15. We just photographed some of the various
7 devices that people brought in with them today. And
8 the smart watch that was referred to in the earlier
9 panel today for classes 13 through 15 was
10 photographed and is going to be hearing Exhibit 7
11 for the record.

12 And actual photographs we took today for a
13 collection of devices that are going be variously
14 referenced, as I understand it, by the panelists,
15 will be Exhibit 8.

16 So Exhibit 8 pertains to classes 16
17 through 18 and is a collection of photographs that
18 show the devices that are going to be referenced by
19 the panelists today.

20 And then just to get through the exhibits
21 we have an additional, I think, Exhibit 9 which is a
22 photograph that was submitted by Mr. Freeman that
23 will also be, I believe, referenced by Mr. Freeman
24 in his remarks today.

25 So with those clarifications about

1 exhibits, I will ask this group of panelists to
2 introduce themselves and explain who you represent
3 for the record and then we will proceed with our
4 discussion of these classes, which are the
5 jailbreaking classes for wireless telephone
6 handsets, all purpose mobile computing devices and
7 dedicated E-book readers.

8 So once again, Ms. Gellis, we will start
9 with you.

10 MS. GELLIS: Catherine Gellis. I am a
11 solo attorney and I am here with my Digital Age
12 Defense Project.

13 MR. STOLTZ: Mitch Stoltz for the Electronic
14 Frontier Foundation.

15 MR. WIENS: Kyle Wiens representing iFixit
16 and the Digital Right to Repair Coalition.

17 MR. FREEMAN: Jay Freeman, SaurikIT.

18 MR. LIGHTSEY: Harry Lightsey with General
19 Motors.

20 MS. CHARLESWORTH: So as we have done
21 before, we will ask you to make a brief opening
22 statement and we may interject questions.

23 Ms. Gellis, we'll start with you.

24 MS. GELLIS: Thank you.

25 I am going to limit my opening comments to

1 one of the main points I have made previously, that
2 the objects in question for these classes are all
3 essentially computers with little difference to what
4 Congress understood computers to be back in 1998
5 except in terms of their form, but their particular
6 form should not be the basis for denying an
7 exemption.

8 People should be able to use computer
9 devices in whatever lawful ways they want to
10 regardless of the form they take.

11 Thank you.

12 MS. CHARLESWORTH: Is that your -- that
13 was even briefer than your usual brief statement.
14 Thank you.

15 Mr. Stoltz.

16 MR. STOLTZ: Thank you.

17 The exemption for phone jailbreaking, by
18 which I mean modifying mobile phones so that it can
19 run software of the user's choice has been in place
20 for five years and it has been a fantastic success
21 for everyone involved from phone manufacturers to
22 application developers to users.

23 That remains true today and it is
24 undisputed on the record of this hearing, but doing
25 the same operation on other devices that are

1 functionally equivalent to mobile phones still
2 carries a risk of anti-circumvention liability and
3 that risk, in turn, exacerbates many problems
4 related to security, privacy, anti-competitive
5 practices, early obsolescence and waste.

6 EFF is asking the Copyright Office and the
7 Librarian to renew the objection to permit
8 jailbreaking of mobile phone handsets, and
9 additionally, to grant an exemption for all-purpose
10 mobile computing devices. And that is a term that
11 is well understood by users and software developers.

12 And for purposes of Class 17, we have
13 defined "all-purpose mobile computing devices" by
14 three criteria.

15 First, they are portable. They are
16 designed to be carried or worn.

17 Second, they come equipped with an
18 operating system that is primarily designed for
19 mobile use. So that includes iOS, Android and the
20 mobile versions of Windows.

21 Third, they're not designed primarily for
22 media consumption. That excludes dedicated eBook
23 readers, which I understand are the subject of a
24 different class, as well as handheld gaming devices.

25 MR. DAMLE: Does that include -- I will

1 just note that I saw an Apple TV -- a couple of
2 versions of the Apple TV.

3 Does yours -- are you excluding those, as
4 well?

5 MR. STOLTZ: The EFF proposal does not
6 include those as they are not designed to be
7 carried.

8 MS. CHARLESWORTH: What about some of the
9 hybrid tablets that have both a tablet functionality
10 and have a Windows operating system such as the
11 Surface? Where would those fall in your
12 definitions?

13 MR. STOLTZ: So Windows as a group of
14 operating systems is and remains divided into
15 several flavors. There are mobile variants. I
16 believe the current one is called Windows Phone.
17 The forthcoming one, I believe, is going to be
18 called Windows 10 Mobile, and on the other hand, the
19 PC variants.

20 MS. CHARLESWORTH: Right. So I mean the
21 way you have defined it, you said it as an operating
22 system primarily designed for mobile use.

23 Is that right?

24 MR. STOLTZ: That is right.

25 MS. CHARLESWORTH: So Surface, I mean I

1 have one of these. So I'm curious. Maybe I want to
2 jailbreak it someday, but my Surface has both sort
3 of a mobile traditional tablet interface and I can
4 switch over to desktop mode and then it has a
5 traditional sort of Windows PC operating system.

6 So I am curious to know how you would
7 characterize that or categorize that.

8 MR. STOLTZ: Again, I would characterize
9 that based on which flavor of the Windows operating
10 system it runs.

11 My understanding is the Surface tablets
12 run the mobile variant, which means that it is a
13 system designed primarily for portable devices, not
14 for desktop devices or laptops, and that it contains
15 the access controls which are the subject of this
16 proposal.

17 The desktop variant does not. It has, I
18 understand, some -- it may have some specific
19 restrictions, but the fundamental difference is that
20 the owner of the device has administrative access or
21 what programmers tend to call root access to the
22 device, whereas in the mobile variants, the owner
23 does not have administrative access. That is the
24 line of demarcation.

25 The pirated devices that you mentioned are

1 a very small segment of the market. And my
2 understanding is that the segment is not growing.
3 It is less than 3 percent of the tablet market and
4 not gaining wide acceptance.

5 So the overwhelming -- the predominance in
6 the market and the need for this exemption at the
7 present time really centers on IOS and Android
8 devices.

9 MS. CHARLESWORTH: So in your view, would
10 my -- I guess I am a small part of the market. I
11 enjoy my device.

12 Would that fall within the parameters of
13 your request or outside of it?

14 MR. STOLTZ: It would fall within because
15 it runs the mobile variant of Windows.

16 MS. CHARLESWORTH: Thank you for that.

17 MR. STOLTZ: And the third component of the
18 definition that EFF has put forth, it's not a device
19 that is primarily designed for media consumption. I
20 think I mentioned that.

21 This proposal does not include vehicle
22 electronics. And I hope I can help give
23 Mr. Lightsey a shorter day here. A car is not a
24 general purpose mobile computing device because its
25 primary and overarching function is transportation.

1 And no matter how many ECU's the car contains, the
2 public doesn't speak of parking their mobile devices
3 in their garages.

4 EFF has proposed two exemptions related to
5 vehicles. You heard comments about those on
6 Tuesday, but Class 17 simply doesn't encompass
7 vehicles.

8 In 2012, the Register's recommendation
9 said that a class should be consistent in terms of
10 the way they operate their intended purpose and the
11 nature of the applications that they can
12 accommodate.

13 The EFF proposal does that.

14 Mobile devices as we have defined them run
15 the same fundamental software, the same group of
16 operating systems. They use a similar process or
17 architecture to one another but different to that of
18 PC's. They have the same purpose, which is running
19 a wide variety of application software. And they
20 can accommodate largely the same range of
21 application software, in most cases the very same
22 apps.

23 Also, since 1201, the market has further
24 coalesced around well-known product categories,
25 including tablets.

1 As you will see from the record,
2 journalists, market analysts and manufacturers and
3 consumers also distinguish a tablet from a PC from a
4 dedicated eBook reader.

5 No one has challenged this evidence. No
6 one has disputed the evidence of the problems of
7 security, privacy, performance, obsolescence and
8 waste that is documented in the written record.

9 No one has asserted that jailbreaking
10 all-purpose mobile computing devices is
11 infringement.

12 And I want to emphasize this -- there are
13 no comments on the record challenging our position
14 that jailbreaking is fair use and no one has
15 presented any evidence that jailbreaking contributes
16 to infringement of other works. You won't find it.

17 So the exemption for jailbreaking phones
18 has been an unmitigated success and we are asking
19 the Office to extend that success to a well-defined
20 class of devices which are the functional and
21 technological equivalent of phones.

22 Thanks very much.

23 MS. CHARLESWORTH: Thank you, Mr. Stoltz.

24 Mr. Wiens.

25 MR. WIENS: I would like to defer to

1 Mr. Freeman.

2 MS. CHARLESWORTH: Mr. Freeman.

3 MR. FREEMAN: Thank you.

4 So before I begin, I would like to clarify
5 that while I am the person who has put an Apple TV
6 as pictured in the evidence, I am not claiming that
7 an Apple TV is something under the defined proposed
8 class. An Apple TV requires being plugged into the
9 wall. Despite the fact that I can hold it in my
10 hand, it requires power from a fixed cable to a wall
11 and it requires a television for use.

12 It does not fall into the category of
13 mobile device as defined by the EFF and I agree with
14 that definition. I am not using it as an example of
15 why it should be classified as a mobile, all-purpose
16 computing device.

17 MS. CHARLESWORTH: Thank you. That is
18 helpful.

19 MR. FREEMAN: So my name is Jay Freeman.
20 I run a company which provides something very
21 similar to a game genie for many different mobile
22 devices, particularly ones that run IOS.

23 So when I say "game genie," I mean a
24 product that was for the old Nintendo entertainment
25 system back in the early 90's. It was a cartridge

1 that you could plug into your Nintendo and plug
2 another cartridge into it in order to make
3 modifications to the software while it is running.

4 Now yesterday, I mentioned a game genie
5 and I was not sufficiently prepared in order to
6 print this out, but this actually is a case that
7 came to court and the court decided that the game
8 genie did not constitute construction of derivative
9 works. And the court constituted that even if
10 somebody were to later try to make a claim, that it
11 was also considered fair use the way that any
12 derivative work could happen. This is something
13 that was all very well done in the court case.

14 MS. CHARLESWORTH: Do you know the name of
15 the case?

16 MR. FREEMAN: So the reference I have is
17 Lewis Galoob Toys, Incorporated, Plaintiff, v.
18 Nintendo of American, Incorporated, Defendant, and
19 related and consolidated action numbers C-90-1440
20 FMS, C-90-1586 FMS, United States District Court, ND,
21 California, Northern District, California, July 12,
22 1991.

23 MS. CHARLESWORTH: Thank you very much.
24 You can continue.

25 MR. FREEMAN: Thank you so much.

1 So one of the points that I would like
2 to make today and the reason why I have various
3 devices in front of me is related to the
4 difficulties that I have as somebody who provides
5 software that allows me to make these modifications.

6 So the software -- as indicated on these
7 mobile devices, the software that runs on them often
8 runs on all the other mobile devices.

9 If I were to show you a number of
10 different Apple devices running a iPad, an iPod, an
11 iPhone, you can install the same applications on all
12 of them. And, in fact, if I were to hold up units
13 in front of you now, a sequence of devices starting
14 at this large Apple device, going through a slightly
15 smaller Apple device which looks very similar, to
16 now another slightly smaller Apple device, another
17 slightly smaller Apple device, another slightly
18 smaller Apple device, another slightly smaller Apple
19 device, it becomes very difficult to really
20 appreciate the exact boundaries that delineate this
21 particular sequence of small, black, rectangular
22 touchscreen devices.

23 MS. CHARLESWORTH: And just for the
24 record, I think all of those devices you just held
25 up for us are pictures in Exhibit 8 now.

1 MR. FREEMAN: That is correct.

2 And so now I will say a little more about
3 that and you will know what they are.

4 So all of these devices I held up, I can
5 start asking questions such as which one of these is
6 a phone. So some of these look very similar. This
7 looks very similar to the various phones, and if I
8 take the case off, it's the exact same thing then.

9 This one is an iPad. This one is an
10 iPhone. If I were to ask you the question which one
11 of these have phone numbers, I think the answer
12 might surprise you. These two iPads have phone
13 numbers because that's how cellular service is
14 provided to handsets.

15 It is actually something I found a little
16 frustrating talking to Verizon when I called about
17 my tablet and they asked me for my phone number and
18 I went "I don't know, it's not really a phone."

19 Then they sent me a text message to verify
20 my account and it's very difficult for me to
21 retrieve that text message on my tablet.

22 If I were to ask a related question of
23 which of these devices, knowing my phone number, can
24 you call me on, I believe all of these devices would
25 ring.

1 And the reason, if you have an Apple
2 device because of the new FaceTime audio feature,
3 that will allow you to make phone calls to my phone
4 number on all of the devices that are connected to
5 my Apple ID account.

6 It becomes very difficult for me as
7 somebody who is providing software for these devices
8 to have any way of differentiating them. I can
9 then -- so this was a -- in the end, this is an
10 iPhone 4S, an iPod 5, an iPhone 6, an iPhone 6 Plus,
11 an iPad Mini Retina 2 and an iPad 3.

12 MR. DAMLE: I'm sorry. Just for the
13 record, do the iPads have 3G connections?

14 MR. FREEMAN: Yes. One of these iPads
15 has -- actually, they are both on Verizon currently.

16 MR. DAMLE: Thank you.

17 MR. FREEMAN: So I also have with me a
18 small collection of -- before I get into that, so
19 that is also the reason -- all of these devices that
20 run the same bootloader, they run the same operating
21 system and they run many of the same applications.

22 Now, the reason why I brought an Apple
23 TV 2 with me is to point out that this also happens
24 to run the same operating system and has the same
25 CPU and has the same hardware platform except for

1 the part that connects to a television, connects to
2 wall power.

3 I agree it's not a mobile device, but I
4 have a particular issue and that is one that is
5 something that maybe I tend to get a little
6 contentious with some of the other people who
7 provide all of these things.

8 The software provided by the iPhone that
9 jailbreaks these devices will jailbreak all of these
10 devices, including an Apple TV 2, and it doesn't
11 know the difference, really, between any of these
12 devices. It has to be specially coded to try to
13 understand this one is not an iPod. It's
14 essentially an iPod with an HDMI port, but from my
15 perspective, it looks like an Apple device with an
16 Apple ECID and it's something that can talk to you
17 using the same protocol. It has the exact same bugs
18 in it and the software that exploits it just works
19 against it.

20 And then when I try to ask myself about
21 these devices and I ask myself which ones of these
22 are the devices that I would almost consider the
23 most important to me, I always think it's the iPod,
24 not necessarily an iPhone. And the reason why is
25 because so many young kids have iPods. And they

1 have iPods particularly because the parent doesn't
2 want to give them a phone.

3 And so an iPhone is not a replacement in
4 any way for the iPod. The parent does not want the
5 child to have a full phone that -- so you can get an
6 iPod that doesn't have a phone number associated
7 with it so it cannot be called.

8 MS. CHARLESWORTH: So the class we're
9 considering I think excludes media devices -- media
10 dedicated devices. Mr. Stoltz gave us a definition.

11 MR. FREEMAN: I believe Mr. Stoltz's
12 definition includes the iPod. I will be shocked if
13 he disagrees.

14 MS. CHARLESWORTH: Well, can you remind us
15 of the exclusion for dedicated media devices?

16 MR. STOLTZ: As EFF proposed it, devices
17 primarily designed for the consumption of media,
18 which that is a category in which I would not
19 include an iPod.

20 MS. CHARLESWORTH: Thank you for that
21 clarification. So that is actually not what has
22 been proposed by the EFF.

23 MR. FREEMAN: He said the opposite just
24 now.

25 MS. CHARLESWORTH: You are saying

1 primarily --

2 MR. STOLTZ: I am sorry. Let me be very
3 clear.

4 We have said -- what we have proposed is
5 that devices that are primarily media consumption
6 devices should be excluded from the class. The iPod
7 is not primarily a media consumption device
8 because --

9 MR. DAMLE: This is the modern ones.

10 MR. STOLTZ: The iPod Touch is an iPhone
11 without the cellular hardware.

12 MR. WIENS: The original iPods were media
13 consumption devices. The new iPods are not.

14 MS. CHARLESWORTH: Mr. Freeman was
15 referring to an iPod, which the traditional iPod is
16 mainly for music.

17 Do you agree with that?

18 MR. FREEMAN: I agree with that and I am
19 sincerely sorry I missed that. The shorthand when
20 we talk about iPods in my communication, I always
21 mean iPod Touch.

22 MS. CHARLESWORTH: Yes.

23 MR. FREEMAN: One of the reasons is this
24 happened -- and this is something that I think is
25 very key to understand -- is that over the course of

1 time as general purpose computing technology has
2 gotten cheaper, more and more of these devices have
3 grown up to become general purpose computers.

4 So as an example, we have the class of
5 dedicated eBook readers. That dedicated eBook
6 reader class -- I was at the hearing three years ago
7 when somebody on the panel held up a Kindle which
8 could only read books and said this device he
9 considers as part of the tablet class today.

10 Today, I am going to hold up a Kindle that
11 does not just read books. Now, this has grown up to
12 be a full Android device and plays games and you no
13 longer have Amazon -- it is discontinuing all of
14 these devices that are more dedicated than that.

15 MS. CHARLESWORTH: I think we need to be a
16 little more specific. Are you talking a Kindle
17 Fire?

18 MR. FREEMAN: Yes.

19 MS. CHARLESWORTH: And when you are
20 talking about the one that has broader
21 functionality, we are talking about a Kindle Fire.
22 The one in your other hand --

23 MR. FREEMAN: The one in my other hand is
24 actually Google Nexus 7, which is a full tablet.
25 And if you were to turn these two devices on, they

1 are running the same operating system. There is
2 slight differences because Amazon has done a couple
3 of customizations because they have a different
4 store, but not because of the hardware, but only
5 because they have a different app store, they have
6 made customizations.

7 MS. CHARLESWORTH: But you do also
8 acknowledge there are versions -- there are
9 different Kindles that really are much more oriented
10 toward simply reading text and not engaging in sort
11 of broader computing activities.

12 MR. FREEMAN: I will acknowledge that that
13 has been the case in the past, but now I will ask a
14 question if it's a device with a web browser and is
15 capable of browsing any website, is it now still
16 dedicated to being an eBook?

17 MS. CHARLESWORTH: The word was, I think,
18 primarily dedicated, as Mr. Stoltz said, right?

19 MR. STOLTZ: Yes, that's correct.

20 MS. CHARLESWORTH: So the main -- we're
21 talking about the main functionality.

22 I mean do you concede that the main
23 functionality of certain kinds of Kindles is mainly
24 to read books?

25 MR. FREEMAN: So the issues I have is that

1 this is a marketing distinction. I have, myself,
2 considered purchasing a 3G Kindle that was primarily
3 marketed by Amazon to read books in order to use it
4 to as a web browser because it has very long battery
5 life.

6 MS. CHARLESWORTH: Do you think many
7 people do that?

8 MR. FREEMAN: I actually do believe many
9 people do that.

10 MS. CHARLESWORTH: And what is the
11 evidence that you have before you?

12 MR. FREEMAN: I am sorry. I just did not
13 appreciate that would not be fairly obvious that
14 that's so. I am terribly sorry.

15 I have a position that from my
16 perspective, all of these devices -- if I try to
17 understand the difference between some of the Amazon
18 markets for it as being an eBook reader and some of
19 the Amazon markets as being a web browser, and
20 another market as being a tablet, I am unable to
21 determine the difference. There is no way I can
22 determine the difference.

23 MS. CHARLESWORTH: But you are an unusual
24 person. You are much more technologically astute,
25 as indeed some of other panelists, too,

1 sophisticated than someone like me. And I have to
2 say I have a Kindle, an Amazon Kindle, an early one.
3 What I did with it is I read books on it. It never
4 occurred to me to use it instead of a more
5 all-purpose device to browse the web.

6 And while I recognize that a lot of these
7 devices have that functionality, what we're trying
8 to do here again -- and I sort of said this
9 yesterday -- we are trying to kind of describe
10 what -- we're tasked with the problem of somewhat
11 general in the way we create exemptions, but also
12 somewhat they have to be appropriately narrow and
13 tailored to the record before us.

14 And so yes, theoretically, you could use a
15 Kindle that way, but I mean we're trying to
16 understand what are -- sort of what appropriate
17 lines might be drawn here to reflect the record
18 before us and the real needs of people to engage in
19 circumvention.

20 I just want to be sure to give that sort
21 of thought or put that thought out there because
22 it's most helpful to us if we can kind of agree on
23 certain definitions. And I think Mr. Stoltz put
24 forth a definition that is really the one we're sort
25 of discussing here.

1 And so I mean if you are -- that is why I
2 am asking you. Basically, I am saying can you agree
3 with his position for purposes of this class or are
4 you disagreeing with it and think that the class
5 really needs to be broader?

6 MR. FREEMAN: So the case with the -- the
7 point that I am bringing up with relation to this
8 eBook reader is something that I am actually trying
9 to raise in order to demonstrate why the class that
10 Mitch proposed, which was mobile, all-purpose
11 computing devices, should get the exemption.

12 I think that the eBook reader exemption is
13 something that -- at this point, I am kind of hoping
14 that since there is no one in opposition, there was
15 no one even providing any commentary in opposition,
16 I am more concerned with the wider class that Mitch
17 proposed, which is why I am not trying to include an
18 Apple TV in there, but I am trying to indicate that
19 for the extent to which we would like to get that
20 eBook reader, the boundaries between the dedicated
21 eBook reader and the iPod 5 running the Amazon
22 Kindle app is sufficiently small that I would like to
23 get the mobile, all-purpose computing exemption
24 based on the --

25 MS. CHARLESWORTH: Are you participating

1 in the eBook panel later? We have another -- this
2 panel.

3 MR. FREEMAN: This is the same panel,
4 which is also why I'm kind of talking about the
5 eBook reader thing as part of this.

6 MS. CHARLESWORTH: Fair enough.

7 MR. FREEMAN: Sorry to contribute to the
8 confusion.

9 MS. CHARLESWORTH: No, I mean we started
10 off with Mr. Stoltz's definition and now we are
11 talking about eBook readers.

12 MR. FREEMAN: I mean from the computing
13 perspective, all of these devices -- there is a
14 myriad of cables. This is a cable that connects an
15 Apple watch, even an old iPod and newer iPhones. It
16 connects an Apple TV, also USB.

17 MR. RUWE: I'm sorry, you need to slow
18 down.

19 MR. FREEMAN: I was saying I have a number
20 of cables for iPhones, iPods, watches, Apple TV.
21 They all connect by USB and they all are identical
22 from my perspective when I build tools on the
23 computer.

24 MR. DAMLE: Just for the record, these
25 cables are also depicted in Exhibit 8.

1 MR. FREEMAN: That's correct.

2 I then also have with me a Samsung Galaxy
3 Tab 10.1, a Google Nexus 4 and a Motorola device
4 with Intel CPU but a mobile version of the Intel CPU
5 for more power efficiency, whose name I should --
6 but I simply bring this in order to show that the
7 same is true in every system, even devices with a
8 different architecture but still has a mobile
9 version of the Intel CPU.

10 These devices all look identical from my
11 perspective when working on the computer.

12 I build exploits, as well, for other
13 devices and people use mine against almost any
14 Android device.

15 In fact, there is a group that
16 Mr. Taylor chairs who have submitted commentary for
17 smart TV's. They use my tools in order to do those
18 and I did not intend it to work on the Google TV,
19 but they told me it worked and I was surprised and I
20 run into the scenario of getting trapped into your
21 exemptions.

22 And then, also, I would like to posit this
23 notion that -- so on the Exhibit 9, I believe it is,
24 the picture on the screen.

25 MS. CHARLESWORTH: The exhibit on the

1 screen.

2 MR. FREEMAN: So that is an Android LG
3 G Watch that is running an application designed for
4 a much larger device that kind of barely fits the
5 screen. The projection that you have isn't quite
6 showing, but there is red text in the center. It's
7 very clear on the actual exhibit when you see the
8 image.

9 This program is an exploit tool run by
10 George Haas, the person who did the original massive
11 PlayStation 3 jailbreak that keeps getting
12 discussed. This tool is to jailbreak Android
13 devices and it runs, as it does on many other devices.
14 You can download aps that are designed for normal
15 Android devices and run it on this watch.

16 Essentially, they have taken an Android
17 phone, shrunk it a little bit and stuck it on my
18 wrist, which is very similar to how the people who do
19 the iPhone jailbreaks have been spending the last
20 couple weeks frantically pulling apart the Apple watch.
21 And my understanding at this time talking to them is
22 that the Apple watch is essentially identical to an
23 iPhone, which make sense. If I hold an Apple watch
24 and hold it next to what is an original iPhone,
25 it's, again, just another smaller device, a small,

1 rectangular device, flat with a touchscreen.

2 All of these devices are things that,
3 again, I am in this horrible position of trying to
4 support with these tools that I build and being
5 almost unable to support some of them because I
6 don't know exactly how they're being marketed by the
7 people who are selling them.

8 Thank you very much.

9 MS. CHARLESWORTH: Thank you.

10 Mr. Lightsey.

11 MR. LIGHTSEY: I will be very brief.

12 General Motors filed an opposition to the
13 proposed Class 17, all-purpose mobile computing
14 devices, frankly, in an abundance of caution as the
15 exemption was first defined.

16 Requiring the jailbreaking of vehicle
17 telematics and communication systems would have a
18 negative impact on vehicle and consumer safety,
19 security and privacy, as well as on emissions and
20 regulatory compliance and could have a chilling
21 effect on future development in the area.

22 As noted by Mr. Stoltz, no proponent here
23 today has argued in favor of including vehicle
24 telematics and communication systems in Class 17.

25 And, in fact, here today, several have

1 indicated that they do not consider the class to
2 include in-vehicle communications and telematics
3 systems.

4 So GM -- if we can work together to find
5 language that appropriately excludes in-vehicle
6 systems from the proposed class, we would not have
7 any other issues with the class as proposed.

8 MS. CHARLESWORTH: And I think that is
9 what I heard, as well. I just want to ask do you
10 have -- are there phones that are incorporated into
11 GM vehicles that are built into the cars, phone-type
12 devices, mobile phones? I haven't bought a car
13 recently.

14 MR. LIGHTSEY: If you have the OnStar
15 service, you can use the communications capability
16 in the service to make cellular telephone calls,
17 yes.

18 MS. CHARLESWORTH: But it's built into the
19 car.

20 MR. LIGHTSEY: Correct.

21 MS. CHARLESWORTH: Understood. Thank you.

22 MR. DAMLE: So I just had a -- so the
23 Apple watch, is that -- Mr. Stoltz, is that
24 something -- I started thinking through your
25 factors -- is that something you are interested that

1 would be encompassed?

2 MR. STOLTZ: Yes, we would believe that
3 would be encompassed within the Class 17 as we have
4 proposed it by the three criteria that we have
5 proposed.

6 MR. DAMLE: Thank you.

7 MR. CHENEY: Would it also include the
8 other sort of health-type devices like the iFit and
9 some of those devices?

10 MR. STOLTZ: Well, it's going to vary by
11 device. And the key question is the second of the
12 three criteria that we proposed. And that's whether
13 the device is sold with a general purpose mobile
14 operating system.

15 I believe many of the devices that you are
16 describing do not, but there may be some that do, in
17 which case it is for all relevant statutory purposes
18 and the purposes of this rulemaking, encompassed
19 within the same class.

20 MS. CHARLESWORTH: So we have the
21 all-purpose -- you would put that in sort of the
22 all-purpose area of the class?

23 On e-Books, does anyone have any evidence
24 that people are trying to jailbreak dedicated eBook
25 readers?

1 MR. FREEMAN: I believe that I had
2 interest. I'm not coming up with it.

3 MS. CHARLESWORTH: I just wanted to make
4 sure.

5 Mr. Wiens.

6 MR. WIENS: I was wondering if I could
7 just have a moment to explain some of the things I
8 have here but I can do it however you would like.

9 MS. CHARLESWORTH: You can go now.

10 MR. WIENS: Great.

11 So I brought a few different devices and I
12 thought I would share from the repair community's
13 perspective, people have a very hard time
14 differentiating types of products when it comes to
15 repairing.

16 I mentioned yesterday some of the
17 environmental impacts of manufacturing these devices.
18 There is a considerable amount of energy just
19 manufacturing a phone. It takes over 600 pounds of
20 raw material to manufacture a phone.

21 I won't go in depth into everything that I
22 talked about yesterday, a few specific examples of
23 ways -- reasons that you would want to jailbreak a
24 device.

25 In the Apple ecosystem, Apple doesn't

1 allow devices or aps in the ap store that allow you
2 to read the cycle count on the battery. So the
3 battery is a consumable just like tires on your car.
4 Lithium ion batteries generally average around 400
5 charges. So on your phone, you go through a battery
6 every year and a half or so and you have to replace
7 the battery.

8 So it's very nice to know how many cycles
9 are left in my battery without jailbreaking the
10 device. There is no way to know. And that's
11 relevant whether it is a media player or not. It's
12 very important for iPods. We have lots and lots of
13 people replacing the batteries in their iPods.

14 Outside of the Apple iPod family of
15 devices, I also brought with me a number of
16 knock-off, I would say, Android tablets.

17 So this is -- I am holding an Ematic
18 EXP8. And if you have never heard of Ematic
19 before, you are not alone. I had never heard of
20 them before I ended with up this tablet.

21 There are a wide variety of products
22 coming and going, some of which may be marketed as
23 eBook readers. Some may be marketed as tablets.
24 Manufacturers pop up very quickly and then
25 disappear.

1 There is no way to get support for this
2 product. There is no way to get software for this
3 product. There is no way to get service parts for
4 this product. This manufacturer may not exist
5 anymore, but there is a need to update it and Google
6 does provide software updates for Android, but you
7 have to rip the device before you can jailbreak it
8 or before you can upgrade it.

9 It is very common to want to downgrade the
10 device to older versions of an operating system. In
11 industrial applications, frequently you might have a
12 computer that is running Windows XP that is
13 controlling a piece of machinery. You have to keep
14 that running on the old version of the operating
15 system. There is no newer software that supports
16 it.

17 Within the Android ecosystem now, we are
18 seeing Android devices built into things like water
19 jet cutting tools. A water jet cutter is a big
20 thing that cuts out hunks of metal. It would have
21 an embedded device in it. As an owner of the device,
22 if the manufacturer goes out of business, you would
23 need to be able to modify that.

24 Now, a water jet cutter may be stationary
25 but you can imagine other types of equipment that

1 might be included within this class, a mobile XRS
2 scanner, for example, for identifying types of
3 plastics.

4 I also brought with me -- this is a
5 Canon -- this is just a representative camera. This
6 is a Canon EOS 40D. There are a number of
7 situations where you would want to be able to modify
8 the software on your digital cameras. I believe
9 under your definition, a digital camera would be
10 included.

11 MS. CHARLESWORTH: Can you explain,
12 Mr. Stoltz, how it would be -- whether it is
13 included, a digital camera.

14 And for the record, these devices that
15 Mr. Wiens is showing us have been photographed and
16 are part of Hearing Exhibit 8.

17 MR. STOLTZ: So we have proposed a three-part
18 definition. I think the question with respect to
19 digital cameras would be whether they are sold with a
20 general purpose mobile operating system.

21 As we sit here, I don't know the answer to
22 that, but if they did, then I believe they would
23 fall in the class.

24 MR. DAMLE: It's not an all-purpose
25 device. The uses are not all purpose. The use is

1 taking photographs.

2 MR. STOLTZ: Yes, I would agree with that.

3 MR. WIENS: In this case, this is a
4 single-purpose device.

5 The Samsung Galaxy camera is a full-blown
6 Android device. I wasn't able to bring mine because
7 the one I have is in very active use at our office,
8 but the Samsung Galaxy camera is basically a tablet
9 with a point-and-shoot camera and a telephoto lens
10 attached to the front of it.

11 MS. CHARLESWORTH: Can I interrupt. I
12 don't think of most people -- let's say someone is
13 trying to understand this law that says there is an
14 exemption for all-purpose mobile computing devices.

15 Do you think the average person on the
16 street would think a camera fell into that category?

17 You are much more sophisticated, but if we
18 write an exemption, it's got to, first of all, be
19 supported by evidence, but second, make common sense
20 in terms of the ability to understand what the law
21 says.

22 Why would most people think that -- I mean
23 I am having trouble accepting that.

24 MR. WIENS: A mobile computing device is a
25 device with a computer in it that is mobile.

1 Increasingly, that is almost everything.

2 MS. CHARLESWORTH: But it says all-purpose
3 mobile computing devices, which to me -- and I think
4 it was a term proposed by EFF -- connotes a device
5 that I can carry with me and that I do a lot of
6 different things with but a tablet operated like I
7 have can have different applications on it, maybe I
8 can make a phone call on it.

9 It does not connote a camera in my opinion
10 even if a camera has an operating system, and I
11 acknowledge many cameras would.

12 So to someone reading this, this is
13 important because it's the first I am hearing about
14 cameras in this record at all, which is another
15 issue, but I mean it's important to be able to write
16 the exemption in a way that make some sense.

17 And so do we need to -- if we don't want
18 to include cameras, do we need to specifically
19 exclude them? That is one of the issues we always
20 have with this class. It's a little bit hard to
21 define.

22 And I think there has been a lot of -- we
23 made progress in that direction.

24 So, Mr. Wiens, if you could answer and
25 then if Mr. Freeman has something he wants to add.

1 MR. WIENS: The challenge that we are
2 having in the repair community is we see all of
3 these products and we don't know where it falls into
4 the spectrum.

5 So the more broader the definition, the
6 more certainty a consumer has that the repair or
7 upgrade they need to do to their device is legal.

8 MS. CHARLESWORTH: But this class is
9 actually to allow you to run other aps on your
10 device. In other words, this isn't really a
11 repair-oriented class.

12 This is a class where we are saying you
13 want to jailbreak your iPhone because you want to be
14 able to run non-Apple aps on it. So the point of
15 this class is really to focus on that type of use.

16 MR. WIENS: But I can share with you a
17 number of cases where you would need to jailbreak a
18 device in order to be able to repair it.

19 MS. CHARLESWORTH: I understand that, but
20 this is not the stated purpose of the class.

21 MR. WIENS: I have a paragraph off of a
22 review for the Samsung Galaxy camera. It says,

23 "Like any Android-based device, the Galaxy
24 camera lets you browse the web and
25 download a host of aps for both work and

1 play. It comes with Google's Play Store
2 and Samsung suggests that the latter of
3 which lists Samsung recommended apps for
4 your device and hands off to Google Play
5 for rapid installation. Pre-installed apps
6 include the Google Chrome browser, search
7 maps, Gmail, Latitude, Google Plus,
8 YouTube and much more."

9 And this is a photo of the device. It
10 looks like a camera. And we can produce this
11 article for the record if you like but it's a
12 camera.

13 MS. CHARLESWORTH: You don't have the
14 article with you today, do you?

15 MR. WIENS: Just on our all-purpose mobile
16 device.

17 MS. CHARLESWORTH: On your all-purpose,
18 yes, device.

19 So let the record reflect we just saw an
20 image on one of the many devices that Mr. Freeman
21 brought with him today.

22 So I don't want to -- I mean I think as I
23 said, there are a couple of points. One is how to
24 define the class. And I think I take your point
25 that a lot of devices can do a lot of different

1 things.

2 And the other point is what does the
3 record support here. So we will think about that in
4 relation to the example you just provided.

5 MR. WIENS: Okay.

6 MS. CHARLESWORTH: Mr. Freeman, do you
7 have anything to add?

8 MR. FREEMAN: Thank you so much.

9 When you asked the question of what a
10 normal person, somebody not like me, would think, I
11 think if you are able to install games, you are able
12 to install new web browsers, you are able to go to
13 Google Play Store and install all of the things you
14 would expect to install on an Android phone, I think
15 that you do believe that you should be able to do
16 the things that are listed in the class and I do
17 think that should fall in this class, but I agree
18 with you that if you are unable to do all of those
19 things on the devices, that it's not something that
20 has a general ap store, if it's a camera that only
21 takes pictures normally and you cannot play a game
22 on it, I would agree it does not fall into that
23 class.

24 Also, and the better answer to your
25 earlier question, I just wanted to verify that

1 whether I had already put evidence into the record
2 related to eBook readers and jailbreaking. I knew
3 that people are doing it. It turns out I had not
4 yet put evidence in the record.

5 So I have found a couple. There is one
6 called the working pot project with dedicated
7 jailbreaking and replacing the operating system on
8 dedicated eBook readers.

9 Many people have jailbroken the Nook eBook
10 reader to turn it into a general purpose Android
11 tablet.

12 People have jailbroken the Amazon original
13 Kindle, the Amazon Paperwhite, also. They have been
14 installing screen savers to the device to make it
15 more fun and pleasant.

16 There is any number of use cases for that.
17 I apparently had not actually provided that in my
18 comments more generally about the class. I did not
19 go into detail in my comments on any of these
20 devices.

21 MS. CHARLESWORTH: When someone jailbreaks
22 an eBook reader like the Kindle, are they able to
23 access content that they wouldn't be otherwise able
24 to access, meaning like eBooks or other things that
25 they haven't paid for?

MR. FREEMAN: Usually, the eBook reader

1 is protected under a separate DRM that is in
2 addition to the DRM being utilized by the operating
3 system, itself, in order to keep you from running
4 applications.

5 MS. CHARLESWORTH: You say "usually," but
6 do we know whether or not if I jailbreak sort of the
7 classic Kindle or Nook, if it allows me to get
8 unlawful or pirated content?

9 MR. FREEMAN: Any particular device, I do
10 not know the answer to that.

11 I can say that it would be very difficult
12 and would require going above and beyond in order to
13 do so and people have gone above and beyond, but I
14 will argue I have seen more TPM's on an iPhone,
15 which is even more general purpose in order to get
16 access to some of the content that is presented in
17 Apple iBooks. And Apple has an entirely separate
18 protection mechanisms for that but I am not certain
19 of any individual device.

20 MS. CHARLESWORTH: For sort of the classic
21 Kindle that is really -- what is the name of it --
22 the Paperwhite Kindle, can you -- if you jailbreak
23 that, are you able to install other aps on it? Does
24 it support that functionality?

25 MR. FREEMAN: If jailbroken, but again,

1 the original Amazon -- I am willing to concede
2 whether or not the original Amazon Kindle Paperwhite
3 falls under Mitch's definition based on its --
4 whether it has a general purpose operating system on
5 it. Of that, I am not as certain, but you are able
6 to install more things on it once you jailbreak it,
7 but it might be by more force than, for example, on
8 an Amazon Kindle Fire where it is essentially
9 designed for that purpose.

10 MS. CHARLESWORTH: Mr. Stoltz, you have
11 been waiting here.

12 MR. STOLTZ: Thank you.

13 I have just a few points in following up
14 on various points and I will be brief.

15 I wanted to clarify that with regard to
16 some of Mr. Wiens' comments that there are a number
17 of subspecies of the Android operating system and
18 they are all capable of running multiple -- a wide
19 variety, I should say, of applications regardless of
20 whether they may be essentially versions or modified
21 or skinned by various intermediaries, be they
22 manufacturers or wireless carriers.

23 Essentially, they are all Android and
24 that's what would fall into the category of
25 operating systems generally designed for mobile use.

1 Also, I wanted to make clear for the
2 record with respect to terminology, we have used the
3 term "jailbreaking" as a general term for the notion
4 of modifying the firmware on a device so as to be
5 able to run applications of the user's choice or
6 remove applications. Another way of defining that
7 would be obtaining administrative access to the
8 device.

9 Now, other terms are used. In the Android
10 world, a common word for that is called "roots."
11 Sometimes you will hear the term "bootloader
12 unlocking," which I should emphasize is distinct
13 from "carrier unlocking" which was discussed in
14 other panels.

15 As we have used it in our written comments
16 and I believe on this panel, we have referred to all
17 of those as "jailbreaking," but they are sort of a
18 universally understood type of modification.

19 And a fundament point with regard to the
20 definition -- and I just would like to refer the
21 Office to the central command of Section 1201. I
22 guess it's (a) (1) (C) -- excuse me -- 1201(a) (1) (B).The
23 prohibition shall not apply to persons who are using
24 a copyrighted work, which is a particular class of
25 works, if such persons are or are likely to be in

1 the succeeding three-year period adversely affected.

2 I just wanted to note the "shall not
3 apply" language is mandatory on the Copyright Office
4 once a substantial adverse effect is demonstrated.
5 And I believe that we have demonstrated that effect
6 on this record. That record is uncontroverted.

7 So while we have endeavored to define a
8 class again based largely on the instructions of the
9 Register from the 1201 recommendation, again, I
10 believe the responsibilities of the Office are well
11 defined at this point.

12 Thank you very much.

13 MS. CHARLESWORTH: Thank you, Mr. Stoltz.

14 Ms. Gellis.

15 MS. GELLIS: In an earlier panel, I had
16 referenced TV-shaped computers. And I think what
17 we're considering now is camera-shaped computers, or
18 in this case, camera-shaped, all-purpose mobile
19 computing devices.

20 And what I am hearing from the questions
21 is some concern that if there might not be much left
22 over if the class as mentioned is as Mr. Stoltz has
23 defined it in the above.

24 MS. CHARLESWORTH: I don't think that is
25 the concern. The concern is how to define the class

1 and what is supported by the evidence.

2 Just to be clear, it's not about an
3 arbitrary issue of what is left over, but you can
4 continue.

5 MS. GELLIS: But it may turn out that as
6 an innovation is developing, it's developing along
7 the lines where there is a lot of convergence and
8 that this is a feature, not a bug, and it encourages
9 the class to be defined as the EFF proposed it,
10 which may catch a number of different devices we
11 haven't previously considered as mobile computing
12 devices in order not to potentially penalize the
13 future direction of innovation that keeps taking
14 place with respect to convergence.

15 MR. CHENEY: I had a question for
16 clarification, if I might, for Mr. Stoltz.

17 There was a question earlier about whether
18 repair is included in this class. It seemed to me
19 on your page 15 of your submission that you did
20 include some fixes as part of your -- not just to
21 uninstall certain software that was unwanted but
22 repair that was wanted -- or I'm sorry -- the
23 software that was wanted. You had some fixes of
24 vulnerabilities as included in your class.

25 Is that still the case or were you

1 removing that from the options here?

2 MR. STOLTZ: No, that is absolutely still
3 the case.

4 MR. CHENEY: I just wanted to be clear. I
5 had maybe heard something else on the record.

6 Mr. Wiens.

7 MR. WIENS: In the process of performing a
8 repair, all of the things that you need to do to
9 jailbreak software, you may have to downgrade a
10 version, you may have to install a specialized
11 repair ap. In the case of diagnoses, you may have
12 to get through the operating system to access some
13 of the remote access controls.

14 All of these jailbreaking activities --
15 it's getting access to low level systems which is
16 required for repairing devices. So I don't see a
17 difference between jailbreaking for the purpose of
18 all-purpose computing and jailbreaking for the
19 purpose of repair.

20 MS. CHARLESWORTH: I understand that. I
21 think that was a question the class was actually
22 considering.

23 Mr. Stoltz.

24 MR. STOLTZ: The class we're considering --
25 not to harp on this, but the noninfringing activity I

1 would define is modifying the device so as to run
2 software of the user's choice.

3 That encompasses repair because repair in
4 many cases requires running software of the user's
5 choice which is prevented from running by the access
6 controls of the firmware.

7 MR. CHENEY: May I follow up.

8 Mr. Stoltz, does that include changing out
9 firmware -- or not firmware -- but hardware once you
10 have jailbroken? Is that included in this? The
11 things that need to be changed in the hardware, once
12 you have jailbroken and you do that, I would assume,
13 is that included here or just installation of software
14 for those fixes?

15 MR. STOLTZ: I think the two may come hand
16 in hand. I am not aware of what restrictions the
17 access controls on the device place on the
18 replacement of hardware. There may be some, but to
19 the extent that process involves, again, either
20 installing software of the user's choice on the
21 device or removing software from the device at the
22 user's election, that would be covered.

23 MS. CHARLESWORTH: I am going to -- I just
24 want to say that I am looking at your actual
25 proposed class here from your petition. And while

1 it does mention installing fixes, meaning, I think,
2 software fixes, the security vulnerabilities, it
3 certainly does not talk about jailbreaks for general
4 repairs.

5 Do you agree with that? Do you want to
6 take a moment to look at it?

7 MR. STOLTZ: No, I am familiar with it.

8 But, again, so what it encompasses is
9 installing software or removing software at the
10 user's election without regard to what that software
11 is. And if that software is a part of a repair, it
12 would be included.

13 MS. CHARLESWORTH: But it doesn't turn
14 on -- it's not -- we had other classes where the
15 specific purpose, the noninfringing purpose for use
16 was repair. This really turns on installing
17 alternative or different software.

18 Do you agree with that, regardless of
19 whether it's a repair?

20 MR. STOLTZ: Regardless of the purpose or
21 function of the software to be installed, yes.

22 MS. CHARLESWORTH: Thank you. That is a
23 helpful clarification.

24 I think we may be done here.

25 MR. WIENS: Could I say one more thing.

1 MS. CHARLESWORTH: Yes, Mr. Wiens.

2 MR. WIENS: I think that it's helpful, as
3 this is the last thing, to look at a spectrum of
4 devices here and imagine what the situation may be
5 in 12 or 24 months.

6 It is getting so inexpensive to put a
7 touchscreen and a battery and processor into a
8 device like this that you are going to be buying
9 greeting cards in a couple of years that have all
10 these functionalities. And if you want to be able
11 to customize the greeting card, you might have to
12 bypass a TPM.

13 So this is the Harmony remote. You would
14 think of a remote control as the most simple device
15 that we have and yet this has a full-blown
16 touchscreen and operating system on it and you can
17 imagine wanting to modify it to do a broad variety
18 of things.

19 I know a guy that built a tool called "TV
20 Be Gone." And TV Be Gone iterates through every
21 possible off command for every TV out there. You
22 push a button on it and it will turn off any TV in
23 existence.

24 I don't particularly like television that
25 much. And so I really love this thing. The Harmony

1 remote does not do this off the shelf but it could
2 if I could install that ap for it, but I would have
3 to bypass their operating system and replace it with
4 a new ap.

5 MS. CHARLESWORTH: Just to be clear, that
6 was part of Exhibit 8?

7 MR. WIENS: Yes.

8 MR. CHENEY: That sounds like a great tool
9 for parents with kids.

10 MS. CHARLESWORTH: My kid just watches her
11 phone -- actually both at the same time.

12 Well, thank you, very helpful. And we
13 really appreciate your being here today.

14 And we will take this back with us and
15 think about it and stay tuned for further
16 developments in the 1201 proceeding.

17 I hope you all have a lovely afternoon and
18 maybe we will see some of you in DC. If not, thank
19 you again for being here.

20 (The proceeding was concluded at

21 11:30 a.m.)

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1 CERTIFICATE OF NOTARY PUBLIC

2 I, DARYL BAUCUM, a Certified Shorthand
3 Reporter of the State of California, do hereby
4 certify:

5 That the foregoing proceedings were taken
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7 that a record of the proceedings was made by me
8 using machine shorthand which was thereafter
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10 I further certify that I am neither
11 financially interested in the action nor a relative
12 or employee of any attorney or any of the parties.

13 IN WITNESS WHEREOF, I have this date
14 subscribed my name.

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16 Dated: 6.3.2015

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