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

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

)

DEPOSITION OF ANDREW COCKBURN, PH.D.

March 1, 2024
7:02 p.m. European Time

Reported by: Lori J. Goodin, RPR, CLR, CRR,
RSA, California CSR #13959

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1 INDEX TO EXAMINATION

2 WITNESS: ANDREW COCKBURN, PH.D.

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4 MR. CANNON 4

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6 INDEX TO EXHIBITS

7

8 PREVIOUSLY MARKED EXHIBITS

9 PRIOR MARKED EXHIBITS FIRST REFERRAL

10 Masimo Exhibit 1001 12

11 Masimo Exhibit 1005 45

12 Masimo Exhibit 1010 103

13 Apple Exhibit 2003 8

14

15 (Newly marked exhibits retained by reporter.

16 Previously marked exhibits retained by counsel.)

17

18

19

20

21

22

1 FRIDAY, MARCH 1, 2024, 7:02 p.m.

2 PROCEEDINGS

3 * * *

4

5 THE REPORTER: Unless an objection
6 is heard at this time, all parties to this
7 deposition are appearing remotely and have
8 agreed to the witness being sworn in
9 remotely.

10 * * *

11 Whereupon,

12 ANDREW COCKBURN, PH.D.,

13 a witness called for examination, having been
14 first duly sworn, was examined and testified as
15 follows:

16 * * *

17 EXAMINATION

18 BY MR. CANNON:

19 Q. Good morning, Dr. Cockburn.

20 A. Good morning. It is actually
21 pronounced Co-burn, but that is okay.

22 Q. Okay. I am Ted Cannon. I will be

1 asking you a few questions today. Please state
2 your name for the record.

3 A. Andrew Jeremy Gavin Cockburn.

4 Q. Do you understand that you are under
5 oath as if testifying in court?

6 A. Yes, I do.

7 Q. Have you ever been deposed before?

8 A. Yes, I have.

9 Q. How many times?

10 A. Approximately seven.

11 Q. Have those been in patent cases?

12 A. Yes.

13 Q. Have you testified at trial?

14 A. Yes.

15 Q. How many times?

16 A. Four times in various jurisdictions.

17 I think it is four. I might be off by one.

18 Q. And, have those also been in patent
19 cases?

20 A. Yes.

21 Q. This deposition is being transcribed
22 by a court reporter. So, we should avoid talking

1 over each other.

2 Will you wait for me to finish my
3 questions before you start your answers?

4 A. I will.

5 Q. Will you let me know if you don't
6 understand a question?

7 A. Yes.

8 Q. Do you understand that you need to
9 give audible answers?

10 A. I do.

11 Q. Your attorney may make objections.
12 Do you understand you still need to answer my
13 question unless your attorney instructs you not
14 to answer?

15 A. I do.

16 Q. We will periodically take breaks.
17 If you need a break, feel free to ask for one.

18 If a question is pending, however, I
19 would ask that you answer the question before
20 asking for a break. Is that okay?

21 A. That is good.

22 Q. Is there any reason, such as illness

1 or medications, that would prevent you from
2 giving truthful testimony today?

3 A. No.

4 Q. Are you aware that Apple has sued
5 Masimo alleging infringement of the '352 patent
6 in the U.S. District Court for the District of
7 Delaware?

8 A. Yes.

9 Q. Have you reviewed any documents
10 related to the Delaware lawsuit?

11 A. I am unclear what you mean by
12 related. I know that IPR proceedings can feature
13 in federal district cases.

14 So, I have reviewed cases related to
15 the IPR, but not beyond that.

16 Q. Have you reviewed the Complaint in
17 the Delaware lawsuit?

18 A. No.

19 Q. Have you reviewed any papers filed
20 in the Delaware lawsuit?

21 A. I don't know what papers have been
22 filed in the Delaware lawsuit. I assume the

1 patent would have been, and I have certainly
2 reviewed the '352 patent.

3 Q. But, have you seen any papers that
4 have a caption indicating the Delaware lawsuit on
5 them?

6 A. Not that I am aware of.

7 Q. Have you talked to anyone at Apple
8 in connection with this IPR?

9 A. I have talked to Apple's external
10 counsel, but nobody who works for Apple that I am
11 aware of.

12 Q. And so -- and that would include the
13 inventor, William Tyler?

14 A. I have never spoken to William
15 Tyler, that I am aware of.

16 (Whereupon, previously marked
17 Apple Exhibit 2003,
18 first referral.)

19 BY MR. CANNON:

20 Q. Let's turn to the exhibit that has
21 been previously marked as Apple 2003.

22 THE DOCUMENT TECHNICIAN: 2003? I

1 do not have anything in the 2000's.

2 MR. CANNON: Okay. There should be
3 one that starts with Apple.

4 THE DOCUMENT TECHNICIAN: Oh, I do
5 have that one. My apologies. One moment.

6 BY MR. CANNON:

7 Q. Do you recognize this document?

8 A. Yes, I do.

9 Q. And is this the declaration that you
10 signed in this IPR?

11 A. This cover sheet certainly is. I
12 assume the rest of the document continues as my
13 declaration.

14 Q. And I believe there is an ability to
15 access the full document if you would like to do
16 that.

17 Before we get into this document, do
18 you have any -- do you have any paper documents
19 in front of you or with you?

20 A. No, I do not.

21 Q. Do you have any electronic versions
22 of the documents locally stored?

1 A. Yes.

2 Q. And, are they unmarked?

3 A. No, they are marked. So, I can
4 clean them within seconds if I need to.

5 Q. So, within this deposition, will you
6 agree not to look at any marked documents?

7 A. I agree.

8 Q. Let's go to Paragraph 16 of your
9 declaration.

10 A. I think you said that I would have a
11 version available to me through the Cockburn
12 marked exhibits folder that you -- that I
13 received by e-mail.

14 And I don't see the document at the
15 moment in there.

16 Q. Okay.

17 THE DOCUMENT TECHNICIAN: You will
18 need to hit refresh on your browser.

19 THE WITNESS: Okay.

20 BY MR. CANNON:

21 Q. Okay. Let me know when you have
22 that accessible to you.

1 A. I have it now. Thank you.

2 Q. Okay. So, turning to Paragraph 16,
3 this paragraph lists materials that you indicate
4 you reviewed and are familiar with; is that
5 correct?

6 A. That is correct.

7 Q. Does Paragraph 16 include all of the
8 materials that you considered in forming your
9 opinions in this IPR?

10 A. Yes.

11 Q. Did you consider the Board's
12 decision to institute the IPR?

13 A. I am unaware of having seen that
14 decision.

15 Q. Let's go to Paragraph 21 of your
16 declaration.

17 A. I am there. Thank you.

18 Q. Sorry. This paragraph sets forth
19 your understanding of what a POSITA in the field
20 of the '352 patent would be. Correct?

21 A. That is correct.

22 Q. What is the field of the '352

1 patent?

2 A. I describe the '352 patent in the
3 following paragraphs, "The '352 patent is related
4 to user interfaces and associated processes that
5 may be implemented on an electronic device, such
6 as a portable multifunction device."

7 And I carry on from there.

8 Q. Is the field limited to any
9 particular kind of electronic device?

10 A. Could I see the patent itself,
11 please?

12 Q. Yes, that would be Exhibit 1001.

13 MR. CANNON: If you would make that
14 available to him, please.

15 (Whereupon, previously marked
16 Masimo Exhibit 1001,
17 first referral.)

18 THE DOCUMENT TECHNICIAN: And again,
19 Doctor, you will need to hit refresh every
20 time a new exhibit is introduced.

21 THE WITNESS: The sentence I just
22 read describes the field -- portable,

1 multifunction devices with a display and a
2 touch-sensitive surface.

3 BY MR. CANNON:

4 Q. And is it limited to, for example,
5 smartphones?

6 A. No, I would not understand it to be
7 limited to smartphones. There are other forms of
8 portable multifunction devices with touchscreens
9 beyond smartphones.

10 Q. How did you arrive at your
11 definition of a POSITA?

12 A. Based on the factors that I have
13 described above in Paragraphs 20 and the relevant
14 field described in the '352 patent, this seemed
15 an appropriate definition of a POSITA.

16 Q. Would the field include design of
17 graphical user interfaces?

18 A. Yes, I believe it does.

19 Q. Does designing graphical user
20 interfaces require creativity?

21 A. Certainly some graphical user
22 interfaces require creativity, the design of

1 them, yes.

2 Q. And why is that?

3 A. I teach extensive courses in human
4 computer interaction at the University of
5 Canterbury, and there are -- the problems the
6 designers address can be in certain circumstances
7 substantially underdetermined.

8 And the designer needs to inject
9 creativity in order to derive user interfaces
10 that are satisfactory to the user, efficient to
11 complete their tasks, and easily learnable.

12 Q. Let's turn to Paragraph 22 of your
13 declaration.

14 A. I am there, thanks.

15 Q. And the -- I believe it is the
16 second sentence begins, "As described in the '352
17 patent, when the display has transitioned from a
18 screen off state to a screen on state, wake
19 screen user interface 504 is displayed."

20 Do you see that sentence?

21 A. I do.

22 Q. What is a wake screen?

1 A. In the context of the '352 patent, I
2 think that is laid out in Claim 1.

3 Q. Okay. What does Claim 1 say about a
4 wake screen?

5 A. I will just need to switch to the
6 patent itself, if I may.

7 Q. That is fine.

8 MR. CANNON: Actually, can you bring
9 up Claim 1 of the '352 patent?

10 THE DOCUMENT TECHNICIAN: Sorry. I
11 am not seeing where it is at.

12 MR. CANNON: It should be in the --
13 there is the end of it.

14 THE DOCUMENT TECHNICIAN: There we
15 go.

16 BY MR. CANNON:

17 Q. There is the start, now.

18 A. In the context of '352 patent, a
19 wake screen user interface is a screen-based
20 interface that is displayed when display waking
21 criteria are satisfied.

22 Q. What is a screen-based interface?

1 A. In the case of a wake screen
2 interface, it is a interface that is displayed
3 when the waking -- when the display waking
4 criteria are met.

5 Q. Okay. Is there any other
6 requirement than being a screen that is displayed
7 when the display waking criteria are met for the
8 wake screen?

9 A. Yes, there were various other
10 limitations that address properties of the wake
11 screen such as when it can be transitioned to.

12 Q. And so -- and those are limitations
13 about when one can go to the wake screen or leave
14 the wake screen; is that right?

15 A. That is fair across the various
16 claims, yes.

17 Q. Are there any -- is there any
18 limitation on what kind of content needs to be
19 displayed on the wake screen?

20 A. Not that is stipulated within the
21 claims themselves, no.

22 Q. Did wake screens exist before

1 the '352 patent?

2 A. In certain contexts there were wake
3 screens on mobile devices but not wake screens
4 that met the limitations specified in the '352
5 patent.

6 Q. And was -- for example, did iPhones
7 prior to the '352 patent have a screen that one
8 would arrive at upon meeting display waking
9 criteria?

10 A. I think we are stepping outside
11 the '352 patent. There were things that were
12 referred to as wake screen interfaces on earlier
13 versions of the iPhone, but not ones that would
14 meet the limitations of this claim -- of these
15 claims.

16 Q. And, did phones prior to the '352
17 patent have the ability to go into sleep mode?

18 A. Sleep modes on certain devices were
19 certainly known prior to the '352 patent.

20 Q. And could phones wake up from those
21 sleep modes prior to the '352 patent?

22 A. I think that is the same answer.

1 Sleep modes were certainly known on certain
2 devices prior to the '352 patent.

3 Q. And when the user woke up their
4 phone prior to the '352 patent, would the phone
5 typically go to a -- to some kind of screen?

6 A. I think this is a hypothetical. But
7 transitioning from a sleep state to a display
8 state -- display on start was certainly known.

9 Q. And so Mr. Tyler didn't invent
10 transitioning from a sleep state to a wake state,
11 correct?

12 A. The claims aren't directed to
13 transitioning from a sleep state to a nonsleep
14 state. They are much more specific and have
15 further limitations.

16 And wake screen has a variety of
17 properties as specified by the '352 patent.

18 Q. Was the ability to transition from a
19 sleep state to a wake state common in smartphones
20 before the '352 patent?

21 A. Can you repeat the question, please?

22 Q. Sure. Was the ability to transition

1 from a sleep state to a wake state common in
2 smartphones before the '352 patent?

3 A. Some form of -- yes, that
4 functionality was known. Some form of a wake
5 display was certainly known. These are not the
6 wake screen states provided by the -- or the wake
7 screen user interfaces described by the '352
8 patent.

9 Q. Okay. Let's go to Paragraph 24 of
10 your declaration.

11 A. I am there, thanks.

12 Q. Okay. The first sentence says,
13 "The '352 patent describes an example of home
14 screen user interface 522 as a user interface for
15 a menu of applications."

16 Do you see that sentence?

17 A. Yes, I do.

18 Q. What is a home screen user
19 interface?

20 A. I provide a depiction of it in the
21 figure that follows, on the top of 5 -- sorry,
22 Page 13, Figure 5H, from the '352 patent.

1 Q. And in relation to that figure,
2 what, what characterizes a home screen user
3 interface?

4 A. Again, I would return to the -- to
5 Claim 1 of the '352 patent and identify the
6 required limitations there.

7 MR. CANNON: Okay. Can we pull that
8 claim up again and look at the portion that
9 refers to home screen user interface?

10 This is going to be on the next
11 page.

12 BY MR. CANNON:

13 Q. In your view, is a home screen user
14 interface any user interface that includes a
15 plurality of application icons corresponding to
16 applications and wherein an application icon of
17 the plurality of application icons when selected
18 causes a display of the application corresponding
19 to the respective application icon?

20 A. Not necessarily. There are further
21 limitations for the transitioning to the home
22 screen user interface as articulated in other

1 claims.

2 Q. Well, let's explore that a little
3 bit.

4 Are you saying that if you use a
5 different transition than what is described in
6 the patent to get to a screen, that the patent
7 calls a home screen, that the screen is therefore
8 not a home screen?

9 A. No. There are further limitations
10 such as at Line 18 that we see here, where the
11 widget screen user interface must be different to
12 the home screen user interface.

13 If you had an assertion that
14 something was a widget screen user interface that
15 was identical to a home screen user interface,
16 then that assertion would not be correct, because
17 it is required -- those two are required to be
18 different.

19 Q. Okay. So, let me give an example
20 here.

21 If I had a phone that had a user
22 interface that included the plurality of

1 application icons and the long phrase shown at
2 about Line 5, and in addition was different from
3 a widget screen, but I accessed it by pushing a
4 button, would that be a home screen?

5 A. I think this is an incomplete
6 hypothetical. Are you asserting that there would
7 be no other way other than the button to
8 transition between the interfaces?

9 Q. Yes, let's go with that. Assume
10 that the only way to get to this screen is by a
11 button. Does that mean it cannot be a home
12 screen?

13 A. Again, I think it is an incomplete
14 hypothetical. It is very difficult to respond to
15 without seeing this particular hypothetical
16 device in it, in existence, and being able to
17 analyze it completely.

18 Q. Let me ask it this way, is the need
19 to press a button to get to a screen relevant to
20 determining whether that screen is a home screen?

21 A. Again, I think this is a
22 hypothetical. I haven't had the opportunity to

1 analyze any device that has this functionality
2 that you are proposing.

3 Q. Are you, would you -- are you able
4 to answer the question in reference to the claim
5 language?

6 A. Same answer.

7 Q. But just to be clear, you are saying
8 that the claim language does not provide you
9 enough information to tell me whether the need to
10 press a button is relevant to whether something
11 is a home screen?

12 A. No. I'm saying that the
13 hypothetical you are proposing is incomplete.

14 Q. And I understand the concept of
15 complete and incomplete hypotheticals.

16 I'm asking, does the claim language
17 provide you enough information to tell me whether
18 the need to press a button is a relevant aspect
19 of whether something is a home screen?

20 A. You are asking me -- my problem
21 isn't with the claim language. My problem is
22 with a proposed hypothetical with a device that I

1 have not seen that uses a button to transition to
2 a particular user interface screen.

3 And, I'm uncomfortable analyzing any
4 hypothetical that I cannot see.

5 Q. Does -- would a person of ordinary
6 skill in the art have an understanding of what a
7 home screen is?

8 A. Home screens can be many things, but
9 in the context of the '352 patent, it is a
10 specific screen within a set of screens that is
11 transitioned to in certain ways.

12 Q. Did the iPhone -- did any phones
13 prior to the '352 patent have a home screen?

14 A. Yes, they had a home screen but not
15 a home screen user interface as described by the
16 '352 patent.

17 Q. And what was the difference that
18 caused the screen that the iPhone called a home
19 screen to not be a home screen in the context of
20 the '352 patent?

21 A. I haven't conducted that full
22 analysis. I could do so, but it would require

1 time to do so.

2 The prior versions of the iPhone
3 would not have met the limitations of this claim.

4 Q. And you have enough information to
5 reach that conclusion that prior iPhones did not
6 have home screens, correct?

7 A. I have familiarity with many
8 versions of the iPhone since 2000 -- well, since
9 the mid-2000's, anyway.

10 And I am confident that they do not
11 meet the limitations of this claim, unlike a
12 hypothetical that I have never seen that I can't
13 confidently recall.

14 Q. And so, what information do you know
15 that allows you to be confident that prior
16 versions of the iPhone did not have a home screen
17 as claimed by the '352 patent?

18 A. The '352 patent describes the home
19 screen as one of a suite of several screen-based
20 interfaces that the user can transition between.

21 And not all of those screen-based
22 user interfaces were present in versions of the

1 iPhone.

2 Q. Which screens were not present in
3 the previous versions of the iPhone?

4 A. I would want to conduct a full
5 analysis to be confident in my answer -- to be
6 completely confident in my answer here. And I
7 haven't conducted that analysis. I would need
8 time to do so.

9 Q. Well, you have made the conclusion.
10 You said it right here on the record.

11 So, could you give me one screen
12 that provides a basis for saying that the
13 previous versions of the iPhone don't have the
14 same suite of screens as required by the '352
15 patent?

16 A. I know that the first version of the
17 iPhone that I had did not include at least a
18 screen that would meet the limitations of a
19 widget screen user interface.

20 Q. And is it your testimony that if you
21 don't have a widget screen user interface, you
22 cannot have a home screen user interface?

1 A. You certainly can't meet the
2 limitations of the claim.

3 Q. Okay. And so, that would be a great
4 answer if I asked you if you could meet the
5 limitations of the claim.

6 I'm asking, would you -- can you
7 have a home screen user interface without having
8 a widget screen user interface?

9 A. Again, this is a hypothetical. The
10 home screen user interface must be different to
11 the wake screen user interface and it must be
12 different to the widget screen user interface in
13 order to meet the limitations of the claim.

14 Q. Did home screens exist long before
15 the '352 patent?

16 A. Phones with home screens existed
17 prior to the '352 patent, not home screens that
18 meet the limitations of this claims.

19 Q. Did Mr. Tyler invent home screens?

20 A. I don't know who invented home
21 screens, the original home screen or the first
22 user interface that demonstrated a home screen

1 user interface.

2 Q. And why do you not know who invented
3 the first user interface that had a home screen?

4 A. Because I haven't conducted a
5 historical analysis of the first home screen user
6 interface.

7 Q. But it was someone before Mr. Tyler,
8 right?

9 A. Not necessarily. Mr. Tyler is an
10 Apple employee. If Apple presented the first
11 home screen user interface, he could have been
12 the inventor. I simply haven't conducted that
13 analysis.

14 Q. If it was Mr. Tyler, it was before
15 the '352 patent, right?

16 A. We should be cautious about how we
17 are using the term, home screen, home screen user
18 interface.

19 There are a set of specific
20 requirements in the home screen user interfaces
21 in the context of the '352 patent.

22 Home screens had been demonstrated

1 on earlier devices, but they are home screens of
2 other forms.

3 Q. Were home screens common in
4 smartphones before the '352 patent?

5 A. Scores of home screens were common
6 on mobile devices before the '352 patent, yes.

7 Q. Okay. Let's look at the next
8 sentence still in Paragraph 24, where it starts
9 with, "The '352 patent further discloses that
10 many application user interface."

11 Do you see that sentence?

12 A. Yes.

13 Q. In your view is a mini application
14 user interface the same thing as a widget user
15 interface?

16 A. Yes, the '352 patent refers to a
17 mini application user interface as a widget user
18 interface.

19 So, I think it is -- the
20 specification treats the -- uses those two terms
21 to refer to the same thing.

22 Q. And are both of those terms that --

1 referring to the same thing as what the claims

2 call a widget screen user interface?

3 A. Can you repeat the question, please?

4 Q. Are both the mini application user
5 interface and the widget user interface the same
6 thing as what the claims call a widget screen
7 user interface?

8 A. The claim -- Claim 1 introduces a
9 very specific set of language in relationship to
10 the widget screen user interface.

11 We are looking at it there on
12 Line 16 of Column 87.

13 Q. Is -- are the descriptions in the
14 '352 patent referring to mini application user
15 interface and widget user interface examples of
16 the claimed widget screen user interface?

17 A. Yes, I believe so. On Page 13, I
18 include -- on my report, I include a figure from
19 the patent that shows an example of a widget
20 screen user interface.

21 Q. Now, both the home screen user
22 interface language and the widget screen user

1 interface language refer to applications.

2 Correct?

3 A. The home screen refers to
4 application icons and the widget screen language
5 refers to applications and application content
6 and application corresponding to user interface
7 objects.

8 So, the language is slightly
9 different.

10 Q. And what is an application?

11 A. Generally, in computer science, an
12 application is a piece of software that performs
13 a specific set of functions for the user.

14 Q. Were applications common in
15 smartphones before the '352 patent?

16 A. Yes.

17 Q. Were application icons well known
18 before the '352 patent?

19 A. Yes.

20 Q. And did smartphones before the '352
21 patent allow users to select an application icon
22 to display an application?

1 A. Yes.

2 Q. What is a widget screen user
3 interface?

4 A. In the context of the '352 patent,
5 that is laid out in Claim 1.

6 Q. Okay. What is a widget?

7 A. Can you be more specific?

8 Q. Well, when the patent -- '352 patent
9 talks about widgets, what does that mean?

10 A. Well, the claim refers to a widget
11 screen user interface that includes a plurality
12 of user interface objects corresponding to
13 different applications.

14 wherein the respective use interface
15 objects of the plurality of user interface
16 objects contains application content from an
17 application corresponding to the respective user
18 interface objects and when selected causes
19 display of an application corresponding to the
20 respective user interface object.

21 Q. And does that claim language tell
22 you what the word, widget, by itself means?

1 A. No, it is specifying what a widget
2 screen user interface contains.

3 Q. Would a person of ordinary skill in
4 the art know what the term, widget, meant before
5 the '352 patent?

6 A. The term, widget, has been used in
7 computer science and human computer interaction
8 since at least the mid-1980's.

9 Q. And was there an accepted meaning of
10 the word, widget, since the 1980's?

11 A. Broadly, yes. There was a -- there
12 was an understanding of what widgets were.
13 Accepted meanings sounds like there is an
14 accepted definition.

15 I don't -- I wouldn't say there was
16 an accepted definition, but there was certainly a
17 broad accepted meaning.

18 Q. And, what, what would -- what is
19 that broad accepted meaning?

20 A. In the 1980's and the 1990's and
21 today, one meaning of the word, widget, is a
22 graphical user interface object that is used in

1 the construction of graphical user interfaces.

2 That is one meaning of the word,
3 widget. It is not the meaning associated with
4 widget screen user interface in the '352 patent,
5 which has much more specific requirements for the
6 widget screen user interface.

7 Q. Prior to the '352 patent, was the
8 term, widget, used to describe objects that
9 display application content and when selected,
10 displayed an application associated with the
11 application -- or, sorry, with the widget?

12 A. Can you repeat the question, please?

13 Q. Sure. Prior to the '352 patent, was
14 the word, widget, used to describe an object that
15 displays application content and when selected
16 displays an application corresponding to the
17 widget?

18 A. Sorry. I'm going to need to hear
19 the question one more time. I apologize.

20 Q. Sure. Prior to the '352 patent, was
21 the word, widget, used to describe objects that
22 displayed application content and when selected

1 displayed an application corresponding to the
2 widget?

3 A. The earlier definition or meaning of
4 the word, widget, that I gave you a minute ago,
5 encompasses all graphical user interface objects
6 that can be displayed. So, user interfaces are
7 constructed from widget sets.

8 So, it would be legitimate to use
9 the term, widget, to describe an object such as
10 the one you just described.

11 I haven't seen a specific example of
12 that in the materials presented in this case.

13 Q. Have you seen an example of that
14 ever?

15 A. Well, in the '352 patent, yes.

16 Q. Are you aware of any usage of the
17 term, widget, prior to the '352 patent where a
18 widget had that meaning?

19 A. The '352 patent addresses the widget
20 screen user interface. That is the use of widget
21 that I'm concerned with here.

22 And I haven't seen prior art that

1 satisfies the limitations for a widget screen
2 user interface.

3 Q. Are you aware of anyone prior to the
4 '352 patent using the term, widget, in the manner
5 that the '352 patent does?

6 A. Well, the '352 patent uses the term,
7 widget, for a widget screen user interface that
8 has a specific set of requirements.

9 And I haven't seen prior art that
10 meets that limitation.

11 Q. And just to be clear, you are
12 talking about in your life you have never seen
13 that prior art. You are not talking about just
14 the universe that is in the petition, right?

15 A. Yes, that is fair.

16 Q. And you have never seen --

17 A. I haven't conducted the analysis --
18 sorry, I apologize. I don't know who spoke over
19 who there.

20 Q. You can continue.

21 A. No, I am finished.

22 Q. Okay. Have you ever seen any

1 document prior to the '352 patent that uses the
2 term, widget, to mean an object that contains
3 application content from an application
4 corresponding to the widget and that when it is
5 selected causes display of an application
6 corresponding to the widget?

7 A. My analysis here concerns the use of
8 widget in the '352 patent which is a widget
9 screen user interface.

10 And I haven't conducted an analysis
11 of all prior -- prior art beyond that which is
12 presented in the petition to assess whether there
13 is something that meets that limitation.

14 Q. All right. You are an expert on
15 user interfaces; is that right?

16 A. Yes.

17 Q. And you have seen examples of user
18 interfaces going back for decades, right?

19 A. Yes.

20 Q. And you have seen the interfaces in
21 earlier versions of the iPhone?

22 A. Yes.

1 Q. And, have you ever in those decades
2 seen something called a widget in those user
3 interfaces prior to the '352 patent that was an
4 object containing application content from an
5 application corresponding to the widget and when
6 selected causes display of an application
7 corresponding to the widget?

8 A. I didn't conduct that analysis for
9 this, for this case.

10 I can't say when I first saw -- or
11 if I first saw something that met that limitation
12 prior to the '352 patent.

13 Q. Did prior versions of the iPhone
14 have widgets meeting that definition?

15 A. I haven't conducted that analysis.

16 Q. Have you ever heard anyone use the
17 term, widget, in a way that meets that
18 definition?

19 A. The definition of the wake screen
20 user interface? No -- sorry. Sorry, I misspoke.

21 The definition of the widget screen
22 user interface, no, I have not.

1 Q. Is it your view that the '352 patent
2 is the first usage of the term, widget, under
3 that definition?

4 A. The definition that we are dealing
5 with here is the definition within Claim 1, the
6 widget screen user interface.

7 That has a very specific set of
8 limitations. And I haven't seen something that
9 meets those limitations prior to the '352 patent.

10 Q. And so let's zero in on the specific
11 language here. You keep kind of talking about
12 the limitations broadly.

13 I want to talk about this one
14 particular limitation.

15 Have you ever seen, prior to
16 the '352 patent, a user interface object that
17 contains application content from an application
18 corresponding to the respective user interface
19 object and when selected causes display of an
20 application corresponding to the respective user
21 interface object?

22 A. Have I ever seen it?

1 Q. Yes.

2 A. Yes, in the '352 patent.

3 Q. Have you ever seen anything like
4 that prior to the '352 patent?

5 A. I haven't conducted an analysis of
6 similarity. My analysis concerns the meeting of
7 limitations.

8 And I haven't seen those -- that
9 limitation being met.

10 Q. Are you aware of any product prior
11 to the '352 patent that had objects meeting that
12 definition?

13 A. No.

14 Q. Are you aware of -- you are aware of
15 previous versions of the iPhone?

16 A. Broadly speaking, yes. But I
17 haven't conducted the historical analysis of
18 various releases of iOS and how they may or may
19 not meet specific parts of these limitations --

20 Q. Okay.

21 A. -- specific parts of these claims.

22 Q. Okay. So, just to -- I want to be

1 just really clear about this.

2 Having knowledge of iPhones, let me
3 know if you can or cannot tell the Board whether
4 previous iPhone versions had user interface
5 objects containing application content from an
6 application corresponding to the respective user
7 interface object and when selected, causes
8 display of an application corresponding to the
9 respective user interface object?

10 A. I haven't --

11 MS. LEUNG: Objection to scope.
12 Objection to scope. Counsel, you have asked
13 many questions regarding the iPhone and those
14 questions are out of the scope of his
15 declaration. I will let it go --

16 MR. CANNON: It goes to the meaning
17 of widget.

18 THE WITNESS: I haven't conducted
19 that chronological analysis.

20 BY MR. CANNON:

21 Q. And sitting here today, knowing what
22 you know about iPhones, do you know the answer to

1 the question?

2 MS. LEUNG: Objection, scope.

3 THE WITNESS: Same answer. I
4 haven't conducted that chronological
5 analysis.

6 BY MR. CANNON:

7 Q. If I were to show you an iPhone that
8 had that, had that type of user interface object,
9 would you be surprised to see that it had it?

10 MS. LEUNG: Objection, scope.

11 THE WITNESS: Well, the question
12 referred to that. And I would like a
13 complete question so I know precisely what I
14 am answering.

15 BY MR. CANNON:

16 Q. Sure. If I were to show you a prior
17 iPhone that has user interface objects containing
18 application content from an application
19 corresponding to the respective user interface
20 object and when selected causes display of an
21 application corresponding to the respective user
22 interface object, would you be surprised?

1 MS. LEUNG: Objection, scope. And
2 vague.

3 THE WITNESS: Yes, that was an
4 incomplete reading of the subpart of the
5 limitation.

6 And I haven't conducted the
7 analysis. I don't know whether I would be
8 surprised or not.

9 BY MR. CANNON:

10 Q. Okay. Does the '352 patent describe
11 what a widget is?

12 A. It describes what a widget screen
13 user interface is.

14 Q. Using movements to navigate between
15 user interface screens was well known before
16 the '352 patent, correct?

17 A. Can you be more specific about,
18 regarding movement?

19 Q. Well, it is admittedly a general
20 term. It could include swipes. It could include
21 some other things.

22 But was there any -- prior to

1 the '352 patent, was it known to use any kind of
2 movements to navigate between user interface
3 screens?

4 A. Well, the scope of movement is
5 enormously broad. We could be referring to the
6 accelerometer-based input from a motion of the
7 device. We could be referring to the approach of
8 various input mechanisms to a touch screen.

9 It is too broad a question to really
10 make sense to respond to.

11 Q. Okay. Was using swipes to navigate
12 between user interface screens well known before
13 the '352 patent?

14 A. Yes. I think that is fair.
15 Gestural input and motion was well known.

16 Q. And that functionality existed on
17 iPhone before the '352 patent, correct?

18 MS. LEUNG: Objection, scope.

19 THE WITNESS: Yes, in various user
20 interface contexts there were -- there was an
21 ability to swipe between screens.

22 BY MR. CANNON:

1 Q. Was that functionality also on Apple
2 Watches prior to the '352 patent?

3 MS. LEUNG: Objection, scope.

4 THE WITNESS: I have provided no
5 opinions on Apple Watch devices.

6 BY MR. CANNON:

7 Q. iPhones were very common before
8 the '352 patent, right?

9 A. Yes.

10 Q. Let's go to Paragraph 27 of your
11 declaration.

12 And this portion starts talking
13 about the prior art reference called Chae. And
14 if you want to look at Chae, the exhibit is
15 Exhibit 1005.

16 MR. CANNON: If you could make that
17 available for him.

18 (Whereupon, previously marked
19 Masimo Exhibit 1005,
20 first referral.)

21 BY MR. CANNON:

22 Q. And for now I'm going to ask you a

1 question from Paragraph 27. But, but -- again,
2 you can look at Chae all you need to, to answer.

3 I'm looking at the portion of the
4 Paragraph 27 where you say, "For instance, a
5 controller 180 of the mobile terminal 100 unlocks
6 the first SIM (SIM1) when the directivity of the
7 line is from bottom to top and displays a home
8 screen customized to the first SIM (SIM1) on the
9 touch screen."

10 Do you see that sentence?

11 A. Yes, I do.

12 Q. Does Chae Figure 3 disclose
13 displaying a home screen customized to the first
14 SIM when a user swipes from bottom to top?

15 A. Yes, it includes that in boxes S250
16 and S260 of Chae's Figure 3.

17 Q. And the next sentence of the
18 declaration you quote another portion of Chae,
19 "When the user draws a line in a top to bottom
20 direction, the controller 180 unlocks the second
21 SIM (SIM2) at step S290 and displays a home
22 screen customized to the second SIM (SIM2) on the

1 touch screen."

2 Do you see that?

3 A. I do.

4 Q. Does Chae Figure 3 disclose
5 displaying a home screen customized to a second
6 SIM when a user swipes from top to bottom?

7 A. Yes.

8 Q. Is the customized home screen
9 customized to the second SIM different from the
10 customized home screen associated with the first
11 SIM?

12 A. Yes, Chae includes figures that show
13 different screens for the different SIMs.

14 Q. Does Chae disclose using a
15 directional swipe gesture to navigate to a user
16 interface screen and a different directional
17 swipe gesture to navigate to a different user
18 interface screen?

19 A. We just identified the bottom to top
20 swipe that goes to a home screen customized to a
21 first SIM, and a different direction gesture from
22 top to bottom that unlocks to a home screen

1 customized to a different SIM.

2 So, I think the answer to the
3 question is yes.

4 Q. Would a POSITA have understood Chae
5 to mean that a device must have multiple SIM
6 cards to allow a user to navigate between user
7 interface screens using swipe gestures?

8 A. Chae is directed at unlocking to a
9 plurality of user identification modules that are
10 provided by SIM cards.

11 So, Chae is limited to a plurality
12 of user identification modules.

13 Q. And so, and so you answered about
14 what Chae discloses. I'm asking what a POSITA
15 would have understood after reading Chae.

16 Would a POSITA have understood after
17 reading Chae that a device needs to have multiple
18 SIM cards in order to be able to allow the user
19 to navigate between user interface screens using
20 swipe gestures?

21 A. Chae's entire purpose is to allow
22 the user to unlock to one or both of multiple SIM

1 cards or identification modules.

2 Chae has no purpose if it only has
3 one SIM card; its entire direction is for use
4 with multiple SIM cards.

5 Q. Is it possible for a POSITA to
6 understand Chae's purpose and yet still
7 understand that one could navigate between user
8 interface screens using swipe gestures with a
9 single SIM card?

10 A. I think that is entirely outside
11 Chae's contemplation. Chae discloses the use of
12 directional swipe gestures to unlock to different
13 SIM cards or both SIM cards.

14 Those directional gestures have
15 absolutely no purpose if there is only one SIM
16 card.

17 Q. Would a POSITA have understood after
18 reading Chae that a device with a single SIM card
19 could be designed to allow a user to navigate
20 between user interface screens using swipe
21 gestures?

22 A. I think that is entirely outside the

1 contemplation of Chae, which is purely directed
2 at the purpose of unlocking to one or both of
3 multiple SIM cards.

4 As far as I am aware, it has no
5 contemplation, no analysis, no implication even
6 that there would be multiple home screens if they
7 were not for the purpose of unlocking to screens
8 associated with different user identification
9 modules or SIM cards.

10 Q. Would a POSITA reading Chae be able
11 to deduce that a device with a single SIM card
12 could be designed to allow a user to navigate
13 between user interface screens using swipe
14 gestures?

15 A. Any understanding that a POSITA had
16 associated with navigating between screens would
17 be entirely unconnected with the disclosure of
18 Chae.

19 Chae's purpose and its sole use for
20 directional gestures is to unlock to multiple --
21 to one or both of multiple SIM cards.

22 Q. Are you suggesting that it would not

1 have even occurred to a POSITA that you could
2 navigate to different screens using swipe
3 gestures unless you used the multi SIM card
4 architecture of Chae?

5 A. I think even stronger than that, a
6 POSITA would have been strongly disincentivized
7 from contemplating the use of directional
8 gestures for any purpose other than unlocking to
9 multiple SIMs -- one or both of multiple SIMs --
10 because there would be overloading the meaning of
11 those gestures if they were used to navigate
12 between different home screens.

13 The gestures disclosed in Chae are
14 used for opening, unlocking to one or both of
15 multiple SIM cards.

16 To then use directional gestures for
17 an entirely different purpose would be
18 antithetical to the objectives of the POSITA in
19 creating an easy-to-use user interface.

20 Q. So, the gesture does two things,
21 right? It unlocks the SIM card and then it
22 displays a home screen associated with the SIM

1 card, right?

2 A. I can check if you would like. It
3 will take some time.

4 But my recollection is that Chae
5 explicitly discloses that the unlocking step and
6 the display steps can be a single step.

7 Now, I can do that check if you
8 would like right now. But my recollection is
9 that it explicitly discloses that possibility.

10 Q. Okay. Let's look at Figure 3 of
11 Chae, of Exhibit 1005, which is up right now.

12 Do you see on Figure 3 the
13 steps S250, S270 and S290?

14 A. I do.

15 Q. And those are the unlock steps,
16 right?

17 A. Yes.

18 Q. And then do you see the steps 2 --
19 S260, S280, S300?

20 A. Yes.

21 Q. And those are the display home
22 screen steps, right?

1 A. That is right.

2 Q. And on Figure 3, the -- there is two
3 separate steps: one is unlock and then the
4 second one is display the home screen, right?

5 A. That is how it is depicted in
6 Figure 3.

7 Again, my recollection is that Chae
8 explicitly states that these two steps, such
9 as S250 and S260, can be a single step.

10 I can confirm that recollection if
11 you like, if I am given time to inspect Chae.

12 Q. Sure. And I'm, I'm -- you
13 understand that a person of ordinary skill in the
14 art would read a reference as disclosing
15 everything that is disclosed within the
16 reference, right?

17 A. Yes.

18 Q. So, whether the reference says it
19 can be a single step, the reference also says it
20 can be two steps, right?

21 A. That is fair.

22 Q. And wouldn't it be obvious to a

1 person of ordinary skill in the art that if you
2 can do two steps associated with a swipe gesture,
3 you can also do just one of those steps
4 associated with a swipe gesture?

5 A. Well, this is highly contextual. It
6 is certainly within the bounds of possibility
7 depending on exactly the nature of the steps we
8 are contemplating here.

9 Q. But a person of skill in the art
10 would have been able to see from this figure that
11 you could do a swipe and just simply unlock the
12 SIM and stop it at -- for example, at S250
13 without going on to the display step. Right?

14 A. I don't understand why a POSITA
15 would infer that. A POSITA would certainly,
16 looking at this figure, would want to understand
17 if the device stalls at S250, what is it supposed
18 to do subsequent to that.

19 The flow chart provides no
20 indication that the device will terminate in the
21 unlock -- in the SIM unlock state and provide no
22 subsequent functionality.

1 Q. And you don't think a person of
2 ordinary skill in the art could deduce that you
3 could unlock a SIM and then leave it to further
4 action to do something else with that SIM?

5 A. I don't understand this
6 hypothetical. If -- I understand you are saying,
7 you are suggesting that a person of skill in the
8 art would understand the bottom to top gesture
9 would transition to box S250, unlock the SIM, and
10 then do some nebulous subsequent activity that
11 doesn't involve displaying a home screen.

12 I don't understand the hypothetical
13 you are proposing.

14 Q. Would a person of ordinary skill in
15 the art understand that if a SIM is already
16 unlocked, that you can skip the unlock step and
17 go directly to the display step?

18 A. I -- again, I don't understand what
19 we are getting at, because Box 250 here says,
20 "Display home screen customized to unlock SIM 1."

21 That box explicitly includes the
22 notion of unlocking.

1 So, how we've got to -- it is a
2 hypothetical that I simply don't follow.

3 Q. Well, I think it actually
4 discloses -- it talks about a SIM that is already
5 unlocked.

6 If you already had -- if a SIM was
7 already unlocked couldn't you skip the unlock
8 step and still perform step S260 exactly as it is
9 written in Figure 3?

10 A. Could you point me to the section of
11 Chae that discloses this?

12 Q. I believe it is paragraphs -- let's
13 see. I think that it starts roughly at around
14 Paragraph 101. Talking about Figure 3.

15 A. Is there a pending question?

16 Q. So, I believe the question was if
17 the device -- if the SIM card is already
18 unlocked, wouldn't you be able to skip the unlock
19 step and go directly to the display step?

20 A. Could you repeat the question,
21 please?

22 Q. Sure. And let me refer specifically

1 to one of the branches of Figure 3 to make it
2 more concrete.

3 If the SIM1 was already unlocked,
4 and a person swiped from bottom to top, wouldn't
5 it be obvious that you could skip the step S250
6 of unlocking the SIM, and go directly to the
7 step S260 of displaying the home screen customize
8 to the unlocked SIM1?

9 A. And can you point me to the segment
10 of Chae that you believe discloses this?

11 Q. I'm asking you what would have been
12 obvious to a person of ordinary skill in the art.

13 A. The -- a person of ordinary skill in
14 the art reading Chae would see that its purpose
15 is to unlock the SIM to one or both of multiple
16 identification modules.

17 And the flow chart explicitly states
18 that those -- that unlocking is part of the
19 process as a result of the bottom to top or top
20 to bottom or left to right gestures.

21 Q. Would a person of ordinary skill in
22 the art understand that there would be situations

1 where a SIM is already unlocked?

2 A. Not reading Chae. Chae is
3 explicitly directed to that process of unlocking
4 the SIM and displaying a home screen that is
5 customized to the SIM.

6 That is Chae's purpose and meaning.

7 A person of skill in the art would
8 not read Chae and throw away a core part of its
9 purpose. I don't understand why they would do
10 that.

11 That is the reason for looking to
12 Chae, to resolve the problem of unlocking to one
13 or both of multiple SIMs.

14 Q. A person of ordinary skill in the
15 art is a person of ordinary creativity as well,
16 right?

17 A. Yes.

18 Q. And a person of ordinary skill in
19 the art isn't going to discard their knowledge
20 that a SIM card might already be unlocked, right?

21 A. Well, a person of skill in the art
22 is looking to Chae for a solution to a particular

1 problem.

2 And Chae discloses explicitly a
3 process based on 1 of 3 directional gestures and
4 other exemplars to unlock the SIM card to one or
5 both of multiple SIMs.

6 That is the entirety of Chae's
7 purpose.

8 Q. Well, it is to unlock a display,
9 right --

10 A. Sorry, I hadn't finished.

11 Q. I'm sorry.

12 A. The person of skill in the art would
13 not look to Chae and immediately discard its
14 purpose.

15 I don't understand why a person of
16 skill in the art would be looking to Chae at all
17 if they are not interested in unlocking to one or
18 both of multiple SIM cards.

19 Q. Would you agree that it actually has
20 a two-part purpose, one is to unlock and the
21 second part is to display the home screen?

22 A. That seems fair.

1 Q. And if a person of skill in the art
2 confronts a situation where the SIM card is
3 already unlocked, wouldn't it be obvious to them
4 to say you know what, the first part of that
5 problem has already been solved, all I need to do
6 is display the SIM card -- sorry, the screen
7 associated with the SIM card?

8 A. I entirely disagree that a person of
9 skill in the art would be looking to Chae for
10 that purpose.

11 If we look at the entirety of
12 Figure 3, it starts with waking up the mobile
13 terminal.

14 Now, I can't see why a person of
15 skill in the art would understand or contemplate
16 the possibility that the SIM is already unlocked,
17 given that the device has just been woken.

18 So, the purpose and meaning of Chae
19 is entirely directed to this process of unlocking
20 the, one or both of multiple SIM cards. That is
21 the extent and purpose of Chae.

22 MS. LEUNG: Mr. Cannon, we have been

1 going for about an hour and 20 minutes. So,
2 whenever you get a chance, it would be nice
3 to have a little break.

4 MR. CANNON: Now is fine. Should we
5 go off the record?

6 (Recess taken -- 8:20 p.m.)

7 (After recess -- 8:26 p.m.)

8 BY MR. CANNON:

9 Q. Dr. Cockburn, did you talk to anyone
10 about the substance of your testimony during the
11 break?

12 A. No.

13 Q. Let's go to Paragraph 29 of your
14 declaration. And let's look at the portion that
15 is on Page 17 where it shows two figures,
16 Figures 3 and 4 of Narendra. Do you see those
17 figures?

18 A. Yes, I do.

19 Q. Do Narendra's Figures 3 and 4
20 disclose using directional swipe gestures to
21 navigate between different user interface
22 screens?

1 A. Yes, they describe those desktop
2 screens, some of which are password protected and
3 some of which are not.

4 Q. Does Narendra Figure 4 disclose
5 using up and down swipe gestures to navigate
6 between screens 310 and 450?

7 A. Yes, 450 is a password protected
8 desktop screen and 310 is a non-password
9 protected desktop screen.

10 Q. Does Narendra Figure 4 disclose
11 using left and right swipe gestures to navigate
12 between screens 410, 310, and 420?

13 A. Yes, all of those screens are
14 non-password protected desktop screens.

15 Q. Would a POSITA have understood that
16 an up or down swipe gesture could be used to
17 navigate to a non-password protected screen?

18 A. Is this specifically as disclosed by
19 Narendra?

20 Q. As understood by a person of
21 ordinary skill in the art?

22 A. And can you repeat the full

1 question, please?

2 Q. Sure. Would a POSITA have
3 understood that an up or down swipe gesture could
4 be used to navigate a non-password protected
5 screen?

6 A. Well, as disclosed by Narendra, if
7 you are on a password protected desktop screen
8 and you make a vertical downwards gesture, then
9 in Figure 4 this discloses moving between a
10 non -- sorry, a password protected desktop screen
11 and a non-password protected desktop screen.

12 Q. Would a POSITA have understood that
13 an up or down swipe gesture could be used to
14 navigate from a non-password protected screen to
15 another non-password protected screen?

16 A. That is not disclosed by Narendra,
17 as I understand it.

18 Q. And would a POSITA have understood
19 that an up or down swipe gesture could be used to
20 navigate from a non-password protected screen to
21 a non-password protected screen?

22 A. Again, that is not disclosed by

1 Narendra.

2 Q. Well, you understand that a person
3 of ordinary skill in the art has an ability to
4 deduce things that are beyond the literal
5 disclosure of a reference, right?

6 A. Yes.

7 Q. And is that something that a person
8 of skill in the art would deduce from Narendra
9 that you could use an up or down swipe gesture to
10 move between two non-password protected screens?

11 A. Well, Narendra discloses using
12 horizontal gestures to transition between
13 non-password protected screens and vertical
14 gestures to transition between non-password
15 protected desktop screens and password protected
16 desktop screens.

17 That is a core part of the purpose
18 of Narendra, to transition between non-password
19 protected screens and password protected screens.

20 It is certainly reasonable for a
21 person of skill in the art to have understood
22 that they could transition the meaning of the

1 horizontal and vertical gestures such that
2 horizontal gestures transition between password
3 protected screens and non-password protected
4 screens, and vertical gestures transition between
5 non-password protected screens.

6 So, you could certainly flip the
7 direction of those -- the meaning of the
8 direction of those gestures.

9 Q. Would a person of ordinary skill in
10 the art understand that you could use either
11 horizontal gestures or vertical gestures to move
12 between two non-password protected screens,
13 correct?

14 A. Narendra discloses a distinction
15 between the meaning of horizontal gestures for
16 transitioning between screens that are within a
17 set of password protected or non-password
18 protected and orthogonal gestures, gestures that
19 are orthogonal to that direction to be used for
20 transitioning between password protected
21 gestures, and non -- sorry, password protected
22 screens and non-password protected screens.

1 Q. Would a POSITA have understood that
2 one could use the navigational map of Figure 4 to
3 navigate between screens that are all
4 non-password protected?

5 A. I don't think a person of skill in
6 the art would have taken that meaning.

7 The core concept here disclosed in
8 Narendra is that gestures on one dimension
9 transition within a set of, in this case,
10 non-password protected desktop screens.

11 It is reasonable that those
12 horizontal gestures could transition between
13 instead password protected desktop screens. And
14 gestures that are orthogonal to that transition
15 between non-password protected and password
16 protected screens.

17 I think it would be nonintuitive
18 for, and unlikely for, a person of skill in the
19 art to take the inference that you would use
20 gestures on one dimension, such as the horizontal
21 gestures shown here, to transition between
22 non-password protected desktop screens and also

1 use a vertical gesture to transition between
2 non-password protected desktop screens.

3 The petition and Dr. Rosenberg
4 talked about the importance of mental models and
5 simplicity and the ability for the user to
6 discern the meaning and nature of the navigation
7 between desktop screens.

8 And it would -- there would be no
9 reason to use a vertical gesture to access one of
10 the non-password protected screens when all of
11 the other non-password protected screens are
12 transitioned between by using horizontal
13 gestures.

14 Q. A person of ordinary skill in the
15 art sounds like is a pretty rigid thinker in your
16 view, right?

17 A. No, I would entirely disagree with
18 that characterization. A person of skill in the
19 art is highly concerned with concepts including
20 consistency and mental models that uses form as
21 they interact with devices.

22 The person of skill in the art would

1 find it highly inconsistent to use horizontal
2 gestures to transition between all but one of the
3 non-password protected desktop screens and then
4 use a, an orthogonal gesture to transition from
5 one of those non-password protected desktop
6 screens to an additional non-password protected
7 desktop screen.

8 They simply wouldn't do it.

9 Q. So, a person of ordinary skill in
10 the art simply would not have the thought, you
11 know what, I don't need to have password
12 protected screens on the top row, those could be
13 non-password protected, too?

14 A. So, then in this hypothetical the
15 user needs to discern the fact that they can
16 swipe horizontally between N minus one
17 non-password protected desktop screen, and yet
18 from one of those non-password protected desktop
19 screens, they need to suddenly decide to do a
20 vertical gesture that in N minus one cases fails
21 to lead anywhere, yet in that one final case
22 transitions to a screen.

1 This simply is not something a
2 person of skill in the art would consider.

3 Q. Wouldn't they just have to think you
4 know what, I can move in two dimensions instead
5 of one?

6 A. It would be immensely confusing for
7 the user for that to be the case.

8 The one -- looking at Figure 4,
9 there is a single -- in your hypothetical we are
10 adapting Figure 4 so that, I think it is 450,
11 Item 450 is a non-password protected desktop
12 screen, same as all of the other non-password
13 protected desktop screens that are on a
14 horizontal arrangement.

15 It is entirely intuitive and natural
16 for a user to swipe between the series of
17 non-password protected desktop screens.

18 A user would transition between
19 these and learn that horizontal gestures
20 transition between non-password protected
21 screens.

22 And yet you are proposing that a

1 person of skill in the art would have decided to
2 assign a vertical gesture to a unique one of
3 those desktop screens and have that transition to
4 another non-password protected screen.

5 Q. Why does -- sorry.

6 A. I don't believe that a person of
7 skill in the art would make that decision. It is
8 inconsistent and -- it is highly inconsistent in
9 multiple ways.

10 Q. Would a person of ordinary skill in
11 the art understand that a two-dimensional grid
12 would reduce the number of swipes to get to a
13 screen?

14 A. I think the correct, the correct and
15 honest answer to that is no, a person of skill in
16 the art would not take that understanding.

17 The reason being, whilst a user who
18 has perfect understanding would be able to
19 transition in fewer gestures to a grid between a
20 grid of desktop screens, a person of skill in the
21 art would understand that unless the user has
22 formed a perfect understanding of the arrangement

1 of those desktop screens, which never happens
2 especially for novice users who are new to a
3 device, the users are going to be substantially
4 lost in transitioning between those user
5 interface desktop screens and learning their
6 relative locations.

7 And due to that, they will be making
8 substantial errors whilst navigating between
9 those screens. And that will be slower and
10 require more swipes.

11 Q. Okay. Let's go to Paragraph 31 of
12 your declaration. You start out saying, "Chae
13 and Narendra are directed to entirely different
14 purposes and implementations." Do you see that?

15 A. Yes, I do.

16 Q. "Both Chae and Narendra disclose
17 using directional swipe gestures to navigate
18 between different user interfaces." Correct?

19 A. Well, Chae uses directional gestures
20 to unlock to one or both of multiple SIM cards.
21 And Narendra uses directional gestures to
22 transition between non-password protected desktop

1 screens and password protected desktop screens.

2 Q. So, you have added some details, but
3 generally speaking, both Chae and Narendra
4 disclose using directional swipe gestures to
5 navigate between different user interface
6 screens, right?

7 A. These screens have entirely
8 different purposes. Directional gestures are
9 used by both Chae and Narendra. But the purpose
10 and intention of these directional gestures is
11 entirely different. Unlocking to one or both of
12 multiple SIM cards in Chae and moving between
13 password and non-password protected desktop
14 screens in Narendra.

15 Q. Both of them navigate between
16 different user interface screens, right?

17 A. For entirely different purposes,
18 yes.

19 Q. Okay. So, if I go to the grocery
20 store to buy milk and you go to the grocery store
21 to buy eggs, we both went to the grocery store,
22 right?

1 A. This analogy is beyond me. I mean,
2 this is not something a person of skill in the
3 art would be contemplating when they see two
4 entirely different references directed at
5 entirely different purposes.

6 Q. And both of us know that if I know
7 how to get to the grocery store to buy milk, that
8 that would also help me get to the grocery store
9 to buy eggs, right?

10 A. This hypothetical is, I think, very
11 much out of bounds for my declaration.

12 But even the hypothetical includes a
13 very important notion that is if the user knows
14 how to get to the grocery store to buy eggs.
15 This is a key part of user interface design.

16 Users don't know how to get to
17 places when they first hit -- when they first
18 encounter their user interfaces.

19 And learn-ability is a core part of
20 user interface design.

21 Users need to discern and form a
22 mental model that allows them to navigate from

1 one place to another.

2 Q. Chae tells you how to navigate from
3 one place to another, right?

4 A. For the purpose of unlocking to
5 different SIM cards, one or both of multiple SIM
6 cards a directional gesture will accomplish that.

7 The user would have -- sorry. The
8 POSITA would have absolutely no reason to look at
9 Narendra for -- to, to solve some problem that
10 Chae has not yet already solved in its navigation
11 to one or both of multiple SIM cards.

12 Q. And Narendra also tells you now to
13 navigate between screens, right?

14 A. This has nothing to do with Chae's
15 purpose which is navigating to one or both of
16 multiple SIM cards.

17 Narendra's purpose is entirely,
18 entirely different, navigating between
19 non-password protected desktop screens and
20 password protected desktop screens.

21 Q. It is navigating to a screen for a
22 different reason, but they both tell you how to

1 get to the screen, right?

2 A. Chae takes you to one -- well,
3 one -- three different home screens that are
4 locked to one or both of multiple SIM cards.

5 The purposes here are entirely
6 different. Narendra's purpose is for
7 transitioning between password protected and
8 non-password protected desktop screens.

9 Q. Narendra discloses using directional
10 swipe gestures to navigate between user interface
11 screens arranged in a two-dimensional grid,
12 correct?

13 A. Yes.

14 Q. If a person of ordinary skill in the
15 art wanted to know how to navigate between two
16 different screens, would Chae tell, tell them how
17 to do that?

18 A. No. Chae tells the person of skill
19 in the art how to navigate to one of three
20 different screens that are customized to one or
21 both of two SIM cards.

22 So, this is a one-directional

1 navigation from a, from an early state where the
2 device is woken up, to a screen that discloses a
3 home screen that has unlocked one or both of
4 multiple SIM cards.

5 Q. If a person of ordinary skill in the
6 art wanted to know how to navigate between two
7 different user interface screens, would Narendra
8 tell them how to do that?

9 A. Yes. Narendra describes navigation
10 between non-password protected desktop screens
11 and password protected desktop screens using
12 horizontal and vertical gestures where those
13 screens are arranged in a revolving grid -- in a
14 grid that is sometimes revolving.

15 Q. Would a POSITA have modified Chae's
16 multi-SIM card device to use Narendra's teaching
17 of using swipe gestures to navigate between user
18 interface screens arranged in a two-dimensional
19 grid?

20 A. No. A person with Chae would have
21 absolutely no reason to look to Narendra, because
22 Chae's purpose and meaning is entirely resolved

1 by Chae.

2 The purpose is to unlock to one or
3 both of multiple SIM cards.

4 Having achieved that through
5 directional gestures, there were no further --
6 there is no reason for a person of skill in the
7 art to look to further screens.

8 Q. Well, I asked that question about
9 could they have, and you answered with
10 motivation. So, let's answer the could question
11 first.

12 Could a POSITA have modified Chae's
13 multi-SIM card device to use Narendra's teaching
14 of using swipe gestures to navigate between user
15 interface screens arranged in a two-dimensional
16 grid?

17 A. It is -- at best, it is enormously
18 unclear how they would do so.

19 Chae has only a small set of
20 potential home screens. Three are disclosed, and
21 directional gestures are used to move to each of
22 those three: unlocked to SIM1, unlocked to SIM2,

1 or unlocked to both SIM1 and SIM2.

2 Those directional gestures consume
3 three of the orthogonal directions: the
4 vertically up, vertically down, and left to
5 right.

6 Having assigned a meaning to each of
7 those directional gestures, as disclosed by Chae,
8 it is very difficult to see how the directional
9 gestures disclosed by Narendra could then be
10 layered on top of Chae, to have different
11 meanings for transitioning between other, other
12 screens that Chae doesn't contemplate.

13 And, and even if they did, even if
14 the person of skill in the art approached Chae
15 with a contemplation that there may be desktop
16 screens beyond those disclosed -- explicitly
17 disclosed by Chae, the person of skill in the art
18 would then need to overload the meaning of those
19 directional gestures.

20 Meaning in one case a left to right
21 gesture might mean one thing, unlocked to a SIM.
22 And in a different case, it would mean an

1 entirely different thing, such as moving between
2 a password protected screen and a non-password
3 protected screen.

4 Q. Narendra allows you to have as many
5 screens as you want while still using four
6 directional swipe gestures, right?

7 A. Yes. And that is because the
8 gestures are parallel and opposite to each other
9 for transitioning between the screens.

10 Q. So, if Chae doesn't have all of the
11 directional swipe gestures that are needed,
12 Narendra would expand the map to allow access to
13 more screens, right?

14 A. I don't understand this hypothetical
15 combination.

16 Narendra -- sorry. Chae explicitly
17 uses three of those directions: vertically
18 upwards, vertically downwards and left to right.

19 There are other embodiments that
20 disclose other gestures as well. So, three of
21 those orthogonal directions are consumed by Chae.

22 Having consumed the meaning of those

1 directional gestures, the POSITA would then --
2 although they would have no reason to look to
3 Narendra. Even if they did, they would find
4 Narendra unappealing, because it requires a
5 different meaning to be applied to each of the
6 gestures that Narendra discloses.

7 And therefore it requires that those
8 gestures have an inconsistent meaning. In one
9 case they mean unlock to a SIM card as disclosed
10 by Chae.

11 And in another case, they have an
12 entirely different meaning.

13 Q. Are you saying that a person of
14 ordinary skill in the art is locked in to the
15 precise gestures that Chae discloses?

16 A. No. I don't think a person of skill
17 in the art would be locked in to those
18 directional gestures.

19 However, I can -- a person of skill
20 in the art could easily understand why Chae would
21 choose the directional gestures that it
22 discloses, vertically upwards, vertically

1 downwards, horizontal gestures, left to right and
2 right to left.

3 These are easy gestures for the user
4 to understand. Much simpler than doing diagonal
5 gestures such as northeast, southwest and so on.

6 So, a person of skill in the art
7 would be averse to layering on additional
8 gestures that are not on those orthogonal axes.

9 Q. Narendra does not add those diagonal
10 gestures, right?

11 A. Correct. And, therefore, a person
12 of skill in the art who somehow came across Chae
13 and Narendra, although they would not look to
14 Narendra with Chae, would not contemplate
15 using -- would be unlikely to contemplate using
16 gestures that are not on the cardinal axes.

17 Q. Chae is disclosing left/right, up
18 and down gestures from a single origin screen,
19 correct?

20 A. I don't think it refers to it as a
21 single origin screen. But, yes, I take your,
22 your meaning that the terminal has been woken up

1 in Step 2 -- S210 of Figure 3.

2 Q. Does Chae provide guidance on
3 operating a mobile device using -- sorry, strike
4 that. I will repeat it.

5 Does Chae provide guidance on
6 operating a mobile device user interface that has
7 multiple SIM cards?

8 A. It discloses a method for unlocking
9 to one or both of multiple SIM cards.

10 So, I think the answer to your
11 question is yes. I'm a little bit cautious about
12 providing guidance. But, yes.

13 Q. Let's go to Paragraph 33, your first
14 sentence.

15 "Indeed, petitioners propose a
16 combination that not only neglects the primary
17 purpose of Chae but would also render Chae
18 unsatisfactory for its intended purpose."

19 Do you see that?

20 A. Yes, I do.

21 Q. And you say, "In particular, by
22 incorporating the teachings of Narendra into the

1 teachings of Chae, a user may navigate between
2 password protected desktop screens and
3 non-password protected desktop screens, but would
4 not be able to navigate between the home screens
5 of two different SIM cards, the primary purpose
6 of Chae."

7 Do you see that?

8 A. Yes, I do.

9 Q. Do you believe that a prior art
10 combination of two references is required to
11 incorporate every teaching from both of the
12 references?

13 A. No, I don't believe that. However,
14 I know that motivation to combine must be
15 present. And if you are starting with Chae,
16 which discloses a mechanism for unlocking to one
17 or both of multiple SIM cards, we would have no
18 reason for looking to Narendra, because it has
19 nothing to do with that, that primary purpose.

20 So, first, a person of skill in the
21 art would not look to Narendra if they have Chae.
22 And then, as I was mentioning a few minutes ago,

1 if they did superimpose Narendra on Chae, the
2 orthogonal axes that have been consumed by Chae's
3 disclosures would need to be discarded.

4 So, Chae's purpose and meaning would
5 need to be thrown away in order to gain access to
6 the gestures that are disclosed by Narendra's
7 matrix of desktop screens.

8 Q. Do you understand that a prior art
9 combination may combine some of the teachings of
10 a primary reference with some of the teachings of
11 a secondary reference?

12 A. Yes. And I know that fundamental to
13 that is a motivation to combine that is absent in
14 the case of Chae and Narendra.

15 Q. Do you believe that Masimo's
16 proposed combination is required to both have a
17 multi-SIM card architecture like Chae and
18 navigate between password protected and
19 non-password protected screens like Narendra?

20 A. I believe the motivation to combine
21 is required. I think that you cannot omit the
22 motivation from combine -- from combination in

1 your analysis.

2 Q. And the motivation to combine is a
3 motivation to create -- or, sorry, to combine the
4 references in a way that yields the claimed
5 invention, correct?

6 A. Correct. The primary reference and
7 the secondary reference must provide a reason --
8 there must be a reason for a person of skill in
9 the art to look to the secondary reference once
10 they have the primary reference.

11 And I -- a person of skill in the
12 art would not look to Narendra when they have
13 Chae.

14 Q. The motivation to combine does not
15 require providing a motivation to combine
16 unclaimed features disclosed in the prior art.
17 Correct?

18 A. That sounds like a legal conclusion,
19 but I think the answer to that is correct.

20 Q. Is it your opinion that it would
21 have been impossible for a POSITA to design a
22 device that can both navigate between password

1 protected and non-password protected screens and
2 can navigate between home screens of different
3 SIM cards?

4 A. That is not my opinion, no.

5 Q. Would it have been possible for a
6 POSITA to associate a password protected screen
7 with a SIM card?

8 A. That would certainly be possible.

9 Q. Would it have been possible for a
10 POSITA to associate a non-password protected
11 screen with a different SIM card?

12 A. That is also possible.

13 Q. Okay. Let's go to Paragraph 34.
14 And in this paragraph, the second sentence you
15 say, "For instance, in the combination of Chae
16 and Narendra, would a left to right gesture
17 result in a customized SIM1 and SIM2 home screen
18 being displayed as shown in Chae's S280 operation
19 in Figure 3 above, or would it result in a
20 non-password protected desktop screen being
21 displayed as shown in Narendra's Figure 4 above?"
22 Do you see that sentence?

1 A. Yes, I do.

2 Q. Is it your opinion that Masimo's
3 combination needs to use the exact directional
4 swipe gestures disclosed by Chae?

5 A. No, I don't think it needs to use
6 the exact gestures.

7 However, the horizontal and vertical
8 gestures disclosed by Chae carry an entirely
9 different meaning to the horizontal and vertical
10 gestures disclosed by Narendra.

11 Q. So, Masimo's combination does not
12 need to use a bottom to top swipe gesture to
13 display a home screen associated with SIM1 as
14 disclosed by Chae, correct?

15 A. If the purpose was to unlock to a --
16 one particular SIM card as disclosed by Chae, a
17 person of skill in the art would understand that
18 that direction could be any direction, with
19 preference for gestures that are on the
20 orthogonal axes for the reasons that I have
21 described earlier --

22 Sorry. Cardinal axes, not

1 orthogonal axes.

2 Q. If Chae and Narendra use an upward
3 swipe gesture for two different actions, could a
4 POSITA have modified either Chae or Narendra to
5 use a different swipe gesture for that action --
6 for one of the actions?

7 A. Yes.

8 Q. Would a POSITA have understood that
9 a graphical user interface cannot use the same
10 directional swipe gesture to navigate the two
11 different user interface screens from the same
12 origin screen?

13 A. I think the correct answer to that
14 is no. But, and you can -- I can elaborate if
15 you wish.

16 Q. Sure. Let me just provide an
17 example.

18 If I am starting from origin screen
19 and I want to get to -- and I swipe left to get
20 to Screen A, would it be possible for me to be
21 able to swipe left from the same origin screen to
22 get to Screen B?

1 A. In -- this is a hypothetical, but
2 yes, there are ways that you could make that
3 possible.

4 Q. And what would be an example of
5 making that possible?

6 A. Well, there is a multitude of ways
7 of making this possible.

8 For instance, a swipe left at the
9 top of the display might go to A. And a swipe
10 left at the bottom of the display might go to B.

11 Alternatively, a swipe left may pop
12 up a dialogue box that then asks you is your
13 intended destination A or B, and then the user
14 then clarifies in response to feedback from the
15 device.

16 There is a vast multitude of ways
17 that this might be achieved.

18 Q. So, if you are just using a swipe to
19 get to one screen to the other, would you agree
20 that you would have to have some mechanism to
21 distinguish the two swipes if you want to go to
22 two different screens?

1 A. Some mechanism. But the extent of
2 the mechanisms that might be used to achieve that
3 is extremely broad.

4 Q. Okay. Let's go to Paragraph 41
5 where you start out, "Petitioner fails to address
6 how Chae's touchscreen is in communication with a
7 computer system."

8 Do you see that?

9 A. I see that.

10 Q. Are you aware of any touchscreen on
11 a mobile device that is not in communication with
12 a computer system?

13 A. That is not the point I'm making
14 here.

15 The point I'm making is that the
16 petitioner fails to address how Chae's
17 touchscreen is in communication with the computer
18 system.

19 Q. Have you ever seen a touchscreen of
20 a mobile device that is not in communication with
21 a computer system?

22 A. I have, but the petitioner has

1 failed to address how Chae's touchscreen is in
2 communication with a computer system.

3 Q. Have you ever read about a
4 touchscreen of a mobile device that is not in
5 communication with a computer system?

6 A. No.

7 Q. Would a POSITA understand that one
8 function of a touchscreen of a mobile device is
9 to provide user input to a computer?

10 A. Regardless of what a POSITA
11 understands about mobile devices, the petitioner
12 has not shown that Chae's touchscreen is in
13 communication with a computer system.

14 Q. And you can make that argument.

15 I just want the answer to, would a
16 POSITA understand that one function of a
17 touchscreen of a mobile device is to provide user
18 input to a computer?

19 A. That is not the point that I am
20 making here. The point that I'm making is that
21 the petitioner has failed to address how the
22 touchscreen is in communication with computer

1 system.

2 Q. And I understand your point. I'm
3 asking you a question that I think has a yes or
4 no answer.

5 Would a POSITA understand that one
6 function of a touchscreen of a mobile device is
7 to provide user input to a computer?

8 MS. LEUNG: Objection, asked and
9 answered.

10 THE WITNESS: As I said, my report
11 is addressed to the petitioner's failure to
12 address how that is accomplished.

13 BY MR. CANNON:

14 Q. And I am going to respond to that
15 objection. The question has been asked three
16 times but never answered, so I'm going to ask it
17 a fourth time and I expect an answer.

18 Would a POSITA understand that one
19 function of a touchscreen of a mobile device is
20 to provide user input to a computer?

21 A. I think I have answered the
22 question.

1 Q. It was a yes?

2 A. That is not the point that I'm
3 making in this section of my report. I am
4 addressing the petitioner's failure to address
5 how Chae's touchscreen is in communication with a
6 computer system.

7 Q. Well, I can ask a question that is
8 not directed to the purpose of your paragraph,
9 can't I?

10 A. I think it is outside the scope of
11 my report. My report stands for itself with
12 respect to this limitation.

13 Q. Well, let me ask it this way.
14 If you can, please identify any
15 situation in which a touchscreen does not have a
16 function of providing user input to a computer?

17 A. Well, if the touchscreen is off,
18 that would certainly satisfy your question.

19 Q. And the touchscreen being off, what
20 is the function of the touchscreen in that
21 situation?

22 A. It has no function in that

1 situation.

2 Q. When the touchscreen is on, when the
3 device is on, the touchscreen provides user input
4 to a computer, correct?

5 A. That is not the point I'm making.
6 We are analyzing a particular segment of my
7 report and I am addressing the petitioner's
8 failure to address.

9 Q. If Chae discloses a touchscreen, and
10 it also discloses a computer system, would a
11 POSITA understand that the touchscreen provides
12 user input to the computer system?

13 A. That question goes beyond my
14 analysis of Limitations 1B, 9B, and 17B, which is
15 limited to the petitioner's failure to address
16 how Chae's touchscreen is in communication with
17 the computer system.

18 Q. Well, the petition says it has got a
19 touchscreen, right?

20 A. Yes.

21 Q. And it says it provides input to a
22 computer, right?

1 A. I would need to check.

2 Q. Well, let's go to the petition.

3 Okay. Let me -- let's go to Page 34
4 of the petition. Section B, Limitation 1B.

5 And you can review that. But, at
6 the end, I would like you to answer, does the
7 petition indicate that the touchscreen provides
8 input to the computer?

9 A. Yes, it does.

10 Q. Okay. Let's go back to your
11 declaration and go to Paragraph 42. And this
12 portion relates to power saving state.

13 The first question I have is, what
14 is a power saving state?

15 A. Well, under plain and ordinary
16 meaning, it is a state that is saving power.

17 Q. Does a display consume power?

18 A. Yes.

19 Q. Does a display consume less power
20 when it is off than when it is on?

21 A. The display does. The device may --
22 turning the display off may trigger activities on

1 the computer system that are no longer saving --

2 I mean, its total power consumption is not

3 decreased.

4 Q. Let's look at -- let's go to

5 Paragraph 45. The first sentence is, "Petitioner

6 fails to show that Chae discloses that a

7 respective user interface object of the plurality

8 of user interface objects contains application

9 content from an application corresponding to the

10 respective user interface object, and when

11 selected, causes display of an application

12 corresponding to the respective user interface

13 objects."

14 Do you see that sentence?

15 A. Yes.

16 Q. What is application content?

17 A. Under plain and ordinary meaning, it

18 would be content from an application.

19 Q. And does it have to be -- does there

20 have to be any particular form in which that

21 information or content is expressed?

22 A. No. It needs to be generated by or

1 come from the application.

2 Q. So, it could be a graphical -- a
3 graphic that changes based on information from
4 the application; is that right?

5 A. That would be included among the
6 things it could be, yes.

7 Q. But it doesn't have to have some
8 kind of numerical indicator or letters or
9 anything like that, right?

10 A. I think that is fair, yes. It --
11 there is no particular constraint on the form of
12 the application content.

13 Q. Let's go to Paragraph 46. Where you
14 state that, "Nothing in Chae indicates that the
15 icons displayed in Figure 6B are dynamic or
16 change in any way in response to content in the
17 corresponding applications, and that the icons
18 when selected causes display of the corresponding
19 applications."

20 Do you see that?

21 A. Yes, I do.

22 Q. When the '352 patent was filed,

1 would a POSITA have been aware of widgets that
2 display application content and when selected
3 cause display of the corresponding applications?

4 MS. LEUNG: Objection, asked and
5 answered.

6 THE WITNESS: Yes, this goes back to
7 an extensive discussion we had in the first
8 hour. I think I have answered that question.

9 BY MR. CANNON:

10 Q. Let's go to, I think the third
11 sentence where it, of 46, "However, nothing in
12 Chae suggests that the rightmost object is
13 anything other than a generic graphical object."

14 Do you see that?

15 A. Yes, I do.

16 Q. And just so we are on the same page,
17 the rightmost object that you are referring to is
18 the graphic that has a sun and a cloud. Is that
19 accurate?

20 A. That is correct. That is a
21 well-known generic icon that has been used for
22 decades and is still used today for weather.

1 Q. When the '352 patent was filed,
2 could a POSITA have implemented the graphical
3 objects of Chae Figure 6B as widgets?

4 A. The question is vague. As I
5 discussed earlier, the term, widget, has been
6 used for decades in user interface design.

7 And any component that is displayed
8 on a graphical user interface is composed of
9 widgets.

10 Q. Okay. When the '352 patent was
11 filed, could a POSITA have implemented the
12 graphical objects of Chae Figure 6B as user
13 interface objects, as that term is set forth in
14 the claims of the '352 patent?

15 A. The possibility of implementation
16 is, is almost unbounded.

17 So, the possibility to implement it
18 certainly was there. Nothing in Chae discloses
19 that that is a part of a widget screen user
20 interface as disclosed in the claims.

21 Q. Were, were there weather widgets
22 prior to the '352 patent that showed application

1 content and when selected opened a weather
2 application?

3 A. Can you repeat the question, please?
4 I missed a couple of words.

5 Q. Were there weather widgets before
6 the '352 patent that showed application content
7 and when selected opened a weather application?

8 A. I think this goes to my earlier
9 discussion of the chronology of widgets that I
10 don't recall -- the uses of widgets that I don't
11 recall.

12 Q. Would a POSITA have been able to
13 implement the Figure 6B object with a cloud and a
14 sun as a user interface object as defined by the
15 claims?

16 A. If a POSITA had the '352 patent and
17 was trying to implement it, they certainly would
18 be able to.

19 Q. But in a -- and just to tie off
20 loose ends, are you saying that if the POSITA did
21 not have the '352 patent, the POSITA would not
22 have been able to implement the Figure 6B object

1 with the cloud and sun as a user interface object
2 as defined by the claim?

3 A. The capability to implement it
4 predates the patent. If, if they were instructed
5 to implement it by some disclosure, they would be
6 able to do so.

7 However, Chae does not disclose the
8 requirements of this limitation.

9 Q. On paragraph -- near the end of
10 Paragraph 46, on the next page, you refer to
11 widgets relating to the use state of the multiple
12 SIM cards.

13 Do you see that?

14 A. Yes, I do.

15 Q. And you say that those use state
16 widgets do not cause display of applications when
17 the widgets are selected, right?

18 A. That's correct.

19 Q. And you also say they don't
20 correspond to applications, right?

21 A. That's correct.

22 Q. Why do you say that Chae's use state

1 widgets do not correspond to applications?

2 A. Nothing in Chae discloses that they
3 do relate to applications.

4 A SIM card is an item of hardware.
5 It is unclear that there would be any application
6 associated with it.

7 The icons that are disclosed in Chae
8 simply display information associated with the
9 hardware component. And nothing suggests that
10 clicking on -- selecting those icons would launch
11 an application.

12 Q. Does Chae disclose that its
13 customized home screens can include widgets?

14 A. Can you show me where you believe it
15 does?

16 Q. Sure. Go to Exhibit 1005.
17 Paragraph 100.

18 A. Yes. It describes that the items
19 can include icons and widgets.

20 Q. Okay. Paragraph 47 of your
21 declaration you state, "Hong's widget provides a
22 preview of a selected application without

1 executing the selected application, but Hong does
2 not teach or suggest displaying the application
3 when the widget is selected as required by
4 Limitation 1G."

5 Do you see that --

6 A. Sorry -- sorry. I was just
7 returning to my declaration. Can you repeat the
8 question, please?

9 Q. Sure. Do you see the sentence on
10 Paragraph 47 that says, "Hong's widget provides a
11 preview of a selected application without
12 executing the selected application, but Hong does
13 not teach or suggest displaying the application
14 when the widget is selected as required by
15 Limitation 1G."

16 A. Yes, I see that.

17 MR. CANNON: Let's go to
18 Exhibit 1010, which is Hong.

19 (Whereupon, previously marked
20 Masimo Exhibit 1010
21 first referral.)

22 BY MR. CANNON:

1 Q. And specifically Paragraphs 4 and 5.

2 A. I don't have it here yet.

3 Q. Okay.

4 A. Oh yes. Yes, I see those. Thank
5 you.

6 Q. Do Paragraphs 4 and 5 disclose
7 widgets that display application content even
8 when the application is not displayed?

9 A. Yes, they do. But they do not --
10 there is no disclosure that the application is
11 displayed when the widget is selected.

12 Q. Are the widgets associated with
13 applications?

14 A. Yes, but they are explicit that the
15 application is not executed as a basis of
16 providing that information.

17 Q. Would a POSITA have understood that
18 the applications can be executed?

19 A. Hong is explicit that they are not.
20 It says without actually executing the
21 application, at the end of Paragraph 5.

22 It uses equivalent terminology

1 several times. It is also in Paragraph 4,
2 "contents provided in the application without
3 executing the application."

4 Q. So, it says a user can access
5 content without executing the application.
6 Correct?

7 A. That's correct.

8 Q. Where does it expressly say the
9 application can't be executed?

10 A. It does not disclose that it can be.

11 Q. Person of ordinary skill in the art
12 would understand that an application can be
13 executed, right?

14 A. They would understand that there is
15 a mechanism to execute the application, but it is
16 not disclosed by Hong in association with these
17 widgets.

18 Q. What is the normal way of executing
19 an application in a graphical user interface?

20 A. There are many ways. This is a very
21 broad generic question. But a common way on a
22 mobile device is by clicking on an application

1 icon on a home screen.

2 Q. And a person of ordinary skill in
3 the art would understand that mechanism of
4 executing an application, correct?

5 A. Sorry. I don't understand the
6 question. Can you repeat it, please?

7 Q. A person of ordinary skill in the
8 art would have understood the method of opening
9 an application by clicking on an icon associated
10 with the application, right?

11 A. Yes. An application icon on a home
12 screen, clicking on it would open the
13 application. That is common understanding.

14 That is not what is addressed here
15 by Hong.

16 Q. Would you agree that Hong doesn't
17 have to expressly say click on the application to
18 open it for a person of ordinary skill in the art
19 to understand that that is how applications work?

20 A. This is a different disclosure. It
21 is not referring to application icons on a home
22 screen. It is referring to widgets that provide

1 a preview of an application. And nowhere does it
2 disclose that selecting that widget will launch
3 the application.

4 Q. Well, Paragraphs 4 and 5 don't talk
5 about previews, right?

6 Oh, Paragraph 5 does talk about
7 previews, but Paragraph 4 just talks about
8 contents of the application, right?

9 A. Right. 4 and 5, we have highlighted
10 them together here.

11 They are providing an overview of
12 the functionality. And both 4 and 5 explicitly
13 address the absence of executing the application
14 and providing a preview instead of the
15 application itself.

16 Hong simply does not address the
17 applications that are provided for launching the
18 application.

19 Q. And claim -- the claims, they
20 also -- the user interface object also provides
21 access to content without executing the
22 application.

1 Right?

2 A. Can you repeat the question, please?

3 Q. The user interface objects of the
4 claims provide access to application content
5 without needing to execute the application.

6 Right?

7 A. I will just return to the patent if
8 I may.

9 Well, the language of the claim
10 stands for itself.

11 Q. And does it, does it allow access
12 to, do those user interface objects to allow
13 access to content without executing the
14 application?

15 A. The execution of the application is
16 not mentioned in the limitation.

17 It simply recites widget screen user
18 interface that is different from the wake state
19 user interface and the home screen user
20 interface.

21 "Wherein the widget screen user
22 interface includes the plurality of the user

1 interface objects corresponding to different
2 applications.

3 "Wherein the respective interface
4 objects of the plurality of user interface
5 objects contain application content from an
6 application corresponding to the respective user
7 interface object, and when selected cause display
8 of an application corresponding to the respective
9 user interface object."

10 Q. Does the term, preview, preview of
11 the information or the function of an application
12 without actually executing the application, does
13 that imply that the application can be executed?

14 A. I think a person of skill in the art
15 would understand that there is a mechanism
16 somewhere to launch the application.

17 There is no disclosure in Hong to
18 suggest any connection between the preview that
19 is provided explicitly without executing the
20 application and the means for executing the
21 application.

22 It is simply not there in Hong.

1 Q. So, a POSITA would read this and say
2 well, maybe I have to go through five levels of
3 menus to get to the application.

4 But he is not going to read it to
5 say oh, maybe I can just click on the application
6 and get -- and open it up?

7 A. Well, I think in your question, you
8 refer to clicking on the application to open it
9 up.

10 And yes, I think a POSITA would
11 understand that. And the means for doing that
12 would be by clicking on an application icon on
13 the home screen. And that is distinct from the
14 disclosures here in Hong.

15 Q. And a person of ordinary skill in
16 the art isn't going to read this to suggest hey
17 if I click on the widget, I'm going to get the
18 application?

19 A. There is no disclosure that that is
20 the case.

21 Q. That is one of the mechanisms that
22 was available at the time for actually executing

1 the application itself, right?

2 A. I have seen no disclosure that that
3 is the case.

4 Q. It was one of the available
5 mechanisms, correct?

6 A. I have seen no disclosure that that
7 is the case.

8 Q. Well, I'm asking you your view
9 because you are an expert and I think you know
10 the answer.

11 That was one of the mechanisms for
12 executing an application, correct?

13 A. Well, if it was at the time --
14 earlier we referred to my, the chronology of
15 understanding.

16 If it was the case that that was --
17 if it is true that that was the case then I
18 imagine that the petitioner would have identified
19 it. And they failed to do so.

20 Q. Well, you know more than the
21 petitioner, don't you?

22 A. I imagine --

1 MS. LEUNG: Objection,
2 argumentative. Badgering the witness.

3 THE WITNESS: I think my
4 understanding of human computer interaction
5 is far beyond the petitioner's.

6 I imagine the petitioner spent a
7 long time seeking prior art references, and
8 this was the best that they could come up
9 with.

10 None of the references disclose that
11 particular step of the limitation.

12 BY MR. CANNON:

13 Q. And you understand that a person of
14 ordinary skill in the art reads Hong, including
15 Paragraphs 4 and 5, with a -- in the context of
16 an understanding of what was known in the art.
17 Right?

18 A. Yes.

19 Q. And a person of ordinary skill in
20 the art had a knowledge that one way to open
21 applications is to click on the graphical object
22 representing the application.

1 A. That was certainly known in the case
2 of application icons on a home screen.

3 I have seen no disclosure that shows
4 that that was the case for previews that are
5 explicitly not involved in executing the
6 application.

7 Q. Are you suggesting that a person
8 skilled in the art did not have any knowledge at
9 the time that one way to open up an application
10 associated with a widget was to click on the
11 widget?

12 A. Well, here we fall into the
13 difficulty associated with the meaning of widget.

14 You are referring to widget, and I
15 would call an application icon on a home screen
16 one form of widget.

17 Not an application widget that
18 satisfies the limits -- limitations of the, of
19 the '352 patent.

20 But, it is one form of widget,
21 because widgets are -- encompass every graphical
22 user interface object on a graphical user

1 interface.

2 Clicking on an application icon on a
3 home screen was certainly well understood to
4 launch an application.

5 But clicking on a preview that is
6 explicitly not associated with executing the
7 application, as disclosed by Hong, I have seen no
8 disclosure that suggests that clicking on that
9 preview would launch the application.

10 Q. Well, you agreed with me before that
11 it doesn't actually expressly say that it is not
12 associated with executing the application?

13 A. Well, I would need to see the
14 transcript to see if I accidentally agreed with
15 some assertion of yours that I didn't intend to.

16 However, Hong, these disclosures
17 that we are looking at in Paragraphs 4 and 5,
18 explicitly state that the preview was provided
19 without executing the application.

20 That is their extent.

21 Q. You agree that a person skilled in
22 the art would read Hong in the context of

1 background knowledge of the art, correct?

2 A. That is fair.

3 Q. And if a person of skill in the art
4 were aware of a preview such as a clock, a
5 calendar, et cetera, where you could click on the
6 clock, calendar, et cetera, and get the full
7 scale application, then that would be relevant to
8 their analysis of Hong, right?

9 A. Well, this is a hypothetical. I
10 would need to see the particular references that
11 the person skilled in the art is hypothetically
12 referring to here.

13 Q. Well, don't you know the background
14 of the art without having seen a reference that
15 shows it?

16 A. I think if the petitioner had a
17 reference that disclosed this limitation, they
18 would have -- they would have seen it as
19 fundamental and essential to incorporate it in
20 their petition. They didn't do so, which to me
21 suggests that their extensive analysis of the
22 prior art failed to disclose this limitation.

1 Q. Wouldn't the petitioner have said it
2 fails to disclose it, if they thought it didn't
3 disclose it?

4 A. I -- look, I'm not a lawyer. But I
5 imagine it is highly unlikely that they would
6 have explicitly pointed out the failure of their
7 own petition.

8 Q. If you are not a lawyer, why are you
9 answering questions about the technical state of
10 the art by pointing to what the petitioner said
11 in the petition. It sounds like a legal analysis
12 to me.

13 A. Well, I am prefacing my response
14 with the explicit statement that I am not a
15 lawyer in that case.

16 I am here to provide expert opinions
17 on user interfaces.

18 Q. And your testimony is that the
19 background of the art that a POSITA would be
20 aware of does not include any application or any
21 graphical object that shows a preview of an
22 application that when you click on that preview

1 shows the full scale application?

2 A. Well, this is a hypothetical and it
3 depends on the nature of the preview.

4 There are no previews that I am
5 aware of that meet these limitations and
6 demonstrate the outcomes that you are suggesting.

7 Q. Do you believe that Paragraphs 4
8 and 5 would suggest to a POSITA the possibility
9 that clicking on what Hong calls application
10 widgets would open up the application?

11 A. Hong simply doesn't disclose it.

12 Q. Does it suggest it?

13 A. No.

14 Q. Would a POSITA have been able to
15 deduce that one possibility is that if I click on
16 that application widget, I'm going to get the
17 full-scale application?

18 A. There is no disclosure of that in
19 Hong.

20 Q. Would it suggest the possibility
21 that that would be one way to get to that
22 application?

1 A. The extent of possibilities is
2 extremely broad. There is no, there is no
3 disclosure of that possibility.

4 Q. Is one of the possibilities that if
5 I click on the application widget, I'm going to
6 get the full-scale application?

7 A. Is it possible? Certainly, it is
8 possible. It was possible to implement that
9 functionality.

10 Would it have occurred to a POSITA
11 without the disclosure -- explicit disclosure, I
12 don't see any reason.

13 The extent of possibilities is
14 truly, truly vast in user interface design.

15 Q. So, application icons, those were
16 known to open up applications when selected,
17 right?

18 A. Correct.

19 Q. And this thing is called an
20 application widget.

21 A. Correct.

22 Q. Correct.

1 A. And it is explicitly associated with
2 not executing the application.

3 Q. It is explicitly associated with
4 providing a preview without executing the
5 application. It never says you can't execute the
6 application, right?

7 A. Correct. A person of skill in the
8 art would understand there would be a mechanism
9 for executing the application.

10 Q. Is an application widget -- strike
11 that.

12 Is the term, widget, in one instance
13 an application icon?

14 A. Yes. As I have discussed it
15 earlier, all components on a graphical user
16 interface are a form of widget.

17 Q. Now, an application icon that also
18 shows a preview of contents would be consistent
19 with what the, what Hong calls application
20 widgets, right?

21 A. Yes.

22 Q. And application icons, when you

1 click on them, they open an application, right?

2 A. Sorry. Can you repeat the -- can
3 you repeat the previous question? I may have
4 made a mistake.

5 Q. I think I have your answer to the
6 previous question.

7 A. I may have misheard the question.
8 If I can re-have it, I think I misheard it.

9 Q. We will move on.

10 MS. LEUNG: Mr. Cannon, since we are
11 moving on, do you think it would be a good
12 time to take a break?

13 MR. CANNON: Sure.

14 (Recess taken -- 9:44 p.m.)

15 (After recess -- 9:53 p.m.)

16 BY MR. CANNON:

17 Q. Did you discuss the substance of
18 your testimony with anyone during the break?

19 A. No.

20 Q. Let's go to the end of Paragraph 47,
21 where you say, "Android also provides no
22 indication that the application is displayed when

1 the widget is selected, rather than providing a
2 preview of the selection within the widget
3 without executing the application as similarly
4 described in Hong."

5 Do you see that sentence?

6 A. Yes.

7 Q. And Android refers to a video,
8 correct?

9 A. That's correct.

10 Q. Did you watch the entire Android
11 video?

12 A. I did.

13 Q. And is it your testimony that the
14 Android video never shows execution of an
15 application in response to selection of a widget?

16 A. Not a widget that is part of a
17 widget screen user interface, that is correct.

18 Q. Let's go to page -- sorry, to
19 Paragraph 48. Where you state, "Petitioner
20 alleges that one well-known functionality of
21 widgets was displaying an application
22 corresponding to the respective user interface

1 objects -- object upon selecting a widget."

2 Do you see that?

3 A. Yes.

4 Q. And, you disagree with that
5 allegation; is that right?

6 A. It -- within the context of this
7 limitation, where we are addressing widget screen
8 user interfaces, yes, that is correct.

9 Q. And so, just to be clear, do you
10 disagree that one well-known functionality of
11 widgets was displaying an application
12 corresponding to the respective user interface
13 object upon selecting a widget?

14 A. Within the context of this
15 limitation which addresses widget screen user
16 interfaces, that is correct.

17 Q. And what part -- what context of the
18 claim provides the reason that you disagree with
19 the allegation?

20 A. Well, the limitation as a whole, the
21 petitioner has failed to show any prior art that
22 meets the limitation.

1 Q. Okay, so, is your testimony that the
2 petition doesn't have prior art or is it your
3 testimony that it was not a well-known
4 functionality of widgets to display an
5 application corresponding to the respective user
6 interface object upon selecting a widget?

7 A. Yes, I have already addressed the
8 distinct meaning of widgets. There was a meaning
9 of widgets that was established in the 1980's,
10 and that meaning would encompass application
11 icons.

12 It was known that clicking on an
13 application icon would launch an application.

14 However, this is not the type of
15 widget we are referring to in this limitation.
16 We are addressing widget screen user interfaces.
17 And there is no prior art that demonstrates a
18 widget screen user interface that satisfies that
19 particular component.

20 Q. Go to Paragraph 50. There is a
21 sentence there that says, "Although the universe
22 of possible swipe directions may be limited, the

1 combination of these directions and the various
2 possible user interface screens is vast."

3 Do you see that?

4 A. Yes.

5 Q. How many possible user interface
6 screens are you aware of?

7 A. Possible -- that is a strange
8 question. I would say infinity is the best
9 answer.

10 Q. Can you give me some examples of
11 different user interface screens?

12 A. Well, I am looking at one right now.
13 It contains an image of you and me and a
14 document. That is one user interface screen.

15 Q. Okay. And some of them are home
16 screen, right? That is one of them?

17 A. Various home screens are user
18 interface screens, yes.

19 Q. And widget screen is a different
20 user interface screen, right?

21 A. Yes, there were many possible widget
22 screen user interfaces.

1 Q. And wake screen?

2 A. There are many possible wake screen
3 user interfaces.

4 Q. And control panel, right?

5 A. Yes.

6 Q. And, the one with the video, what
7 kind of screen would you call that?

8 A. I would call this a maximized Zoom
9 window.

10 Q. Okay. So, we've got the Zoom
11 screen. You call that a different user interface
12 screen? Isn't that just an application?

13 A. It is a -- no, I'm looking at a
14 screen, a Zoom. A Zoom is an application that
15 supports a truly vast array of different screens.

16 Q. Okay. So, I'm just trying to figure
17 out why you are saying it is infinite.

18 And is it because every single
19 application that you run is a different user
20 interface screen?

21 A. We are not addressing any particular
22 context.

1 Screens, every -- pretty much
2 every -- there is a vast number of screens that
3 are distinct from one another.

4 Q. One could put them in a few buckets,
5 right?

6 A. I think this is a strange
7 characterization, but I substantially disagree
8 with the question.

9 Q. Well, you could say that there is
10 a -- there is infinite home screens, right?

11 A. I wouldn't put it that way, but
12 there are billions of mobile devices out there at
13 the moment. And I suspect there are billions of
14 various instantiations of home screen user
15 interfaces across those devices.

16 Q. Now, you talked about the possible
17 user interface screens.

18 Would you agree that home screens is
19 a very common type of user interface screen?

20 A. I think that is fair.

21 Q. And widget screen is a, is a common
22 type of screen, right?

1 A. The -- within the context of
2 the '352, we are dealing with a very specific
3 widget screen user interface that has a set of
4 limitations or requirements associated with it.
5 And, that is far less common.

6 Q. And wake screens are common, right?

7 A. Broadly. Beyond the context of '352
8 patent, yes, there are many forms of wake
9 screens.

10 Q. And, control panel screens are
11 fairly common, right?

12 A. Yes. There are many of them on
13 mobile devices now.

14 Q. And applications screens are common,
15 right?

16 A. I think that is fair.

17 Q. So, I have listed five types of
18 screens. We've got wake screens, home screens,
19 widget screens, application screens and control
20 panel screens.

21 Can you think of another type of
22 screen that you would -- that would be distinct

1 from those five screens?

2 A. Yes, many.

3 Q. Give me one example.

4 A. Clock screen.

5 Q. Isn't that an application screen?

6 A. It is a screen. I think I was asked
7 to identify a screen.

8 Q. Okay. Is there something, I mean --
9 so, I'm trying to get at the nature of this large
10 number of types of screens.

11 Are you counting every application
12 as a separate screen? So a clock is one type of
13 screen and a weather app is another type and
14 Microsoft Word is another type and Excel is
15 another type?

16 A. I think you are mischaracterizing
17 the meaning I'm getting at in this paragraph.
18 The universe of possible swipe directions may be
19 limited, but if you treat those directions in
20 combination, such as an up followed by down
21 gesture, or up followed by north gesture, up
22 followed by west gesture, or up down up,

1 up-up-up.

2 There is a vast array of directional
3 gestures that the user may express. Similarly,
4 there is a vast array of different screens that
5 the user may choose to navigate between.

6 And then we have a combinatory
7 explosion of those set of states that may be
8 obtained through a variety of different
9 directional gestures.

10 Q. Would you agree that the swipe
11 directions that would be common to use would be
12 up, down, left and right?

13 A. They are probably the most common
14 directions. We addressed that earlier on that
15 the cardinal directions are probably the ones
16 that any -- that a person of skill in the art
17 would contemplate first.

18 It is very common to use other
19 directional gestures, though, on mobile devices
20 and other devices.

21 Q. And would you agree that the common
22 user interface screens would be wake, home,

1 widget, control panel and application?

2 A. I mean, I can agree that those are
3 common screens. There are many, many, many other
4 common screens that users need to navigate to and
5 do navigate to.

6 Q. You mentioned the clock. Isn't the
7 clock -- the way you get to a clock is you tap on
8 an application icon or a widget that is a clock,
9 right?

10 A. That is one way, yes.

11 Q. So, you can get to all of the
12 different kinds of applications by tapping on an
13 application icon without swipe gestures, right?

14 A. That is a common way to launch an
15 application, yes, by clicking on an icon.

16 Q. All right. Can you list any other
17 common user interface screens besides the five
18 that we have mentioned?

19 A. A reconfiguration screen, currently
20 running application screen, screens associated
21 with each and every one of the applications that
22 are available on a device. I will finish there.

1 If you give me time, I can send you
2 a much more comprehensive list.

3 Q. So, you are suggesting that it would
4 not have been obvious to swipe to get to home
5 screens, widget screens, et cetera, because maybe
6 the user would be thinking no, I wanted to have a
7 swipe gesture to get to each and every separate
8 application; is that right?

9 A. That is not the implication I am
10 providing here at all. Just that there is a
11 combinatory explosion of the way that users can
12 navigate to different screens available on mobile
13 devices.

14 Q. These aren't chemical compounds,
15 right?

16 A. Correct.

17 Q. We are not talking about finding
18 a -- you know, the few combinations of chemicals
19 that will create the right result in a
20 pharmaceutical, right?

21 A. That is far outside what we are
22 contemplating here.

1 Q. We are just talking about screens
2 that a user might want to access, right?

3 A. Yes. And a vast array of ways in
4 which accessing those screens can be
5 accomplished.

6 Q. All right. Let's go to
7 Paragraph 51. Where you say, "Specifically, Chae
8 already contemplates that swipes left, right, up
9 and down are preassigned actions to facilitate
10 navigation between the multiple user profiles
11 related to the different SIM cards."

12 Do you see that?

13 A. Yes, I do.

14 Q. Now, that Paragraph 51 of your
15 declaration is citing separate embodiments of
16 Chae, correct?

17 A. In total, yes. In three
18 directions -- sorry.

19 Q. Sorry, continue.

20 A. Three of the directions are consumed
21 within one embodiment. That is the embodiment we
22 were addressing earlier where top to bottom,

1 bottom to top, and I believe it is left to right
2 are consumed by a single embodiment.

3 Q. Okay. So, does any single
4 embodiment of Chae have a preassigned action for
5 each of the four cardinal directions?

6 A. I think the most cardinal directions
7 consumed by one embodiment is three.

8 Q. And there is an embodiment that
9 consumes only two cardinal directions, right?

10 A. Yes.

11 Q. Do you believe that Masimo's
12 combination is required to use all of Chae's
13 preassigned actions without modification?

14 A. When Masimo proposes combining Chae
15 with Narendra, where Chae consumes three of the
16 cardinal directions for one set of purposes, and
17 Narendra consumes four cardinal directions for
18 entirely different purposes, it is easy to see
19 that that combination would not occur to a person
20 of skill in the art.

21 Q. And a POSITA would have understood
22 that Chae's preassigned actions could be changed

1 to accomplish different desired functions, right?

2 A. No, I disagree with that. If Chae's
3 entire purpose is to unlock to one or both of
4 multiple SIM cards on a device, if you take away
5 that purpose, it is no longer Chae. It is now
6 something entirely different.

7 Q. Would you agree that a POSITA would
8 have understood that Chae's direction of swipe
9 could be changed?

10 A. Yes.

11 Q. So, something that is disclosed as
12 an upwards swipe in Chae could be switched off
13 with a left swipe. Right?

14 A. Yes. And for the reasons I
15 described earlier, a person skilled in the art
16 would be most drawn to the cardinal directions.
17 And Chae's primary embodiment involves consuming
18 three of those cardinal directions.

19 Q. Masimo required to use the primary
20 embodiment of Chae in a combination?

21 A. I don't think Masimo is required to
22 use the primary embodiment, but they did.

1 Q. Let's go to Paragraph 52. But
2 before we do that, let me just ask this.

3 Did you just indicate that your
4 understanding is that Masimo did propose using
5 the primary embodiment of Chae in the
6 combination?

7 A. Yes. I recall the petition and
8 Dr. Rosenberg reproducing Figure 3 and exten --
9 Chae's Figure 3 and extensively referring to it.
10 And it is the -- it is the embodiment that
11 consumes three of the cardinal directions.

12 MR. CANNON: Let's go to, let me go
13 to Chae again, Exhibit 1005.

14 And let's go to Figure 3 which is
15 the one that you just mentioned, I believe.

16 BY MR. CANNON:

17 Q. Can you see there the three branches
18 of the decision tree there, on Step S240?

19 A. Yes.

20 Q. And you get one swipe bottom to top,
21 to get to the home screen customized to SIM1,
22 right?

1 A. Yes.

2 Q. And you see the rightward branch top
3 to bottom, to display the home screen customized
4 to unlocked SIM2. Do you see that?

5 A. Yes.

6 Q. And the petition relied on those two
7 swipe directions, correct?

8 A. Can you show me where the petition
9 did so?

10 Q. Sure.

11 A. I am sorry. It -- the petition at
12 least relied on those two. I -- my recollection
13 is the petition also addressed the left right
14 swipe direction.

15 So, I agree that the petition relied
16 on those two. I believe it also relied on the
17 third direction.

18 Q. Okay. Now, does the combination --
19 is Masimo required in its combination to use the
20 left to right branch of Figure 3?

21 A. My report doesn't address what
22 Masimo is required to do. It addresses what

1 Masimo did in its petition.

2 Q. Let's go back to your declaration.

3 And let's go to Paragraph 52. And the first
4 sentence of that paragraph says, "Narendra also
5 does not teach or suggest returning to a previous
6 screen using a swipe direction that is not
7 substantially parallel and opposite, e.g.,
8 perpendicular as illustrated in the petition, to
9 the direction for navigating from the previous
10 screen to the current screen."

11 Do you see that?

12 A. Yes.

13 Q. Do any of the claims require
14 returning to a previous screen using a swipe
15 direction that is not substantially parallel and
16 opposite to the direction for navigating from the
17 previous screen to the current screen?

18 A. I would just refer to the patent.

19 Q. And, you know, looking at the
20 claims -- sorry.

21 Were you going to say you were going
22 to still answer or was that your answer?

1 A. I'm referring to the patent in order
2 to be able to answer.

3 Q. Okay. All right.

4 A. And can you repeat the question,
5 please?

6 Q. Sure. Do any of the claims require
7 returning to a previous screen using a swipe
8 direction that is not substantially parallel and
9 opposite to the direction for navigating from the
10 previous screen to the current screen?

11 A. Certain claims require -- make
12 stipulations for the direction of the swipe
13 gestures, including the fact that they must be
14 opposite to a respective gesture.

15 Q. And that is the one -- that is the
16 claims that refer to the control panel; is that
17 right?

18 A. At least those, yes.

19 Q. Are you aware of any other claims
20 that require a swipe direction that is
21 substantially parallel and opposite to -- or
22 sorry, that is not substantially parallel and

1 opposite to the other swipe directions?

2 A. There are requirements that gestures
3 be different to one another.

4 But, as far as I recall that is
5 the -- that control panel or those control panel
6 limitations are the ones that require opposite.

7 Q. All right. Let's go to
8 Paragraph 54. Where you say, "Petitioner
9 provides a graphical representation of the
10 navigational path of Claims 4, 12, and 20,
11 showing a third direction that is perpendicular
12 to the first and second directions."

13 Do you see that?

14 A. Give me a moment. I'm just
15 returning there now. Paragraph 54. Yes, I see
16 that.

17 Q. Do Claims 4, 12 and 20 require a
18 swipe in a third direction that is perpendicular
19 to the first and second directions?

20 A. No. But they require that the
21 direction be different to the first and second
22 gestures.

1 Q. Okay. Do you understand that the
2 graphical representation that -- from the
3 petition that you reproduced in Paragraph 54
4 illustrates general concepts, not a precise
5 navigational path required by the claims?

6 A. Yes, I understand that. However, in
7 producing this graphic, it is with respect to
8 what is purportedly taught to a person of skill
9 in the art by Narendra.

10 And yet Narendra's movement between
11 desktop screens uses parallel and opposite
12 directions.

13 Q. Now, the petition doesn't put
14 this -- this graphic isn't in the petition for
15 the purpose of explaining Narendra, right?

16 A. I think this graphic is for the
17 purpose of communicating purportedly what a
18 person of skill in the art would understand from
19 the combination of Chae and Narendra.

20 And I think it is erroneous.

21 MR. CANNON: Okay. Let's go to the
22 petition itself. Claim -- sorry, Page 68.

1 BY MR. CANNON:

2 Q. Do you see the footnote at the
3 bottom of Page 68?

4 A. Yes, I do.

5 Q. And that Footnote 8, did you
6 consider Footnote 8 on Page 68 of the petition in
7 forming your opinions?

8 A. Yes, it did.

9 Q. And do you see that sentence, the
10 second one at the footnote, "Further, the
11 graphics illustrate general concepts, not a
12 precise navigational path required by the
13 claims."

14 A. I see that.

15 Q. And it says, "For example, the solid
16 arrows in the graphic above are meant to
17 illustrate that the first, second, and fourth
18 directions are different from each other, not
19 that they must be bottom to top, top to bottom,
20 and left to right."

21 Do you see that?

22 A. I see that.

1 Q. And do you understand that there are
2 multiple navigational maps that meet the claim
3 limitations, not just the illustrations shown in
4 the petition?

5 A. That is correct. However, this part
6 of the petition is addressed at the combination
7 of Chae and Narendra.

8 And yet Narendra teaches parallel
9 and opposite gestures to move between display
10 screens. And the gestures shown herein, as the
11 fourth direction, is not parallel and opposite to
12 either of the other gestures.

13 Q. Let's go to the top of Page 68. Do
14 you see the sentence right above the graphic that
15 says, "Below is a graphical representation of the
16 two-step navigational path of Claim 6"?

17 A. I see that.

18 Q. And so, that is illustrating the
19 scope of Claim 6, right?

20 A. Yes.

21 Q. And it is not illustrating the
22 proposed combination of Chae and Narendra, right?

1 A. This is part of the analysis that
2 begins on Page 66 of Claim 6. That is the
3 heading. And the final sentence of the first
4 paragraph of that section says, "In view of
5 Chae's and Narendra's disclosures a POSITA would
6 have recognized the directional swipe gestures,"
7 and so on.

8 I think this is the introduction to
9 this section on Claim 6 that is directly
10 referring to what a POSITA would have understood
11 based on Chae and Narendra.

12 Q. Do you see anywhere in the petition
13 that says that the proposed combination of Chae
14 and Narendra is to create the exact figure shown
15 on Page 68?

16 A. Well, yes, essentially. There is a
17 paragraph that reads, "Accordingly, it would have
18 been obvious to choose among the finite design
19 choices described above to yield any of the
20 specific navigational paths and associated
21 directional swipe gestures recited by Claims 3
22 to 6."

1 So, I believe that paragraph,
2 beginning with accordingly is based on the above
3 disclosures of what a POSITA would have
4 understood based on Chae and Narendra.

5 That seems to be the meaning of this
6 section. It mentions no other pieces of prior
7 art other than Chae and Narendra.

8 So, I think it is reasonable to
9 assume that this portion of the petition is based
10 on Chae and Narendra and the POSITA's
11 understanding thereof.

12 Q. Okay. But you understand that this
13 representation of the two-step navigational path
14 of Claim 6 is not the only navigational path that
15 would satisfy Claim 6, right?

16 A. You referred to the navigational
17 path. The navigational path is fixed by Claim 6.
18 The piece that is not fixed explicitly is the
19 associated directions.

20 Q. All right. Let's go to Paragraph 55
21 of your declaration.

22 A. I'm there. Thanks.

1 Q. And you say that, "The combination
2 of Chae and Narendra would not result in the --
3 in a third direction that is different from the
4 first direction and the second direction. Rather
5 the third direction would be the same as the
6 second direction in view of Narendra's teachings
7 of parallel and opposite directions for
8 navigating between two screens as shown below."

9 Do you see that sentence?

10 A. Yes.

11 Q. And then on the next page it shows a
12 figure that I believe you created for the purpose
13 of this declaration, right?

14 A. That's correct.

15 Q. Is the figure shown on Page 32
16 Masimo's proposed construction of Chae and
17 Narendra?

18 A. No. We just said this is a figure
19 that I created that shows what would result from
20 the combination, from Masimo's proposed
21 combination of Chae and Narendra. Narendra
22 explicitly refers to parallel and opposite

1 gestures.

2 This is using parallel and opposite
3 gestures.

4 Q. And what is your basis for asserting
5 that Masimo's proposed construction would
6 necessarily result in the path shown on Page 32?

7 A. Because a fundamental component of
8 Narendra as we were describing earlier is that
9 the -- its password protected and non-password
10 protected desktop screens are arranged in a grid.

11 And that parallel and opposite
12 gestures are used to navigate between those
13 desktop screens.

14 Q. These -- you could draw arrows in a
15 way that -- I mean you can combine Chae and
16 Narendra in different ways, right?

17 A. I'm not addressing all of the
18 different ways that Chae and Narendra could
19 hypothetically be combined.

20 I'm addressing the ways that they
21 were combined in the petition and by
22 Dr. Rosenberg.

1 Q. Okay. But I thought you said that
2 this figure is not Masimo's proposed combination?

3 A. Well, Masimo's proposed combination
4 is the one that I reproduced at Paragraph 54.

5 That proposed combination is not
6 something that is derived. I am pointing out the
7 error in that Chae and Narendra would not produce
8 the figure at Paragraph 54.

9 Instead, the combination would
10 produce this figure displayed at Paragraph 55.

11 Q. So, are you suggesting that this is
12 the only way to combine Chae and Narendra?

13 A. Well, first, I disagree that a
14 person of skill in the art would combine Chae and
15 Narendra. They would have no reason to do so.

16 But, if they did, this is the most
17 logical outcome of combining Chae and Narendra in
18 the way proposed by Masimo.

19 The proposal described by Masimo
20 at 54, at my Paragraph 54 is unsubstantiated by
21 the disclosures of Chae and Narendra.

22 The outcome depicted at the figure

1 of the top of Page 32 is dramatically more likely
2 a outcome of a POSITA's combination of Chae and
3 Narendra.

4 Q. Let's go to Paragraph 56. And at
5 the bottom of Page 32, near the bottom anyway,
6 you say, "This argument does not show that it
7 would have been obvious to a POSITA to use a
8 swipe direction that is different than the first
9 direction and the second direction, e.g.,
10 perpendicular to the direction for navigating
11 from the widget screen to the home screen as the
12 petition illustrates."

13 Do you see that?

14 A. I do.

15 Q. Do the claims require using a swipe
16 direction that is perpendicular to the direction
17 for navigating from the widget screen to the home
18 screen?

19 A. They don't require it, but it must
20 be different to the first direction and the
21 second direction.

22 Q. Let's go to the last sentence on

1 Page 32. "A POSITA would have understood it to
2 be much more user friendly to navigate between
3 two screens using parallel and opposite
4 directions as shown by Narendra than to confuse a
5 user with a different perpendicular direction for
6 returning to the widget screen."

7 Do you see that sentence?

8 A. Yes, I do.

9 Q. I'm going to point to a few
10 sentences that are similar before asking the next
11 question. I just want to get these into the
12 record.

13 The next sentence is at the bottom
14 of Page 33. It is actually about two thirds
15 down.

16 "Likewise a POSITA would have also
17 understood it to be much more user friendly to
18 provide access to the widget screen using a
19 consistent directional swipe gesture as disclosed
20 by Shuttleworth than to confuse a user from a
21 different direction with returning to the widget
22 screen."

1 Do you see that?

2 A. Yes.

3 Q. I would like to go to Paragraph 60.

4 And the last sentence of that paragraph says,

5 "A POSITA would have understood it to be much

6 more user friendly to simply include a button to

7 return to a wake screen or lock the device in

8 Chae than to confuse a user with a different

9 direction for returning to the wake screen."

10 Do you see that?

11 A. Yes.

12 Q. And then the start of Paragraph 61,

13 "Further, a POSITA would have understood it to be

14 much more user friendly to navigate between two

15 screens using parallel and opposite directions as

16 shown by Narendra than to confuse a user with a

17 different direction for returning to the wake

18 screen."

19 Do you see that?

20 A. Yes.

21 Q. Let's go to Paragraph 65. At the

22 bottom of that -- the bottom sentence has a very

1 similar sentence about user friendliness of using
2 a button.

3 Do you see that?

4 A. Yes.

5 Q. And then paragraph -- at the top of
6 Paragraph 66 has a paragraph that is similar to a
7 previous one about it being more user friendly to
8 use parallel and opposite directions.

9 Do you see that?

10 A. Yes.

11 Q. Now, in all of these paragraphs
12 where you talk about things being user friendly
13 and others being confusing, how did you determine
14 which swipe gestures a POSITA would have
15 considered to be more user friendly than others?

16 A. I think that is discussed in each of
17 the separate analyses.

18 Q. Is there any analysis beyond what is
19 in your declaration for how you reached the
20 conclusion that certain swipe gestures would have
21 been more user friendly than others?

22 A. No. The analysis is expressed in

1 each of the cases.

2 Q. And how did you determine what would
3 have confused a user?

4 A. I make several references to -- in
5 particular, user interface consistency.

6 Q. And that is all in your declaration?

7 A. Yes.

8 Q. You didn't do any analysis beyond
9 what is shown in your declaration?

10 A. That is correct.

11 Q. And you didn't do any user surveys
12 showing what users perceive to be user friendly?

13 A. Not for this purpose. I have
14 conducted an extensive number of user surveys for
15 other purposes.

16 Q. You didn't do such an analysis for
17 this declaration, correct?

18 A. Correct.

19 Q. That is the type of analysis that a
20 person skilled in the art would do to determine
21 whether a device would be, you know, one that
22 they would want to sell on the market?

1 A. Can you clarify what you mean by
2 that at the start of the question?

3 Q. Yes. Let me ask a different -- a
4 slightly different question.

5 Is it common to use user surveys to
6 attempt to assess what features are user
7 friendly?

8 A. User interface evaluation is a
9 common part of establishing the success and
10 failure, desirability of different user interface
11 features.

12 But, so, too, is rational analysis,
13 as Dr. Rosenberg conducts. In places I agree, in
14 places I disagree with his analysis.

15 But, the rational analysis that I
16 conduct in the report is a common part of the
17 user interface design.

18 Q. You didn't do the -- what you called
19 the user interface analysis to reach your
20 conclusions?

21 A. No, that is not what I stated -- if
22 I did state that, that is not what I meant to

1 state.

2 I didn't conduct user interface
3 evaluations. Those are surveys, experimental
4 methods where you involve subjects. I didn't
5 conduct any of that for this analysis.

6 But I did conduct an analysis based
7 on rational expectations of a person experienced
8 in user interface design, as a person of skill in
9 the art would.

10 Q. Does a proposed combination need to
11 be the most user friendly option to have been
12 obvious to a POSITA?

13 A. I think that is a hypothetical.
14 When a proposed -- when a combination is
15 proposed, that goes against what a person of
16 skill in the art would contemplate, I think it is
17 my job to point out those inconsistencies.

18 Q. It is possible, isn't it, that there
19 would be multiple options that are obvious but
20 with different levels of user friendliness?

21 A. This is a broad hypothetical. But
22 there are certainly situations where that is

1 true.

2 Q. And, if a combination is suitable
3 for the purpose, does it need to achieve a
4 particular level of user friendliness for it to
5 have been obvious?

6 A. If a proposal is antithetical to the
7 contemplations that a person of skill in the art
8 would have, then it is worth pointing out the
9 fact that a person of skill in the art would not
10 contemplate that particular embodiment, proposed
11 embodiment.

12 Q. And how does one quantify how user
13 unfriendly an option needs to be in order for it
14 to be antithetical to the purpose?

15 A. Well, for instance, as I demonstrate
16 in my report, if there are interactions that are
17 strongly inconsistent, or if there are proposals
18 that contravene good mental models, both
19 Dr. Rosenberg and I refer to consistency and the
20 need for appropriate mental models.

21 These are part of the analysis that
22 a person of skill in the art would consider when

1 contemplating proposed combinations.

2 Q. So, just to clarify your testimony,
3 does -- what role does user friendliness play in
4 your conclusion that Masimo's proposed
5 combination would not have been obvious?

6 A. I think that is all spelled out in
7 my report. It is explicit about why people
8 would -- a person of skill in the art would or
9 would not consider particular combinations, with
10 explicit reference to critical issues such as
11 consistency.

12 Q. Does a proposed combination need to
13 be the least confusing option to have been
14 obvious to a POSITA?

15 A. I am not addressing a hypothetical
16 here. I am addressing a specific proposed
17 combination and pointing out why the combination
18 is unlikely to be something that the POSITA would
19 contemplate.

20 Q. Okay.

21 MR. CANNON: No further questions.

22 MS. LEUNG: Okay. Can you give me a

1 few minutes to gather my thoughts and we will
2 get back on the record?

3 MR. CANNON: Yes.

4 (Recess taken -- 10:42 p.m.)

5 (After recess -- 10:47 p.m.)

6 MS. LEUNG: Thank you.

7 Dr. Cockburn, we have no further questions --
8 or we have no questions on our end.

9 MR. CANNON: Thank you,
10 Dr. Cockburn.

11 THE WITNESS: Thank you.

12 (Whereupon, signature having been waived, the
13 deposition suspended at 10:56 p.m. European Time)

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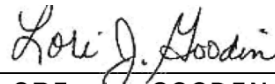
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