

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE, INC.,

Petitioner,

v.

MASIMO CORPORATION,

Patent Owner.

Case Nos. IPR2024-00290

U.S. Patent 8,190,223

DEPOSITION OF DR. ANDREW COCKBURN

August 23, 2024

2:00 p.m. (Eastern Standard Time)

Reported by: Eileen Mulvenna, CSR/RMR/CRR

DIGITAL EVIDENCE GROUP

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1 REMOTE CROSS-EXAMINATION DEPOSITION of DR.
2 ANDREW COCKBURN, Declarant for Petitioner in the
3 above-titled action, held on Friday, August 23,
4 2024, commencing at approximately 2:00 p.m., before
5 Eileen Mulvenna, CSR/RMR/CRR/RDR, Certified
6 Shorthand Reporter, Registered Merit Reporter,
7 Certified Realtime Reporter, Registered Diplomate
8 Reporter, and Notary Public of the State of New
9 York.

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

2 FOR PATENT OWNER, MASIMO CORPORATION:

3

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17 Also Present:

18 Henry Marte, Document technician

19

20

21

22

1	I N D E X		
2	WITNESS	EXAMINATION BY	PAGE
3			
4	DR. ANDREW COCKBURN		
5			
6		MR. KIANG-CROSS	7

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1 (Witness sworn.)

2 THE REPORTER: You may proceed,
3 Counsel.

4 MR. KIANG: Do you want us to put on
5 our appearances?

6 THE REPORTER: Sure.

7 MR. KIANG: My name is Daniel Kiang
8 from Knobbe Martens. I'm representing the
9 patent owner, Masimo Corporation. And with
10 me today is also Ashley Morales, also from
11 Knobbe Martens.

12 MS. KIM: My name is Grace Kim. I'm
13 at Fish & Richardson, representing
14 petitioner. I'm accompanied by Gretchen
15 DeVries, at Fish & Richardson, as well.

16 MR. KIANG: All right. I guess I'll
17 begin then.

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1 DR. ANDREW COCKBURN,
2 having been duly sworn by Eileen Mulvenna,
3 a Notary Public of the State of New York,
4 was examined and testified as follows:

5 CROSS-EXAMINATION

6 BY MR. KIANG:

7 Q. Good morning, Dr. Cockburn.

8 A. Good morning.

9 Q. Could you please state your full name
10 for the record.

11 A. Andrew Jeremy Gavin Cockburn, spelled
12 C-O-C-K-B-U-R-N.

13 Q. Oh, it's pronounced Cockburn?

14 A. It is.

15 Q. Okay. I'll try to remember that.

16 You've been deposed before; correct?

17 A. Yes.

18 Q. Do you know how many times?

19 A. I think this is my eleventh
20 deposition.

21 Q. And have you ever given testimony in a
22 trial proceeding or other -- actually, let's just --

1 have you ever given testimony in a trial proceeding
2 before?

3 A. Yes.

4 Q. Do you know how many times?

5 A. Across various jurisdictions, I think
6 it's five times, plus or minus one.

7 Q. Have you been deposed in other inter
8 partes proceedings that Apple filed against Masimo?

9 A. Yes.

10 Q. Do you know how many times you have
11 been deposed in those IPRs?

12 A. I think it's twice.

13 Q. Is there any reason why you would be
14 unable to give truthful testimony today?

15 A. No.

16 Q. Are you taking any medications that
17 could affect your ability to provide truthful and
18 accurate testimony?

19 A. None.

20 Q. Is anyone in the room with you?

21 A. I have a dog lying on the bed behind
22 me, which I apologize for. Normally my family would

1 be taking care of him, but they're all asleep at the
2 moment.

3 Q. I fully understand.

4 Do you have any notes with you at the
5 moment?

6 A. I have a blank sheet of paper in front
7 of me, no notes on it. That's just for me to note
8 any thoughts during question and answer.

9 Q. Other than that sheet of paper, do you
10 have any documents with you?

11 A. There are documents in the room around
12 me. There are no documents on the desk.

13 Q. Do you have any documents --

14 A. There is actually one Post-it note
15 that is sitting on my desk, and that's to remind me
16 of typos if I get the opportunity to identify them.

17 Q. Are you talking about typos in your
18 declaration?

19 A. Yes.

20 Q. Why don't we just do that right now
21 then since you -- so can you tell us what typos
22 you're referring to?

1 A. Sure. These are in my declaration.

2 The first one is at paragraph 88, and I believe the
3 word is -- there's a word "non," N-O-N, that should
4 be "noninvasive."

5 Q. Are you talking about in the first
6 sentence in paragraph 88, there's a -- it says, "In
7 the combination, the physiological parameters are
8 measured using non sensors such as 'a blood-pressure
9 sensor 14,' " blah, blah, blah?

10 You're a talking about that instance
11 of "non"; correct?

12 A. That sounds like the correct sentence.
13 I can't actually see my declaration at this point.

14 Q. Okay. Let's address that then.

15 MR. KIANG: Can we please pull up
16 Exhibit 1003.

17 (Exhibit 1003, Previously marked.)

18 BY MR. KIANG:

19 Q. And, Dr. Cockburn, this is -- do you
20 recognize this document?

21 A. I do.

22 Q. And this is your declaration in this

1 IPR; correct?

2 A. That's correct.

3 Q. Okay. Let's go to that paragraph 88.
4 I believe it's on page 56.

5 And so could you please -- do you
6 recognize this on the screen?

7 A. I do.

8 Q. And so could you please identify
9 which -- where the typo was again?

10 A. On the line immediately after the
11 beginning of paragraph 88. The first word on that
12 line says "non," N-O-N, that should be
13 "noninvasive."

14 Q. Okay. Thank you.

15 Are there any other typos that you'd
16 like to correct?

17 A. Yes, at paragraph 166, there is a
18 reference to "32" in square brackets, and that's a
19 reference to claim -- sorry, I think it's 33. Yes,
20 33. And it should be a reference to 32.

21 Q. I see the number "33" in square
22 brackets twice in this paragraph.

1 A. Correct.

2 Q. That's a typo for both of those
3 instances?

4 A. Yes, both should be 32.

5 Q. Are there any other typos that you'd
6 like to correct?

7 A. Two more. The next one is at
8 paragraph 70.

9 Q. Okay.

10 A. In the first sentence, there's a
11 reference to Figure 11. Also, on the last line,
12 there is a reference to Figure 11. And on the
13 previous line, there's a reference to Figure 11.
14 But perhaps it's quickest to say all the references
15 to Figure 11 in paragraph 70 should be references to
16 Figure 13.

17 Q. Okay. And I believe you said you had
18 one more typo; is that correct?

19 A. Yes, on page 98. Would you like me to
20 describe it? The caption to the figure should read,
21 "Naghavi-Hochstedler-Burnes-Hayashi," and not to
22 reference "Mortz."

1 Q. Okay. That's all the typos that you
2 wanted to correct; is that right?

3 A. Yes.

4 Q. All right.

5 A. Thank you.

6 Q. Going back to my other line of
7 introduction questions, are you in -- other than
8 through this Zoom link, are you in communication
9 with counsel at the moment?

10 A. Currently, no.

11 Q. Thank you.

12 A. Yeah.

13 Q. Okay. I'll be asking you some
14 questions today. Please wait until I've completed
15 the question before answering. If you don't
16 understand the question, please let me know, and
17 I'll try to explain the question.

18 If you do not ask me to clarify, I'll
19 assume that you understand the question; is that
20 fair?

21 A. Yes.

22 Q. You can take a break at any time

1 today, but I also ask that if there is a question
2 pending to you, that you please answer the question
3 before taking a break; is that fair?

4 A. Yes.

5 Q. And do you understand that you're
6 being deposed today in connection with the
7 declaration that was signed by you and that was
8 filed into IPR 2024-00290; is that correct?

9 A. I don't have the number memorized, but
10 that sounds correct.

11 MR. KIANG: Let's bring up
12 Exhibit 1003 again, which was your
13 declaration, just the cover page.

14 BY MR. KIANG:

15 Q. So you understand that -- well, let me
16 rephrase this question.

17 In this declaration, which is
18 Exhibit 1003, you provided opinions about
19 U.S. Patent No. 8 million 190 -- well, 8,190,223; is
20 that correct?

21 A. Yes.

22 Q. And if I use the phrase "'223 patent,"

1 will you understand that to mean U.S. Patent
2 No. 8,190,223?

3 A. Yes.

4 Q. I believe earlier today you mentioned
5 there were some other documents in the room; is that
6 correct?

7 A. Yes.

8 Q. Are any of those documents related to
9 this IPR or your declaration?

10 A. No.

11 Q. Are you aware that Masimo has alleged
12 that -- oh, sorry. Let me start over with that
13 question.

14 Are you aware that Masimo has alleged
15 patent infringement by Apple of the '223 patent in a
16 related district court proceeding?

17 A. Yes, I understand that. I just would
18 like to clarify the answer to my previous question
19 about regarding documents in the room. All of the
20 documents that I have related to this case are on my
21 computer, which is in this room.

22 So just for the record the

1 documents -- there are no printed documents related
2 to this case in this room.

3 Q. Okay. Thank you for clarifying.

4 So the district court proceeding that
5 I was referencing in my prior question, do you
6 understand that to be the litigation that's in the
7 U.S. District Court for the District of Delaware?

8 A. I've not been connected with the other
9 case. I know it exists. So I've had no particular
10 reference to it, and I believe I've not had access
11 to the documents in that case, except for the
12 documents in that case that are related to the IPR.

13 Q. So you're not retained as an expert
14 witness in that other case; is that correct?

15 A. I'd need to check my letter of
16 engagement, but I believe the letter of engagement
17 refers to the IPRs.

18 Q. In forming your opinions in your
19 declaration for this IPR, did you speak to anybody
20 at Apple?

21 A. No.

22 Q. You're currently a professor at the

1 University of Canterbury in New Zealand; correct?

2 A. Yes.

3 Q. And you currently have the computer --
4 sorry, the human computer interaction and multimedia
5 research group at that university; is that right?

6 A. Yes.

7 Q. Could you please explain what human
8 computer interaction is?

9 A. Broadly, it relates to the
10 interactions between humans and computers and
11 determining ways to make that interaction more
12 positive in a variety of ways for the users.

13 That can include the efficiency of
14 interaction, allowing users to get their jobs done
15 more quickly with interactive devices. It also
16 relates to the learnability of those systems
17 allowing people to quickly and intuitively
18 understand how to interact with computer systems.

19 And it also relates to the subjective
20 satisfaction of those systems. So making people
21 like their devices and interact with systems more,
22 have a more positive experience through them.

1 Q. Are you familiar with the term "user
2 interface"?

3 A. Yes.

4 Q. What is a user interface?

5 A. It's a component of a system that
6 allows users to interact with that system.

7 Q. Have you been involved in designing
8 user interfaces?

9 A. Yes, many.

10 Q. Could you please provide some examples
11 of user interfaces that you developed?

12 A. My CV was attached to this report, and
13 it provides an extensive -- relatively extensive set
14 of examples of systems that I have designed as part
15 of my research work in human computer interaction.

16 Q. Have you ever been involved in
17 designing a user interface for a medical device?

18 A. Not that I recall. But I believe
19 Duckworth, Masimo's expert, and I both agree
20 about -- broadly agree about the requirements for a
21 person of ordinary skill in the art related to the
22 '223 patent.

1 Q. Are you familiar with the concept of a
2 patient monitor?

3 A. Yes.

4 Q. What is a patient monitor?

5 A. Broadly, it's a system that allows for
6 the monitoring of patients.

7 Q. And that would be in a health care
8 context; is that correct?

9 A. That could be personal health care, or
10 it could be professional health care, yes.

11 Q. Have you ever designed any user
12 interfaces for patient monitors?

13 A. Not that I recall.

14 Q. Let's turn now to paragraph 15 of your
15 declaration. I believe that's on pages 7 to 8. And
16 you can just take a moment to review that, and let
17 me know when you're done.

18 (Document review.)

19 THE WITNESS: Paragraph 15, yes, I've
20 reviewed it.

21 BY MR. KIANG:

22 Q. Okay. So you've reviewed certain

1 documents in forming the opinions you wrote in your
2 declaration; is that right?

3 A. Yes.

4 Q. And does paragraph 15 list the
5 documents that you considered in forming your
6 opinions?

7 A. The paragraph states that those were
8 documents I've also reviewed in forming my opinions.
9 In addition, there were the '233 patent excerpts
10 from the prosecution history and also the documents
11 that allowed me to establish my status as at least a
12 person of ordinary skill in the art.

13 Q. You're aware that Apple has submitted
14 a petition for inter partes review in this case; is
15 that correct?

16 A. I believe it's submitted at least
17 several IPR -- IPRs in this case.

18 Q. What do you mean by "several IPRs in
19 this case"?

20 A. Well, depending on what we mean by
21 "this case," if you mean the IPR related to the
22 '223 patent or if you mean the broader case of

1 Masimo and Apple's litigation.

2 Q. Thank you for clarifying.

3 I mean the IPR that's related to the
4 '223 patent.

5 A. Okay. And can you repeat the question
6 then, please?

7 Q. Yes. You're aware that Apple
8 submitted a petition for inter partes review related
9 to the '223 patent; is that correct?

10 A. Yes.

11 Q. Did you review that petition in
12 forming the opinions in your declaration?

13 A. No. I believe I've never seen the
14 petition.

15 Q. So you've never seen the petition even
16 to this day?

17 A. To my recollection, that's correct.

18 Q. In the second sentence of
19 paragraph 15, you say that you've reviewed the '223
20 patent and relevant excerpts of the prosecution
21 history of the '223 patent.

22 Do you see that?

1 A. Yes.

2 Q. Do you recall what excerpts of the
3 prosecution history you reviewed?

4 A. No, this is over six months ago now.
5 I don't recall that.

6 Q. Are you aware that the '223 patent
7 underwent an ex parte reexamination?

8 A. I think I did know that. I don't
9 think I've seen the documents related to that
10 re-exam.

11 Q. So you have not seen any documents
12 from the file history of the re-exam; is that
13 correct?

14 A. If they're in the file history, I will
15 have seen them.

16 MR. KIANG: Can we please have
17 Exhibit 1020 put on the screen. I believe
18 it's -- that one is split into two parts.
19 Let's put up Part 2.

20 (Exhibit 1020, Previously marked.)

21 BY MR. KIANG:

22 Q. Dr. Cockburn, have you seen this

1 document before?

2 A. I don't think it's on my folder yet.

3 Oh, there it is.

4 Q. You can wait for it to appear.

5 (Document review.)

6 THE WITNESS: Can you repeat the
7 question, please?

8 BY MR. KIANG:

9 Q. Yes.

10 My question was: Have you seen this
11 document before, Exhibit 1020?

12 A. Well, the page we're looking at is the
13 '223 patent. So, yes.

14 Q. You said that the page we're looking
15 at is the '223 patent; is that right?

16 A. Yes. It says US 8,192,223 in the top
17 right-hand corner.

18 Q. And above that you see the phrase
19 "Ex Parte Reexamination Certificate"; correct?

20 A. Right, yes.

21 Q. So this is the reexamination
22 certificate for the '223 patent; is that right?

1 A. Yes.

2 Q. Did you have a chance to scroll
3 through the rest of this document?

4 A. Very quickly, yes.

5 Q. And do you recall if you've ever seen
6 this document?

7 A. I don't recall seeing this particular
8 document, no.

9 Q. Let's go to page 6 of this document.
10 And you have a copy of this document
11 on your computer now; right?

12 A. I do. Are we in Part 2 or Part 1?

13 Q. We're in Part 2. I believe that part
14 number was switched around. So Part 2 looks like
15 the beginning of the document.

16 A. I'm at page 6.

17 Q. Okay. Have you seen -- I understand
18 that you may not recall seeing this document before,
19 but have you seen this particular page of this
20 document before?

21 A. I don't recall it.

22 Q. Okay. And so this page number 6 that

1 I'm showing you right now is the notice of intent to
2 issue a reexamination certificate.

3 And so you've not seen this document
4 prior to signing your declaration; is that correct?

5 A. Not that I recall.

6 MR. KIANG: Let's take down this
7 exhibit, then.

8 BY MR. KIANG:

9 Q. Turning now to paragraph 22 of your
10 declaration, that's Exhibit 1003. And that's on
11 page 10.

12 (Exhibit 1003, Previously marked.)

13 BY MR. KIANG:

14 Q. Let me know when you're there.

15 A. Paragraph 23? I'm there.

16 Q. Yes -- or 22.

17 A. 22, yep.

18 Q. Okay. And in paragraph 22, you set
19 forth your opinion on the level of ordinary skill in
20 the art; is that right?

21 A. Yes.

22 Q. Did you independently come up with

1 this description of the level of ordinary skill?

2 A. I think it was the result of a
3 discussion between me and the attorneys in the case
4 that at least contributed to that description of the
5 person skilled in the art.

6 Q. Did you perform any analysis in
7 developing this description of the level of ordinary
8 skill?

9 A. Yes, that analysis included very close
10 attention to the '223 patent.

11 Q. Can you tell me what -- what that
12 analysis involved?

13 MS. KIM: Objection. Communications
14 between the expert and counsel are protected
15 from discovery.

16 THE WITNESS: Can you repeat the
17 question, please?

18 BY MR. KIANG:

19 Q. Yes. Can you tell me what that
20 analysis involved, your analysis of the level of
21 ordinary skill in the art?

22 A. Yes, it included careful reading of

1 the '223 patent and determining the types of skills
2 that would be required to work on the purported
3 invention disclosed in the '223 patent and related
4 types of work.

5 Q. Do you meet or exceed the level of
6 ordinary skill that you described here in
7 paragraph 22?

8 A. Yes.

9 Q. And how so?

10 A. I have a bachelor's degree in computer
11 science. I also have a Ph.D. in computer science.
12 Both the bachelor's degree and the Ph.D. have
13 included extensive work on human computer
14 interaction, and I've worked in the field for
15 30-plus years.

16 And at the priority date of the '223
17 patent, I also had decades of experience working in
18 the design and development of graphical user
19 interfaces and in human computer interaction.

20 Q. In your analysis of the '223 patent
21 claims, did you interpret the claims of the '223
22 patent?

1 A. Yes, I think reading material
2 necessarily involves interpreting that material.

3 Q. How did you interpret the claims of
4 the '223 patent?

5 A. As they would be understood by a
6 person of ordinary skill in the art.

7 MS. KIM: Objection, vague.

8 BY MR. KIANG:

9 Q. Did counsel provide you with any legal
10 standards for interpreting the claims of the '223
11 patent?

12 A. At the end of my declaration, I have a
13 series of pages that describe the relevant legal
14 terms and understandings that I was provided from
15 counsel.

16 Q. Go to page 123 of your declaration,
17 and specifically to paragraph 210.

18 A. I'm there, thanks.

19 Q. And in paragraph 210, does this set
20 forth the legal standards that were provided to you
21 for interpreting the claims of the '223 patent?

22 A. From paragraph 210 to the end of the

1 document, yes.

2 Q. You did not set forth any opinions on
3 claim construction of any terms in the '223 patent;
4 is that correct?

5 A. That's correct.

6 Q. And so in your declaration, did you
7 apply the plain and ordinary meaning to all terms of
8 the '223 patent?

9 A. As best I could, yes.

10 Q. What do you mean by as best you could?

11 A. There's at least one footnote in my
12 declaration that points out that certain terms are
13 particularly ambiguous, and I note that I interpret
14 it as best I can.

15 Q. I believe that footnote's on page 68
16 of your declaration. So why don't we go there.

17 And at the bottom of page -- are you
18 there, on page 68?

19 A. Yes, I am there. Thanks.

20 Q. Okay. And is this the footnote that
21 you were referring to in your previous answer?

22 A. Yes.

1 Q. So what did you mean by the phrase --
2 by your sentence, actually, "I interpret the phrase
3 'generally capable' as best understood"?

4 A. I think the footnote stands for
5 itself. The term is, I think, particularly vague.
6 And, therefore, I added a footnote saying, I'm
7 interpreting the term as best understood.

8 Q. What prompted you to add this
9 Footnote 1?

10 A. The term, to me, reads almost as a
11 tautology, a display location that is generally
12 capable of displaying something. Any location on a
13 display is generally capable of displaying
14 something. So it's an odd term in a patent claim.
15 So I interpreted it as best understood.

16 Q. Were you aware -- actually, let me
17 restart that.

18 Are you aware that in a related
19 litigation between Apple and Masimo, Apple advanced
20 several proposed claim constructions for terms in
21 the '223 patent?

22 A. Can you repeat the question, please?

1 Q. Yes.

2 And just to preface the question, I'm
3 talking about the litigation in Delaware between
4 Apple and Masimo that's involved -- that involves
5 the '223 patent.

6 So with that in mind, are you aware
7 that in this related litigation between Apple and
8 Masimo that's in Delaware, Apple advanced several
9 proposed claim constructions for terms in the '223
10 patent?

11 A. Yes, counsel has advised me that
12 certain terms have been construed in those matters.

13 Q. Did counsel inform you of those
14 constructions before you signed your declaration or
15 after you signed your declaration?

16 A. I believe only after.

17 Q. Before you signed your declaration,
18 were you aware that Apple took the position that the
19 phrase "generally capable of displaying" in Claim 21
20 was indefinite?

21 A. I'm near certain that I was unaware of
22 that.

1 Q. And so your decision to add Footnote 1
2 on page 68 had nothing to do with Apple's
3 contentions on indefiniteness in the other
4 litigation.

5 Is that what you're saying?

6 A. I was -- I'm very near certain that I
7 was unaware of the indefiniteness argument. And as
8 I said at the beginning of this passage of
9 questions, I did find that term "generally capable
10 of displaying" to be essentially a tautology.

11 MR. KIANG: Let's bring up
12 Exhibit 1001.

13 (Exhibit 1001, Previously marked.)

14 BY MR. KIANG:

15 Q. Dr. Cockburn, have you seen this
16 document before?

17 (Document review.)

18 THE WITNESS: Yes, I have.

19 BY MR. KIANG:

20 Q. And what is this document?

21 A. This is the '223 patent.

22 Q. You reviewed the claims of the '223

1 patent; correct?

2 A. Yes. And I'll point out that were two
3 versions of the claims at the end of the document.

4 Q. And can you please clarify what you
5 mean by two versions of the claims?

6 A. There's a corrected version. Oh, so,
7 yes, I was aware. Those earlier questions about
8 whether I was aware of the re-exam, I was certainly
9 aware of the re-exam and its result as a consequence
10 of the modified or adjusted claims that emerged as a
11 result of the re-exam.

12 Q. So you were aware that there was a
13 re-exam and that there were claims that were amended
14 as part of the re-exam; is that correct?

15 A. That's correct. So the re-exam
16 document that we were looking at earlier, I believe
17 I had never seen that. But the consequence of the
18 reexamination and the modification of the claims as
19 a consequence of that, I was aware of.

20 Q. Okay. Thank you for clarifying.

21 MR. KIANG: Let's take down

22 Exhibit 1001.

1 And let's go back to page 36 of your
2 declaration, Exhibit 1003.

3 THE WITNESS: I'm there now, thanks.

4 BY MR. KIANG:

5 Q. And at the bottom of page 36,
6 continuing onto page 37, you have a heading
7 beginning 1a. And you reproduced a portion of
8 Claim 1 of the '223 patent; is that correct?

9 A. Yes.

10 Q. And so I'll refer to this as
11 limitation 1a. And so limitation 1a recites, in
12 part, "a display capable of displaying a measured
13 value of a first physiological parameter of body
14 tissue."

15 Do you see that?

16 A. Yes.

17 Q. What is a measured value of a
18 physiological parameter?

19 A. I didn't offer any construction. I
20 just interpreted that as best understood by a person
21 of skill in the art at the time.

22 Q. Is it your understanding that in order

1 for a patient monitor to be capable of -- to be
2 capable of displaying a measured value of
3 physiological parameter, there needs to be some kind
4 of sensor for that physiological parameter that's
5 connected to the patient monitor; correct?

6 A. There would need to be something
7 that's capable of measuring. That's actually a
8 component of the limitation that I identified above
9 at page 34, where it says, a patient monitor capable
10 of measuring.

11 Q. So the patient monitor -- in order to
12 be able to display a measured value of a
13 physiological parameter, there needs to be some kind
14 of measuring device for that parameter connected to
15 the monitor; is that right?

16 A. There would need to be a component of
17 the system that is capable of measuring at least two
18 physiological parameters.

19 Q. If that component that was capable of
20 measuring the physiological parameters were removed
21 or disconnected from the patient monitor, would the
22 display of the patient monitor still be capable of

1 displaying a measured value of that physiological
2 parameter?

3 A. I haven't contemplated that
4 hypothetical. My declaration provides examples of
5 how the combination of Naghavi, Hochstedler, and
6 Burnes meets the claim.

7 Q. Let me try to rephrase the question a
8 little bit.

9 So if you can imagine for a moment a
10 patient monitor that's connected to a patient, and
11 there's a sensor that's connected -- also connected
12 to the patient, and it's monitoring some
13 physiological parameter and is sending that
14 parameter over to the patient monitor, right. The
15 patient monitor's displaying that physiological
16 parameter.

17 Now, if you were to disconnect that
18 sensor from the -- from the patient monitor, would
19 the patient monitor still be capable of displaying
20 that physiological parameter?

21 MS. KIM: Objection --

22 THE WITNESS: I -- apologies. I spoke

1 over counsel.

2 MS. KIM: Objection, relevance. Thank
3 you.

4 THE WITNESS: I think my answer is
5 exactly the same. This is a hypothetical
6 that I have not considered. My analysis
7 identifies ways in which the combination of
8 Naghavi, Hochstedler, and Burnes meets this
9 particular limitation.

10 BY MR. KIANG:

11 Q. Let's go to page 45 of your
12 declaration.

13 And do you see the heading that begins
14 with 1b?

15 A. Yes, I do.

16 Q. So limitation 1b recites, "wherein in
17 the common display area, the display of one of the
18 measured values of the first or second physiological
19 parameter is replaced by the other of the measured
20 values based on an occurrence of an event."

21 Do you see that?

22 A. Yes.

1 Q. Does the term "replaced" in this
2 limitation have a plain and ordinary meaning?

3 A. I applied the plain and ordinary
4 meaning as understood by a person skilled in the
5 art.

6 Q. Under the plain and ordinary meaning
7 of the term "replaced," can the measured value of
8 the first parameter still be displayed after it's
9 been replaced by the measured value of the second
10 physiological parameter?

11 A. My declaration provides examples of
12 how that replacement is disclosed by the combination
13 of Hochstedler -- Naghavi, Hochstedler, and Burnes.
14 I think you're addressing a particular hypothetical
15 that I have not necessarily considered in my
16 declaration.

17 Q. In your proposed combination of
18 Naghavi, Hochstedler, and Burnes, is it your
19 understanding that when a measured value of a first
20 parameter is replaced by a measured value of the
21 second parameter, the first measured value is no
22 longer displayed on the display?

1 A. I provide examples of where at a
2 particular location the measured value is no longer
3 displayed. For instance, at the top of page 47 of
4 my declaration, I show an example where the first
5 parameter GAS is displayed at one location.

6 And in the second -- in a subsequent
7 display, a different parameter, a second parameter,
8 for CO is displayed at the same location, replacing
9 the previous parameter of GAS.

10 That's one of the examples that I
11 provide in my declaration. There are others.

12 Q. And in your declaration, you don't
13 provide any examples of your proposed combination
14 where the first parameter remains displayed on the
15 screen after it's been replaced by the second
16 parameter; right?

17 A. I don't recall providing that
18 particular example, no. It's possible that it's
19 there. I need to check thoroughly through my entire
20 declaration.

21 Q. When you interpreted the claims of the
22 '223 patent and in particular limitation 1b in

1 forming your opinions, was it your understanding
2 that the first parameter would no longer be
3 displayed after it's been replaced by the second
4 parameter?

5 A. It's important to note here that in
6 limitation 1b, we're addressing the common display
7 area. So earlier limitations identify a particular
8 region of the display. So I think the issue of
9 whether a parameter can remain displayed elsewhere
10 on the display is outside the contemplation of
11 limitation 1b.

12 Q. Let's turn now to page 60 of your
13 declaration and paragraph 95.

14 A. I'm there, thanks.

15 Q. So down here at the bottom, you have a
16 heading that begins 13b. So limitation 13b recites,
17 "wherein the common display area changes from
18 displaying one of the measured values of the first
19 or second physiological parameter to displaying the
20 other of the measured values based on an occurrence
21 of an event."

22 Do you see that?

1 A. I do, yes.

2 Q. Okay. So limitation 13b uses the term
3 "changes."

4 Do you see that?

5 A. Yes.

6 Q. And for purposes of your analysis in
7 your declaration, did you treat the term "changes"
8 the same as the word replace -- "replaced" in
9 Claim 1?

10 A. I applied the understanding that a
11 person of ordinary skill in the art would have, and
12 I provide examples of how the limitation is met.

13 Q. And your analysis of limitation 13b,
14 you referred back to your discussion of limitation
15 1b; is that correct?

16 A. That's correct.

17 Q. And you didn't change the combination
18 of Naghavi, Hochstedler, and Burnes to address the
19 word "changes" as opposed to the word "replaced";
20 correct?

21 A. Well, the paragraph goes on to provide
22 an extension of the analysis beyond that provided in

1 1b. The remainder of that paragraph 95 does. So
2 it's not entirely the same argument, but it largely
3 relies on the explanation provided for limitation
4 1b.

5 Q. And you're not suggesting in
6 paragraph 95 that you would need to change anything
7 about your combination of Naghavi, Hochstedler, and
8 Burnes for limitation 13b; is that correct?

9 A. Well, there's an extended explanation
10 of how the limitation is met. So it incorporates
11 the explanation for 1b, and it adds several
12 sentences.

13 Q. But the combination itself has not
14 changed; is that right?

15 A. The combination is still Naghavi,
16 Hochstedler, and Burnes.

17 Q. We've been going about one hour,
18 Dr. Cockburn. Do you want to take a break at this
19 point?

20 A. Yes, that would be great. Thanks.
21 Short break.

22 MR. KIANG: Could we take a ten-minute

1 break? And I guess before we go, I know it's
2 still pretty early for you. Do you need any
3 meal breaks during our deposition today?

4 THE WITNESS: No, I'll be fine.
5 Thanks.

6 MR. KIANG: Okay. Well, maybe during
7 our three hours in, we can probably take a
8 longer break. I'll probably need to eat
9 something. Maybe you can get something to
10 eat as well.

11 THE WITNESS: Sure. Thank you.

12 MR. KIANG: Okay. Ten-minute break,
13 please.

14 THE REPORTER: We're off the record.

15 (Recess taken at 2:57 p.m.)

16 THE REPORTER: We're back on the
17 record. The time is 3:07.

18 MR. KIANG: Could we please pull up
19 Exhibit 1005.

20 (Exhibit 1005, Previously marked.)

21 BY MR. KIANG:

22 Q. Dr. Cockburn, have you seen this

1 document before?

2 A. It hasn't arrived in my marked
3 exhibits Dropbox yet, but, yes, I've seen this
4 document. It's Naghavi.

5 Q. And this is one of the prior art
6 references that you relied on in your declaration?

7 A. That's correct.

8 MR. KIANG: You can take that down.
9 Let's bring up Exhibit 1004.

10 (Exhibit 1004, Previously marked.)

11 BY MR. KIANG:

12 Q. And, Dr. Cockburn, have you seen this
13 document before?

14 A. Yes, I have. That's the prior art
15 reference I refer to as Hochstedler.

16 MR. KIANG: Let's take that down
17 quickly, and bring up Exhibit 1006.

18 (Exhibit 1006, Previously marked.)

19 BY MR. KIANG:

20 Q. Dr. Cockburn, have you seen this
21 document before?

22 A. Yes, that's the prior art reference I

1 refer to as Burnes.

2 Q. Thank you.

3 MR. KIANG: And we can take that down.

4 BY MR. KIANG:

5 Q. In your declaration, you relied on a
6 combination of Naghavi, Hochstedler, and Burnes for
7 obviousness of the claims of the '223 patent; is
8 that correct?

9 A. That's correct. Under ground 1a, yes.

10 Q. And those three references, Naghavi,
11 Hochstedler, and Burnes are in every -- every
12 obviousness combination that's set forth in your
13 declaration; correct?

14 A. That's correct. In ground 1b, it's
15 also combined with a reference called Hayashi, and
16 in ground 1c, with Hayashi and Mortz.

17 Q. Let's turn to paragraph 34 of your
18 declaration. It's on page 20 of Exhibit 1003.

19 MR. KIANG: Paragraph 34 on page 20,
20 please.

21 THE WITNESS: I'm there, thanks.

22

1 BY MR. KIANG:

2 Q. Okay. And in this section that begins
3 with paragraph 34, you've described how Naghavi,
4 Hochstedler, and Burnes would be combined; is that
5 correct?

6 A. Yes.

7 Q. And is this explanation also
8 applicable to grounds 1b and 1C, where you've also
9 added other references, Hayashi and Mortz?

10 A. Yes, the -- under ground 1b, it builds
11 on this combination, and on ground 1c, it builds on
12 both com- -- on both ground 1a and ground 1b.

13 Q. Let's turn to page 45 of your
14 declaration, under the heading 1b.

15 A. Yes, I'm there. Thanks.

16 Q. So this is a section discussing your
17 analysis of limitation 1b in Claim 1; is that
18 correct?

19 A. Yes.

20 Q. And for limitation 1b, is it your
21 contention that this limitation is met by the
22 combination of Naghavi, Hochstedler, and Burnes?

1 A. That's correct, yes.

2 Q. You're not contending that any single
3 one of these references discloses the limitation; is
4 that correct?

5 A. My analysis relates to the combination
6 of Naghavi -- in ground 1a, it relates to the
7 combination of Naghavi, Hochstedler, and Burnes.

8 Q. So Naghavi by itself does not disclose
9 limitation 1b; is that right?

10 A. I haven't conducted that analysis. My
11 analysis relates to the combination only.

12 Q. So there's no contention in your
13 declaration that Naghavi, Hochstedler, or Burnes by
14 themselves would disclose limitation 1b; is that
15 correct?

16 A. Yes, my analysis relates to the
17 combination.

18 Q. And this limitation 1b includes the
19 phrase "the measured value of the first or second
20 physiological parameter is replaced with the other
21 of the measured values."

22 You see that?

1 A. I see that.

2 Q. For this portion of the limitation
3 that talks about replaced with -- the measured value
4 replaced by another one, is it correct that you're
5 relying on Hochstedler for that disclosure?

6 A. My analysis relates to the
7 combination.

8 Q. In the combination --

9 A. I provide examples of how
10 Hochstedler -- Hochstedler's description of the --
11 of its functionality discloses that particular
12 component of the limitation.

13 Q. So it's not your contention then that
14 Naghavi discloses the replaced portion of this
15 limitation; is that right?

16 A. Again, my analysis relates to the
17 combination. Naghavi describes how its graphical
18 user interface can mutate and reorder items within
19 the graphical user interface. And Hochstedler
20 provides specific details of how that reordering and
21 mutation described by Naghavi can directly disclose
22 the replacement limitation of 1b.

1 And I provide figures from Hochstedler
2 to show those transitions, including the transition
3 from Figure 2 to Figure 9 of Hochstedler and
4 Figures 2 to 13 of Hochstedler, directly disclosing
5 how the mutation and reordering described by Naghavi
6 is satisfied by the specific examples of replacement
7 provided by Hochstedler.

8 Q. So I understand that you're relying on
9 the combination of the references, but in that
10 combination of references, is it correct that you're
11 not contending that Naghavi discloses replacement of
12 one measured value with another?

13 MS. KIM: Objection, asked and
14 answered.

15 THE WITNESS: Naghavi describes that
16 the graphical user interface referred to as
17 Item 80 in Naghavi's figures can mutate and
18 reorder health objects and icons. So it's
19 describing a graphical user interface in
20 which a variety of mutations and changes can
21 occur, including reordering.

22 Person of skill in the art, having

1 read Naghavi's disclosures and looking to
2 Hochstedler's specific examples of how those
3 mutations and reorderings can occur, would
4 look to the examples provided by Naghavi,
5 such as those that I disclose in the
6 transitions from Figures 2 to 9 in
7 Hochstedler and Figures 2 to 13 in
8 Hochstedler.

9 And those would provide specific
10 examples of how reordering and mutation of
11 the graphical user interface can occur,
12 directly disclosing replacement of one
13 physiological parameter with another
14 physiological parameter in a common display
15 area.

16 If we're discussing the entirety of
17 limitation 1b, I should point out that there
18 are other elements that I also disclose from
19 Naghavi and Hochstedler and Burnes that
20 relate to the limitation component referring
21 to the occurrence of an event.

22

1 BY MR. KIANG:

2 Q. Now, you mentioned that Naghavi
3 references mutations and changes and reordering, but
4 Naghavi does not disclose or use the phrase
5 "replacement"; is that correct?

6 A. I can search for the term "replace" in
7 Naghavi, but I don't recall seeing the term
8 "replace" in Naghavi. However, a person of skill in
9 the art, with Naghavi's statements regarding the
10 mutation and reordering of display elements, would
11 look to Hochstedler for specific examples of how
12 those mutations and reorderings could occur.

13 And Hochstedler provides specific
14 examples, including direct replacement, as I
15 referred to earlier and as disclosed in my
16 declaration.

17 Q. Is it correct that you're also not
18 contending -- sorry. Let me rephrase that.

19 You're not contending that Burnes
20 discloses a replacement of one measured parameter
21 with another; is that correct?

22 A. My analysis relates to the combination

1 and how the combination discloses these components.

2 Q. And the combination of Naghavi,
3 Hochstedler, and Burnes, you're not relying on any
4 particular disclosure from Burnes for the "replace"
5 portion of this limitation 1b; is that correct?

6 A. Again, my analysis relates to the
7 combination. I don't recall making reference to --
8 directly to Burnes, for example, of the replacement,
9 but I provide clear examples of the replacement from
10 examples -- specific examples in Hochstedler.

11 Q. At the end of limitation 1b, there's
12 also this phrase "based on an occurrence of an
13 event."

14 Do you see that?

15 A. Yes.

16 Q. And if we continue to -- it's the next
17 section on page 50. It's your understanding that
18 this event is what's described here in limitation
19 1c, which is, quote, the event being the measured
20 value of one of the first or second physiological
21 parameters approaching one or more threshold values
22 indicative of the worsening state of a patient, end

1 quote; is that correct?

2 A. I see that limitation, yes.

3 MR. KIANG: Going back now to page 45.

4 And let's also have page 46 on the screen,
5 too.

6 BY MR. KIANG:

7 Q. In your combination of Naghavi,
8 Hochstedler, and Burnes, you're not contending or
9 relying on any disclosure in Hochstedler for the
10 "based on the occurrence of an event" portion of
11 limitation 1b; is that correct?

12 A. Again, my analysis relates to the
13 combination of the three. I recall describing how
14 Hochstedler includes description of changes to its
15 display, including the examples replacement that I
16 provided in response to events. So there is an
17 analysis of how Hochstedler discloses changes to its
18 display in response to events.

19 Naghavi also discloses changes and
20 mutations and reordering of the graphical user
21 interface in response to changes in the health
22 status of the patient.

1 And Burnes also describes changes to
2 an interface in response to events, including the
3 approach or nearing of values to a threshold and the
4 surpassing of thresholds. So the combination
5 clearly discloses this limitation.

6 Q. You mentioned in your answer that
7 Hochstedler discloses changes to its display in
8 response to events. Those events in Hochstedler are
9 changes in the system's capability, such as a sensor
10 being added, or changes in the system's environment,
11 such as a switch from one medical procedure to
12 another; is that right?

13 A. Those are included in its examples
14 that Hochstedler provides, yes.

15 Q. But Hochstedler does not include an
16 example where the event is the measured value of one
17 of the first or second physiological parameters
18 approaching a threshold value; correct?

19 A. The combination discloses that -- that
20 particular functionality through Naghavi's
21 disclosure of the graphical user interface changing
22 or mutating in response to changes in the status of

1 the patient.

2 Similarly, Burnes describes alarms and
3 other events being triggered by changes in
4 physiological parameters.

5 Q. I understand your contention with
6 respect to the combination of references, but my
7 question was directed to Hochstedler by itself.

8 So Hochstedler does not include an
9 example where the event is the measured value one of
10 the first or second parameters approaching a
11 threshold value; is that right?

12 A. The combination discloses this
13 limitation. I don't recall Hochstedler directly
14 disclosing changes in response to a physiological
15 parameter, but the combination certainly does.

16 Can I close my door? My dog's barking
17 outside the door.

18 Q. Go ahead.

19 A. It will be five seconds.

20 Apologies for that. My kids just got
21 up.

22 Q. Not a problem. To be honest, I didn't

1 even hear the dog.

2 (Pause from the record.)

3 BY MR. KIANG:

4 Q. Going back -- actually, staying on
5 pages 45 and 46 and this section generally
6 discussing limitation 1b, in your combination of
7 Naghavi, Hochstedler, and Burnes, when the first
8 measured value is replaced by a second measured
9 value, the first measured value is no longer
10 displayed on the combination system; is that
11 correct?

12 A. That's not part of my analysis. My
13 analysis discloses how one value is -- in a common
14 area is replaced by another value.

15 MR. KIANG: Let's go to page 46, in
16 the middle of paragraph 73.

17 BY MR. KIANG:

18 Q. Do you see the sentence that says,
19 "The purple parameter block 172 in the new layout
20 takes the place of (i.e., replaces) the blue
21 parameter block 51 in the original layout in that
22 the display of the measured value of the first

1 physiological parameter (in the blue-highlighted
2 parameter block of the Figure 2 based layout) is
3 replaced with the measured value of the second
4 physiological parameter (in the purple-highlighted
5 parameter block)"?

6 A. Sorry, was there a question?

7 Q. Actually, I was just directing you to
8 that sentence.

9 A. I see it, yes.

10 Q. So at the top of that -- well, towards
11 the beginning of that sentence, you say "takes the
12 place of (i.e., replaces)."

13 And so is it your understanding that
14 when something replaces another, it takes the place
15 of that thing?

16 A. I think that's a clear example where
17 the value for CO at 33.0 degrees C has replaced the
18 previous display at that location, which reads
19 "GAS." And I've added the hash, hash, hashmarks
20 underneath the "GAS."

21 Q. You're referring to the two figures
22 that are on the top of page 47; is that right?

1 A. That's correct.

2 Q. And so this example -- in this example
3 that's illustrated at the top of page 47, you're
4 saying the GAS parameter is replaced by the CO
5 parameter in the next figure; is that right?

6 A. That's correct, in this particular
7 example. There are other examples.

8 Q. Okay. And in this example, after the
9 GAS parameter has been replaced by the CO parameter,
10 the GAS parameter is no longer displayed; correct?

11 A. At that location, that's correct.

12 Q. You have another example that's on the
13 top of page 48.

14 Do you see that?

15 A. Yes, I do.

16 Q. The depiction of Figures 2 and 13 from
17 Hochstedler.

18 A. Yes.

19 Q. In the -- is it your contention that
20 in the left figure, the block that's labeled "SvO2"
21 is replaced by the block labeled CO2 in the right
22 figure?

1 A. Yes, I think that's an extremely clear
2 disclosure of a common display area identified in
3 the images and the replacement of the first
4 parameter in that common display area with a second
5 parameter that includes at least that common display
6 area.

7 Q. And in this example, once SvO2 has
8 been replaced by CO2 in Figure 13, SvO2 is no longer
9 displayed; correct?

10 A. The limitation refers to the common
11 display area, certainly not -- SvO2 is not displayed
12 in that common display area.

13 Q. Let's go back -- let's turn now to
14 paragraph 38 of your declaration, which is on
15 page 23 and going to page 24.

16 A. I'm there, thanks.

17 Q. In the second sentence of this
18 paragraph, you state, "However, although Naghavi
19 indicates that this change in health status can be
20 related to the 'severity' of one or more of the
21 parameters, Naghavi provides no further details
22 about specifically what is considered a change

1 sufficient to prompt a change in device layout."

2 Do you see that?

3 A. Yes, I do. And I've spotted a further
4 typo in my declaration. At the end of that
5 sentence, not highlighted, it refers to "Barnes."
6 That should be "Burnes."

7 Q. What does Naghavi mean by the
8 "severity of a parameter"?

9 A. I didn't construe that particular
10 term. I just took it as a person of ordinary skill
11 in the art would understand it. "Severity of
12 medical parameters" indicate how bad things are for
13 a patient on a particular parameter.

14 Q. Continuing up through the middle of
15 paragraph 38, there's a sentence that says, "For
16 instance, when a parameter that is not displayed in
17 a current layout changes to become 'out of range'
18 (or to approach an out of range value), this
19 triggers an alarm, as taught by Burnes."

20 Do you see that?

21 A. Yes, I do.

22 Q. And you cited Burnes, Exhibit 1006, at

1 paragraphs 38 to 39; is that right?

2 A. Yes.

3 Q. So what are you relying on Burnes for
4 in this statement?

5 A. Well, these are the specifics
6 regarding the -- what is a sufficient change to
7 prompt a change in the display layout.

8 Q. So are you relying on Burnes for this
9 idea of a parameter triggering an alarm?

10 A. That's not entirely the case. Naghavi
11 suggests the triggering of an alarm also at
12 paragraph 45. So Naghavi suggests the existence of
13 this feature as part of responding to the health
14 status of a patient and Burnes provides the
15 specifics of how those changes can be triggered with
16 respect to parameters becoming out of range or near
17 or approaching the out of range criteria.

18 Naghavi already suggests these
19 features and Burnes provides the specifics of how
20 that occurs.

21 Q. Does Burnes disclose monitoring a
22 parameter that is not displayed?

1 A. It's the combination that I'm relying
2 on to disclose these combined features.

3 Q. I don't think that quite answers my
4 question.

5 In this statement that's in
6 paragraph 38, you said, when a parameter that is not
7 displayed in the current layout changes to become
8 out of range or to approach an out of range value,
9 this triggers an alarm. And you cited Burnes for
10 this statement.

11 Does Burnes disclose monitoring a
12 parameter that's not displayed?

13 A. I haven't relied on Burnes for that
14 particular element.

15 Q. Does Hochstedler disclose monitoring a
16 parameter that's not displayed?

17 A. I don't recall providing any such
18 example in my declaration.

19 Q. Does Naghavi disclose monitoring a
20 parameter that's not displayed.

21 A. I provide examples of how these --
22 this combination meets the limitations. Are we

1 addressing any particular limitation at the moment?

2 Q. You've said here that "when a
3 parameter that is not displayed in a current layout
4 changes to become out of range (or to approach an
5 out of range value), this triggers an alarm."

6 So I understand that your contention
7 is that this combination of Naghavi, Hochstedler,
8 and Burnes is monitoring a parameter that's not
9 displayed; is that correct?

10 A. The combination would disclose that
11 feature, yes.

12 Q. Which reference discloses monitoring a
13 parameter that's not displayed?

14 A. Naghavi discloses mutating and
15 changing the display, including reordering items.

16 Q. But where does Naghavi disclose
17 monitoring a parameter that's not displayed?

18 A. Well, I hadn't finished my answer.
19 Naghavi discloses mutating changing the display.

20 Hochstedler discloses adapting
21 specific ways in which the display can be changed or
22 mutated, consistent with Naghavi. And that includes

1 displaying new values when -- changing the display
2 to display new values when events occur in the
3 system.

4 And Burnes discloses creating alarm
5 events that were previously not displayed when
6 parameters become out of range or near out of range.

7 Q. So in this combination of Naghavi,
8 Hochstedler, and Burnes, it's your contention that
9 this combination system is monitoring parameters
10 that are not displayed so that when that parameter
11 becomes out of range or near out of range, it can
12 replace something that is being displayed; is that
13 correct?

14 A. That's correct.

15 Q. Okay. Which reference discloses
16 monitoring a parameter that's not being displayed?

17 MS. KIM: Asked and answered,
18 objection.

19 THE WITNESS: I recall providing an
20 example -- a specific example of this in my
21 declaration with reference to Hochstedler's
22 capability to allow the user to configure

1 which parameters are displayed or not
2 displayed. I can find that particular
3 example in my declaration, if you wish me to
4 do so.

5 BY MR. KIANG:

6 Q. Yes, please do so.

7 A. The particular example I was recalling
8 is at paragraph 141 on page 87.

9 MR. KIANG: Okay right. Can we go to
10 page 87, and display paragraph 141.

11 BY MR. KIANG:

12 Q. Okay. So what were you referring to
13 in Hochstedler here?

14 A. I can read the paragraph.

15 "Hochstedler describes that the
16 layouts are set according to user input: 'how the
17 system'" -- this is a direct quote now -- 'how the
18 system 10 displays information may be modified
19 through the controls 42 and buttons 45 that are
20 associated with the layout 39,' e.g., to 'adjust the
21 display of information to suit that user's
22 preferences or needs.'"

1 That's from Hochstedler at Column 3,
2 lines 55 to 59.

3 Then I state, "The question of which
4 blood parameters are displayed on which layout is
5 thus a user preference. A POSITA would have
6 recognized that in certain situations, it would make
7 sense to display certain blood parameters in one
8 layout and other blood parameters in a different
9 layout, e.g., depending on factors such as patient
10 condition or medical issues."

11 And it goes on to provide specific
12 examples of that.

13 Q. So at the beginning of this paragraph,
14 you cited Hochstedler, Exhibit 1004, at 3 --
15 Column 3, lines 55 to 59. You've quoted that.

16 But that portion of Hochstedler does
17 not disclose monitoring a parameter that's not being
18 displayed; is that correct?

19 A. To a person of ordinary skill in the
20 art, I believe it does, as I go on to provide
21 specific examples of how a person of skill in the
22 art would understand that disclosure.

1 Q. So Hochstedler does not actually
2 disclose monitoring of that parameter in the
3 background that's not displayed; correct?

4 A. A person of skill in the art reading
5 Hochstedler, including that disclosure, this is how
6 they would understand it, that it could be
7 monitoring something that is not displayed.

8 "For instance, for a patient for whom
9 carbon monoxide saturation is not likely to be a
10 concern, blood parameters indicative of carbon
11 monoxide saturation (e.g., carboxyhemoglobin
12 concentration) are not displayed in the main layout,
13 and replace other, more relevant blood
14 parameters...only should an issue arise" --

15 Q. Referring to -- now, you didn't cite
16 any exhibits for that statement; correct?

17 A. Well, this is an explanation of a
18 person of skill in the art's understanding of the
19 disclosure within Hochstedler.

20 Q. Is it possible that Hochstedler does
21 not actually monitor parameters in the background
22 that are not displayed?

1 MS. KIM: Objection, relevance.

2 THE WITNESS: I haven't provided an
3 opinion on that.

4 Well, I mean, can you repeat the
5 question, please?

6 BY MR. KIANG:

7 Q. Is it possible that Hochstedler does
8 not actually monitor parameters in the background
9 that are not displayed on the display?

10 A. This is a hypothetical addressing
11 possibility. I think those possibilities include
12 not monitoring and not displaying, for instance,
13 when Hochstedler is turned off.

14 Q. Now, you've said that's when
15 Hochstedler's turned off, but is it possible that
16 when Hochstedler is turned on, it is not monitoring
17 parameters that are not displayed?

18 MS. KIM: Objection, relevance.

19 THE WITNESS: Again, possibilities are
20 hypotheticals. Hochstedler includes the --
21 it discloses to a person of skill in the art
22 the possibility that sensors will be

1 connected and disconnected from the device.

2 Clearly, a person of skill in the art
3 would understand that if Hochstedler's device
4 was on and no sensors were connected to it,
5 then its display would not be displaying any
6 outputs related to disconnected sensors.

7 BY MR. KIANG:

8 Q. I'm just trying to understand your
9 opinion because you said that a person of ordinary
10 skill reading Hochstedler would understand it to
11 disclose -- or could understand that it would make
12 sense to display certain blood parameters in one
13 layout and other blood parameters in a different
14 layout.

15 And it's also your understanding, and
16 correct if I'm wrong, that you're reading
17 Hochstedler such that it's also monitoring
18 parameters that are not displayed, but it's doing
19 this background monitoring; is that correct?

20 A. That's more or less a rephrasing of
21 paragraph -- my understanding as disclosed in
22 paragraph 141.

1 Q. Okay.

2 A. There may be situations --

3 Q. Oh, please continue.

4 A. There may be situations in which the
5 user does not require certain parameters to be
6 displayed, but it makes sense for those parameters
7 to become displayed if certain events, including
8 alarm situations, occur.

9 Q. Okay. And so that would assume that
10 Hochstedler is, in fact, monitoring parameters in
11 the background; correct?

12 MS. KIM: Objection, relevance.

13 THE WITNESS: I haven't provided
14 opinions on background monitoring, but there
15 could be situations in which the user's
16 preferences have determined certain layouts
17 do not disclose certain parameters.

18 BY MR. KIANG:

19 Q. What do you mean by you haven't
20 provided opinions on background monitoring?

21 A. Well, background monitoring is not a
22 phrase that I've used.

1 Q. Let me -- I'd like to clarify then.

2 When I say "background monitoring," I mean
3 monitoring a parameter that's not displayed.

4 With that in mind, did you provide any
5 opinions on background monitoring relevant to your
6 combination of Naghavi, Hochstedler, and Burnes?

7 A. I think the example I provided in
8 paragraph 141 includes what you are referring to as
9 background monitoring.

10 Q. But there's no express disclosure in
11 Hochstedler of background monitoring; is that
12 correct?

13 A. I don't recall the term "background
14 monitoring" occurring in Hochstedler.

15 Q. And there is no other disclosure
16 expressed or otherwise that Hochstedler monitors
17 parameters that are not displayed; correct?

18 A. A person of skill in the art reading
19 Hochstedler's disclosures would understand that the
20 example of adjusting the display of information to
21 suit the user's preferences would include the
22 ability to select certain parameters for nondisplay.

1 Q. And Hochstedler --

2 (Cross talk.)

3 THE WITNESS: I'm finished.

4 BY MR. KIANG:

5 Q. Okay. So I understand you've said
6 that a person of skill would understand that there
7 might be a user selection of certain parameters that
8 might not be displayed; is that correct?

9 A. In certain layouts, yes, that's
10 correct.

11 Q. But does Hochstedler disclose anywhere
12 in the specification that if a user does not -- a
13 user chooses not to display a parameter, that that
14 parameter is still being monitored in the
15 background?

16 A. A person of skill in the art would
17 understand that that would still be monitored, and
18 if the associated parameter alarms or has a severity
19 rating associated with it in the combination, then
20 that alarming parameter would become displayed.

21 Q. I wasn't asking about how a person of
22 ordinary skill would understand it. I was asking

1 whether Hochstedler discloses monitoring a parameter
2 in the background that's not displayed.

3 MS. KIM: Objection, relevance.

4 THE WITNESS: I think the issue is
5 what is disclosed to a person of skill in the
6 art -- I guess the answer depends on what you
7 mean by "disclosed." Direct disclosure of
8 background monitoring, the phrase "background
9 monitoring," I believe, does not occur in
10 Hochstedler.

11 However, what a patent discloses to a
12 person of skill in the art is how a person of
13 skill in the art would understand the
14 disclosures. And the person of skill in the
15 art's understanding of the disclosures would
16 include the examples that I provided in
17 paragraph 141.

18 BY MR. KIANG:

19 Q. Would a person of ordinary skill
20 understand that it's possible that Hochstedler does
21 not monitor parameters that are not displayed?

22 A. I haven't provided an opinion on that

1 situation.

2 Q. I'd like to ask you to provide that
3 opinion now.

4 MS. KIM: Objection, relevance.

5 THE WITNESS: An opinion on what is
6 possible?

7 BY MR. KIANG:

8 Q. You said that Hochstedler -- back up.
9 You said that a person of skill

10 reading Hochstedler would understand that
11 Hochstedler is monitoring these parameters in the
12 background; is that right?

13 A. Essentially, yes.

14 Q. Now, is it also possible that a person
15 of skill would understand that it's not doing that?

16 A. A person of skill in the art would
17 understand that Hochstedler would be able to monitor
18 these parameters and adjust its display if a
19 particular parameter alarms.

20 A person of skill in the art would
21 also understand that Hochstedler would be capable of
22 displaying those parameters. I think that includes

1 your scenario.

2 Q. Where does Hochstedler disclose
3 adjusting a display if a particular parameter
4 alarms?

5 A. It's the combination that provides the
6 disclosure of the response to parameters alarming.

7 Q. Okay. So Hochstedler alone does not
8 disclose adjusting a display of a particular
9 parameter when it alarms; correct?

10 A. I don't recall the use of the word
11 "alarm" in Hochstedler, but the combination
12 certainly provides that disclosure, including
13 Naghavi's mentions alarms at paragraph 45 and the
14 extensive discussion of how alarms are triggered in
15 Burnes.

16 Q. Let's go to paragraph 49 of your
17 declaration.

18 A. I'm there, thanks.

19 Q. All right. In the second sentence,
20 you state, "The combination system, though, does not
21 necessarily display all parameters on a single
22 screen, at least in cases when more parameters are

1 being monitored than there are spaces to display
2 those parameters in the display layout."

3 Do you see that?

4 A. I do.

5 Q. You didn't include a citation to any
6 exhibit for that statement; correct?

7 A. Correct, there's no citation right
8 there.

9 Q. And there's no particular reference
10 that discloses monitoring more parameters that are
11 being displayed; correct? And let me rephrase that.

12 There's no particular reference from
13 your combination of Naghavi, Hochstedler, and Burnes
14 that discloses more parameters are being monitored
15 than there are spaces to display; correct?

16 A. A person of skill in the art would
17 certainly understand that to be the case, including
18 the fact that Naghavi includes a variety of
19 displays, and those variety of displays include
20 small displays that the user patient may wear.

21 A user patient would not want to see
22 or would be unlikely to want to see all of the

1 parameters that are tailored to a particular health
2 professional.

3 So a complex display such as that
4 provided by Naghavi -- Naghavi's remote monitoring
5 display and by Hochstedler's hospital-based display,
6 those would be unsuitable for presentation to the
7 patient themselves who also has a display disclosed
8 in Naghavi.

9 So that includes situations in which
10 there are more parameters being monitored than are
11 displayed to the user.

12 Q. You're referring to the device that's
13 being worn by the patients in Naghavi; correct?

14 A. That's one of the displays that is
15 provided, yes.

16 Q. But what is the display in your
17 combination of Naghavi, Hochstedler, and Burnes?
18 Isn't it a display in graphical user interface of
19 Hochstedler?

20 A. Well, it's -- not exactly, no. It's
21 the display described by Naghavi that is described
22 as being mutable and changeable, including the

1 reordering and the other display changes, and then
2 the specifics of how that -- those display changes
3 occur or mutations occur is provided by Hochstedler.

4 Q. Let's turn to paragraph 35 of your
5 declaration.

6 A. I'm there, thanks.

7 Q. You say -- you state, "More
8 specifically, in the Naghavi-Hochstedler-Burnes
9 combination, information from the sensors is
10 displayed in a 'dynamic interactive healthcare
11 specific graphical user interface [GUI]' that
12 displays 'different types of icons and health
13 objects.'" And you cite a couple paragraphs from
14 Naghavi.

15 And you continue, "This GUI can be
16 implemented on an 'output device 8 such as a
17 monitor,' highlighted in orange, or can be displayed
18 on a display of a 'remote service' for patient
19 monitoring, highlighted in brown, e.g., at a
20 hospital, as taught by Naghavi."

21 Do you see that?

22 A. Yes.

1 Q. On page 22, you have a depiction of
2 Naghavi, Hochstedler, and Burnes; correct?

3 A. Yes.

4 Q. And you've highlighted the display 8;
5 correct?

6 A. Yes. And the display 19, or 3.

7 Q. Okay. And both the display 8 and the
8 display 19 are not the displays -- well, those are
9 not whatever object is being worn by the patient;
10 correct?

11 A. That's correct.

12 Q. Okay. How -- sorry.

13 Naghavi does not disclose monitoring
14 any parameters that are not being displayed on
15 either display 8 or 19; correct?

16 MS. KIM: Objection to form.

17 THE WITNESS: Naghavi discloses the
18 graphical user interface is mutable,
19 including the reordering and other forms of
20 changes to the graphical user interface, but
21 specifics of how that occur, I'm primarily
22 relying on Hochstedler.

1 MR. KIANG: We've been going about
2 another hour, Dr. Cockburn. Do you want to
3 take another ten-minute break?

4 THE WITNESS: Sure.

5 MR. KIANG: Let's take a break then.

6 THE REPORTER: We're off the record.

7 (The time is 4:05 p.m.)

8 THE REPORTER: We're back on the
9 record.

10 (The time is 4:13 p.m.)

11 BY MR. KIANG:

12 Q. Dr. Cockburn, did you speak to anybody
13 during the break about the substance of your
14 testimony?

15 A. No.

16 Q. Let's turn to paragraph 50 in your
17 declaration.

18 A. I'm there, thanks.

19 Q. Now, you said in paragraph 50, "The
20 second reason why a POSITA would have been motivated
21 to pursue this implementation is to 'relieve the
22 data analysis burden based on the clinician while

1 enabling the clinician to maintain thorough patient
2 care.'" You cite Burnes at paragraph 4.

3 You continue, "For instance, a POSITA
4 would have recognized that not all parameters
5 necessarily need to be displayed on a main (e.g.,
6 default) layout. For instance, parameters that are
7 less relevant to the patient's condition or that are
8 less likely to change in severity does not
9 necessarily need to be constantly displayed."

10 Do you see that?

11 A. Yes.

12 Q. Now, you didn't cite any exhibits for
13 your assertion that a person of skill would have
14 recognized that not all parameters necessarily need
15 to be displayed; correct?

16 A. Well, the next sentence goes on to
17 read, "Indeed, avoiding display of redundant
18 information is a key aspect of Hochstedler's
19 objective - which is, generally, to display the set
20 of parameters that is appropriate for a given
21 situation." And that cites to Hochstedler,
22 Column 1, lines 49 to 60.

1 MR. KIANG: Let's bring up
2 Exhibit 1005. And let's go to Column 1,
3 lines 49 to 60.

4 Can we go to Column 1, lines 49 to 60.

5 Is this Exhibit 1005?

6 THE VIDEOGRAPHER: This is, yes.

7 THE WITNESS: It should be 1004.

8 MR. KIANG: Okay. Let's bring up
9 1004. Looks like that was another typo.

10 (Exhibit 1004, Previously marked.)

11 BY MR. KIANG:

12 Q. So here, in paragraph 50, you meant to
13 reference Hochstedler, which is Exhibit 1004;
14 correct?

15 A. Correct.

16 Q. Okay.

17 MR. KIANG: Let's go to -- in
18 Exhibit 1004, let's go to Column 1, lines 49
19 to 60.

20 BY MR. KIANG:

21 Q. Where in this section of Hochstedler
22 does it discuss avoiding display of redundant

1 information?

2 A. There's a sentence at line 55 and 56
3 that says, "The system determines the active or
4 currently used components of the current layout and
5 monitors the system to detect changes in the
6 system's capabilities (e.g., an additional sensor is
7 added) or changes in the system's environment (e.g.,
8 a switch is made from one medical procedure to
9 another)."

10 A person of skill in the art would
11 understand that if there are parameters that are not
12 actively in use, then the display of those
13 not-in-use parameters would be redundant. That's
14 obvious in light of this statement.

15 And a person of skill in the art would
16 understand the purpose of this invention is to
17 avoid -- part of the purpose is to avoid the display
18 of nonrelevant information or redundant information
19 and to ensure that the most valuable display is
20 continually presented to the user.

21 Q. What does a parameter that is not
22 actively in use mean?

1 A. In light of the disclosures of
2 Hochstedler -- I actually haven't interpreted that
3 term, but in light of the disclosures of
4 Hochstedler, that would include parameters that the
5 user has determined to be not necessary for the
6 current display.

7 Q. So if a user has determined that a
8 parameter does not need to be in active use or is
9 not necessary for the current display, does
10 Hochstedler disclose monitoring that parameter
11 anyway?

12 A. We were earlier discussing and I
13 provided examples in my declaration of how and why a
14 person of skill in the art would understand
15 Hochstedler to allow the user to configure the
16 display to not display certain parameters in certain
17 layouts that are currently unimportant or of low
18 priority.

19 Q. And does Hochstedler disclose
20 monitoring parameters that are currently unimportant
21 or low priority and are not being displayed?

22 A. I think my answer is the same as the

1 previous question. I provide examples in my
2 declaration of why a person of skill in the art
3 would take that understanding from Hochstedler.

4 Q. So --

5 A. So I should add Hochstedler in
6 combination with Naghavi and Burnes.

7 Q. And what -- does Hochstedler -- does
8 Naghavi or Burnes disclose monitoring a parameter
9 that's not displayed?

10 A. Is this with respect to any particular
11 limitation?

12 Q. This is with respect to your previous
13 answer, which you stated, I should add Hochstedler
14 in combination with Naghavi and Burnes.

15 A. Well, yes, in certain limitations at
16 certain parts of my declaration, I provide examples
17 of why in the combinations that I've discussed, a
18 person of skill in the art would understand that
19 there may be parameters that are not displayed in
20 the combination. Those are the examples that I'm
21 referring to.

22 Q. And in paragraph 50, that's one

1 example, correct, that -- let me restart that.

2 Paragraph 50 is one of these examples
3 in which you put in your declaration that there are
4 parameters that are being measured but not being
5 displayed; is that correct?

6 A. Yes. "For instance, a POSITA would
7 have recognized that not all parameters necessarily
8 need to be displayed on a main (e.g., default)
9 layout."

10 Q. Hochstedler does not discuss redundant
11 information; correct?

12 A. I believe the term "redundant"
13 information is not contained in Hochstedler.
14 However, a person of skill in the art reading
15 Hochstedler would understand that a primary purpose
16 of Hochstedler is to provide a display that provides
17 the most useful information to the user possible,
18 and that includes not displaying information related
19 to nonactive and noncurrently used components.

20 Q. When you say a nonactive and not
21 currently used component, are you referring to
22 parameters that are not being monitored?

1 A. It includes parameters that are not
2 being monitored. It also includes parameters that
3 the user has determined are not important for the
4 current display.

5 Q. Let's turn to -- let's stay on this
6 Exhibit 1004. And let's turn to Column 8, lines 19
7 to 24. And let me know when you're there.

8 A. I'm there, thanks.

9 Q. Now, do you see at lines -- at
10 Column 8, lines 19 to 24, Hochstedler states, "The
11 user may set the threshold such that no switching
12 will occur if the current layout set contains all of
13 the parameters needed for the current set of system
14 capabilities, but as soon as the current layout set
15 is missing one, the system will make a layout switch
16 using one of the layout switch algorithms."

17 Do you see that?

18 A. Yes.

19 Q. Wouldn't a person of ordinary skill in
20 the art read this in Hochstedler and understand that
21 Hochstedler teaches or suggests that whenever a
22 parameter that's being measured is missing, it will

1 switch the layout to display all of them?

2 A. Can you remind where in my declaration
3 I refer to this passage in Hochstedler?

4 Q. I'm not referring to any particular
5 paragraph in your declaration, but I'm referring to
6 Column 8, lines 19 to 24, of Hochstedler.

7 A. I think this calls for a new opinion,
8 and I'd want to think carefully about exactly how a
9 person of skill in the art would interpret this
10 portion.

11 Q. Okay. So you've opined several times
12 today and in your declaration that Hochstedler --
13 that a person of skill reading Hochstedler would
14 understand Hochstedler to be monitoring parameters
15 that are not displayed; correct?

16 A. A person of skill in the art would
17 understand in the combination, including those
18 disclosed by Hochstedler, that that is a
19 possibility, yes.

20 Q. But you didn't consider this portion
21 of Hochstedler, which is at Columns 8 lines 19 to
22 24; correct?

1 A. When I formed my declaration over
2 six months ago, I read and interpreted the entirety
3 of Hochstedler. I don't recall making particular
4 reliance on this particular disclosure.
5 Hochstedler -- the disclosures I rely on in
6 Hochstedler are clear and presented in my
7 declaration.

8 Hochstedler includes a variety of
9 other disclosures, including the weighting functions
10 that it uses in association with a set of parameters
11 and algorithms that operate off those weighting
12 functions.

13 I don't recall making direct reference
14 to those in my declaration, and I don't believe they
15 were pertinent to my analysis of how the combination
16 of Naghavi, Hochstedler, and Burnes render the
17 limitations of the '223 patent obvious.

18 Q. You mentioned "weighting functions" in
19 your answer. Were you referring to Hochstedler's
20 best guess algorithm?

21 A. Not directly, no. I was -- I was
22 providing a statement that's associated with my

1 recollection. This set of disclosures in
2 Hochstedler is fulsome. I don't rely on all of
3 those disclosures.

4 I read Hochstedler as a whole, and my
5 declaration makes clear the components of
6 Hochstedler on which I was relying in the
7 combination with Naghavi and Burnes for ground 1a.

8 Q. So where in all of Hochstedler's
9 disclosure would it suggest to a person of skill
10 that Hochstedler will monitor parameters that are
11 not being displayed?

12 A. We can turn back, I believe it was
13 paragraph 141, for one particular example of how a
14 person of skill in the art would understand the
15 disclosures of Hochstedler to yield that particular
16 element you're questioning about.

17 Q. So in paragraph 141 of your
18 declaration, you cited Hochstedler at Column 3,
19 lines 55 to 59. Let's go there.

20 Column 3, lines 55 through 59,
21 Hochstedler reads, "How the system 10 displays
22 information may be modified through the controls 42

1 and buttons 45 that are associated with the
2 layout 39. The controls 42 and control buttons 45
3 provide an end user a mechanism for adjusting the
4 display of information to suit that user's
5 preferences or needs."

6 Am I reading that correctly?

7 A. Yes.

8 Q. That sentence -- those two sentences,
9 is there any disclosure in here of monitoring a
10 parameter that's not displayed?

11 A. That paragraph includes a statement,
12 "Preferably, the components of the GUI are also
13 created with standard windowing-type controls that
14 allow modification of the size and location of
15 components."

16 Standard windowing controls, a person
17 of skill in the art, would understand to include the
18 maximize, minimize, and resizing controls that are
19 common and have been common on graphical user
20 interfaces since at least the 1980s, if not earlier.

21 Minimizing a window removes that
22 window from the display. This is a standard

1 windowing-type control. So, yes, Hochstedler does
2 disclose to a person of skill in the art the
3 possibility of removing certain monitored parameters
4 from the display.

5 Q. So to be clear, in paragraph 141, you
6 reference Column 3, lines 55 through 59. And now
7 you're reading from Column 3, lines 62 to 64; is
8 that correct?

9 A. That's correct. I was just --

10 Q. And you also read that standard
11 windowing-type controls to somehow include
12 minimizing window; correct?

13 A. Well, a person of skill in the art has
14 certain understandings relating to standard
15 windowing-type controls. Hochstedler clearly
16 doesn't feel the need to disclose what those are
17 directly -- explicitly. Because they are entirely
18 standard and have been since at least the early
19 1980s.

20 I was just providing yet another
21 example of how the set of disclosures in Hochstedler
22 provides disclosure to a person of skill in the art

1 the functionality that you are addressing.

2 Q. In your combination of Naghavi,
3 Hochstedler, and Burnes, when this combination
4 system is monitoring a parameter, that would mean
5 that some clinician, whether it's a doctor, a nurse,
6 or some other professional, has hooked up a patient
7 to some kind of sensor that is then providing this
8 parameter measurement to the combined system; is
9 that correct?

10 A. Broadly, that sounds correct, yes.

11 Q. Now, if a clinician thought it was
12 important enough to connect that sensor to the
13 patient, why would a person of skill believe that
14 that parameter does not need to be displayed?

15 MS. KIM: Objection, relevance.

16 THE WITNESS: The disclosures of
17 Naghavi, Hochstedler, and Burnes are related
18 to providing a graphical user interface
19 display that is of most value to the user.

20 If the user knows that certain
21 parameters are of less pertinence or less
22 value at the current time, they may want to

1 suppress the display of those parameters to
2 avoid the display of redundant or non-useful
3 information and to focus the display on
4 information that is most useful to them.

5 BY MR. KIANG:

6 Q. And what is that opinion based on?

7 A. Pardon?

8 Q. What was that opinion based on?

9 A. The disclosures of Naghavi,
10 Hochstedler, and Burnes.

11 Q. And, again, where in either -- in any
12 one of those references, Naghavi, Hochstedler, or
13 Burnes, does it disclose that certain parameters are
14 less important or don't need to be displayed?

15 A. A person of skill in the art reading
16 Naghavi would understand that these changes are
17 occurring in order to make the most important
18 information conspicuous to the user. A person
19 reading Naghavi would understand the same. And a
20 person reading Burnes would understand the same.

21 They all address reformatting the
22 graphical user interface to bring certain

1 information to the user's attention, at least to a
2 person of skill in the art's understanding and
3 explicitly.

4 Q. You've stated that each of these
5 references discuss reformatting the graphical user
6 interface to bring certain information to the user's
7 attention.

8 Do any of these references discuss
9 removing information from the display?

10 A. My analysis is --

11 Q. I'm sorry. And by "information," I
12 mean a measured value of a parameter.

13 A. My analysis is focused on how these
14 disclosures meet the limitations. I have not
15 conducted a thorough analysis of elements or
16 functionality that is not pertinent to the
17 limitations that may not be disclosed by the -- by
18 the references.

19 Q. Now, the claims of a '223 patent --
20 several of the claims of the '223 patent recite a
21 measured value of one parameter being replaced by
22 the measured value of another parameter; right?

1 A. That's correct, in different
2 contexts -- in the context of Claim 1, that
3 replacement is directed to a particular common
4 display area, not the display as a whole.

5 Q. And we've also discussed how in your
6 particular examples of Hochstedler, I believe it was
7 Hochstedler's Figures 2 and 9 and then Figures 2 and
8 13, we've talked about how it's your contention that
9 a measured value of one parameter takes the place of
10 another measured value of another parameter;
11 correct?

12 A. Yes, that's extremely clear in
13 Hochstedler's transitions from Figures 2 to 9 and 2
14 to 13.

15 Q. And when that happens, the original
16 measured value is removed from display, and it's
17 replaced by a measured value of the other parameter;
18 correct?

19 A. In Claim 1, whether it is removed from
20 the display or not, is not part of my analysis. My
21 analysis is related in Claim 1 to the common display
22 area. That's what the limitation requires, and it

1 is abundantly clear that the value -- the first
2 value in the common display area is replaced by the
3 second value in that common display area.

4 Q. In the combination of Naghavi,
5 Hochstedler, and Burnes, why would a person of
6 ordinary skill have wanted to remove information,
7 remove a measured value of one parameter from the
8 display?

9 A. Does this relate to any particular --
10 any particular analysis of any particular claim in
11 my declaration?

12 Q. Yes, as we've discussed in your
13 combination, when Hochstedler transitions from
14 Figures 2 to 9 or Figures 2 to 13, the first
15 parameter has been removed and replaced in favor of
16 a different parameter.

17 So where does Naghavi, Hochstedler, or
18 Burnes discuss removing information that's already
19 being displayed?

20 A. I think we're -- my impression is
21 we're just revisiting the same issue. In Claim 1
22 and ground 1a, there is a common display area. And

1 Hochstedler's transitions from Figures 2 to 9 and
2 Figures 2 to 13 clearly show that the information
3 that was displayed by the first parameter in the
4 common area is replaced by the second parameter in
5 the common area.

6 I'm referring primarily to the figures
7 transition from 2 to 9 and 2 to 13, but, of course,
8 these figures are supported in the specification of
9 Hochstedler that describes these transitions and the
10 replacement therein.

11 Q. Why would a person of skill want to do
12 that?

13 MS. KIM: Objection, relevance.

14 THE WITNESS: There are many reasons.

15 And these reasons include mutating the
16 display to ensure that it provides the most
17 conspicuous display of pertinent and relevant
18 information to the user.

19 BY MR. KIANG:

20 Q. Why wouldn't a person of skill have
21 just displayed both parameters?

22 A. Among the reasons that a person of

1 skill would make that change would be to accentuate
2 the conspicuousness of certain information.

3 Q. So in order to accentuate the
4 conspicuousness of certain information, you're
5 suggesting that a person of skill would remove
6 information that was already being displayed;
7 correct?

8 A. In ground 1a, that removal or
9 replacement is with respect to a certain common
10 display area. So it may be that a certain common
11 display area has a location and a formatting that is
12 designed to accentuate the conspicuousness of
13 information.

14 Q. Let's turn to page 72 of your
15 declaration. It's Exhibit 1003.

16 A. I'm there, thanks.

17 Q. And there's a heading here, "Ground
18 1B."

19 And I believe earlier today you've
20 said that for ground 1b, you've basically taken
21 Naghavi-Hochstedler-Burnes combination and you've
22 added Hayashi to it; is that correct?

1 A. That's essentially correct, yes.

2 Q. Okay. What did you add Hayashi for?

3 A. Well, the reason I've added Hayashi is
4 expressed from throughout this section, the analysis
5 is fulsome through ground 1B.

6 Q. Are you relying on Hayashi for
7 disclosure of replacing one measured value with
8 another?

9 A. No, that's provided by the other
10 combination.

11 Q. And by "the other combination," you're
12 referring to Naghavi, Hochstedler, and Burnes;
13 correct?

14 A. Correct.

15 Q. Let's turn to page 113 in your
16 declaration. And this is -- there's a heading here,
17 "Ground 1C."

18 Do you see that?

19 A. I do.

20 Q. And here, you've added -- I guess the
21 combination is Naghavi, Hochstedler, Burnes,
22 Hayashi, and Mortz; is that right?

1 A. Yes.

2 Q. So at a high level, you've basically
3 taken the combination of Naghavi, Hochstedler,
4 Burnes, and Hayashi that was in ground 1B, and
5 you've added Mortz to it; correct?

6 A. Correct.

7 Q. Are you relying on Mortz for
8 disclosure of replacing one measured value with
9 another?

10 A. Hayashi and Mortz both provide
11 specific ways for providing measurements that meet
12 certain limitations. I don't use them directly for
13 the replacing limitations.

14 MR. KIANG: I guess now is probably a
15 good time for our third break. I think we
16 talked about earlier, let's do a longer break
17 so we can get something to eat.

18 Do you know -- how much time would you
19 prefer, Dr. Cockburn?

20 THE WITNESS: It doesn't matter to me.
21 It's coming on 9 a.m. I've had my breakfast.

22 MR. KIANG: Okay. How about

1 30 minutes?

2 THE WITNESS: Sure.

3 MR. KIANG: Okay. See you then.

4 Or you know what, actually, let's just
5 start again at -30. So I guess 38 minutes
6 from now.

7 So for me, that will be 2:30, whatever
8 time it is for you there, 9:30, I guess.

9 THE WITNESS: Thanks.

10 MR. KIANG: Thanks.

11 THE REPORTER: We're off the record.

12 (The time is 5:16 p.m. Recess from
13 the record.)

14 THE REPORTER: We're back on the
15 record.

16 (The time is 5:30 p.m.)

17 BY MR. KIANG:

18 Q. Dr. Cockburn, did you speak to anybody
19 during the break about the substance of your
20 testimony?

21 A. No.

22 MR. KIANG: At this point I have no

1 further questions. I'll pass the witness.

2 MS. KIM: Great. We have no further
3 questions either.

4 THE REPORTER: The examination is
5 concluded. The time is 5:31 p.m.

6 (Off the record at 5:31 p.m. EST)

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1 STATE OF NEW YORK)

ss:

2 COUNTY OF WESTCHESTER)

I, EILEEN MULVENNA, CSR/RMR/CRR, a
3 Certified Court Reporter, Registered Merit Reporter,
Certified Realtime Reporter, and Notary Public in
4 and for the State of New York, do hereby certify:

That I reported the taking of the
5 deposition of the witness, DR. ANDREW COCKBURN,
commencing on the 23rd day of August, 2024, at the
6 hour of 2:00 p.m. (Eastern Standard Time).

That prior to being examined, the witness
7 was duly sworn by me to testify to the truth, the
whole truth, and nothing but the truth.

8 That I thereafter transcribed my said
shorthand notes into typewriting and that the
9 typewritten transcript of said deposition is a
complete, true and accurate transcription of my
10 said shorthand notes taken down at said time, and
that a request has been made to review the
11 transcript.

I further certify that I am not a relative
12 or employee of an attorney or counsel of any of the
parties, nor a relative or employee of any attorney
13 or counsel involved in said action, nor a person
14 financially interested in the action.

15 IN WITNESS WHEREOF, I have hereunto
16 set my signature this 26th day of August, 2024.

17

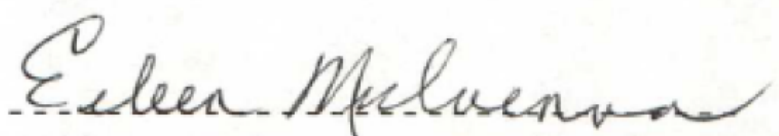
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EILEEN MULVENNA, CSR/RMR/CRR/RDR

1 Dr. Andrew Cockburn, c/o
FISH & RICHARDSON P.C.

2 60 South 6th Street, Suite 3200
Minneapolis, Minnesota 55402

3
Case: Apple, Inc. v. Masimo Corp.

4 Date of deposition: August 23, 2024

Deponent: Dr. Andrew Cockburn

5

6 Please be advised that the transcript in the above
referenced matter is now complete and ready for signature.

7 The deponent may come to this office to sign the transcript,
8 a copy may be purchased for the witness to review and sign,
9 or the deponent and/or counsel may waive the option of
10 signing. Please advise us of the option selected.

11 Please forward the errata sheet and the original signed
12 signature page to counsel noticing the deposition, noting the
13 applicable time period allowed for such by the governing
14 Rules of Procedure. If you have any questions, please do
15 not hesitate to call our office at (202)-232-0646.

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5 Witness Name: Dr. Andrew Cockburn
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6
7 I do hereby acknowledge that I have read
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10 complete transcription of the answers given by
me to the questions therein recorded.
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12 correct and complete transcription of the
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10 Deposition Date: August 23, 2024

11 Page No. Line No. Change

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Signature Date

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