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UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASIMO CORPORATION,	)	
	)	Case IPR 2023-00664
Petitioner,	)	
	)	U.S. Patent 11,106,352
vs.	)	
APPLE INC.,	)	
Patent Owner.	)	
_____	)	

Deposition of CRAIG ROSENBERG, PH.D.,
taken remotely via Zoom, in the above-captioned
cause, before Rachel F. Gard, CSR, CCR, RPR, CRR,
commencing at the hour of 9:15 a.m. Pacific, on
Wednesday, April 24, 2024.

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1 I N D E X

2 WITNESS PAGE

3 CRAIG ROSENBERG, PH.D.

4 Cross-Examination by Mr. Leung 4

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7 E X H I B I T S

8 EXHIBIT PAGE

9 Number 1001 U.S. Patent No. 11,106,352 5

10 Number 1054 Declaration 6

11 Number 1051 Dascola reference 7

12 Number 1056 Declaration 33

13 Number 1005 Chae reference 37

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1 (Witness sworn.)

2 WHEREUPON:

3 CRAIG ROSENBERG, PH.D.,
4 called as a witness herein, having been first duly
5 sworn, was examined and testified as follows:

6 CROSS-EXAMINATION

7 BY MS. LEUNG:

8 Q Good morning, Dr. Rosenberg. Thank you
9 for being here today.

10 I'll just start, I would like to recognize
11 that our conversation today is being transcribed
12 by the court reporter. And to make her job easier
13 and make sure we can obtain an accurate record of
14 this deposition, it's important that we strive not
15 to talk over one another.

16 Now, I'll ask a question and then provide
17 you with an opportunity to respond. If a question
18 is unclear, please just ask me to clarify and I
19 will restate or rephrase the question. I'll try
20 to take a break about every hour. But if at any
21 time you need to take a break, please just let me
22 know.

1 Do you understand?

2 A I do.

3 Q Please state your full name for the
4 record.

5 A Craig Stuart Rosenberg.

6 Q You understand that you're under oath?

7 A I do.

8 Q Is there any reason that you can't give
9 truthful and accurate testimony today?

10 A No, there is not.

11 Q Do you have any documents in front of you,
12 Dr. Rosenberg?

13 A I do. I have a printout of my third
14 declaration and my first declaration and the
15 defendant's responsive construction brief. And
16 then I have a PDF viewer that has my -- all of my
17 three declarations, unmarked up, and the prior
18 art, unmarked up, and the '352 patent, unmarked.

19 Q Okay. So these are all clean copies?

20 A They are.

21 (Exhibit Number 1001 referred to for
22 identification.)

1 Q Okay. So just to make sure that we're on
2 the same page, we're here today regarding
3 IPR2023-00664 relating to the U.S. Patent No.
4 11,106,352. That's Exhibit 1001 in this
5 proceeding. That's correct, right?

6 A Yes. Yes, it is.

7 (Exhibit Number 1054 referred to for
8 identification.)

9 Q Okay. Can we please turn to your second
10 declaration, which is Exhibit 1054 in this
11 proceeding?

12 A I'm there.

13 Q And if you can please turn to
14 paragraph 54, which is on page 26.

15 A Okay. I'm there.

16 Q In this paragraph, you say, the second
17 sentence, you say: Dascola discloses that tactile
18 output generators 167 produce tactile outputs in
19 response to user interactions with device 100.
20 And you cite Dascola, which is Exhibit 1051 at
21 paragraph 153.

22 Can we go to Exhibit 1051 at

1 paragraph 153?

2 (Exhibit Number 1051 referred to for
3 identification.)

4 A Let me just quickly read that 54, please.

5 All right. So going to Dascola
6 paragraph 123; is that correct?

7 Q That's correct. Let me know when you're
8 there.

9 A All right. I'm looking at 123.

10 Q Okay. So in paragraph 123 of Dascola, it
11 describes the tactile output generators 167 you're
12 referring to in paragraph 54 of your second
13 declaration; is that right?

14 A That's right.

15 Q Okay. Paragraph 123 also describes a
16 haptic feedback module 133. That includes various
17 software components for generating instructions
18 used by the tactile output generators 167. Is
19 that right?

20 A Yes. It says: Haptic feedback module 133
21 includes various software components for
22 generating instructions used by the tactile output

1 generator 167 to produce tactile outputs at one or
2 more locations on device 100 in response to user
3 interactions with device 100. I see that.

4 Q Okay. So paragraph 123 says that the
5 haptic feedback module 133 includes various
6 software components.

7 Does it describe in this paragraph what
8 those various software components are?

9 A Not in this paragraph.

10 Q Do you know of anywhere in Dascola that
11 describes what these software components of the
12 haptic feedback module 133 are?

13 A I haven't memorized this very long patent,
14 so I would need to review it to look for more
15 detail that Dascola may provide about the various
16 software components that are referenced in
17 paragraph 123.

18 Q I know this is a very long document, and I
19 know you don't have it memorized. How long do you
20 think it would take you to take a look at Dascola
21 to see if it describes various -- these various
22 software components for the haptic feedback module

1 133?

2 A Gosh, I mean, I have a PDF viewer so I
3 could quickly do some searches. I see it's a
4 463-page document. So, I mean, I would first
5 search for 133 and see what I found and then I'd
6 search for software components. You know, I would
7 start there and I'm not sure how many results I
8 found, but I'm more than happy to start looking
9 for those with searches. That's where I think
10 would be a reasonable place to start.

11 Q Okay. So why don't we start with the
12 haptic feedback module 133. And can you tell me
13 in which paragraphs you find any description for
14 this haptic feedback module 133.

15 A In searching for 133, I see in Figure 1A
16 there is an element labeled haptic feedback
17 module, but that's -- you know, it's just one of
18 the many modules. So that's the only thing that
19 was found for 133, assuming that the OCR is
20 accurate and complete in this PDF. I searched for
21 haptic feedback. Yeah, this is causing me to
22 question the OCR because when I search for "haptic

1 feedback," I'm getting no hits, which is a little
2 bit odd because we know that there's at least one
3 in the paragraph that you just pointed me to.

4 Q Okay. So why don't we try this. Why
5 don't I search in my document that I have, and we
6 can discuss what I find.

7 So you pointed to Figure 1A, the haptic
8 feedback module 133 there?

9 A Yes.

10 Q Is there any indication in Figure 1A of
11 what software components are in this haptic
12 feedback module 133?

13 A I would say likely no, but there's nothing
14 else written about the haptic feedback module, per
15 se. It just says -- it's just one of several
16 modules that are listed that are -- seem to be
17 residing in memory 102.

18 Q Okay. And then when I search 133 again, I
19 see it in Figure 3. If you can turn to Figure 3.
20 Is there anything in Figure 3 that indicates what
21 software components are in the haptic feedback
22 module 133?

1 A No, not in Figure 3.

2 Q And the next instance that I find is in
3 paragraph 111.

4 A One moment. Let me get there. Yeah,
5 there was definitely something wrong about my OCR
6 because it only found one version, one instance of
7 133.

8 Okay. I am almost there. I see 111.

9 Q Okay. It's a pretty long paragraph. Can
10 you read that paragraph to yourself and let me
11 know if there are any software components listed
12 in paragraph 111 for the haptic feedback module
13 133?

14 A Sure. I'll read it.

15 I don't see a description of the software
16 modules in the haptic feedback generator, but I do
17 see it saying at the bottom of page 10 that the
18 tactile output generator 167, I probably in my
19 search, you know, if I were searching, I would
20 re-OCR this document and make sure it was working
21 and then I would also search for "167" to see what
22 disclosures are around that element as well as

1 133.

2 Q Okay. We can do that. Did you want to
3 re-OCR your document and we can also talk about
4 tactile output generators 167?

5 A Yes. I'm hesitating just for a moment
6 because I recently switched from Adobe Acrobat to
7 this PDF Exchange Editor, and I haven't yet OCR'd
8 a document in this. I know it has that
9 capability, so it might -- you know, I don't want
10 to unnecessarily delay the deposition, but it
11 would require a little bit of learning and
12 experimentation about what the process is to
13 re-OCR a document in PDF Exchange Editor.

14 Q That's fine. We can just keep going with
15 me searching, and then maybe during a break, you
16 can re-OCR your document. But I think my OCR is
17 finding all the instances, so maybe we'll go
18 through my findings of Dascola and then we'll take
19 a break and you can re-OCR and we'll come back and
20 see if there's any additional ones that you find.

21 So the next instance I find for the haptic
22 feedback module 133 is in paragraph 113. Does

1 paragraph 113 describe any software components of
2 the haptic feedback module 133?

3 A No.

4 Q Okay. Can we skip back to paragraph 111
5 really quick? I just want to ask one more
6 question.

7 Does this paragraph 111 describe the
8 haptic feedback module aggregating and/or
9 combining tactile outputs?

10 A No, I don't see that.

11 Q And then the same question for
12 paragraph 113. Does paragraph 113 describe the
13 haptic feedback module aggregating and/or
14 combining tactile outputs?

15 A No, I don't see that in that
16 paragraph 113.

17 Q Okay. Let me see if I find any more
18 haptic feedback module 133.

19 So paragraph 123, which is the one that
20 you cited in your declaration, does paragraph 123
21 describe the haptic feedback module aggregating
22 and/or combining tactile outputs?

1 A No, I don't see that. But when you say
2 aggregating or combining, can you describe what
3 you mean combining from what sources or
4 aggregating from what sources?

5 Q Let me see if I can answer your question.
6 Sorry. Bear with me here. I'm looking at the
7 '352 patent.

8 So aggregating and combining the tactile
9 outputs from different software applications, so
10 if several software applications were running on
11 the device at the same time and they each wanted
12 to provide a tactile output for user feedback, the
13 haptic feedback module would aggregate and combine
14 the tactile outputs from the different software
15 applications.

16 So that's what I mean.

17 A Okay.

18 Q Do you see that in paragraph 123 or 111 or
19 113 that we previously discussed?

20 A I do not. Not in the specific paragraphs.

21 Q Okay. So that's all the instances of
22 haptic feedback module 133 that I found in my

1 document. We can --

2 A Just for my clarification, were you
3 searching for "133" or were you searching for the
4 term "haptic feedback module"? Or did you try
5 both of those?

6 Q Just "133." We can go to haptic -- just
7 the word "haptic" because I know sometimes when it
8 runs over the next line it doesn't find it. So
9 I'll just use one word and search "haptic" and see
10 if it finds any additional ones, and we can
11 discuss those.

12 Okay. I didn't find any more instances of
13 haptic feedback module.

14 A You were searching for "haptic," so all of
15 the -- in your search when searching for "haptic,"
16 you found only the instances that we previously
17 reviewed; is that what you're saying?

18 Q For the haptic feedback module, that's
19 right.

20 So let's look at the tactile output
21 generator 167. So in Figure 2, it shows tactile
22 output generators 167. Does Figure 2 give you any

1 indication of what software components might be in
2 the haptic feedback module 133?

3 A No. I don't see element 133 listed on
4 Figure 2. The haptic feedback module sounds
5 similar to a tactile output generator. I'd want
6 to understand the differences, to the extent there
7 are, between those two and the role and
8 responsibility of each.

9 As you know, when searching for "133," we
10 came across this tactile output generator, and
11 that's why I requested that we search for it as
12 well. So it could be informative to find
13 descriptions of what the tactile output generator
14 does and what its subcomponents are. You seem to
15 be asking about software subcomponents, so that's
16 why I requested we look for this as well.

17 Q Okay. That's fine. We can keep going.
18 In paragraph 93, let me know when you're there.

19 A Okay. I see 93 on my screen.

20 Q Okay. And can you read paragraph 93 and
21 let me know if you see any description of what
22 software components are in the haptic feedback

1 module 133.

2 A I don't see a description in this
3 paragraph 93 of the software components of the
4 haptic feedback module.

5 Q Okay. We can go on to the next
6 paragraph 94 because it looks like it goes on to
7 describe the term "tactile output." Can you read
8 paragraph 94 and let me know if there are any
9 software components listed here for the haptic
10 feedback module 133?

11 A Sure.

12 No, I don't see a description of the
13 software components of the haptic feedback module
14 in paragraph 0094 of Dascola.

15 Q In paragraphs 93 and 94, do you see any
16 description of tactile outputs being aggregated
17 or -- and/or combined?

18 A I do not.

19 Q So the next instance I find is in
20 paragraph 111, which we've already discussed or
21 I've already asked the questions that I wanted to
22 ask for that paragraph.

1 The next one would be paragraph 123, which
2 we've also looked at.

3 The next one would be paragraph 192. Let
4 me know when you're there.

5 A I have 192 on my screen now.

6 Q Read that paragraph and let me know if you
7 see any description of the software components in
8 the haptic feedback module 133.

9 A I do not see a description of the software
10 components for haptic feedback module in
11 paragraph 192 of Dascola.

12 Q Do you see any description of the tactile
13 outputs being aggregated and/or combined in
14 paragraph 192 of Dascola?

15 A No, I do not.

16 Q And then paragraph 193, if you can read
17 that and keep the two questions that I asked
18 previously in mind.

19 A The answer is the same. I don't see
20 disclosure relating to the software components of
21 the haptic feedback module or discussion of
22 combination, combining or aggregating haptic

1 sensation, haptic output in that paragraph 193.

2 Q Okay. It looks like the next instance is
3 in paragraph 399.

4 A Say the number again, please.

5 Q 399.

6 A Okay.

7 Q Then if you can read that paragraph when
8 you get there and let me know if you see any
9 description of the software components of the
10 haptic feedback module or any description of
11 tactile outputs being aggregated or combined.

12 A No, I do not see disclosures related to
13 the software components of the haptic feedback
14 module or discussion related to combining or
15 aggregating haptic feedback in paragraph 399 of
16 Dascola.

17 Q And the next one is in paragraph 426. And
18 the same question here. If you can read that
19 paragraph and let me know if you see any of those
20 descriptions in this paragraph.

21 A The same answer as before. I don't see
22 disclosures for the software components or

1 discussion related to aggregation or combining
2 haptic feedback in paragraph 426 of Dascola.

3 Q The next paragraph is 449. And if you can
4 read that paragraph, and the same questions for
5 this paragraph also.

6 A The same answer as before. I don't see
7 disclosures for either of those in paragraph 449
8 of Dascola.

9 Q Okay. That's the last instance I found
10 for the tactile output generators 167. I know
11 this Dascola patent is about providing haptic --
12 visual and/or haptic feedback according to its
13 title. So I know this document is quite long and
14 there's probably many more instances of the word
15 "tactile" in this document, and I don't want to go
16 through and search for all of those.

17 But based on your recollection of reading
18 Dascola during your review, do you recall it
19 describing aggregating or combining tactile
20 outputs?

21 A I don't have a specific recollection of
22 where that is in Dascola, no. It doesn't mean

1 that it's not present somewhere. It just means I
2 can't point you to it right now without having
3 search abilities or taking the time to read it in
4 its entirety.

5 Q And you wouldn't be able to point me to
6 anything right now that would describe the
7 software components of the haptic feedback module
8 in Dascola; is that correct?

9 A Not right at the moment. As you know, my
10 ability to search is impaired at this exact
11 moment, and I wouldn't think you would want me to
12 read the entire patent right here given our time
13 today.

14 Q Okay. Yeah, that's fine. We can move on.
15 Let's go to your second declaration,
16 Exhibit 1054, again.

17 A I'm there.

18 Q And if you can, go to paragraph 87, which
19 is on page 38 of your second declaration.

20 A 38? Page 38, you said?

21 Q Right. Page 38, paragraph 87.

22 A Okay. I see that.

1 Q And in paragraph 87, you say: Dascola
2 discloses that wake screen user interface 5002 is
3 displayed when device 100 is activated from a
4 screen-off state, e.g., a sleep state, to a
5 screen-on state, e.g., a wake state. And you cite
6 Dascola Exhibit 1051 at paragraph 242.

7 Does Dascola describe how the device 100
8 is activated from a screen-off state to a
9 screen-on state?

10 A Again, I would want to review Dascola to
11 see what the specific disclosures are related to
12 activating the wake screen or waking the device
13 up, as it were.

14 Q Okay. Can you at least look at
15 paragraph 242 of Dascola and see if paragraph 242
16 that you cited describes how the device 100 is
17 activated from a screen-off state to a screen-on
18 state?

19 A Paragraph 242, you say?

20 Q Right.

21 A All right.

22 I do not see in paragraph 242 of the

1 disclosure the specific action that a user would
2 take, action or actions the user would take to
3 wake the device up, wake the device in Dascola up
4 and moving it from a power-off state to a power-on
5 state or low-power state to achieve the wake
6 screen. I don't see that in 242.

7 Q So sitting here today, you can't recall if
8 Dascola describes anywhere in its specification
9 how the device 100 is activated from a screen-off
10 state to a screen-on state; is that right?

11 A Yes, I wouldn't be able to point you to a
12 specific paragraph in Dascola that describes that
13 just sitting here today without, you know, an
14 ability to search the patent and/or reread the
15 patent.

16 Q Did you review Dascola before the
17 deposition today in preparation for the deposition
18 today?

19 A I did. Not in its entirety, but I
20 reviewed sections of it.

21 Q How long do you think you spent reviewing
22 Dascola in preparation for the deposition today?

1 A I would estimate 10 to 15 minutes. My
2 focus was primarily on the third declaration, not
3 the second declaration, in my preparation. And
4 Dascola relates more to the second declaration.

5 Q Okay. Then let's turn to your third
6 declaration.

7 A I'm there.

8 Q Let's go to page 15.

9 A 15 that's on the document, not PDF
10 page 15; is that correct?

11 Q Right. The number that's listed on the
12 bottom of the document.

13 A All right. I'm at page 15.

14 Q So on page 15, you have a subheading 2
15 here where you say: Chae discloses or renders
16 obvious the computer system is in a power-saving
17 state, and you have the computer is in a
18 power-saving state in quotes. Is that a
19 recitation of the claim language? Is that why you
20 have that in quotes?

21 A One moment.

22 Yes, that's recited in one of the

1 limitations of claim 1 of the '352 patent.

2 Q What does it mean for the computer system
3 to be in a power-saving state?

4 A It would mean a state in which the
5 computer system is consuming less power than a
6 state in which the user is able to utilize and
7 work with the computer.

8 Q So would all the components in the
9 computer system need to be in an idle state in
10 order to be in a power-saving state?

11 A You say all of the components?

12 Q Right.

13 A In an idle state? I think that depends on
14 what you mean by "idle state." It's what -- here
15 we're primarily talking about the display and how
16 the display goes black or the display is off,
17 which consumes less power than when the display is
18 on.

19 So I'm not offering an opinion about other
20 components and what they might be doing. There's
21 no disclosure about, in '352, when the computer
22 system is in a power-saving state about other

1 components. It's just we're talking about the
2 display being off, and that display being off
3 consumes less power than when the display is on,
4 which results in a longer battery life.

5 Q So you're saying that the computer system
6 is in a power-saving state just because its
7 display is off?

8 A I think by definition, it's indisputable
9 that when the display is off, the computer uses
10 less power than when the display is on. Yes, a
11 POSITA would understand that. So it would, by
12 definition, be in a power-saving state at least
13 relative to the state in which the display was on.

14 Q So what if you walk by a car and you see a
15 mobile phone sitting inside with its screen off,
16 its display off, are you able to say definitively
17 that it's in a power-saving state?

18 A Okay. So in your hypothetical, you're
19 putting a phone inside of a car and you're walking
20 by the car looking in through the window and
21 observing the phone? Just so I understand your --

22 Q Right, right. And you see its screen is

1 off.

2 A Well, I guess I want to ask, what is the
3 relevance of it being in a car versus just sitting
4 on a desk or being held in your hand? Is there
5 something I'm missing about being in a car that's
6 relevant to your example here?

7 Q No, visually you can only see that the
8 display is off. You don't hear anything, you
9 can't hear anything. If the phone was, to say,
10 outputting some audio you wouldn't be able to hear
11 it. So all you can see is that its display is
12 off.

13 A Yes, like I said, if the -- all things
14 equal, if the display is off, it's necessarily
15 consuming less power than if the display is on.
16 But you seem to be suggesting with that, like you
17 can't hear it, that well, maybe it was playing
18 music very loudly. So every time the display goes
19 off, some other process happens that consumes more
20 power, a delta differential power that's greater
21 than the power that you save by the display going
22 off.

1 Let's say it computes pi, you know, to the
2 one-millionth decimal point every time the display
3 goes off, so your CPU is running like crazy,
4 potentially one could have a program running on
5 the computer that causes the phone to use more
6 power when the display is off.

7 But like I said, there's no disclosure
8 about that at '352. A POSITA on the '352 patent,
9 a POSITA when reading the patent and learning
10 about what is meant by a power-saving state, they
11 keep talking about the display being off and, you
12 know, waking up the display from that, a POSITA
13 would understand that all things equal, as I said,
14 the display being off uses less power than the
15 display being on. So I don't think that -- I
16 think it would be unreasonable to conclude that
17 every time the display goes off, some process
18 happens that would consume more energy than the
19 display takes.

20 Q So if the display was off and the computer
21 system was transmitting or receiving data, would
22 the computer system be in a power-saving state?

1 A Relative to the display being on. If the
2 computer system is transmitting and receiving data
3 with the display on and the computer system is
4 transmitting, that's situation one.

5 And then situation two is if the computer
6 system is also transmitting or receiving data with
7 the display on, it's going to necessarily use more
8 computer with the display on. So blanking your
9 display, turning your display off, consumes less
10 power than having the display on, you know, given
11 a constant background process. And there's no
12 discussion -- there's no reason a POSITA would
13 assume that background processes increase
14 power-utilizing background processes, which would
15 be all background processes would utilize some
16 degree of power. There's nothing that would make
17 a POSITA believe that by blanking the display, you
18 are somehow increasing some other process that
19 consumes more power.

20 Q So the power-saving state that is in the
21 claims of the '352 patent, that's a relative state
22 to the state when the display is on, so it's

1 relative to when the display is on or off in the
2 power-saving state?

3 A We're not talking absolutes here. Yes, a
4 POSITA would understand that all of this is
5 relative. It's not saying that it's using, you
6 know, X many watts, it drops from, you know,
7 2 watts to 1.5 watts. It's not saying anything in
8 absolutes. It's just saying it's moving to a
9 power-saving state. So that would be using
10 relatively less power. It's -- I hope that
11 answers your question. I'm trying to be
12 responsive to it.

13 If it were absolute, if it wasn't
14 relative, we would see specific numbers that would
15 need to be listed, you know, does it meet this,
16 this is the absolute power consumed. So a POSITA
17 would understand that a power-saving state is
18 relative to being in a wake state, a screen-on
19 state.

20 Q Well, let's say that you had configured
21 the settings in your mobile phone to back up your
22 data when you weren't looking at the display,

1 would that still be in a power-saving state?

2 A Like I said before, it's possible that
3 someone could program the system to purposely use
4 more power when the display was off than it was
5 on.

6 Chae discloses a power-saving state. I
7 believe it's indisputable when a display is off,
8 it consumes less power than when it's on.
9 Dr. Coburn agreed with that, when a display is on,
10 it consumes less power than when it's on. When a
11 device wakes up, it's waking up from a
12 power-saving state. It goes on from a screen-off
13 state to a screen-on display. It's going to use
14 more power.

15 Smartphones, they turn off their displays
16 in order to save power. Are you asking in your
17 hypothetical is it possible that someone or some
18 company could purposefully create a system that
19 used more power when it's off because it computed
20 pi to the millionth degree or decided to hit the
21 CPU really hard in some way, there would be a
22 variety of things that could be done but

1 nothing -- there's no disclosure of that
2 happening.

3 And I think it would be unreasonable for a
4 POSITA when reading the '352 patent or when
5 reading Chae -- specifically Chae, I think we're
6 talking about here -- is to assume that they're
7 saying power-saving state. They're talking about
8 lower-power states, but it's really not because
9 something is happening in the background that's
10 completely undiscussed. It's not ever mentioned
11 that actually makes it not in a power-saving
12 state. So I think that's a very unreasonable
13 interpretation of the patent and the prior art
14 that assumes something that's never discussed.

15 Q So you're saying merely because the
16 display is off, the computer system is in a
17 power-saving state?

18 A All things equal, and there's no
19 discussion that that's not the case, the device is
20 on and then the display turns off. That's the
21 only thing that's discussed. It absolutely will
22 consume less power than when the device is on.

1 Yes, it's in a power-saving state because the
2 device is off, yeah, relative to when the device
3 is on.

4 Q Okay. It looks like it's 10:13. If you
5 need a break, Dr. Rosenberg, we can take a short
6 break now.

7 A Sure. Let's take -- I'm fine with
8 5 minutes.

9 Q Okay.

10 A If you want to get together at 10:20
11 maybe.

12 Q Yeah, that sounds good.

13 (A short break was taken.)

14 (Exhibit Number 1056 referred to for
15 identification.)

16 Q Dr. Rosenberg, if you can turn to page 16
17 of your third declaration, Exhibit 1056.

18 A I'm on page 16.

19 Q So in your subheading 3, you say: Chae
20 discloses or renders obvious the widget screen
21 user interface limitation.

22 A Yes.

1 Q How many user interface screens are
2 required by the claims of the '352 patent?

3 A Well, I mean, I think there are several
4 screens that are discussed, such as the home
5 screen, a widget screen. Across all of the
6 claims; is that what your question is?

7 Q Right. Across all of the claims.

8 A A home screen, a widget screen, a wake
9 screen, and a control panel user interface.

10 Q So is it four user interface screens then?

11 A I believe so.

12 Q So what is a widget screen user interface?

13 A In claim 1, it says, this is column 87
14 around line 16: A widget screen user interface
15 that's different from the wake screen user
16 interface and the home screen user interface,
17 wherein the widget screen user interface includes
18 a plurality of user interface objects
19 corresponding to different applications, wherein a
20 respective user interface object of the plurality
21 of user interface objects contains application
22 content from an application corresponding to the

1 respective user interface object and, when
2 selecting, causes display of an application
3 corresponding to the respective user interface
4 object.

5 So it would be a screen that contains a
6 plurality, so two or more, widgets on that screen.

7 Q So are you saying where it says "a
8 plurality of user interface objects," those are
9 the two or more widgets you're referring to?

10 A Yeah. The plurality gets to the two or
11 more, and the user interface objects that display
12 application content from an application, so that
13 gets to one of the attributes of what a widget is.
14 It's an application of which the -- prior to it
15 being opened up into the full application can
16 display application content.

17 Q And this widget screen user interface has
18 to also be different from the wake screen user
19 interface and the home screen user interface; is
20 that right?

21 A Yes. To meet the -- to meet the
22 limitation of claim 1 of the '352 patent.

1 Q Does it also need to be different than the
2 control panel user interface?

3 A It doesn't -- claim 1 doesn't talk about
4 the control panel user interface. I think a
5 POSITA would understand that a control panel
6 interface looks a certain way. And, I mean, a
7 designer has flexibility when designing any
8 interface, of course. But control panels contain
9 elements, user interface elements, that are
10 typically not widgets.

11 So to answer your question directly, I
12 don't see in claim 1 a limitation that says it
13 needs to be different from the control panel user
14 interface but, practically speaking, a POSITA
15 would understand that a screen with a collection
16 of widgets doesn't -- isn't very similar to
17 typical control panel user interfaces.

18 Q Okay. So in your third declaration,
19 Exhibit 1056, in paragraph 28, you point to Chae's
20 Figure 6B here as the claimed widget screen user
21 interface; is that right?

22 A I would say that's one of them. I believe

1 Figure 22 of Chae could also be another one as
2 well. But yes, I do point to 6B.

3 Q Do you know where in your declaration you
4 point to Figure 22 as the claimed widget screen
5 user interface?

6 A Well, there can be more than one. I mean,
7 just I'm saying that 6B is a widget screen user
8 interface. It's an example of a widget screen
9 user interface. As I described, a widget screen
10 user interface contains more than one widget, and
11 Figure 22 contains two widgets that are related to
12 selecting which SIM card the user wants to use.
13 That would just be another example. I wasn't
14 aware that I needed to point out every example of
15 a widget screen user interface in Chae, but I
16 think that Figure 6B is a good one as well.

17 (Exhibit Number 1005 referred to for
18 identification.)

19 Q Okay. Let's talk about Figure 6B. So in
20 Chae, which is Exhibit 1005 in this proceeding,
21 paragraph 108, if you can look at that paragraph
22 and let me know when you're there.

1 A Okay. I have 108 on my screen.

2 Q Is Chae's Figure 6B a home screen
3 customized to the second SIM, SIM2? Is that what
4 it's showing in Figure 6B?

5 A One moment. Let me read 108 and then come
6 back to the figure.

7 I don't see a reference to 6B in
8 paragraph 108, but you're asking me does Figure 6B
9 of Chae correspond to SIM2 was your question?

10 Q Yeah, whether it's a home screen
11 customized to the second SIM, SIM2, that's
12 described in paragraph 108.

13 A Well, you say it's a home screen. And to
14 meet the definition of home screen, I'd want to go
15 back to the claim 1 of the '352 patent but which
16 says the home screen user interface includes a
17 plurality of application icons corresponding to
18 different applications. And when the applications
19 icons are selected, they cause display of an
20 application. So it's similar to a widget. The
21 difference is that the application icons aren't
22 showing application content. And to meet the

1 definition of a home screen, you need two or more.
2 You need a plurality in the same way you need a
3 plurality of widgets.

4 So in looking at 6B, we see a plurality of
5 widgets, and we also see a plurality of
6 application icons at the bottom so one could call
7 that a home screen. One could also call that a
8 widget screen in the parlance of '352 because
9 there's a plurality of widgets and there's a
10 plurality of application icons that don't rise to
11 the status of widget because they're not showing
12 application content.

13 So your question said is that the home
14 screen of SIM2. That could be called a home
15 screen of SIM2, but it could also be called the
16 widget screen of SIM2 per the '352 claim 1.

17 Q So is this home screen and the widget
18 screen of SIM2 the same screen then?

19 A It's -- because of the way that they've
20 labeled in '352 claim 1, that they've defined what
21 a home screen is, a POSITA could call it either.
22 It could call it -- it's a widget screen in the

1 sense that it has more than two widgets on the
2 screen. It's a home screen in the sense that it
3 has more than two application icons on the screen.
4 A POSITA would probably -- so just looking at
5 '352, it could be either.

6 If a POSITA was able to evaluate this
7 working system and it went, you know, from
8 unlocking it, from going from the low-power state,
9 going from the screen-off state to the wake screen
10 and then going from the wake screen to the
11 unlocked next screen, I think a POSITA would be
12 more likely to call it a home screen because it's
13 the first screen, but it's a screen with multiple
14 widgets, nonetheless, and strictly speaking,
15 technically speaking, it does meet the criteria of
16 being a widget screen per the '352 claim 1.

17 Q So you were just saying that it's -- you
18 said that it's the first screen.

19 A I didn't -- well, it likely is but just
20 because we've gone from the wake screen to unlock.
21 In 6A, you've got the wake screen, and it looks
22 like there's a downward swipe and it likely is the

1 first screen.

2 But it does meet the definition of being a
3 widget screen because it has two or more -- two or
4 more widgets in the same way Figure 22, they're
5 not showing exactly how you got to this widget
6 screen in 22, but there's also two or more widgets
7 in Figure 22.

8 Q Okay. So let's stay with Figure 6B for
9 now. You said it's likely the first screen after
10 the wake screen if you swipe in a -- is it a
11 top-to-bottom direction? Top-to-bottom direction
12 is likely the first screen you'll reach for SIM2;
13 is that correct?

14 A In looking at Figure 6 of Chae, the users
15 on the wake screen in 6A, there's a downward swipe
16 on that wake screen, it unlocks SIM2, and one sees
17 the figure on 6B.

18 Q Okay. So this screen shown in Figure 6B,
19 does that serve as a starting point from which
20 users navigate to the features and services for
21 SIM2?

22 A I'm sorry. Is it a starting point where

1 they navigate where?

2 Q To features and services for SIM2.

3 A I suppose you could phrase it that way,
4 yes, but a widget screen could be your starting
5 point. There's no reason that a widget screen
6 can't be your starting point also.

7 Q Now, you were talking about Figure 22. Is
8 Figure 22 a wake screen?

9 A Let me review what's said about 22 before
10 I answer that.

11 In paragraph 152 of Chae, it says:
12 Figure 22 illustrates process of unlocking a SIM
13 corresponding to a dragging motion made by a user
14 on a touchscreen, according to the method for
15 operating a mobile terminal of Figure 17.
16 Referring to Figure 22, the touchscreen displays
17 widgets to show use-state information of the first
18 and second SIM, SIM1 and SIM2, that is the regions
19 are illustrated as widgets in Figure 22.
20 Referring -- and then I'm going on to Figure -- to
21 paragraph 153. Referring to Figure 22, when a
22 user selects one of the widgets displayed on the

1 touchscreen and drags the selected widget to a
2 region labeled using SIM1, the controller 180 of
3 the mobile terminal 100 unlocks the SIM
4 corresponding to the dragged widget.

5 You asked is it a wake screen. Well,
6 there is -- I'm going back to 22 now so I can look
7 at it as I speak. Not necessarily. As we know
8 from Android version 4.X that came before, it's
9 possible to put widgets on a wake screen. This
10 does seem to have elements more of -- I mean, it
11 has a clock that could easily be a clock widget
12 where, when you open it up, you get some full
13 clock functionality or calendar functionality at
14 the top. You see various status indicators across
15 the top, which aren't typically associated with
16 wake screens. More typically associated with home
17 screens or widgets screens.

18 So there's not explicit disclosure in Chae
19 if this is a wake screen. But I would say from
20 the diagram in 22 itself, I would say given the
21 status indicators across the top, a POSITA would
22 likely not interpret this as a wake screen,

1 although it could be because a wake screen, you
2 know, can have widgets on it, as we know, from
3 prior art too. So there's that possibility. But
4 it could also just be a regular widget screen and
5 this allows the user to change from SIM1 to SIM2.

6 Q So when you look at Chae Figure 4A, is
7 that a wake screen?

8 A Chae Figure 4A, let me go there. Then let
9 me see what's said about it.

10 Okay. In paragraph 104 of Chae, it says:
11 Figure 4 illustrates unlocking the first SIM,
12 SIM1, according to a method of operating mobile
13 terminal Figure 3. Referring to Figure 4, when a
14 user draws a line directivity -- draws a line, a
15 directivity of a line drawn by a user on the
16 touchscreen is a bottom-to-top direction as shown
17 on diagram (a) of Figure 4 of the controller 180
18 unlocks the first SIM.

19 All right. I think really it's the same
20 answer as I said before. Let me go back to 4A and
21 describe that. It could be a wake screen with
22 status indicators. That's possible. They're not

1 saying in the written description of Chae in the
2 specification definitively whether this is a wake
3 screen or not. It certainly could be. I think
4 most POSITAs would not be used to a row of
5 status indicators across the top that one would
6 find when -- after one transitions away from the
7 wake screen, so it's -- but it could be to a wake
8 screen that's taking you to unlocking SIM1, but it
9 doesn't have to be.

10 But once you're in SIM -- let's say you're
11 in -- it does seem to be unlocking, unlocking
12 SIM1. But the question is: Is it unlocking it
13 from just a wake -- a wake screen, or is it -- are
14 you transitioning from SIM2 to SIM1. I guess
15 there's no explicit disclosure if there's a wake
16 screen. The part that's causing a little bit of
17 uncertainty is that row of status indicators
18 across the top that's typically not part of a wake
19 screen.

20 Q So looking at Figure 5A, is that a wake
21 screen? It also has a row of indicators at the
22 top. So would that -- would that suggest it's

1 also not a wake screen?

2 A One moment. Let me find the description
3 of this, please.

4 In paragraph 105 of Chae, they're talking
5 about again just unlocking SIM1. So, you know, a
6 system of Chae could provide the ability to unlock
7 SIM1 from a wake screen, but it should be able to
8 provide the ability to unlock SIM1 from another
9 screen as well because otherwise if you're in SIM2
10 and you want to go to SIM1, you would have to put
11 it in a low-power state. You'd have to sleep the
12 device, essentially, and then wake the device and
13 then go to the alternate SIM. So, I mean, I can
14 see situations where designers would say that's
15 unnecessary steps the user needs to go through.

16 If we look at 22, 22 is essentially
17 determining that is also the ability to -- they're
18 all the same because the artist that was creating
19 the figures for this, we're reading in clues, if
20 you will, from the diagrams themselves. And I
21 just can't say it's definitive. You keep asking,
22 is it a wake screen? Is it a wake screen? And

1 I'm not finding a description in the specification
2 that's saying it's a wake screen. And I'm telling
3 you as an experienced user interface designer,
4 that providing the ability to transition from one
5 SIM to another SIM is something that the designer
6 might not want to force the user to go all the way
7 to a low-power state and then the wake screen
8 state and then to the SIM as opposed to just going
9 directly to. So either or both, I guess, is the
10 best way to put it. I can't say for sure that
11 it's a wake screen. It certainly could be. It
12 could be. I think the system of Chae would work
13 if this was done on a wake screen. If it wasn't a
14 wake screen, I think the system of Chae would also
15 work.

16 Q So considering all the embodiments of
17 Chae, including the ones that we just talked
18 about, Figure 4, Figure 5, Figure 22, how many
19 directional swipe gestures does Chae teach for
20 moving between screens of the mobile device?

21 A In looking at Chae, Figure 3, I see
22 disclosure of three different swipe directions.

1 There's a bottom-to-top swipe to get you from --
2 to unlock SIM1, I guess, from the wake screen to
3 unlock SIM1. And then there's a top to bottom
4 swipe to unlock SIM2. And they're disclosing a
5 left-to-right swipe to unlock both SIM1 and SIM2.

6 I think there's something else that I want
7 to point out in Chae. Let me quickly find it
8 here. So those are three different swipe
9 directions. But what is also said in Chae is
10 this. If you look at paragraph 112 of Chae, it is
11 saying that essentially the user, the manufacturer
12 could change what the swipe directions are. So,
13 you know, if the user or the manufacturer didn't
14 like that left-to-right swipe to unlock SIM1 and
15 SIM2 and instead wanted a right-to-left swipe,
16 that that is possible to do. Or if they wanted to
17 reverse SIM1 and SIM2 to have a top-to-bottom to
18 unlock SIM1 and a bottom-to-top to unlock SIM2,
19 that would be possible.

20 Q So are you --

21 A Three different swipe directions are
22 disclosed in Chae.

1 Q Okay. But there's more possibilities than
2 just three if you, say, had also a control panel
3 screen, let's say?

4 A Yes. Yeah. The paragraph I just pointed
5 you to, which was 112, shows that there's
6 configurability, either by the manufacturer or the
7 user.

8 Q Okay. Let's go to the next paragraph in
9 your third declaration, Exhibit 1056. That's
10 paragraph 29. You say in the first sentence
11 there: In my view, the claimed user interface
12 objects are merely application icons with the
13 added functionality of displaying application
14 content without requiring execution of the
15 application.

16 Did I read that correctly?

17 A You did, yes.

18 Q What is an application?

19 A An application is a program that in
20 response to user commands performs a task beyond
21 device control, device status indication, or
22 another task related to the internal function of

1 the device itself.

2 Q So is unlocking a SIM card
3 functionality -- sorry. I'm going to restart that
4 question.

5 Is unlocking a SIM card functionality
6 that's typically provided by an application?

7 A Is unlocking a SIM card -- repeat the
8 question, please.

9 Q Is unlocking a SIM card functionality
10 typically provided by an application?

11 A Yes.

12 Q And why is that?

13 A Well, that's -- the best way to answer
14 that, what other way would you unlock the SIM card
15 if it weren't through an application?

16 Q So unlocking a SIM card -- okay. So how
17 about what is -- what is a task that would be the
18 device control?

19 A The task that would be device control
20 would be like using the control panel to turn the
21 phone into airplane mode, so you're turning off
22 all the radio receivers and transmitters or using

1 a slider to change the volume of the speaker on
2 the device or the brightness of the screen. Those
3 would all be examples of device control.

4 Q And unlocking a SIM card wouldn't be
5 device control?

6 A No. A SIM card is not -- it's not a
7 device. It's much more like a smart card with
8 data on it. It's got data on it. It has
9 subscriber information that has credentials
10 associated with logging into a cellular network.
11 It's got various authentication keys associated
12 with that. It's got the algorithms. It's much
13 more like a collection of data files to allow
14 connection to the cellular network. It's -- I
15 mean, you could think of it as it's basically just
16 an SD card. It's a solid-state collection of
17 data. It doesn't control anything about the
18 device. It assists in logging one onto the
19 network. It also has personal information on it.
20 It has your contacts on it. It has the layout of
21 your home screen. So in that way, it's also more
22 like just data. It's not device controlled at

1 all.

2 Q What does it mean to display application
3 content without requiring execution of the
4 application?

5 A It means that prior to opening up the
6 application, you can see some data on the user
7 interface object. So I'll use a weather -- the
8 weather widget as an example. I could use many
9 different kinds.

10 The weather widget in Figure 6B of Chae,
11 let me go there so I can see it as I speak to it,
12 shows a sun that's partially occluded by a cloud.
13 So what that's telling the user is the current
14 weather is, it's partly sunny/partly cloudy, and
15 that data is coming from the application but the
16 application isn't open yet, but it is the current
17 data.

18 If it were fully sunny, one wouldn't see
19 the cloud there. If it were fully rainy, one
20 could see graphic associated with rain. So the
21 user doesn't have to open the application to get
22 some application content. That would be -- that's

1 an example of receiving application content
2 without opening it. If the user did choose to
3 open the weather widget, they would get the
4 full-blown weather application.

5 Widgets were well known before '352.

6 Dr. Coburn agreed with that. Apple had widgets
7 starting at Mac OS 8 in 2014. Windows had widgets
8 starting with Microsoft Vista in 2007. And they
9 all operated in the same way where they showed
10 application content without having to execute it.
11 But you double-click to open it, and up comes the
12 full-blown application.

13 Q So would a static graphical icon be
14 application content for the -- for a widget?

15 A A widget is an application. It's a
16 representation of an application. Some people can
17 call that an icon. But widgets can be larger than
18 the small thumbnail icons too. Many of them are.
19 They don't have to be, but they can be larger.

20 If it's purely static and it never
21 changes, then it would not be a widget because a
22 widget needs to receive application content.

1 What's meant by that is it's dynamic. That can
2 change over time. If it changes from partly sunny
3 to rainy, that would change over time. This isn't
4 a static graphic, so that's one requirement to be
5 a widget.

6 And then also like any application icon,
7 of which widgets are a subcategory of that have
8 this additional capability of showing application
9 content but like any application icon, when
10 selected, when executed, they open up into the
11 full application. So a static picture in your
12 question, in your example, that wouldn't be --
13 that wouldn't be an executable icon, for one. And
14 for two, is it wouldn't show application content
15 that -- yeah, I think that is all I had to say on
16 that one.

17 Q So does Chae actually describe anywhere
18 that that sun partially occluded by the cloud
19 changes according to the, I guess, present
20 application content?

21 A Chae doesn't talk about the weather icon
22 in Chae, but Chae does provide these three

1 graphics of Lauren, Chris, and the weather icon in
2 Figure 6B, it's also on three other figures too,
3 Figure 7, Figure 9 -- I'm sorry, Figure 7,
4 Figure 10, and Figure 11. It's more than just 6B,
5 but we see widgets in all four of those figures as
6 well as in the fifth figure, which is Figure 22.

7 In Figure 22, we see widgets. Chae calls
8 them widgets by name in two or three paragraphs
9 around 152, 153-ish, I believe, of Chae, and we
10 see the data coming from the application,
11 including number of minutes of talk time, number
12 of messages. Widgets are mentioned multiple times
13 in Chae. A POSITA would understand what a widget
14 is because they predated this patent by many, many
15 years. I described how early they were in
16 Microsoft Windows as well as Mac OS.

17 And I talk about the reference Hong too
18 which describes widgets in detail and how they
19 work and how they show application content and how
20 they open when selected.

21 Q But Chae doesn't describe in words in its
22 specification any details about these three

1 graphics of Lauren, Chris, and the weather icon;
2 is that right?

3 A I guess, narrowly, not specific to those
4 three widgets, but Chae does talk in detail about
5 the widgets in Figure 22 that it calls them
6 widgets in paragraph 152, 153, 154, and it
7 describes the widgets in detail in at least those
8 three paragraphs.

9 Q Does Chae call these three graphics of
10 Lauren, Chris, and the weather icon widgets?

11 A Let me go there. They're not called out
12 specifically. They're not a numbered element, so
13 they're not spoken about specifically those three
14 ones. It does say in paragraph 100 of Chae -- let
15 me go there. It says: The home screen customized
16 to the SIM has been displayed on the home screen
17 different from those on the general home screen.
18 These items include icons and widgets.

19 So when you look at Figure 6B -- forgive
20 me. I keep scrolling between different parts of
21 this patent. When SIM2 is unlocked and you get to
22 this screen, this, it has a combination of widgets

1 that are obviously widgets. A POSITA would see
2 those as being different from the application
3 icons that are non-widgets, the four on the
4 bottom.

5 So I guess that's my answer with --
6 related to those three. But there's at least two
7 other widgets that Chae specifically calls widgets
8 in Figure 22 and are discussed in paragraphs 150
9 to 153 and 154.

10 Q Okay. So Chae doesn't specifically call
11 these three graphics of Lauren, Chris, and the
12 weather widgets; is that right?

13 A Yes, but I don't see that as
14 consequential. They're in the status bar icon of
15 6B too. They don't specifically call out that
16 battery icon that's up above in that same figure.
17 They don't specifically say, hey, this is a
18 battery icon. But a POSITA, when seeing that
19 status bar, when seeing that battery icon, would
20 know it's a battery icon. It doesn't -- Chae
21 doesn't need to have a sentence saying, oh, by the
22 way, that's a battery icon. It's clear. It's

1 obvious.

2 Q Could those three graphics of Lauren,
3 Chris, and the weather also just be application
4 icons?

5 A So you're suggesting that somebody has
6 installed a Lauren application? And then they've
7 also installed another application that's a Chris
8 application? Is that -- would that -- I think a
9 POSITA would have to believe that someone
10 installed, yes, a Lauren application and a Chris
11 application and then another application that
12 always shows an icon that's, you know, a partially
13 occluded sun, occluded by a cloud, even though in
14 paragraph 100, it says that the home screen, when
15 it's unlocked, can contain both application icons
16 and widgets.

17 So they have to believe all of that to
18 think, yep, those are just applications even
19 though the patent specifically says it can have
20 widgets on this screen and that there's a Lauren
21 application and a Chris application. I don't
22 think that would -- there would be a lot of

1 cognitive dissonance for a POSITA reading that to
2 think, oh, yeah, that's definitely the Lauren
3 application and here's a different application, a
4 Chris application. It makes much more sense
5 especially since Chae discloses multiple times
6 about widgets and since widgets can be on this
7 screen that they are, in fact, widgets.

8 Q Okay. Let's turn to paragraph 45 of your
9 third declaration, Exhibit 1056.

10 A All right. One moment. 45, you say?

11 Q Yes.

12 A Okay. All right. I have 45 on my screen.

13 Q The last sentence of that paragraph, you
14 say: Another example shown below allows a user to
15 return to the wake screen from the home screen
16 using a parallel and opposite swipe gesture.

17 Now, this example wasn't in your first
18 declaration; is that right?

19 A That's correct, it wasn't in the first
20 one. This is another way that the combination of
21 Chae, Narendra, and Shuttleworth can combine to
22 meet -- let's see, this is a discussion. I'm just

1 scrolling up here. I believe it's a discussion of
2 claim 6. Yeah, it is claim 6.

3 So this is another combination that also
4 meets claim 6. It's really just responding to, I
5 believe, Dr. Coburn's criticism that a
6 perpendicular swipe is required, which, (A), is
7 incorrect. The claim does not require a
8 perpendicular swipe. They just talk about in a
9 different direction and, (B), just showing a way
10 in which the combination can be done with using a
11 parallel and opposite swipe direction or swipe
12 gesture.

13 Q You didn't feel like you needed to provide
14 this example in your first declaration?

15 A There's many, many examples. The claims
16 are not so specific that it says -- like imagine
17 claim 1 saying swipe from left to right to get
18 from the wake to the home, and then swipe from
19 right to left to get from the wake to the widget.
20 It doesn't -- it's not so specific. It just says
21 "and swipe in a different direction."

22 So one could come up with multiple

1 examples that meet claim 1, and in order to -- or
2 any of the claims. So no, I did not feel that it
3 was necessary or appropriate to go through the
4 time to figure out all of the various combinations
5 of swipe directions that would meet claim 1 or
6 claim 3, 4, 5, 6, et cetera.

7 It's -- I'm showing here that you could
8 see there are multiple ways. I never implied in
9 the first declaration that there is only one. And
10 you can -- a POSITA could easily use the
11 teachings, the base teachings of Chae plus the
12 teachings of Narendra and Shuttleworth to come up
13 with a variety of ways, a variety of swipe
14 directions to navigate to. Essentially there's
15 just four swipe directions that we're discussing
16 here, and there's essentially just four screens
17 that we're discussing here: home, wake, widget,
18 and control panel.

19 And because the claims are not so specific
20 in requiring a specific swipe direction, they just
21 talk about either the same swipe direction, a
22 different swipe direction, or an opposite swipe

1 direction. There's leeway, if you will. There's
2 multiple solutions that would be well within the
3 knowledge of a POSITA to, you know, to implement.
4 And as I show here, here's a different example
5 that also implements claim 6 to, (A), show that a
6 perpendicular swipe direction is not required
7 which -- and also to show that if you want
8 parallel and opposite, fine, look at this one.
9 This also is the same as claim 6 but is parallel
10 and opposite.

11 Q Okay. Dr. Rosenberg, did you speak with
12 anyone regarding the substance of your testimony
13 at any time today after you were sworn in by the
14 court reporter?

15 A I did not.

16 MS. LEUNG: I have no other questions
17 right now.

18 MR. CANNON: I have a few questions, and
19 I'll go right into them.

20 //

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22 //

1 REDIRECT EXAMINATION

2 BY MR. CANNON:

3 Q Dr. Rosenberg, do you remember being asked
4 a few questions about haptic feedback and tactile
5 outputs?

6 A I remember that.

7 Q You went -- you were directed to look
8 through portions of the Dascola publication to
9 find references to those -- to those features; is
10 that right?

11 A I recall that.

12 Q Now, during that cross-examination by
13 Apple's counsel, were you asked to do any analysis
14 of what a person of ordinary skill in the art
15 would have known about a haptic feedback by way of
16 background knowledge?

17 A I was not asked that.

18 Q And were you asked any questions about the
19 person of ordinary skill in the art's background
20 knowledge about tactile outputs?

21 A No, I was not asked that either.

22 Q And would a person of ordinary skill in

1 the art have some background knowledge about
2 haptic feedback and tactile outputs?

3 A They would, yes.

4 Q And during the cross-examination, were you
5 asked to do any analysis of what Dascola would
6 have suggested to a POSITA about haptic feedback
7 in view of the POSITA's background knowledge?

8 A No, I was not asked those questions.

9 Q And were you asked to do any analysis of
10 what Dascola would have suggested to a POSITA
11 about tactile outputs in view of the POSITA's
12 background knowledge?

13 A No, I was not asked that either.

14 Q And were you asked any questions about
15 whether a person of ordinary skill in the art,
16 with their background knowledge would have the
17 ability to program tactile feedbacks or, sorry,
18 haptic feedback or tactile output?

19 A No, I was not asked that.

20 Q If those issues were raised in this
21 proceeding, would you, if given sufficient time,
22 have the ability to do an analysis to respond to

1 any allegations about the ability of a person of
2 ordinary skill in the art to implement tactile
3 feedback and -- sorry, haptic feedback and tactile
4 outputs?

5 A Yes, I would be able to perform that
6 analysis.

7 Q Do you recall being asked about Dascola's
8 discussion of a screen-off state and a screen-on
9 state?

10 A I do.

11 Q Would a person of ordinary skill in the
12 art have background knowledge outside of Dascola
13 regarding screen-on and screen-off states?

14 A Absolutely, yes.

15 Q And in the cross-examination, were you
16 asked to assess what Dascola suggests about
17 screen-on and screen-off states in view of the
18 POSITA's background knowledge?

19 A No, I was not asked that.

20 Q And were you asked to assess what a POSITA
21 would have known about how to implement a
22 screen-on and screen-off state in view of Dascola

1 and the POSITA's background knowledge?

2 A No.

3 Q If issues related to whether a POSITA
4 would be able to do that came up in this case,
5 would you be able to do such analysis if given
6 sufficient time?

7 A I would.

8 Q You were -- do you recall being asked a
9 question about the '352 patent and whether -- and
10 the types of screens that were required by the
11 claims of the '352 patent?

12 A I do.

13 Q And I believe one of the questions was
14 phrased as screens required across all claims, and
15 I just want to clarify.

16 Are all of the screens that you
17 identified, I believe you identified four,
18 required in every one of the claims?

19 A No, they're not.

20 That's why I think I asked the clarifying
21 question, are we talking about across all of the
22 claims? And Ms. Leung said yes. So I would --

1 added them up, if you will.

2 But no, in any given claim, they're
3 typically a subset.

4 Q Do you recall being asked a series of
5 questions about the figures in Chae and whether
6 they -- whether they were the various screens,
7 wake screen, home screen, et cetera in the '352
8 patent?

9 A Yes, I do recall that line of questioning.

10 Q And did you -- did you do an analysis
11 in your original declaration mapping various
12 figures of Chae to the screens claimed in the '352
13 patent?

14 A I did, yes.

15 Q And was your analysis in the original
16 declaration accurate?

17 A Yes, it was.

18 Q And was there anything that came up in the
19 deposition today that would cause you to change
20 your mapping of the screens displayed -- or
21 disclosed in Chae with the screens claimed in the
22 '352 patent?

1 A No, there's not.

2 MR. CANNON: No further questions.

3 MS. LEUNG: I have no other questions.

4 (Witness excused, 11:27 a.m. Pacific.)

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C E R T I F I C A T E

I, RACHEL F. GARD, RPR, CCR, CRR, CSR No. 084-3324, No. 9315, No. 1010, a Certified Shorthand Reporter in and for the States of Illinois, Michigan, Nevada at large, do hereby certify that CRAIG ROSENBERG, PH.D., the deponent herein, was previously duly sworn to tell the truth, the whole truth, and nothing but the truth in the aforementioned matter;

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2 12860 El Camino Real, Suite 400
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