

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

APPLE INC.,	)	
Petitioner,	)	
v.	)	Case IPR 2024-00290
	)	U.S. Patent 8,190,223
MASIMO CORPORATION,	)	
Patent Owner.	)	

REMOTE DEPOSITION OF R. JAMES DUCKWORTH, PH.D.

November 19, 2024

11:01 a.m. Eastern Standard Time

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

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1 REMOTE DEPOSITION of R. JAMES
2 DUCKWORTH, PH.D., Witness in the above-titled
3 action, held on Tuesday, November 19, 2024,
4 commencing at approximately 11:01 a.m. EST before
5 Lori J. Goodin, RPR, CRR, RSA, California CSR
6 #13959, Registered Professional Reporter,
7 Certified Realtime Reporter, Realtime Systems
8 Administrator, and Certified Shorthand Reporter,
9 and Notary Public of the State of Florida, State
10 of California, State of Maryland, District of
11 Columbia, State of Delaware and Commonwealth of
12 Pennsylvania.

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1 REMOTE APPEARANCES:

2

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20

21 Also Present:

22 Gretchen A. DeVries, Ph.D., Fish &

1 INDEX TO EXAMINATION

2 WITNESS: R. JAMES DUCKWORTH, PH.D.

3

4 EXAMINATION BY

PAGE

5 MS. KIM

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1 INDEX TO EXHIBITS
2 R. JAMES DUCKWORTH, PH.D.
3 Apple Inc. v. Masimo Corporation
4 Tuesday, November 19, 2024
5 Lori J. Goodin, RPR, CLR, CRR,
6 RSA, California CSR #13959
7

8 PREVIOUSLY MARKED EXHIBITS

9 FIRST REFERRAL

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1 TUESDAY, NOVEMBER 19, 2024, 11:01 a.m. EST

2

3 PROCEEDINGS

4 * * *

5 Whereupon,

6 R. JAMES DUCKWORTH, PH.D.,

7 a witness called for examination, having been
8 first duly sworn, was examined and testified as
9 follows:

10 * * *

11 EXAMINATION

12 BY MS. KIM:

13 Q. Great. Hi, Dr. Duckworth. My name
14 is Grace Kim. I am from Fish & Richardson. And
15 I represent petitioner Apple, Inc. in this
16 proceeding. I am accompanied by my colleague,
17 Gretchen DeVries, who is also at Fish &
18 Richardson.

19 We are here today regarding IPR
20 proceeding IPR 2024-00290 regarding U.S. patent
21 number 8,190,223.

22 Can you state your full name.

1 A. Reginald James Duckworth.

2 Q. Can you state your city of
3 residence.

4 A. Saint Marys, Georgia.

5 MR. KIANG: Counsel, before we go
6 any further, I just have a quick question for
7 the court reporter.

8 Are we -- is there supposed to be a
9 videographer or a hot seater for this
10 deposition?

11 THE REPORTER: To my knowledge,
12 there is none, but if you guys decide
13 otherwise, we can check on that.

14 MR. KIANG: Okay. Well, I didn't
15 ask for one, so I was just wondering. But,
16 okay. If not, then continue.

17 MS. KIM: I did not request one,
18 either.

19 MR. KIANG: Okay, thank you for the
20 clarification.

21 MS. KIM: Sure.

22 BY MS. KIM:

1 Q. Can you please state your work
2 address, Dr. Duckworth?

3 A. 905 Riverview Place, Saint Marys
4 Georgia.

5 Q. You understand you are under oath?

6 A. Yes.

7 Q. Is there any reason you cannot give
8 truthful and accurate testimony today?

9 A. No.

10 Q. Is there any reason you cannot
11 give -- withdrawn.

12 To ensure clarity, I will define
13 several terms that will be used throughout
14 today's deposition.

15 When I use the terms "petitioner," I
16 am referring to Apple, Inc., the petitioner in
17 this proceeding.

18 Do you understand?

19 A. Yes.

20 Q. When I use the term "patent owner,"
21 I am referring to Masimo Corporation. Do you
22 understand?

1 A. Yes.

2 Q. When I use the term "'223 patent," I
3 am referring to U.S. patent number 8,190,223,
4 titled Noninvasive Multi-parameter Patient
5 Monitor.

6 Do you understand?

7 A. Yes.

8 Q. When I use the phrase "this IPR" or
9 "this proceeding," I am referring to IPR
10 proceeding number IPR 2024-00290 filed against
11 the '223 patent.

12 Do you understand?

13 A. Yes.

14 Q. When I use the acronym, POSITA, I am
15 referring to a person of ordinary skill in the
16 art at the time of the alleged invention. Do you
17 understand?

18 A. Yes.

19 Q. When I use the term "your
20 declaration" or "the Duckworth declaration," I am
21 referring to Exhibit 2042 in this proceeding.

22 Do you understand?

1 A. Yes, I do.

2 Q. Can you describe to me how you
3 prepared for today's deposition?

4 A. Yes. I reviewed my declaration that
5 you just referred to, the patent '223, and
6 Apple's prior art.

7 Q. Approximately how much time did you
8 spend preparing for today's deposition?

9 A. Maybe 20 to 30 hours.

10 Q. And, as part of your preparation to
11 testify today, please identify each person you
12 communicated with either in person or via
13 telephone or Zoom?

14 A. I communicated with Daniel Kiang,
15 who is on this call, and Ashley Morales, who is
16 also on this call.

17 Q. What documents did you review in
18 preparation for today's deposition?

19 MR. KIANG: Objection to privilege.

20 I would just caution the witness not to
21 reveal the contents of any communications
22 with counsel.

1 THE WITNESS: As I mentioned, I
2 reviewed the, my declaration, the patent in
3 question, '223, and Apple's prior art. And,
4 they were the main things I reviewed.

5 BY MS. KIM:

6 Q. Without disclosing privileged
7 information, don't you state in your declaration
8 the documents, the list of documents that you
9 reviewed?

10 A. I should mention I've got a clean
11 copy of my declaration and of the '223 patent and
12 the Apple's prior art that Masimo attorneys sent
13 to me.

14 So, I'm just going to refer to my
15 declaration where I believe I do list the
16 materials.

17 So, yes. On Page 2, I mention, "I
18 have also reviewed and considered at least the
19 following materials in preparing this
20 declaration."

21 Q. And there is a table that starts on
22 Page 2 and it extends to Page 3 of your

1 declaration, correct?

2 A. Yes. As part of Paragraph 4, yes.

3 Q. And those are the documents that you
4 have reviewed and considered as part of preparing
5 your declaration in this proceeding?

6 A. That's correct.

7 Q. As part of your preparation for
8 today's deposition, did you conduct any
9 independent searches such as searches on the
10 internet?

11 A. No.

12 Q. When were you first contacted by
13 somebody from Masimo Corporation?

14 MR. KIANG: Objection --

15 BY MS. KIM:

16 Q. Or anyone on behalf of Masimo
17 Corporation?

18 MR. KIANG: Objection, privilege.

19 Just caution the witness not to reveal
20 contents of any communications with counsel.

21 THE WITNESS: I --

22 MR. KIANG: Please go ahead and

1 answer.

2 THE WITNESS: I am unclear of the
3 question.

4 Do you mean in relation to this IPR
5 or specifically what do you mean?

6 BY MS. KIM:

7 Q. Who contacted you from Masimo?

8 MR. KIANG: Same objection.

9 THE WITNESS: Again, can you
10 clarify? Are you referring to this
11 declaration or ever been in contact with
12 Masimo?

13 BY MS. KIM:

14 Q. With respect to this proceeding, who
15 contacted you on behalf of Masimo?

16 A. To tell you the truth, I don't
17 remember. The -- I believe this IPR goes back
18 many months or even over a year.

19 I don't remember who initially made
20 contact with me.

21 Q. What did you do, if anything, before
22 agreeing to be retained on behalf of Masimo for

1 this proceeding?

2 MR. KIANG: Objection, privilege.

3 Just caution the witness not to reveal the
4 contents of any communications with counsel.

5 THE WITNESS: Can you ask the
6 question again, Counselor?

7 BY MS. KIM:

8 Q. What did you do, if anything, before
9 agreeing to be retained on behalf of Masimo in
10 this proceeding?

11 MR. KIANG: Same objection.

12 THE WITNESS: I prefer not to answer
13 that question.

14 BY MS. KIM:

15 Q. Do you have a written agreement that
16 governs your work on this matter?

17 MR. KIANG: Same objection.

18 THE WITNESS: I have an agreement
19 with Masimo to serve as an expert on the IPR
20 proceedings.

21 BY MS. KIM:

22 Q. When was the first time you ever

1 heard of Masimo?

2 A. Maybe at least 20 years ago.

3 Probably -- yes, at least 20 years ago. Maybe as
4 a result of pulse oximeter work I did in maybe
5 around 2000 or so.

6 It goes -- so, you asked when I
7 first heard of Masimo. So, at least 20 years
8 ago, I would say.

9 Q. When did you first become aware of
10 the '223 patent?

11 A. I don't recall.

12 Q. Are you aware that the '223 patent
13 is currently involved in a District Court
14 litigation between Apple and Masimo?

15 A. In Paragraph 1, I state, "I
16 understand that Masimo has asserted the '223
17 patent against petitioner in Apple, Inc. versus
18 Masimo Corporation and Sound United for the
19 District of Delaware."

20 Q. Have you written any expert opinions
21 for that related District Court litigation
22 involving this patent, the '223 patent?

1 MR. KIANG: Objection, scope.

2 THE WITNESS: Not that I recall.

3 BY MS. KIM:

4 Q. Do you recall in the past year if
5 you have written any expert opinions in the
6 related District Court litigation involving the
7 '223 patent?

8 MR. KIANG: Same objection.

9 THE WITNESS: I don't recall. I
10 remember at some point for the District -- I
11 may be wrong here, but I believe I wrote an
12 opinion about -- I don't know whether it was
13 this IPR or another IPR, maybe some patent
14 terms. But that is all I remember.

15 BY MS. KIM:

16 Q. Without revealing any privileged
17 communications, can you please describe your
18 process by which you prepared your declaration?

19 MR. KIANG: Objection to form.

20 THE WITNESS: I reviewed the patent
21 in question. I reviewed Apple's petition. I
22 reviewed Apple's prior art. And then I

1 proceeded to develop my opinions.

2 BY MS. KIM:

3 Q. Did you write every word throughout
4 the entire process?

5 A. No, I did not. I had help from
6 counsel, especially developing the figures.

7 But, my declaration is my own
8 opinions.

9 Q. Did counsel for patent owner prepare
10 first drafts that you revised --

11 MR. KIANG: Objection, privilege.
12 Objection to privilege. I would instruct the
13 witness not to answer that question.

14 THE WITNESS: I will not answer the
15 question.

16 BY MS. KIM:

17 Q. What percentage of the words in your
18 declaration did you write in the case as opposed
19 to merely reviewing words written by somebody
20 else?

21 MR. KIANG: Objection to privilege.

22 Instruction to the witness not to answer the

1 question.

2 THE WITNESS: I will not answer the
3 question.

4 BY MS. KIM:

5 Q. In your work on this IPR, did you
6 communicate in any way with any of the named
7 inventors on the '223 patent?

8 A. No, I did not.

9 Q. Did you communicate with anyone
10 affiliated with Masimo other than Masimo's
11 attorneys?

12 A. No.

13 Q. Approximately when did you start
14 working on your declaration for the present
15 proceeding?

16 A. A few months ago, approximately. I
17 don't remember the exact time.

18 Q. Did you have anyone, such as an
19 assistant, help you with your declaration for
20 this IPR?

21 A. No.

22 Q. In forming your opinions in this

1 IPR, did you rely on any assumptions that are not
2 identified in your declaration?

3 A. Can you say the question again,
4 please, Counselor?

5 Q. In forming your opinions in this
6 IPR, did you -- withdrawn.

7 In forming your opinions in this
8 IPR, did you not rely on any assumptions that are
9 not identified in your declaration?

10 MR. KIANG: Objection to form.

11 THE WITNESS: There was a few
12 negatives in there, Counselor. I'm confused
13 about the question.

14 Can you ask me again?

15 BY MS. KIM:

16 Q. Sure. In forming your opinion in
17 this IPR, did you rely on assumptions that are
18 not identified in your declaration?

19 MR. KIANG: Objection to form.

20 THE WITNESS: No.

21 BY MS. KIM:

22 Q. Do you currently have any opinions

1 about the '223 patent that are not contained in
2 your declaration?

3 A. No.

4 Q. Nothing has happened since you
5 prepared your declaration that changes any of the
6 opinions you provided in the 2042 declaration,
7 correct?

8 A. That is correct.

9 MR. KIANG: Object to form.

10 THE WITNESS: I'm sorry. I stepped
11 on you there, Daniel.

12 Can you repeat the question, please?

13 I'm sorry, Counselor --

14 BY MS. KIM:

15 Q. Are you talking to Daniel?

16 A. Yes, can you repeat the question
17 because I -- yes --

18 Q. Nothing has happened since you
19 prepared your declaration that changes any of the
20 opinions you provided in your 2042 declaration,
21 correct?

22 MR. KIANG: Same objection.

1 THE WITNESS: That is correct.

2 BY MS. KIM:

3 Q. Are you currently aware of any
4 errors that exist in your 2042 declaration?

5 A. Yes, I am. I was going to bring
6 these to your attention, but let me try and find
7 those. There were four typos. Let me see.

8 So, the first is in Paragraph 104.
9 And in the last two sentences I say, "In fact,
10 C02 is blank in multiple locations in Figures 2
11 and 9."

12 And in the last sentence I say, "See
13 1004, Figures 2 and 9."

14 That should actually say "in
15 Figures 2 and 13" in both places.

16 Q. Thank you, Dr. Duckworth. You said
17 there were three other errors?

18 A. Yes. Let me try and find those.
19 So, the next one is in Paragraph 134.

20 And at the top of Page 72, I state,
21 "This alleged motivation fails because Naghavi,
22 Hochstedler and Burnes, alone or in combination,

1 do not disclose using the same screen area to
2 display two currently measured parameters." The
3 to, the second to should be T-W-O.

4 Q. Thank you.

5 A. And the next one is in
6 Paragraph 141. About halfway through the
7 paragraph, I have statements that say -- well,
8 the error is that the sentence that starts, "A
9 clinician would not have had motivation to
10 replace a measured value."

11 That sentence should actually start,
12 A POSITA would have not had motivation to replace
13 a measured value.

14 Q. Understood.

15 A. And the last change is on Page 78.
16 I have a figure there with the caption, EX 1004,
17 Figure 13.

18 It should actually state that is an
19 annotated version of Apple's annotated Figure 13.

20 Q. Understood. Are there any other
21 errors, Dr. Duckworth, that you would like to
22 bring to my attention?

1 A. Not that I am aware of.

2 Q. During your career, how many times
3 have you been retained as an expert in litigation
4 matters as either a testifying expert or a
5 nontestifying expert?

6 A. Maybe about ten times.

7 Q. During your career, how many times
8 have you been retained as an expert in IPR
9 matters or other proceedings before the PTAB?

10 A. That would be maybe eight to ten
11 times.

12 Q. During your career, how many times
13 have you been deposed as an expert in litigation
14 matters?

15 A. Again, approximately the same, about
16 ten times.

17 Q. Okay. And the same for IPR. How
18 many times have you been deposed in IPR matters,
19 proceedings before the PTAB?

20 A. The question is how many times have
21 I been deposed?

22 Q. Yes.

1 A. Maybe about six times.

2 Q. Dr. Duckworth, I would like to now
3 turn your attention to your declaration
4 Exhibit 2042.

5 (Whereupon, previously marked
6 Exhibit 2042,
7 first referral.)

8 THE WITNESS: I have that in front
9 of me.

10 BY MS. KIM:

11 Q. Great. In your declaration you have
12 provided opinions on claim constructions for
13 numerous terms, correct?

14 A. Are you referring to Section 7,
15 starting on Page 28 of my declaration?

16 Q. Yes.

17 A. So, yes. To answer your question, I
18 have provided claim construction for a few terms.

19 Q. On Page 28 of your declaration,
20 starting with Paragraph 54, you have provided
21 opinions on the claim construction for measured
22 value, correct?

1 A. That is correct.

2 Q. Is the term "measured value" recited
3 in all of the claims of the '223 patent?

4 A. In Paragraph 54, I state, "All
5 claims in the '223 patent recite displaying the
6 measured values of the first physiological
7 parameter (or blood parameter) and the second
8 physiological parameter (or blood parameter)."

9 Q. Can you read the remainder of
10 Paragraph 54?

11 A. "A POSITA would have recognized
12 that, based on the claims and specification of
13 the '223 patent, the physiological or blood
14 parameter must be currently detected and
15 determined by the monitor."

16 Q. Those are the words you submitted in
17 your declaration, correct?

18 A. I just read out that sentence from
19 my declaration, yes.

20 Q. That still reflects your position
21 today, correct?

22 A. Yes.

1 Q. Can you turn to Paragraph 55 and
2 read the first sentence?

3 A. Paragraph 55, "First, a POSITA would
4 have recognized that the claim language of the
5 '223 patent requires the parameters, whether
6 physiological or blood, to be currently detected
7 and determined by the monitor."

8 Q. Those words you submitted in your
9 declaration in Paragraph 55 still correctly
10 reflect your position, correct?

11 A. Yes.

12 Q. Can you read the last sentence in
13 Paragraph 55?

14 A. Last sentence at Paragraph 55, "As
15 such, based on the claim language of the claims
16 of the '223 patent, a POSITA would have
17 understood that the measured values of the first
18 and second physiological parameters (or blood
19 parameters) must be currently measured for all
20 claims."

21 Q. So, it is the basis of your opinion
22 that a POSITA would have understood that the

1 measured value of the first and second
2 physiological parameters must be currently
3 measured for all claims as stated in your
4 declaration?

5 MR. KIANG: Objection to form.

6 THE WITNESS: I'm sorry. I -- was
7 that a question you -- because I just read
8 out the last sentence of Paragraph 55.

9 BY MS. KIM:

10 Q. Sorry. That last sentence in
11 Paragraph 55, you still believe it correctly
12 reflects your position, right?

13 A. Yes.

14 Q. Okay. And, the second to the last
15 sentence in that paragraph you state that, "In
16 order for the claimed patient monitors and
17 methods to identify an event or other occurrence
18 has happened, the patient monitor must be
19 currently monitoring the first and second
20 parameters."

21 So, you state the reason for why the
22 patient monitor must be currently monitoring the

1 first and second parameters, correct?

2 MR. KIANG: Objection to form.

3 THE WITNESS: You just read out one,
4 one sentence there. So I'm not quite sure --
5 can you ask me the question again then,
6 please?

7 BY MS. KIM:

8 Q. Sure. Just to clarify the basis of
9 your opinion is that, "In order for the claimed
10 patient monitors and methods to identify an event
11 or other occurrence has happened, the patient
12 monitor must be currently monitoring the first
13 and second parameters." Correct?

14 A. Again, I am a little bit confused by
15 your question because you said your opinion.

16 I am not sure if you are asking me
17 about something specific here or in general,
18 because my opinion is not just based on one
19 sentence in isolation. It is based on the
20 complete information I am providing.

21 Q. Okay. Let me reframe.

22 Is it your position that in order

1 for the claimed patient monitors and the methods
2 to identify an event or other occurrence has
3 happened, the patient monitor must be currently
4 monitoring the first and second parameters?

5 A. I can just repeat my opinion here.
6 The last sentence of Paragraph 55, "As such,
7 based on the claim language of the claims of the
8 '223 patent, a POSITA would have understood that
9 the measured values of the first and second
10 physiological parameters or blood parameters must
11 be currently measured for all claims."

12 Q. That sentence says "as such".
13 Is it referring to the previous
14 sentence as the basis for why a POSITA would have
15 understood that the measured values of the first
16 and second physiological parameters must be
17 currently measured for all claims?

18 MR. KIANG: Objection to form.

19 THE WITNESS: I can, you know, read
20 out that previous sentence and say I agree
21 with it.

22 "In order for the claimed patient

1 monitors and methods to identify that an
2 event or other occurrence has happened, the
3 patient monitor must be currently monitoring
4 the first and second parameter."

5 BY MS. KIM:

6 Q. Is it true that the claimed method
7 and patient monitors cannot be monitoring only
8 the first parameter or only the second parameter?

9 MR. KIANG: Objection to form.

10 THE WITNESS: Can you repeat the
11 question, Counselor?

12 BY MS. KIM:

13 Q. In order for the claimed patient
14 monitors and methods to identify an event or
15 other occurrence has happened, do they need to be
16 monitoring -- withdrawn.

17 To rephrase your last sentence in
18 that paragraph, would it be correct to say that
19 the claimed patient monitors and methods cannot
20 be monitoring only the first parameter?

21 A. I would prefer to stick with the
22 description that I have in there, that the second

1 to the last sentence says, "The patient monitor
2 must be currently monitoring the first and second
3 parameter."

4 And then the last sentence, "A
5 POSITA would have understood that the measured
6 values of the first and second physiological
7 parameters must be currently measured for all
8 claims."

9 Q. Okay. So then you are saying that
10 in your declaration you indicate that both the
11 first and second physiological parameters must be
12 currently measured?

13 A. That is what I say in the second to
14 the last sentence. For example, "The patient
15 monitor must be currently monitoring the first
16 and second parameter."

17 Q. Your statement doesn't say that the
18 measured value of only the first physiological
19 parameter must be currently measured for all
20 claims, correct?

21 MR. KIANG: Objection to form.

22 THE WITNESS: What you just read out

1 is not what I have written in that second to
2 last sentence where it says, "The patient
3 monitor must be currently monitoring the
4 first and second parameter."

5 BY MS. KIM:

6 Q. And what you have written also
7 doesn't say that the claimed patient monitors and
8 methods cannot be monitoring only the second
9 parameter, correct?

10 A. I don't have those words in my
11 description there, no.

12 Q. Instead, it says that the first and
13 the second physiological parameters must be
14 currently measured, correct?

15 A. Again, that is what my last sentence
16 in Paragraph 55 states. "A POSITA would have
17 understood that the measured values of the first
18 and second physiological parameters must be
19 currently measured for all claims."

20 Q. How often does the parameter need to
21 be measured in order to be currently measured?

22 MR. KIANG: Objection to form.

1 THE WITNESS: That is not something

2 I have provided an opinion on.

3 BY MS. KIM:

4 Q. Can you turn to Paragraph 59 of your
5 declaration.

6 A. Yes. I am at 59.

7 Q. And it continues to Page 31.

8 A. Paragraph 59 starts on Page 31 --
9 oh, I'm sorry. Yes. Paragraph 59 starts on
10 Page 31.

11 Q. Oh, it starts on 30 and then
12 continues on 31, correct?

13 A. No. No.

14 Q. Paragraph 59?

15 A. Paragraph 59 starts on Page 31.

16 Q. Oh, there is two paragraph 59s, so I
17 guess that might be another correction -- oh,
18 wait, I'm sorry. That is 59 from a quote,
19 apologies.

20 So then, I meant Paragraph 58 that
21 extends to Page 31.

22 A. Okay. I am at Paragraph 58.

1 Q. Can you read that paragraph that
2 starts on Page 31?

3 A. You mean Page 30? I am confused
4 about now which paragraph you are asking me to
5 read.

6 Q. The first sentence on Page 31 that
7 starts with "The specification".

8 A. Oh. Okay. So, we are at the top of
9 Page 31, so, this is part of Paragraph 58.

10 So, you want me to read the
11 paragraph that starts, "The specification"; is
12 that correct?

13 Q. Yes.

14 A. "The specification for the '223
15 patent also explains the patient monitor as a
16 display for displaying these values as measured.

17 "The display of the monitor can
18 display measured pulse rate and beats per
19 minute," and then there is a BPM and reference,
20 "measured HbCO values," again a reference,
21 "measured values of SpO2 to HbCO," again a
22 reference.

1 "One or more of the measured
2 parameters," again a reference. "Measured values
3 of perfusion over time," again a reference.

4 "Measured values of SpO2, HbCO, BPM,
5 perfusion," and again a reference. "Measured
6 values of SPO2," a reference.

7 "And measured values of additional
8 parameters such as HbCO," and again a reference.

9 Q. Thank you. So, of all of those
10 parameters, can you tell me how often these
11 parameters are measured?

12 MR. KIANG: Objection to form.

13 BY MS. KIM:

14 Q. Let's start with measured pulse rate
15 in beats per minute. It provides a time frame,
16 correct?

17 So, how many times does it need to
18 be measured?

19 MR. KIANG: Objection to form and
20 scope.

21 THE WITNESS: So, the '223 patent,
22 if I turn to paragraph -- or Column 11.

1 So, the '223 patent states,
2 "Figure 2 also shows a monitor 200 including
3 a pulse display 216 displaying measured pulse
4 rates and beats per minute (BPM)."

5 So, the specification does not
6 specify, I think your question was how
7 frequently is that being measured. The '223
8 patent does not specify that.

9 BY MS. KIM:

10 Q. So, how do you determine whether or
11 not it is being currently measured?

12 MR. KIANG: Objection to form.

13 BY MS. KIM:

14 Q. How do you know if the pulse rate
15 and beats per minute is being currently measured?

16 A. A POSITA would assume it would be
17 measured fast enough to be able to determine in
18 this case the beats per minute.

19 Q. So, does that mean that BPM in order
20 to be currently measured would have to be
21 measured every minute?

22 MR. KIANG: Objection to form and

1 scope.

2 THE WITNESS: Can you ask the
3 question again, Counselor?

4 BY MS. KIM:

5 Q. Sure. Does currently measured mean
6 that BPM would need to be measured every minute?

7 MR. KIANG: Objection to form and
8 scope.

9 THE WITNESS: A POSITA would
10 understand that the, to measure a pulse rate
11 in beats per minute, it would have to be
12 measured more frequently than just every
13 minute.

14 BY MS. KIM:

15 Q. Okay. Then does currently measured
16 mean that BPM would have to be measured every
17 second?

18 MR. KIANG: Same objections.

19 THE WITNESS: A POSITA would
20 understand that there is a measurement rate
21 that would be required to determine an
22 accurate pulse rate in beats per minute.

1 But, but, not necessarily. The
2 example you gave was once every second. It
3 could be some other value.

4 BY MS. KIM:

5 Q. The next item on this list is
6 arterial carbon monoxide saturation, the HbCO
7 value.

8 In order to be currently measured,
9 how often would this parameter need to be
10 measured? Every minute, every second, every
11 hour, every day?

12 MR. KIANG: Objection to form and
13 scope.

14 THE WITNESS: The specification does
15 not specify how frequently that HBO -- HbCO
16 value is currently being measured.

17 BY MS. KIM:

18 Q. But, based on your understanding of
19 currently measured, could you measure HbCO once a
20 week and still consider it being currently
21 measured?

22 A. You are asking me to --

1 THE WITNESS: I'm sorry. I
2 interrupted you, Daniel.

3 MR. KIANG: Sorry. Same objections,
4 go ahead.

5 THE WITNESS: You are asking me to
6 speculate about -- I don't know how
7 frequently you would need to measure an HbCO
8 value to have an accurate measurement of that
9 value.

10 I suspect it is not once a week,
11 though.

12 BY MS. KIM:

13 Q. So, you can't tell me whether or not
14 HbCO needs to be measured every minute or every
15 hour in order to be currently measured?

16 MR. KIANG: Objection to form and
17 scope.

18 THE WITNESS: Again, I am, you are
19 asking me to --

20 I don't know how frequently an
21 HBO -- an HbCO value would need to measure to
22 provide an accurate measurement, no.

1 BY MS. KIM:

2 Q. But you indicated earlier that HbCO,
3 along with other parameters, it would depend on
4 the parameter to know how frequently it needs to
5 be measured, correct?

6 A. Please ask the question again.

7 MR. KIANG: And objection, misstates
8 testimony.

9 BY MS. KIM:

10 Q. In order to know how often a
11 parameter needs to be measured, you would need to
12 know what parameter is being measured, correct?

13 MR. KIANG: Objection to form and
14 scope.

15 THE WITNESS: Please ask your
16 question again, Counselor.

17 BY MS. KIM:

18 Q. So, without knowing the parameter,
19 you can't tell me whether the parameter needs to
20 be measured every minute, correct?

21 MR. KIANG: Same objections.

22 THE WITNESS: Again, I am confused

1 here.

2 Are you referring to a statement I'm
3 making in my declaration here? Can you point
4 me to that so I can better respond?

5 BY MS. KIM:

6 Q. I'm just referring to a statement
7 you made earlier today.

8 You stated that in order to
9 currently measure BPM, it would likely need to be
10 measured more frequently than every minute,
11 correct?

12 MR. KIANG: Objection. Misstates
13 testimony.

14 THE WITNESS: I believe you asked me
15 how frequently you need to measure pulse rate
16 to determine beats per minute. And I said
17 you need to measure it more frequently than
18 every minute.

19 BY MS. KIM:

20 Q. If you measured it more frequently
21 than every minute, would you consider it
22 currently measured?

1 MR. KIANG: Objection to form and
2 scope.

3 THE WITNESS: That is not something
4 I provide an opinion on.

5 BY MS. KIM:

6 Q. So, you can't provide an opinion
7 here today on how frequently a parameter needs to
8 be measured in order to be currently measured?

9 MR. KIANG: Objection. Misstates
10 testimony.

11 THE WITNESS: Yes. I was responding
12 specifically to your question about pulse
13 rate in beats per minute.

14 BY MS. KIM:

15 Q. I will reframe the question.
16 Can you tell me here today how
17 frequently a parameter needs to be measured in
18 order to be currently measured?

19 MR. KIANG: Objection to form.

20 THE WITNESS: I don't believe I
21 provided an opinion on frequency.

22 As we were referring back in

1 Paragraph 55, I said, in order for the
2 claimed patient monitors and methods to
3 identify that the event or other occurrences
4 happened, the patient monitor must be
5 currently monitoring the first and second
6 parameter.

7 BY MS. KIM:

8 Q. But you can't tell me if that
9 parameter needs to be measured every minute or
10 every hour, or every day?

11 MR. KIANG: Objection to form and
12 scope.

13 BY MS. KIM:

14 Q. Let me re-ask the question.

15 So, in order for the claimed patient
16 monitor and method to identify that an event or
17 other occurrence has happened, the patient
18 monitor must be currently monitoring -- oh,
19 withdrawn.

20 You are not able to tell me today
21 that in order for a patient monitor to be
22 currently monitoring the first and second

1 parameter, whether the first and second parameter
2 need to be measured every minute, hour, or day?

3 A. That is not something I provided an
4 opinion on.

5 Q. Does currently measured mean
6 realtime data is being recorded in this way?

7 MR. KIANG: Objection to form.

8 THE WITNESS: Can you clarify what
9 you mean by realtime data?

10 Is that something I refer to in my
11 declaration?

12 BY MS. KIM:

13 Q. It means that data is being
14 displayed instantaneously as when it is being
15 recorded.

16 A. Is that a --

17 MR. KIANG: Objection to form.

18 THE WITNESS: Is that a statement
19 that you are making about the definition of
20 what realtime; is that in the patent?

21 Or, is that -- I don't recall making
22 a statement like that in my declaration.

1 BY MS. KIM:

2 Q. Can you tell me what your
3 understanding of realtime data is as a POSITA?

4 MR. KIANG: Objection, relevance.
5 Scope.

6 THE WITNESS: That is such a general
7 question.

8 Can you be more specific about what
9 you are, what you are referring to?

10 BY MS. KIM:

11 Q. Do you -- okay, withdrawn. How
12 about stored data.

13 Is currently measured -- is a
14 currently measured value reflected in stored data
15 that is displayed?

16 MR. KIANG: Objection, relevance.
17 Scope. Form.

18 THE WITNESS: Can you clarify what
19 you mean by stored data?

20 Again, I don't believe I have used
21 that term, expression, in my declaration or
22 remember seeing it in the '223 patent.

1 BY MS. KIM:

2 Q. As an example, what if a parameter
3 was measured earlier in the day, but then it is
4 displayed later in the day.

5 Is that a currently measured value?

6 A. This is not something I provided an
7 opinion on.

8 But, if it was something that was
9 measured earlier in the day, now I would not
10 consider it to be currently being monitored or
11 measured.

12 Q. Can you explain why?

13 A. I believe I just did. That, if it
14 was, as you have described I believe, stored
15 earlier in the day, it is not being now currently
16 being monitored and measured.

17 Q. And so is it because the data was
18 stored that it is no longer currently measured?

19 MR. KIANG: Objection, misstates
20 testimony. Objection, relevance and scope.

21 THE WITNESS: So, again, you are
22 asking me something that I have not provided

1 an opinion on in my declaration. So, I'm
2 confused.

3 And can you ask me the question
4 again, please? I forget the exact phrasing
5 of the question.

6 BY MS. KIM:

7 Q. You said that if something was not
8 measured earlier in the day, I would not consider
9 it currently being -- to be currently monitored
10 or measured.

11 And I was asking you, do you believe
12 that it is not being currently monitored or
13 measured because it was stored data.

14 MR. KIANG: Objection, not a
15 question.

16 THE WITNESS: Yes, I'm still
17 confused, Counselor.

18 Can you rephrase the question again
19 or ask me the question again?

20 BY MS. KIM:

21 Q. Why is a parameter that was measured
22 earlier in the day and then displayed later in

1 the day not currently measured -- not being
2 currently measured?

3 MR. KIANG: Objection to form.

4 THE WITNESS: So, again, I have not
5 provided this as an opinion in my
6 declaration.

7 But, you are -- if I understand the
8 question, something that was measured earlier
9 and stored is not the same as a currently
10 monitored or measured parameter.

11 MS. KIM: Okay. We are at an hour.
12 Does it make sense to take a break right now?

13 THE WITNESS: Yes, in fact it is
14 noontime on the east coast. I don't know
15 where anyone else is.

16 Can I take a lunch break for an
17 hour.

18 MS. KIM: Sure. That is fine with
19 me.

20 THE WITNESS: So, reconvene at
21 1:00 p.m., then, my time?

22 MR. KIANG: Sounds good.

1 MS. KIM: Let's do that. That is
2 fine, Dr. Duckworth.

3 THE WITNESS: Thank you.

4 (Recess taken -- 12:01 p.m.)

5 (After recess -- 1:00 p.m.)

6 BY MS. KIM:

7 Q. Dr. Duckworth, in your declaration,
8 you provided an opinion on the claim construction
9 for replaced, replaces, replacing, correct?

10 A. Yes. Let me find that in my
11 declaration. Yes, on Page 33, Section C.

12 Q. In your declaration in Paragraph 64,
13 you refer to the recitation of replaced, replaces
14 and replacing as generally the term "replace,"
15 correct?

16 A. In Paragraph 64, I say for
17 simplicity in this section I will generally refer
18 to the term "replace" which also applies to the
19 terms "replacing" and "replaces".

20 Q. Do you understand then, when I say
21 the term "replaced" or if I use the language
22 "replacement limitations" as does patent owner,

1 that I am referring to independent Claims 1, 5 --
2 sorry, 1, 15, 18, 21 and 27, each containing a
3 variation of a limitation where the display of a
4 measured value of a physiological parameter is
5 replaced with the measurement value of another
6 physiological parameter?

7 MR. KIANG: Objection, foundation.

8 THE WITNESS: You essentially read
9 most of my first sentence in Paragraph 64.
10 So, just to be clear, "Independent Claims 1,
11 15, 18, 21, and 27 each contain a variation
12 of limitation where the display of a measured
13 value of a physiological parameter or blood
14 parameter is replaced or replacing Claim 21
15 or replacing Claim 27 with a measured value
16 of another physiological parameter (or blood
17 parameter)."

18 BY MS. KIM:

19 Q. Correct. So, in addition to using
20 the term "replace," I may also use the language
21 "replacement limitations" to mean the same.

22 Do you understand?

1 A. I think so. But, maybe when you ask
2 additional questions, you know, for clarification
3 I might need to just check we are talking about
4 the same thing.

5 Q. Would it for simplicity reasons be
6 easier if I just used the term "replaced" to --
7 the three recitations of "replace," "replaces,"
8 and "replacing"?

9 A. Yes. I think so. But again, I will
10 defer until we have a specific question just in
11 case there is some potential confusion.

12 Q. Could you ask a question if you are
13 unclear as to which limitation I am referring to?

14 A. Yes, I will.

15 Q. Thank you. Let's turn to
16 Paragraph 66 --

17 A. Uh-huh.

18 Q. -- of your declaration.

19 Can you read the last sentence of
20 that paragraph?

21 A. The last sentence of Paragraph 66
22 says, "In its place, the display shows the

1 measured value of the second parameter."

2 Q. Can you read the second to the last
3 sentence in that paragraph?

4 A. The second to last sentence in
5 Paragraph 66 says, "Like the batteries and
6 sensor, a POSITA would recognize that when a
7 measured value of a first parameter is replaced
8 with a measured value of a second parameter, the
9 display no longer shows the measured value of the
10 first parameter."

11 Q. What you wrote there in Paragraph 66
12 still reflects your opinion today, correct?

13 A. Yes, it does.

14 Q. Can you turn to Paragraph 68 and
15 read the first and second sentences to yourself?
16 And let me know when you have finished.

17 A. I have read the first two sentences
18 of Paragraph 68.

19 Q. What you wrote in the first two
20 sentences of Paragraph 68 still reflect your
21 opinion today, correct?

22 A. That's correct.

1 Q. Can you please turn to Paragraph 79
2 and read it to yourself. Please let me know when
3 you've finished.

4 A. I have finished reading
5 Paragraph 79.

6 Q. Based on your understanding, is it
7 true that a POSITA would have understood that
8 when a measured value of a first parameter is
9 replaced by the measured value of a second
10 parameter, the measured value of the first
11 parameter is removed from the display?

12 A. I think you are reading a part of
13 what I said in Paragraph 79.

14 Just to be clear, though, there is,
15 "A POSITA, in view of the claims of the '223
16 patent, the specification, the file history
17 (including re-examination of the '223 patent),
18 and the basic understanding of 'replaced' in the
19 English language would have understood that when
20 a measured value of a first parameter was
21 replaced by the measured value of a second
22 parameter, the measured value of the first

1 parameter is removed from display, and the
2 measured value of the second parameter is
3 displayed in place of the measured value of the
4 first parameter."

5 Q. What you just stated still reflects
6 your opinion today, correct?

7 A. Correct.

8 Q. In your declaration when you say,
9 "The measured value of the first parameter is
10 removed from the display," do you mean that the
11 measured value of the first parameter is removed
12 from the entire display screen?

13 MR. KIANG: Objection to form.

14 THE WITNESS: Can you clarify what
15 you mean by the entire display screen?

16 BY MS. KIM:

17 Q. All of the areas -- when you say,
18 "The measured value of the first parameter is
19 removed from the display," do you mean that the
20 measured value of the first parameter is removed
21 from all areas of the display screen?

22 A. Again, your use of the term "display

1 screen" is not what I believe is the claim
2 language.

3 So, I would like you to clarify what
4 you mean by the entire display screen.

5 Q. When you say that, "The measured
6 value of the first parameter is removed from the
7 display," do you mean that the device no longer
8 displays the first parameter?

9 MR. KIANG: Objection to form.

10 THE WITNESS: I mean what I state in
11 my declaration, the measured value of the
12 first parameter is removed from the display
13 there.

14 The -- to be accurate, we have to
15 distinguish what you mean by the display,
16 because some of the terms, some of the claim
17 terms are slightly different as to how it
18 refers to the display.

19 So, when you say an entire display
20 screen, that term is not used in the claims.

21 BY MS. KIM:

22 Q. What in your opinion is a display?

1 MR. KIANG: Objection to scope.

2 THE WITNESS: I can provide you an
3 example of display by referring to my
4 Paragraph 67, which refers to the '223
5 patent.

6 Middle sentences say things like,
7 "Figures 4 and 5 illustrate how the display
8 of Figure 3 replaces a measured value of a
9 first physiological parameter with a measured
10 value of a second physiological parameter."

11 And I explain in Figure 4 the
12 display SPO2.

13 So, there, for example, is an
14 example of a display showing -- shown in
15 Figures 4 and 5, showing how the measured
16 value -- "how the display of Figure 3
17 replaces the measured value of a first
18 physiological parameter (SPO2 in Figure 4)
19 with a measured value of a second
20 physiological parameter (HbCO in Figure 5)."

21 So, I believe you asked me what I
22 mean by display, and there is an example of

1 use of the term "display".

2 BY MS. KIM:

3 Q. In Figure 4, is there a display of
4 an SPO2 value?

5 A. So, as I describe in Paragraph 67, I
6 say, "replaces a measured value of a first
7 physiological parameter (SPO2 in Figure 4)."

8 So, yes, as we see on Page 35 of my
9 declaration, there is SPO2 displayed in Figure 4.

10 Q. In Figure 4 is there a display of
11 the BPM value?

12 A. Again, just to be clear, you are
13 referring to a different display.

14 The one we were just looking at with
15 SPO2 was the, as the patent refers to as the
16 multi-mode display 206.

17 You are now asking me about a
18 different display 216, I believe.

19 Q. Again, my question is, is there a
20 display of BPM in Figure 2?

21 A. I think, you want to be clear here,
22 that Figure 4 shows two displays. And the one I

1 was referring to in my Paragraph 67 is the upper
2 display that was showing the first physiological
3 parameter SPO2.

4 Q. When we move to Figure 5 shown on
5 Page 35 of your declaration, Figure 5 shows a
6 display of HbCO, correct?

7 A. So again, referring back to my
8 Paragraph 67, I say that the SPO2 -- how the
9 display of Figure 3 replaces a measured value of
10 the first physiological parameter of SPO2 in
11 Figure 4 with a measured value of a second
12 physiological parameter, HbCO in Figure 5.

13 So, yes. In Figure 5, we see that
14 the SPO2 has been replaced with a measured value
15 of the second physiological parameter, HbCO.

16 Q. So, with respect to Figures 4 and 5,
17 the SPO2 value has been removed from the display,
18 correct, in Figure 5?

19 A. In Figure 5, that multi-mode display
20 206 is no longer displaying SPO2. It is now
21 displaying HbCO.

22 Q. And would it be correct to refer to

1 the SPO2 value as being a replaced value?

2 MR. KIANG: Objection to form.

3 THE WITNESS: Are you referring to a
4 specific --

5 BY MS. KIM:

6 Q. In Figure 5?

7 A. In Figure 5. Well, I think the best
8 I can say is what I have said a few times now is
9 in Paragraph 67, "Figures 4 and 5 illustrate how
10 the display of Figure 3 replaces a measured value
11 of a first physiological parameter (SPO2 in Figure
12 4) with a measured value of a second
13 physiological parameter (HbCO in Figure 5)."

14 Q. With respect to Figure 5, would you
15 agree that the SPO2 value is nowhere on a display?

16 A. At the bottom of Paragraph 67, I
17 quote from the patent where it says, "explaining
18 in Figure 5, the display has shifted the data to
19 the left to quickly and efficiently indicate that
20 the displayed parameter is other than SPO2."

21 So, as we can see in the display
22 206, in Figure 5, SPO2 is no longer displayed.

1 Q. So, it is correct to state that in
2 Figure 5, the SPO2 value is no longer shown by the
3 display?

4 A. I believe I have answered that a few
5 times by my statements in Figure 7. I want to be
6 just really clear that, you know, you are not
7 asking me something different here.

8 So, I will just go back and refer to
9 my statement in Paragraph 67 that describes what
10 happens between Figures 4 and 5.

11 Q. If the SPO2 value were visible in the
12 second display, would it be a replaced value?

13 MR. KIANG: Objection to form.

14 THE WITNESS: So, the patent in
15 Figure 5 doesn't show SPO2 in that display
16 area 206.

17 So, now you are asking me a
18 hypothetical question, are you, that now
19 Figure 5 is showing SPO2?

20 BY MS. KIM:

21 Q. Yes. What if hypothetically SPO2
22 were shown in Figure 5 in the bottom display

1 window?

2 A. In the bottom display window, that
3 shows the letter CO?

4 Q. Yes. Would it still be a replaced
5 parameter?

6 MR. KIANG: Objection to form.

7 THE WITNESS: I believe you are
8 describing something that, as you said, it is
9 hypothetical and it is outside the scope of
10 the claims.

11 We have been talking about the upper
12 display portion, which is the common display
13 area, and that is what I have been describing
14 in Paragraph 67.

15 So, I am not clear on your question.

16 You seem to be asking something --
17 as you said it was hypothetical, but I am
18 trying to understand, you know, what exactly
19 this hypothetical is that you are asking me.

20 BY MS. KIM:

21 Q. I would like to know if the SPO2
22 value were still visible but shown in a different

1 display area, whether or not it would still be a
2 removed parameter?

3 MR. KIANG: Objection to form.
4 Relevance.

5 BY MS. KIM:

6 Q. A replaced parameter.

7 MR. KIANG: Same objections.

8 THE WITNESS: So, Counselor, I just
9 want to be clear.

10 You are asking me a question that is
11 not covered by the claims of the '223 patent,
12 you know, this hypothetical case you are
13 asking me?

14 BY MS. KIM:

15 Q. I'm asking you about a hypothetical
16 based on your definition and claim construction
17 of replaced.

18 So, if Figure 5 showed SPO2 in the
19 bottom display window and it was visible, would
20 it still have been a replaced value according to
21 your claim construction that you provided in your
22 declaration?

1 MR. KIANG: Objection to form.

2 Relevance.

3 THE WITNESS: Counselor, this
4 hypothetical case is not what I was
5 contemplating when I was providing my
6 opinions, because my opinions are
7 specifically to the '223 patent and the claim
8 language.

9 So, I feel uncomfortable speculating
10 about this hypothetical case that you are
11 proposing.

12 I would need to think about that
13 some more.

14 BY MS. KIM:

15 Q. Okay. Well, let's go back to the
16 display shown on the top window.

17 So, it is your position that when
18 the SPO2 value, the first parameter shown in
19 Figure 4, is replaced by a second parameter value
20 which is the HbCO2 value, that it can no longer
21 be visible in that display?

22 A. So, I think it is very clear. Again

1 I want to be careful, we are talking about --
2 when you say that display, we are talking about
3 the upper portions of Figure 4 and Figure 5, the
4 206 there.

5 And again, you know, the best I can
6 do is refer back to my description on
7 Paragraph 67 where it says, "Figures 4 and 5
8 illustrate how the display of Figure 3 replaces a
9 measured value of a first physiological parameter
10 (SPO2 in Figure 4) with a measured value of a
11 second physiological parameter HBO -- (HbCO in
12 Figure 5)."

13 So, in that upper display, SPO2 is no
14 longer being displayed there.

15 Q. And SPO2, that first parameter, isn't
16 being displayed in the entire display area in
17 that upper display, correct?

18 MR. KIANG: Objection to form.

19 THE WITNESS: I am confused. What
20 do you mean by the entire upper display area?

21 BY MS. KIM:

22 Q. Do you see the window that is

1 colored in pink in Figure 5?

2 A. Yes.

3 Q. The window that is colored in pink?

4 A. Yes.

5 Q. That entire window does not contain
6 an SPO2 value, correct?

7 A. Correct. The measured value of SPO2,
8 which was shown in Figure 4, is no longer being
9 shown in Figure 5.

10 Q. Okay. Let's move on.

11 In your declaration, you've also
12 provided opinions on claim construction for
13 change for Claims 13 and 28, correct?

14 A. Let me find that. Yes.

15 Paragraph -- or Section D starting on Page 40.

16 Q. So, in Paragraph 80 you state that
17 on the, "Based on the plain meaning of claim
18 language, which requires changing from one
19 measured value to another measured value, a
20 POSITA would have understood that the claim term
21 'changed' as used in the claims of the '223
22 patent should be interpreted similarly to

1 'replaced' as used in the claims of the '223
2 patent."

3 Correct?

4 A. I believe you were just reading from
5 my Paragraph 80. "Based on the plain meaning of
6 claim language, which requires changing from one
7 measured value to another measured value, a
8 POSITA would have understood that the claim
9 language -- sorry, that the claim term 'change'
10 as used in the claims of the '223 patent should
11 be interpreted similarly to 'replace' as used in
12 the claims of the '223 patent."

13 Q. And then, in your declaration,
14 Paragraph 81, the last sentence you state,
15 "Because the common display area is supposed to
16 be displayed either, display either the measured
17 values of the first or second physiological
18 parameters, and because the claims recite
19 changing from displaying one to the other, a
20 POSITA would understand that after the change,
21 the original measured value is no longer
22 displayed."

1 A. That is -- you read from the end of
2 Paragraph 81 from my declaration, yes.

3 Q. You state in Paragraph 85 in your
4 declaration that, "A POSITA would have therefore
5 understood the term 'change' as used in Claim 13
6 and 28 to have a similar meaning as 'replaced',
7 'replacing', and 'replaces' as used in Claims 1,
8 15, 18, 21 and 27."

9 Correct?

10 A. Yes, you read my Paragraph 85 from
11 my declaration.

12 Q. And this still reflects your
13 position today, correct?

14 A. Correct.

15 Q. Okay. Let's turn to the '223
16 patent, Exhibit 1001.

17 (Whereupon, previously marked
18 Exhibit 1001,
19 first referral.)

20 THE WITNESS: Yes, I have that.

21 BY MS. KIM:

22 Q. Can you look at Figure 2, please.

1 A. Yes. I am looking at Figure 2.

2 Q. Can you tell me what Figure 2 shows?

3 MR. KIANG: Objection to form.

4 THE WITNESS: The '223 patent
5 describes in Column 4, describes Figure 2,
6 "Illustrates a top elevation view of an
7 exemplary handheld noninvasive
8 multi-parameter patient monitor capable of
9 displaying at least HbCO, such as, for
10 example the patient monitor of Figure 1."

11 BY MS. KIM:

12 Q. And based on our previous
13 discussion, moving to Figure 4.

14 Do you agree that Figure 4 shows
15 both a display of an oxygen saturation value and
16 a display of the pulse rate BMP value?

17 A. So, the patent describes -- this is
18 Column 14, around about Line 40.

19 "As shown in Figure 4, the
20 multi-mode display 206 is displaying a percentage
21 value of SPO2 and the pulse rate display 216 is
22 displaying a pulse rate in beats per minute."

1 Q. So, based on that description
2 provided in the patent, do you agree that
3 Figure 4 shows a display of the oxygen saturation
4 value and a display of the BMP value?

5 A. I think I want to be a little bit
6 more accurate than that. So that we are -- you
7 know, when you say display, I will refer back to
8 what I just described.

9 "The multi-mode display 206 is
10 displaying a percentage value of SPO2 and the
11 pulse rate display 216 is displaying a pulse rate
12 in beats per minute."

13 Q. Can you turn to Figure 11A?

14 A. Yes, I have turned to Figure 11A.

15 Q. Can you tell me what Figure 11A
16 shows?

17 MR. KIANG: Objection to form.

18 THE WITNESS: The patent describes
19 Figure 11A, this is in Column 4, "Figure 11A
20 illustrates a perspective view of an
21 exemplary noninvasive multi-parameter patient
22 monitor, such as, for example the patient

1 monitor of Figure 1."

2 BY MS. KIM:

3 Q. Now, do you agree that the device
4 shown in Figure 11A has a display screen?

5 MR. KIANG: Objection to form.

6 THE WITNESS: So, in Column 17
7 around about Lines 20, the '223 patent
8 describes 11A. It says, "As shown in Figures
9 11A to 11B, an embodiment of the monitor 1100
10 includes a display 1101 showing a plurality
11 of parameter data."

12 BY MS. KIM:

13 Q. So, the display shown in Figure 11A
14 shows more than one physiological parameter,
15 correct?

16 A. Later in Column 17, it says in an
17 embodiment the display encodes a measured value
18 of SPO2, 1102 in the figure, a measured value of
19 the pulse rate 1104 in BPM, a plethysmography
20 1106, a measured value of HbCO 1108, a measured
21 value of HbMet, a measured value of a perfusion
22 quality, et cetera.

1 Q. Based on that description, can you
2 answer whether or not the device in 11A shows
3 multiple physiological parameters?

4 A. As I just described, it is
5 describing multiple physiological parameters,
6 SPO2, pulse rate, HbCO, et cetera.

7 Q. So, your answer is yes?

8 A. Yes, it is showing those
9 physiological parameters.

10 Q. Thank you. Can you turn to
11 Figure 11B?

12 A. Yes. I am at Figure 11B.

13 Q. Can you tell me what Figure 11B
14 shows?

15 A. In general terms, Figure 11B
16 illustrate display screens of the patient monitor
17 of Figure 11A.

18 Q. In Figure 11B, there is a display of
19 methemoglobin saturation, correct?

20 MR. KIANG: Objection to form.

21 BY MS. KIM:

22 Q. It shows as a value of 1.2.

1 A. I see a value of 1.2 percent HbMet
2 in Figure 11B.

3 Q. There is also in Figure 11B, a
4 display of perfusion index indicated by PI with
5 the value of 3.25, correct?

6 A. I see a value, 3.25 labeled PI, yes.

7 Q. So, just to be clear, Figure 11B
8 shows both a display of the percent HbMet value
9 and a display of the PI value. Correct?

10 A. Yes. The display shown in
11 Figure 11B shows the HbMet and PI value.

12 Q. Figure 11B also shows display of
13 other physiological parameters, correct?

14 A. Yes. Correct.

15 Q. Figure 11B includes multiple display
16 locations showing the multiple physiological
17 parameters, correct?

18 MR. KIANG: Objection to form.

19 THE WITNESS: I'm not sure what you
20 mean when you use the term "display
21 locations," I believe. I'm not sure.

22 Can you ask the question again.

1 BY MS. KIM:

2 Q. Figure B includes multiple locations
3 where physiological parameters are shown,
4 correct?

5 A. Figure 11B, as we just described, as
6 the patent describes, the display includes
7 various physiological -- the display shows
8 various measured values of physiological values.

9 Q. And those multiple physiological --
10 excuse me, withdrawn.

11 And those multiple physiological
12 parameters are shown in different locations,
13 correct?

14 A. The display shows multiple physical
15 parameters in various locations on the display.

16 Q. So, isn't it true, then, that the
17 device shown in this figure includes more than
18 one display location because it shows the
19 multiple physiological parameters in different
20 locations?

21 MR. KIANG: Objection to form.

22 THE WITNESS: I am a little bit

1 confused by, again, your use of the term
2 "location".

3 I think the best way to describe the
4 display of Figure 11B is that it is showing
5 various physiological parameters.

6 BY MS. KIM:

7 Q. Well, it is showing multiple
8 physiological parameters, but isn't it true that
9 all of those physiological parameters are not at
10 the same location?

11 A. Well, by location, I described it
12 that they are not -- they are in different areas
13 of the display.

14 Q. So, the different areas of the
15 display, are they -- withdrawn.

16 The value of SPO2 is in a location
17 that is above the value of the BPM, correct?

18 A. The SPO2 value is shown in that
19 display above the value of BPM, I think that is
20 what you just asked me, yes.

21 Q. And the value of the BPM parameter
22 is shown in a location above the percent HbMet

1 value, correct?

2 A. Again, I would use the term area --
3 that the BPM value is an area, is in a display
4 area -- is in an area of the display above the
5 area used to display the HbMet.

6 Q. Can you turn to Figure 11C?

7 A. 11, which one, sorry?

8 Q. 11C.

9 A. C, yes. I am there.

10 Q. In Figure 11C, do you see the 1.2
11 value and that the 3.25 value have switched
12 places in comparison to Figure 11B?

13 A. Figure 11B and 11C are different, of
14 course. And, I wouldn't use the term -- I don't
15 know what term you used. But, they are not
16 displaying the same information in those two
17 areas.

18 They are similar, but they are not
19 the same.

20 Q. Could you elaborate?

21 A. Yes. In Figure 11B where 1.2 is
22 shown, the side of it, there is 10.5, 0.5, a

1 percent HbMet.

2 And, where 3.25 is shown, there is
3 21.0 MPI shown. They are not the -- it is not
4 the same as shown in Figure 11C.

5 Q. Would it be true to state that the
6 1.2 value shown in 11 -- Figure 11C is in an area
7 approximate to where the 3.25 value was shown in
8 Figure 11B?

9 MR. KIANG: Objection to form.

10 THE WITNESS: In a very, very
11 general sense, I would say that in the
12 general area where 3.25 was shown, now 1.2 is
13 very generally shown.

14 But, they are not, they are not in
15 the same, specifically the same area.

16 BY MS. KIM:

17 Q. It may not be the exact area. But,
18 generally speaking, they are in the same
19 proximate display location, correct?

20 A. I think I would refer back to my
21 previous answer that, where 3.25 was shown, very
22 approximately 1.2 is now being shown.

1 Q. So, in Figure 11B, let's say you
2 drew a square around the 1.2 value.

3 And let's say the square is replaced
4 by the 3.2 value. That same square area is
5 replaced by the 3.2 value.

6 Would you consider that 1.2 has been
7 replaced by the value 3.25?

8 MR. KIANG: Objection to form.

9 Objection, incomplete hypothetical.

10 THE WITNESS: I want to be careful
11 here, because you are using the term
12 "replaced" and we were just discussing what
13 replaced means in the context of the patent
14 claims.

15 And, we talked at length about how
16 we've got a, a measured value of the first
17 physiological parameter -- sorry, how
18 Figures 4 and 5 illustrate how the display of
19 Figure 3 replaces a measured value of a first
20 physiological parameter, SPO2 in Figure 4,
21 with a measured value of a second
22 physiological parameter.

1 And, as we saw SPO2 is no longer
2 being displayed in Figure 5. We have now got
3 HbCO has replaced that.

4 So, I want to be careful with your
5 hypothetical description here, that we are
6 talking about something different to the
7 claim language that we were discussing
8 earlier.

9 BY MS. KIM:

10 Q. Understood. So --

11 THE WITNESS: Counselor, can I just
12 interrupt? We have been going for nearly an
13 hour. Would you mind if we take a few minute
14 break?

15 MS. KIM: How much time would you
16 like, Dr. Duckworth?

17 THE WITNESS: Could we take ten
18 minutes, like 5 after 2?

19 MS. KIM: Sure.

20 THE WITNESS: Thank you.

21 (Recess taken -- 1:56 p.m.)

22 (After recess -- 2:04 p.m.)

1 BY MS. KIM:

2 Q. Dr. Duckworth, going back to where
3 we left off. We were looking at Figure 11B with
4 respect to Figure 11C.

5 And I was asking you whether those
6 figures show that the 2.1 value in Figure 11B has
7 been replaced by the 3.2 value in Figure 11C?

8 THE WITNESS: And I think you had a
9 couple of numbers wrong. You know, 1.2, I
10 think you were referring to in Figure 11B.

11 BY MS. KIM:

12 Q. Oh, sorry.

13 A. I think 3.25, right?

14 But, anyway, I believe I answered
15 your question before the break by explaining that
16 your use of the term "replaced" is -- this is a
17 hypothetical case that you are asking me about.
18 And it is not how we were talking about the use
19 of the term "replaced" for the claim language
20 there.

21 And I referred back to figure --
22 sorry, Paragraph 67 where Figures 4 and 5

1 illustrate how the display of Figure 3 replaces a
2 measured value of a first physiological parameter
3 with a measured value of a second physiological
4 parameter.

5 So, I explained that -- you know,
6 you are asking me it seems like, you know, a
7 hypothetical case that is outside the scope of
8 the claims there.

9 Q. Figure 11B and C show a display,
10 correct? And the claims recite a display,
11 correct?

12 MR. KIANG: Objection to form.

13 BY MS. KIM:

14 Q. -- withdrawn.

15 So is it your position that the
16 claims do not cover the embodiment shown in
17 figures 11B and C?

18 MR. KIANG: Objection to scope.
19 Relevance.

20 THE WITNESS: Can you ask the
21 question again, please, Counselor?

22 BY MS. KIM:

1 Q. Is it your opinion that the claims
2 do not cover the embodiments shown in 11B and C?

3 MR. KIANG: Same objections. And
4 objection to form.

5 THE WITNESS: I think the best way
6 to answer that is that the claims require
7 more than we were just discussing in
8 Figures 11B and 11C.

9 BY MS. KIM:

10 Q. Could you elaborate?

11 A. Yes. So, for example -- let's see.

12 Yes. So, for example, on my
13 declaration, Page 44, I say that, "All claims
14 require currently monitoring two parameters, one
15 of which is not displayed."

16 So, continuing in Paragraph 92,
17 "Based on the above, a POSITA would have
18 understood that the claims require displaying the
19 measured value of a first parameter and then
20 replacing it with the measured value of a second
21 parameter that the device is currently monitoring
22 but not displaying.

1 "That is because the measured values
2 of the first and second parameters replace each
3 other within the common display area, display
4 area, or display of the claims, and both
5 parameters must be currently measured in order to
6 determine when to make the replacement.

7 "Accordingly, the claims require a
8 device that monitors both a displayed parameter
9 and an undisplayed parameter so that it can
10 replace one parameter with the other."

11 Q. So, it is your position that because
12 in Figure 11C both parameters are still visible
13 and displayed they do not meet the claims?

14 MR. KIANG: Objection, misstates
15 testimony. Objection to form and scope.

16 THE WITNESS: You asked me why
17 figure -- I think you asked me why
18 Figure 11C -- I will refer back to my, the
19 answer I just gave when I described all
20 claims require currently monitoring two
21 parameters, one of which is not displayed,
22 and how I described my opinions in

1 Paragraph 92 there.

2 BY MS. KIM:

3 Q. Thank you. I am just trying to
4 understand why you believe it is outside of what
5 you stated in Paragraph 92.

6 So, when you say, "A POSITA would
7 have understood that the claims require
8 displaying the measured value of a first
9 parameter and then replacing it with the measured
10 value of a second parameter that the device is
11 currently monitors but not displaying."

12 When I apply that to figures 11C and
13 B, the distinction I am seeing is that both the
14 first and second parameters, being 1.2 and 3.25,
15 are both displayed in each figure?

16 A. Again, I was giving you one example
17 of why we can't just look at Figure 11C and say,
18 you know, that is outside the scope of the
19 claims.

20 I gave you one example. The claims
21 also require additional requirements.

22 So, for example, just taking

1 Claim 1, the claim requires displaying the other
2 of the measured values based on the occurrence of
3 the event. The event being the measured value of
4 one of the first or second physiological
5 parameters approaching one or more threshold
6 values indicative of a worsening state of a
7 patient.

8 Q. Okay. So when I look at Figure 11C,
9 I see a caret that is located next to the 1.2
10 value which indicates a physiological parameter
11 increasing in value.

12 Do you see that?

13 A. No, I do not.

14 Q. On figure -- in Figure 11C, on the
15 upper left-hand side of 1.2, I see a little
16 caret, like it is a triangle, upward facing
17 triangle next to the 1.2.

18 And it is identified by numeric
19 reference 1142. That is an indicator that the
20 value is going up.

21 Do you see that?

22 A. I see the 1142. Let me refer to the

1 patent.

2 The description refers to a trend
3 line 1142 for HbMet.

4 Q. Yep. 1142 points to both the trend
5 line in 11 -- Figure 11C, and it also points to
6 the caret symbol.

7 Do you see that?

8 A. Yes. I see the trend line, 1142
9 pointing to that triangle shape.

10 Q. The '223 patent states that the
11 display screen can show trending directional
12 indicators such as 1142 and 1144.

13 Do you see that in the '223 patent?
14 It is in the middle of that paragraph that you
15 were reading from?

16 A. So, "The display screen also shows
17 trending directional indicators, 1142, 1144, for
18 many of the displayed physiological parameters."

19 Q. Yes. And it goes on to say, "In an
20 embodiment, the directional indicators 1142, 1144
21 may advantageously comprise arrows showing the
22 recent trend."

1 Do you see that?

2 A. I see that, yes.

3 Q. Okay. So, then going back to
4 Figure 11C, the triangle that is located at the
5 upper left-hand side of the 1.2 value is a
6 directional indicator indicating upward trend.

7 Do you see that?

8 A. Yes. As we just described -- let me
9 see. "The display screen also shows trending
10 directional indicators, 1142, 1144, for many of
11 the displayed physiological parameters."

12 Q. So, isn't it true you that if there
13 is a directional indicator indicating that a
14 recent trend is showing an upward trend in
15 Figure 11C, that that could qualify as an event
16 in which a physiological parameter is approaching
17 one or more threshold values as recited in Claim
18 1?

19 MR. KIANG: Objection to form and
20 scope.

21 THE WITNESS: We were talking about
22 that description that I read, "The event

1 being the measured value of one of the first
2 or second physiological parameters
3 approaching one or more threshold values
4 indicative of a worsening state of the
5 patient."

6 But, again you know, this is all
7 part of the overall claim for Claim 1 where
8 we are talking about the display capable of
9 displaying a measured value of a first
10 physiological parameter.

11 And then we are going to be
12 replacing this.

13 So, you are now talking about
14 something different here and asking me if
15 that arrow or that triangle symbol is somehow
16 a worsening state of a patient.

17 I don't equate the two together at
18 all. This is not what the Claim 1 is
19 describing.

20 And you could have an upward arrow
21 that is actually like your SPO2. SPO2 could
22 be going up. That is not indicating a

1 worsening state of a patient, for example.

2 BY MS. KIM:

3 Q. Can we go back to what you were
4 saying about Paragraph 92 in your declaration?

5 A. Yes. I am back at 92.

6 Q. So, you state in that paragraph in
7 the last sentence, "The claims require a device
8 that monitors both a displayed parameter and an
9 undisplayed parameter so that it can replace one
10 parameter with the other."

11 Correct?

12 A. That is what I state in
13 Paragraph 92, yes.

14 Q. In your opinion, does Figure 11B
15 when it transitions to 11C not reflect that?

16 MR. KIANG: Objection, assumes facts
17 not in evidence.

18 THE WITNESS: Again, we have to look
19 at the claim language in its entirety.

20 BY MS. KIM:

21 Q. Dr. Duckworth, do you have an
22 answer?

1 A. I thought I had answered the
2 question.

3 Q. Oh, I'm sorry. I thought you were
4 providing an answer.

5 A. No. I thought I already replied.
6 And also I should point out that I don't recall
7 these figures that you are referring to here
8 being part of the petition for Apple's arguments.

9 Q. So, these figures are embodiments
10 provided by the '223 patent.

11 And, my question started with
12 whether the 2 -- 1.2 value in Figure 11B is
13 replaced in Figure 11C by the 3.25 value?

14 MR. KIANG: Objection. Assumes
15 facts not in evidence.

16 THE WITNESS: And again, Counselor,
17 I believe I have answered this many ways.

18 That your use of the term "replaced"
19 is -- you have given me a hypothetical case
20 that was not in Apple's petition there, but
21 also you have given me a hypothetical case.

22 And I am explaining that we have to

1 be careful about your use of the term
2 "replace" there because the use of the term
3 "replaced" as I have explained is very
4 specific in its requirements. And I gave
5 you, you know, examples before.

6 So, I believe I have answered that
7 question.

8 BY MS. KIM:

9 Q. When you look at Figure 11C, do you
10 believe that the 1.2 value is an undisplayed
11 parameter?

12 A. The patent description I think makes
13 it clear that Figure 11C is showing a measured
14 value of HbMet.

15 Q. And likewise, the PI value is also a
16 displayed parameter like the percent HbMet value,
17 correct?

18 A. Yes. I believe the description
19 shows that Figure 11C shows a measured value of
20 PI.

21 Q. Both Figures 11B and 11C show
22 display parameters of percent HbMet and PI

1 values, correct?

2 A. Yes. Again, the patent describes
3 that, a measured value of perfusion quality and
4 the measured value of HbMet.

5 Q. So, neither the percent HbMet and
6 the PI values are undisplayed parameters in
7 Figures 11B and C?

8 A. Figure 11B shows a displayed value
9 of HbMet, a display value of PI.

10 And Figure 11C shows a displayed
11 value of PI and a displayed value of HbMet.

12 Q. So, neither of those values have
13 been removed from the display, correct, in
14 Figures 11B and 11C?

15 MR. KIANG: Objection to form.

16 THE WITNESS: The display shows both
17 values of PI and HbMet in both 11B and 11C.

18 BY MS. KIM:

19 Q. In your opinion, when a parameter
20 replaces another parameter, can it still be
21 displayed on the screen?

22 MR. KIANG: Objection to scope.

1 THE WITNESS: I believe we talked
2 about this earlier that we have to be
3 accurate about what we mean by screen.

4 And are you asking me specifically
5 about a statement in my declaration or one of
6 the claims?

7 BY MS. KIM:

8 Q. Well, referring to -- withdrawn.
9 Let's move on.

10 So, looking at Figure 11B, there are
11 four icons on the right side of the display
12 screen, correct?

13 MR. KIANG: Objection to form.

14 BY MS. KIM:

15 Q. There are rectangular-shaped icons
16 stacked?

17 A. Yes, I see four rectangular boxes on
18 the far right of the display shown in Figure 11B.

19 Q. Those four icons are in a display
20 location but don't display measured values,
21 correct?

22 MR. KIANG: Objection to form.

1 Relevance.

2 THE WITNESS: I'm trying to find a
3 description of those four rectangles in the
4 patent description, and I don't see them at
5 the moment.

6 But can you ask your question again
7 please then, Counselor?

8 BY MS. KIM:

9 Q. Sure. The icons themselves shown on
10 the right side of Figure 11B do not display
11 measured values, correct?

12 A. I do not see any, any values, any
13 measured values in those four boxes, no.

14 Q. So, would the area occupied by those
15 icons be capable of displaying information on a
16 physiological parameter?

17 MR. KIANG: Objection to form.
18 Scope.

19 THE WITNESS: The patent doesn't
20 disclose whether that is possible or not.

21 BY MS. KIM:

22 Q. Claim 1 of the '223 patent talks

1 about a common display area, correct?

2 A. Claim 1, yes. It has got a --
3 comprised at least some common display area
4 capable of displaying information, et cetera.

5 Q. Would the area occupied by the icons
6 be considered an area -- withdrawn.

7 So, would the area occupied by the
8 icons be considered a common display area?

9 A. In the context of Claim 1 -- where
10 is that?

11 So, if we go to my Paragraph 39,
12 where I reproduce Claim 1. It says Limitation
13 1b, "Wherein in the common display area, the
14 display of one of the measured values of the
15 first or second physiological parameter is
16 replaced with the other of the measured values
17 based on an occurrence of an event."

18 So, a, the common display area has
19 to display one of the measured values of the
20 first or second physiological parameter and
21 replaced with the other of the measured values.

22 So, I think, you know, you asked me

1 is that a common display area.

2 Well, not in the context of the
3 claim language there.

4 Q. So, in the context of Figure 11B
5 would it be true to state that the common display
6 area would exclude the area occupied by the
7 icons?

8 A. The common display area though -- it
9 is better, I think, if we look at the description
10 that I provide that we were looking at before.

11 This I think better describes the
12 common display area on Page 35, Figures 4 and 5.

13 We don't -- in there, it is very
14 clear we've got that multi-mode display 206. And
15 that is the common display area displaying one or
16 other of the physiological parameters.

17 Q. So, is it your testimony that it is
18 unclear what the common area is in Figure 11B?

19 MR. KIANG: Objection. Misstates
20 testimony.

21 BY MS. KIM:

22 Q. Or can you point to where the common

1 area is on figure, in Figure 11B?

2 MR. KIANG: Objection to form.

3 THE WITNESS: The Figure 11B does
4 not have the correct context for that, you
5 know, claim language we were just looking at.

6 So, I think it is inappropriate to
7 start trying to say well, is this that
8 portion or that portion.

9 I think it is better to, like I say,
10 look at the figures that I provided for
11 Figure 4 and Figure 5, for example.

12 BY MS. KIM:

13 Q. In Figure 4, the pink -- in Figure 4
14 the section that is highlighted in pink in your
15 declaration, is that the common area?

16 A. Yes. That is the 206, the
17 multi-mode display, that is the common display
18 area.

19 Q. And then in Figure 5, likewise, is
20 the pink area considered the common display area?

21 A. Yes.

22 Q. But when you look at Figure 11B, are

1 you unable to identify what the common area would
2 be in that figure?

3 MR. KIANG: Objection to form.
4 Misstates testimony.

5 THE WITNESS: This is -- to me this
6 is a totally different use of the terms that
7 we were referring to as regards to the claim
8 language and the common display area.

9 So, I can't apply that how you are
10 asking me to Figure 11B. There is not -- I
11 don't believe there is enough description or
12 it is appropriate to apply it to Figure 11B,
13 as required by the claims and how I have
14 explained that in my earlier declaration
15 there.

16 BY MS. KIM:

17 Q. Can we look at Claim 1 again of the
18 '223 patent.

19 MR. KIANG: Counsel, if you are
20 asking Dr. Duckworth about the claims, can
21 you show him a document with the claims?

22 I understand the patent itself has

1 the claims but I think they have all of the
2 markups from the re-exam.

3 MS. KIM: So, Lori, are you able to
4 show the '223 patent?

5 THE REPORTER: I am not, and I don't
6 have it, either, so --

7 MS. KIM: Just give me a second.

8 MR. KIANG: And I will just suggest
9 that I think your petition had the claim list
10 and that would be probably a lit bit easier
11 to use.

12 MS. KIM: Yes, I would suggest that,
13 too. Thanks, Daniel.

14 Dr. Duckworth, do you have a copy of
15 the petition?

16 THE WITNESS: I can -- excuse me. I
17 believe so. But, is it, you want to look at
18 the claim language --

19 BY MS. KIM:

20 Q. Yes.

21 A. -- because Claim 1, I listed Claim 1
22 in, on Page 21 of my declaration.

1 Q. Okay. Is that sufficient for you to
2 view during your deposition?

3 A. Yes, I believe so.

4 Q. Okay. Great.

5 MS. KIM: Is that okay with you,
6 Daniel?

7 MR. KIANG: Yes, at least as to
8 Claim 1. But if you are going to ask
9 questions about other ones, we might need to
10 get that claim list.

11 MS. KIM: Okay. Well, let's get
12 through Claim 1 first.

13 BY MS. KIM:

14 Q. So, Dr. Duckworth, Claim 1 starts by
15 reciting, "A patient monitor capable of measuring
16 at least two physiological parameters."

17 Do you see that?

18 A. I do.

19 Q. It also recites, "The patient
20 monitor comprising a display capable of
21 displaying a measured value of a first
22 physiological parameter of body tissue of a

1 monitored patient in a first display area or
2 displaying a measured value of a second
3 physiological parameter of the body tissue in the
4 second display area."

5 Correct?

6 A. Yes.

7 Q. Does Claim 1 state that the patient
8 monitor comprising a display capable of
9 displaying -- withdrawn.

10 Does Claim 1 state that the display
11 is capable of displaying a currently measured
12 value of the first physiological parameter?

13 A. The claims state, "The display of
14 one of the measured values of the first or second
15 physiological parameter is replaced with the
16 other of the measured values based on the
17 occurrence of an event."

18 And then, "The event being the
19 measured value of one of the first or second
20 physiological parameters approaching one or more
21 threshold values indicative of a worsening state
22 of a patient."

1 So, as we were talking about
2 earlier, in my Paragraphs 54, 55, 56, 57, 58, 59,
3 and 60, I state in 60, "Thus, from the
4 specification claims of the '223 patent, a POSITA
5 would have understood the measured value refers
6 to a value of a parameter currently detected and
7 determined by the monitor."

8 Q. That doesn't answer my question,
9 Dr. Duckworth.

10 I asked does Claim 1 state a display
11 capable of displaying a currently measured value
12 of a first physiological parameter?

13 A. The claims do not have the term
14 "currently" in the claim language.

15 But as I just explained, a POSITA
16 would have understood that the measured values --
17 that a measured value refers to a value of
18 parameter currently detected and determined by
19 the monitor.

20 Q. Does Claim 1 recite "presently
21 measured" anywhere?

22 A. Claim 1 does not use the term

1 "presently measured," but as again I explained in
2 Paragraphs 54, 55, 56, 57 and 58, and again
3 summarizing 59 and 60, like for example 58,
4 second, "A POSITA in view of the specification of
5 the '223 patent would have understood that a
6 measured value must be currently measured."

7 Q. Does Claim 1 state anywhere
8 "actively measured"?

9 A. Claim 1 does not use the term
10 "actively measured".

11 Q. So, then going back to Claim 1 of
12 the '223 patent, isn't it true that Claim 1
13 doesn't recite anywhere that the patient monitor
14 comprises a display capable of displaying a
15 currently measured value of a first physiological
16 parameter?

17 A. The words used in the claim language
18 does not include the term "currently" but again
19 as I have just explained a POSITA would have
20 understood that a measured value refers to a
21 value parameter currently detected and determined
22 by the monitor.

1 Q. Claim 1 also recites "Wherein in the
2 common display area the display of one of the
3 measured values of the first or second
4 physiological parameters replaced with the other
5 of the measured values based on an occurrence of
6 an event."

7 Correct?

8 A. That is part of the claim language,
9 yes.

10 Q. And it also recites "The event being
11 the measured value of one of the first or second
12 physiological parameters approaching one or more
13 threshold values indicative of a worsening state
14 of a patient."

15 Correct?

16 A. That is what the end of the claim
17 states there, yes.

18 Q. But Claim 1 doesn't say that the
19 event being the measured value of both the first
20 and second physiological parameters approaching
21 one or more threshold values, correct?

22 A. The claim language says, "The event

1 being the measured value of one of the first or
2 second physiological parameters."

3 Q. Do you agree that one of and both
4 mean different things -- so, let me reframe.

5 Do you agree that the words "one of"
6 versus the term "both" mean different things?

7 A. The claim does not use the term
8 "both".

9 I think the claim makes it clear
10 that the event being the measured value of one of
11 the first or second.

12 THE WITNESS: Counselor, we have
13 been going for nearly an hour again. Can we
14 take another break?

15 MS. KIM: Sure. That is fine.

16 THE WITNESS: Thank you.

17 (Recess taken -- 2:56 p.m.)

18 (After recess -- 3:06 p.m.)

19 MS. KIM: Dr. Duckworth, I would
20 like to turn to Claim 21. And my colleague,
21 Gretchen, is going to drop in the chat a copy
22 of the petition so that you can refer, you

1 and Daniel can refer to the pertinent claim
2 language if desired.

3 BY MS. KIM:

4 Q. Let me know when you are ready.

5 A. I have the patent in front of me so
6 I can look at the claim language from that.

7 Q. Very good. Okay. Let's look at
8 Claim 21.

9 Claim 21, Column 21, Line 42,
10 beginning with Column 21, Line 42 recites,
11 "Replacing the display of the measured value of
12 the first physiological parameter with the
13 display of the measured value of the second
14 physiological parameter in a display location
15 when a change in the measurement of the second
16 physiological parameter indicates a worsening
17 state of the patient."

18 Correct?

19 A. I see that, yes.

20 Q. Now in that limitation, Claim 21
21 only refers to the second physiological
22 parameter, correct? Not a first physiological

1 parameter -- withdrawn. Let me reframe,
2 rephrase.

3 In that limitation, Claim 21 only
4 refers to the second physiological parameter when
5 referring to a change in the measurement
6 indicating a worsening state of the patient,
7 correct?

8 MR. KIANG: Objection to form.

9 THE WITNESS: I believe what you
10 read out the first time when we were looking
11 at this claim is what we should be using.
12 So, let me just confirm this.

13 So, Claim 21, the latter part says,
14 "and replacing the display of the measured
15 value of the first physiological parameter,
16 the display of a measured value of a second
17 physiological parameter, in the displayed
18 location when a change in the measurement of
19 the second physiological parameter indicates
20 a worsening state of the patient."

21 So, does that answer your question
22 or do you have another question?

1 BY MS. KIM:

2 Q. My question is, isn't it true that
3 Claim 21 says when a change in the measurement of
4 the second physiological parameter indicates a
5 worsening state of the patient, it does not refer
6 to the first physiological parameter, true?

7 MR. KIANG: Objection to form.

8 THE WITNESS: The claim just refers
9 to -- the latter part just mentions when a
10 change in the measurement of the second
11 physiological parameter indicates a worsening
12 state of the patient.

13 BY MS. KIM:

14 Q. So, to clarify then, Claim 1 doesn't
15 require that there is a change in the measurement
16 of the first and second physiological parameters
17 indicating a worsening state of the patient,
18 correct?

19 A. You are now referring back to
20 Claim 1, Counselor?

21 Q. Claim 21.

22 A. Because you said Claim 1.

1 Q. Sorry. I meant claim -- let me
2 rephrase or correct it.

3 Claim 21 doesn't say that replacing
4 the display of the measured value of the first
5 physiological parameter with the display of the
6 measured value of the second parameter in the
7 display location when a change in the measurement
8 of the first and second physiological parameter
9 indicates a worsening state of the patient,
10 correct?

11 A. I would agree with you that the
12 language of Claim 21 is not what you just said.

13 Q. Let's turn to Claim 27. Claim 27
14 recites, "Wherein the display of the measured
15 value of the first blood parameter is replaced by
16 the measured value of the second blood parameter
17 when the second blood parameter passes an alarm
18 threshold."

19 Do you see that?

20 A. I think I've got that. Let me just
21 confirm.

22 So, the middle of the description

1 for 27, for Claim 27, "Wherein the display," --

2 actually no, I'm not clear where you are --

3 Could you explain where you are

4 looking at, Counselor?

5 MR. KIANG: I also want to clarify

6 for the record, Dr. Duckworth, Claim 27 was

7 amended during the re-exam.

8 So, if you are looking at Column 22,

9 that is no longer the operative version of

10 27.

11 THE WITNESS: Yes, thank you for

12 that. I need to look at the back. Thank

13 you. Yes.

14 So --

15 BY MS. KIM:

16 Q. So, in the re-exam portion of the

17 patent.

18 A. Yes.

19 Q. I direct your attention, I would

20 like to direct your attention to Column 2.

21 A. Yes.

22 Q. Claim 27 starts at Line 49.

1 A. I have that now. Thank you.

2 Q. Okay, great.

3 A. So, I wasn't sure -- can you ask the
4 question again? I wasn't sure what, which
5 portion you were referring to or what the
6 question was.

7 Q. Okay. So, I'm going to direct your
8 attention to Column 2, starting on Line 61.

9 Claim 27 recites, "Wherein the
10 display of the measured value of the first blood
11 parameter is replaced by the measured value of
12 the second blood parameter when the second blood
13 parameter passes an alarm threshold."

14 Correct?

15 A. So, I think I am reading the correct
16 portion here.

17 So, "Wherein the display of the
18 measured value of the first blood parameter is
19 replaced by the measured value of the second
20 blood parameter when the second blood parameter
21 passes an alarm threshold."

22 Q. That's correct. In that latter

1 portion of the limitation you just read, Claim 27
2 doesn't say when the first and second blood
3 parameters pass an alarm threshold, correct?

4 A. I agree the claim language does not
5 say that.

6 Q. So, to be clear, Claim 27 says "when
7 the second blood parameter passes an alarm
8 threshold," but it does not refer to the first
9 blood parameter, true?

10 A. The language of Claim 27 as we just
11 went through, it says, it "is replaced by the
12 measured value of the second blood parameter when
13 the second blood parameter passes an alarm
14 threshold."

15 Q. Okay. Let's turn to Claim 27 -- 28,
16 sorry. And that starts on Column 3.

17 A. Uh-huh.

18 Q. So, it is also part of the re-exam.

19 A. Yes, got it.

20 Q. So, starting at Line 15 of Column 3,
21 Claim 28 recites, "Wherein the display also
22 changes from displaying the measured value of the

1 blood parameter to displaying the measured value
2 of the second blood parameter when the second
3 blood parameter passes a threshold alarm."

4 Correct?

5 A. Close, but not quite. You missed a
6 couple of words and I think changed. So, let me
7 read that back.

8 What I have is, "Wherein the display
9 also changes from displaying the measured value
10 of the first blood parameter to displaying the
11 measured value of the second blood parameter when
12 the second blood parameter passes an alarm
13 threshold."

14 Q. Okay. That is what I have read to
15 you. So I agree, that is, that is what Claim 28
16 reads.

17 Similar to Claim 27, Claim 28 does
18 not recite that wherein the display also changes
19 from displaying the measured value of the first
20 parameter to displaying the measured value of the
21 first and second blood parameter when the second
22 blood parameter passes -- sorry, withdrawn.

1 So, Claim 28 when it says "when the
2 second blood parameter passes an alarm
3 threshold," it does not refer to a first blood
4 parameter, true?

5 A. The claim language is as we, you
6 know, just talked about there.

7 It says, "to display the measured
8 value of the second blood parameter when the
9 second blood parameter passes an alarm
10 threshold."

11 Q. And in that last portion when it
12 says, "when the second blood parameter passes an
13 alarm threshold," it does not refer to a first
14 blood parameter passing an alarm threshold,
15 correct?

16 A. I don't see it saying that
17 displaying the measured value of the second blood
18 parameter when the, yes, the first blood
19 parameter passes an alarm threshold.

20 Q. Okay. Great.

21 So, let's go back to Claim 1. Let
22 me know when you are ready.

1 A. Yes. I am referring to Claim 1 in
2 my declaration.

3 Q. Okay. So, Claim 1, it recites in
4 Limitation 1b, "Wherein" -- it starts with,
5 "Wherein the common display area."

6 Do you see that?

7 A. I do.

8 Q. It says that "the display of one of
9 the measured values of the first or second
10 physiological parameters is replaced with the
11 other of the measured values based on an
12 occurrence of an event."

13 Do you see that?

14 A. I do.

15 Q. Now, in that limitation, Claim 1
16 doesn't say that the measured value of the first
17 or second physiological parameter is removed and
18 replaced with the other of the measured values,
19 correct?

20 A. It says the display of one of the
21 measured values of the first or second
22 physiological parameters was replaced with the

1 other of the measured values based on the
2 occurrence of an event.

3 Q. But it doesn't ever use the term
4 "removed," correct?

5 A. The claim does not use the term
6 "remove".

7 But, as I explained that the --
8 whatever is replaced is no longer part of the --
9 is no longer displayed.

10 Q. But you agree that Claim 1 doesn't
11 ever use the word -- explicitly use the word
12 "remove" anywhere?

13 A. Claim 1 does not use the word
14 "remove".

15 Q. So, in Claim 1 do you see that it
16 recites, "A patient monitor capable of measuring
17 at least two physiological parameters"?

18 A. Yes, I do.

19 Q. And you also see that Claim 1
20 recites, "The patient monitor comprising a
21 display capable of displaying a measured value of
22 a first physiological parameter of body tissue of

1 a monitored patient in a first display area."

2 Correct?

3 A. I do, yes.

4 Q. It also goes on to recite that it
5 can display a measured value of a second
6 physiological parameter of the body tissue in a
7 second display area, correct?

8 A. Yes, I see that.

9 Q. Is there anything in the claim that
10 states that the first display area and the second
11 display area must be equal or the same?

12 A. It says, "where the first display
13 area and the second display area comprise at
14 least a common display area."

15 And then continues, "Wherein the
16 common display area the display of one of the
17 measured values of the first or second
18 physiological parameters replaced with the other
19 of the measured values based on the occurrence of
20 an event."

21 Q. So, nothing in the claim states that
22 the first display area must be the same as the

1 second display area, correct?

2 A. The claim just states, "where the
3 first display area and the second display area
4 comprise at least some common display area
5 capable of displaying information."

6 Q. Do you see that Claim 1 recites,
7 where the first display area and the second --
8 the section that you just read, "where the first
9 display area and the second display area comprise
10 at least a common display area capable of
11 displaying information."

12 Do you -- isn't it true that that
13 limitation does not require that the first
14 display area must be the same as this common
15 display area?

16 A. I found that question confusing. I
17 think you said something like the first display
18 area is not the same as the --

19 So, can you ask the question again,
20 please?

21 Q. Sure. Nothing in the claim requires
22 the first display area to be the same as the

1 common display area, correct?

2 A. The claim requires the first display
3 area and the second display area to comprise at
4 least some common display area.

5 Q. That is a different requirement,
6 correct?

7 MR. KIANG: Objection to form.

8 THE WITNESS: A different
9 requirement to what?

10 BY MS. KIM:

11 Q. To a requirement that would require
12 the first display area to be the same as the
13 common display area.

14 A. I think the claim is clear that it
15 says where the first display area and the second
16 display area comprise at least some common
17 display area.

18 Q. Is it true that -- isn't it true
19 that Claim 1 doesn't say that the first display
20 area is the same as the entire display area?

21 MR. KIANG: Objection to form.

22 THE WITNESS: You are asking me

1 about what the claim says? All I can do is
2 repeat actually what the claim does say.

3 And that is, "where the first
4 display area and the second display area
5 comprise at least some common display area
6 capable of displaying information."

7 BY MS. KIM:

8 Q. I am asking you what the claim says.
9 Does the claim state that the first
10 display area is the same as the entire display
11 area?

12 A. The claim says, "The first display
13 area and the second display area comprise at
14 least some common display area."

15 Q. Is the common display area an entire
16 display area?

17 MR. KIANG: Same objections.

18 THE WITNESS: So, I believe I have,
19 you know, answered the question there, that I
20 think the claim is very clear.

21 "The first display area and the
22 second display area comprise at least some

1 common display area."

2 BY MS. KIM:

3 Q. Okay. So then, because Claim 1
4 states that it is only at least some of the
5 common display area, is it reasonable to assume
6 then in some cases the first display area and the
7 second display area comprise only a portion of
8 the common display area?

9 MR. KIANG: Objection to form.
10 Calls for speculation.

11 THE WITNESS: Can you ask that
12 question again please, Counselor?

13 BY MS. KIM:

14 Q. Claim 1 states that, "The first
15 display area and the second display area comprise
16 at least some common display area." Correct?

17 A. That is what it states, yes.

18 Q. So, because it states only at least
19 some common display area, isn't it reasonable to
20 assume that in some cases the first display area
21 and the second display area comprise only a
22 portion of the common display area?

1 MR. KIANG: Objection to form.

2 Calls for speculation.

3 THE WITNESS: I have to refer back
4 to the claim language. That is all I can --
5 you know, you asked me what the claims say.

6 Well, that is what the claims say.
7 It says where, "The first display area and
8 the second display area comprise at least
9 some common display area."

10 That is what the claim says.

11 BY MS. KIM:

12 Q. What is your understanding of "at
13 least some" mean? Does it mean the same as all
14 of the common area display area, the common
15 display area?

16 MR. KIANG: Objection to form.

17 THE WITNESS: It says what it says,
18 "at least some common display area."

19 BY MS. KIM:

20 Q. Does that -- so, standing here today
21 you can't tell me if at least some common area
22 can be a portion of the common area, common

1 display area?

2 MR. KIANG: Objection to form.

3 Misstates testimony.

4 THE WITNESS: What the claim
5 language states I think is very straight
6 forward, where, "The first display area and
7 the second display area comprise at least
8 some common display area."

9 It doesn't say anything different.

10 It just says that, at least some common
11 display area.

12 BY MS. KIM:

13 Q. Do you agree that Claim 1 doesn't
14 recite "an entire common display area"?

15 A. Claim 1 does not use terms like
16 "entire common display area".

17 Q. Does Claim 1 use the phrase, "a
18 common display area"?

19 A. The wording of Claim 1 does not use
20 the words "a common display area".

21 Q. Do you agree that at least some
22 common area display -- withdrawn.

1 Do you agree that "at least some
2 common display area" is different from "a common
3 display area"?

4 MR. KIANG: Objection to form.
5 Relevance.

6 THE WITNESS: In what context,
7 Counselor? We are looking at the claim
8 language of Claim 1.

9 Are you asking me now, asking me
10 about something out of, you know, the scope
11 here of Claim 1?

12 BY MS. KIM:

13 Q. I don't believe so.

14 A. Well, you know, the claim language
15 is, you know, says what -- sorry.

16 Q. Oh, go ahead.

17 A. I was just saying, you know, the
18 claim language says what it says.

19 And the second display area comprise
20 at least some common display area.

21 Q. Do you -- is it your opinion that
22 there is a difference between the phrase "at

1 least some common area" and the phrase "the
2 common display area"?

3 MR. KIANG: Objection, misstates
4 testimony. Scope.

5 THE WITNESS: Again, in what
6 context, Counselor?

7 The -- we have the claim language
8 there and now you are asking me something
9 different to the claim language. Right?

10 And all I'm saying is that I believe
11 it is straight forward what the claim
12 language says, "Where the first display area
13 and the second display area comprise at least
14 some common display."

15 It doesn't say anything different to
16 that.

17 BY MS. KIM:

18 Q. Well, let's look at Claim 2.

19 Can you recite the language of
20 Claim 2?

21 A. I will have to find that. Let me
22 just, one second. So, I found Claim 2.

1 Q. Can you recite the language?

2 A. Yep. The patient monitor -- "The
3 patient monitor of Claim 1, wherein the first
4 display area and the second display area comprise
5 the common display area."

6 Q. Would you agree that the limitation,
7 "wherein the first display area and the second
8 display area comprise a common display area," is
9 different and narrower than the limitation,
10 "where the first display area and the second
11 display area comprise at least some common
12 display area"?

13 MR. KIANG: Objection, scope.

14 THE WITNESS: So, Claim 2 is
15 dependent on Claim 1.

16 And as we just stated, the first
17 display area and the second display area
18 comprise the common display area.

19 BY MS. KIM:

20 Q. So, do you agree that the language
21 in dependent Claim 2 is narrower than the
22 limitation recited in Claim 1?

1 MR. KIANG: Objection, legal
2 conclusion.

3 THE WITNESS: I will just state that
4 Claim 1 has the language, "comprised at least
5 some common display area capable of
6 displaying information".

7 And Claim 2 states, "wherein the
8 first display area and the second display
9 area comprise the common display area".

10 BY MS. KIM:

11 Q. Okay. Let's take a look at
12 Claim 21. Let me know when you are ready.

13 A. Okay. I am at 21.

14 Q. Do you see that Claim 21 recites,
15 "A method of displaying two physiological
16 parameters -- two physiological parameter
17 measurements using a display location of a
18 display of a patient monitoring device."

19 A. That is the start of Claim 21, yes.

20 Q. Do you see that Claim 21 also
21 recites, "the display location being generally
22 capable of displaying a single physiological

1 parameter measurement"?

2 A. I see that, yes.

3 Q. Do you also see that the claim
4 recites, "the method comprising displaying a
5 measurement value -- measured value of a first
6 physiological parameter and a display location of
7 an electronic display"?

8 A. I see that too.

9 Q. Claim 21 recites a display location,
10 correct?

11 A. As we just read -- excuse me.

12 As we just read, it says, "A method
13 of displaying two physiological parameter
14 measurements using a display location of a
15 display."

16 So, it uses the term "a display
17 location".

18 Q. In that limitation, Claim 21 doesn't
19 state that it is displaying a measured value of a
20 first physiological parameter in an entire
21 display area, correct?

22 A. The claim does not use those words

1 that you just used.

2 Q. Claim 21 doesn't recite displaying a
3 measured value of a first physiological parameter
4 in all of the available display area, correct?

5 A. It states comprising, "displaying a
6 measured value of a first physiological parameter
7 in a display location of an electronic display."

8 Q. And isn't it true that Claim 21
9 doesn't specify whether the display location is
10 the only display location?

11 A. The claim states using a display
12 location of a display of a patient monitoring
13 device.

14 Q. So, it doesn't use the term "only,"
15 correct?

16 A. The term does not use the term
17 "only," no.

18 Q. Okay. So, does Claim 1 use the
19 phrase "one display location"?

20 A. You said Claim 1 again, Counselor.
21 Did you mean Claim 1.

22 Q. I'm sorry. Claim 21. Does Claim 21

1 recite the phrase "one display location"?

2 A. The claim uses the term "using a
3 display location of a display".

4 Q. Isn't it true that a electronic
5 display can include multiple display locations?

6 MR. KIANG: Objection, scope.
7 Speculation.

8 THE WITNESS: So, you are asking me
9 a hypothetical question: Can an electronic
10 display contain multiple display locations?

11 And I would say the answer is yes.

12 BY MS. KIM:

13 Q. But Claim 21 doesn't specify how
14 many display locations the display has, correct?

15 A. Claim 1 -- 21, does not state how
16 many display locations. That is correct.

17 Q. You also see that Claim 21 recites,
18 "replacing the display of the measured value of
19 the physiological parameter with the display of a
20 measured value of a second physiological
21 parameter in the display location," correct?

22 A. I see that, yes.

1 Q. It doesn't say there replacing and
2 then removing the display of the measured value
3 of the first physiological parameter, correct?

4 A. As we talked about earlier --

5 Q. So --

6 A. So, let me answer your question.
7 So, in Paragraph 66, a POSITA would understand
8 that use of the word "replacing". So, if I can
9 read the last part of my Paragraph 66.

10 "A POSITA would recognize that when
11 a measured value of a first parameter is replaced
12 with a measured value of a second parameter, the
13 display no longer shows the measured value of the
14 first parameter. In its place the display shows
15 the measured value of the second parameter."

16 Q. But as we discussed before, Claim 21
17 doesn't explicitly state in its language replace
18 and then remove?

19 A. As I explained, a POSITA reading the
20 patent would understand that the display no
21 longer shows the measured value of the first
22 parameter.

1 Q. Understood. But, again my question
2 is, the language used in Claim 21 does not use
3 the word "remove," correct?

4 A. Claim 21 does not have the word
5 "remove".

6 Q. Thanks. Let's move on to Claim 27
7 when you are ready.

8 A. Yes, ready.

9 Q. Now, Claim 27, can you find the
10 section that recites "the patient monitor
11 comprising a display"?

12 MR. KIANG: Let me just note, as a
13 note to Dr. Duckworth, Claim 27 was part of
14 the amended claims.

15 THE WITNESS: Thank you for the
16 reminder again. I was looking at the wrong
17 place. Thank you.

18 So, Counselor, can you ask me the
19 question again, please?

20 BY MS. KIM:

21 Q. Can you, do you see that Claim 27
22 recites a patient monitor, "The patient monitor

1 comprising," and then goes on to include, "a
2 display capable of," and continues on.

3 It is Line 52, Column 2.

4 A. Okay. So, I've got Claim 27. "The
5 patient monitor comprising a display table with
6 displaying a measured value of a first blood
7 parameter," et cetera.

8 Is that where you want me to look?

9 Q. Yes. Claim 27 in this section uses
10 the word comprising following the phrase "the
11 patient monitor," correct?

12 A. Claim 27, as we just said, the
13 patient monitor comprising.

14 Q. Have you been instructed that
15 comprising has an open-ended meaning, by counsel?

16 MR. KIANG: Give me one second about
17 that.

18 MS. KIM: Sorry. Could you repeat?

19 MR. KIANG: I am just going to
20 object to privilege there.

21 THE WITNESS: Are you instructing me
22 not to answer, Daniel?

1 MR. KIANG: Sorry. Give me one or
2 two minutes to think about this.

3 I will withdraw that objection.

4 THE WITNESS: Can you repeat the
5 question then, Counselor, please?

6 BY MS. KIM:

7 Q. Have you been instructed by counsel
8 that comprising has a special meaning in patent
9 law associated with the open-ended claim?

10 A. I don't recall.

11 Q. Do you understand that comprising
12 includes one or more?

13 MR. KIANG: Objection to form.

14 THE WITNESS: So, Counselor, you are
15 saying I should read that description the
16 patient monitor comprising as the patient
17 monitor. I'm unclear of your question.

18 BY MS. KIM:

19 Q. Do you understand that when the term
20 "comprising" is used, that it is not the -- the
21 claim is not limited to the items that are listed
22 following the comprising language?

1 A. I believe I understand what you
2 asked me, yes.

3 Q. But then have you interpreted
4 Claim 27 to mean that the patient monitor can
5 include more than one display?

6 MR. KIANG: Objection to scope.

7 THE WITNESS: I interpreted the
8 claim as read, "The patient monitor
9 comprising a display capable of displaying
10 the measured value of a first blood
11 parameter, a measured or displaying the value
12 of a second blood parameter of the body
13 tissue."

14 BY MS. KIM:

15 Q. In your opinion, can Claim 27
16 include one or more displays?

17 MR. KIANG: Objection to scope.

18 THE WITNESS: It says Claim 27
19 states, "The patient monitor comprising a
20 display capable."

21 And you are asking me -- I'm not
22 sure what you are asking me. Can you ask me

1 again, please?

2 BY MS. KIM:

3 Q. Sure. Can Claim 27 include more
4 than one display? Can it be interpreted to
5 include a patient monitor that has more than one
6 display?

7 MR. KIANG: Objection to scope.
8 Relevance.

9 THE WITNESS: The claim says, "The
10 patient monitor comprising a display
11 capable." It doesn't say anything about
12 additional displays.

13 BY MS. KIM:

14 Q. But you agree that it uses -- the
15 claim uses the term "comprising" before the
16 phrase "a display"?

17 A. Claim 27 does use the word
18 "comprising" before the following sentence.

19 Q. Like Claim 27, Claim 1 also recites
20 similar language, doesn't it?

21 A. I'm not sure what you mean by
22 similar language, Counselor. What do you mean?

1 Q. In Claim 1 -- does Claim 1 recite a
2 patient monitor comprising a display?

3 A. Let me go back to Claim 1. Claim 1
4 we have read I think a few times now.

5 I don't see the word "comprising" in
6 Claim 1.

7 Q. In Limitation 1a, do you see the
8 patient monitor --

9 A. Oh, I do now. I'm sorry, yes.
10 Limitation 1a, "The patient monitor comprising a
11 display." Yes.

12 Q. Thank you. Let's stick with
13 Claim 1.

14 Now, Claim 1 doesn't say that a
15 display is capable of only displaying a measured
16 value of a first physiological parameter of body
17 tissue of a monitored patient in a first display
18 area, correct?

19 A. Well, can you repeat your question?
20 I found that confusing. Can you repeat that,
21 please?

22 Q. Claim 1 when it recites, "The

1 patient monitor comprising a display capable of
2 displaying a measured value of a first
3 physiological parameter," it doesn't say that a
4 display is capable of only displaying a measured
5 value of the first physiological parameter,
6 correct?

7 A. The claim language says, "comprising
8 a display capable of displaying a measured value
9 of a first physiological parameter of body tissue
10 of a monitored patient in a first display area or
11 displaying a measured value of a second
12 physiological parameter of the body tissue in a
13 second display area where the first display area
14 and the second display area comprise at least
15 some common display area capable of displaying
16 information."

17 In that section, Claim 1 doesn't say
18 that it only displays a measured value of a first
19 physiological parameter or a second physiological
20 parameter, correct?

21 MR. KIANG: Objection to form.

22 THE WITNESS: Which display were

1 you -- when you used the word "display,"
2 Counselor, which area were you referring to
3 again, please?

4 BY MS. KIM:

5 Q. Limitation 1a. "The patient monitor
6 comprising a display capable of displaying a
7 measured value of a first physiological
8 parameter."

9 Do you see that?

10 A. I do, yes, uh-huh. I'm still
11 confused about specifically what you are asking
12 me in the question, though.

13 Q. The claim language doesn't state
14 that the display is capable of only displaying a
15 measured value of the first physiological
16 parameter, correct?

17 A. When you say display, are you
18 talking about the first display area or the
19 second display area or the common display area?

20 What are you referring to?

21 Q. It would be referring to
22 displaying -- only displaying a measured value of

1 the first physiological parameter of body tissue
2 of a monitored patient in a first display area.

3 A. So, I think the claim language is
4 very clear.

5 It is capable of displaying a
6 measured value of a first physiological parameter
7 body tissue of a monitored patient in a first
8 display area.

9 Q. It doesn't use the word "only" in
10 that language, correct?

11 A. The claim language does not use the
12 word "only," that is correct.

13 MR. KIANG: Excuse me, can we take
14 another break, Counselor? We have been going
15 another hour. I could do with a drink.

16 MS. KIM: Sure.

17 THE WITNESS: Thank you.

18 (Recess taken --4:03 p.m.)

19 (After recess -- 4:12 p.m.)

20 BY MS. KIM:

21 Q. So, Dr. Duckworth, we were talking
22 about Claim 1 with respect to a display capable

1 of displaying, prior to the break.

2 And my question regarding that
3 limitation is Claim 1 doesn't explicitly say that
4 a display is capable of displaying either a
5 measurement value of a blood parameter of body
6 tissue of a monitored patient or displaying a
7 measured value of a -- sorry, withdrawn.

8 Claim 1 doesn't say a display
9 capable of displaying either a measured value of
10 a first physiological parameter of a body tissue
11 of a monitored patient in a display area, or
12 displaying a measured value of a second
13 physiological parameter of the body tissue in the
14 second display area, correct?

15 A. That is not the wording of Claim 1.

16 Q. In Claim 1, none of the words
17 "only," "either," or "without" are used, correct?

18 A. I don't see the word "only" in
19 Claim 1. I don't see the word "either" in
20 Claim 1.

21 And remind me of the last one?

22 Q. Without.

1 A. And I do not see the word "without"
2 in Claim 1.

3 Q. For instance, Claim 1 doesn't say a
4 display capable of displaying a measured value of
5 a first physiological parameter of a body tissue
6 of a monitored patient in the first display area
7 without displaying a measured value of a second
8 physiological parameter, correct?

9 A. That's correct. The claim language
10 does not state that.

11 Q. Okay. Furthermore, in Claim 1, in
12 that same section of the limitation, it says, "a
13 display capable of displaying," correct?

14 A. Just to make sure, so, in
15 Limitation 1a it says, "The patient monitor
16 comprising a display capable of displaying."

17 Is that what you are referring to?

18 Q. It is. A display capable of
19 displaying is different from a display displaying
20 a measured value, correct?

21 MR. KIANG: Objection to form.

22 THE WITNESS: So, I am -- I think I

1 am unclear.

2 Are you asking me in a general
3 sense, a display displaying something or what
4 exactly are you asking me related to Claim 1?

5 BY MS. KIM:

6 Q. I'm asking if a display that is
7 capable of displaying has a different meaning
8 from a display that is displaying a measured
9 value?

10 MR. KIANG: Objection to form.

11 THE WITNESS: Counsel, you have just
12 got a few words in isolation there. The
13 claim, you know, says more than just
14 comprising a display capable of displaying.

15 It goes on to, in the first display
16 area, displaying a measured value in a second
17 display area, and then talks about the common
18 display area.

19 So, I am unclear. And I want to be,
20 you know, accurate with, you know, my
21 response and understanding what exactly are
22 you, are you asking here?

1 BY MS. KIM:

2 Q. Is a display that is capable of
3 displaying a measured value of the first
4 physiological parameter of body tissue of a
5 monitored patient in a first display area,
6 different from a display, displaying a measured
7 value of a first physiological parameter of body
8 tissue of a monitored patient in a first display
9 area?

10 MR. KIANG: Objection to form.

11 THE WITNESS: I would not want to --

12 BY MS. KIM:

13 Q. Dr. Duckworth, are you still --

14 A. Yes, I am still thinking about this.
15 So, a display capable of displaying a measured
16 value shows that you have a display that has the
17 capacity or is capable of displaying the
18 parameters in the first or second display area
19 and with that common display area, as opposed to
20 you said -- I believe you said comprising a
21 display, displaying.

22 In the latter case, it would be the

1 latter case specifically displaying, you know,
2 the rest of the description there.

3 So, if I understand your question, a
4 display capable of displaying a measured value,
5 et cetera, compared to just a display displaying
6 a measured value, et cetera.

7 I see the first having additional
8 display capacity.

9 Q. Would it be true to say that a
10 display that is capable of displaying a measured
11 value of a first physiological parameter does not
12 necessarily need to be displaying the measured
13 value of the first physiological parameter?

14 A. Again, are you asking me a
15 hypothetical question here? Because you know we
16 have to take Claim 1 in its entirety. And that
17 is how I have explained, you know, how a POSITA
18 would understand that.

19 So, now are you asking me something
20 separate to what is in the claims now?

21 Q. No. I'm just asking you your
22 understanding of the claims as written?

1 A. I think I have been very clear in my
2 understanding and in my declaration of my
3 understanding of the claims.

4 You know, we can look at some of my
5 specific paragraphs, you know, if you don't
6 understand some of those descriptions.

7 Q. Well, consistent with the
8 explanation that you have just provided, it seems
9 that your understanding of a display capable of
10 displaying a measured value of a first
11 physiological parameter wouldn't necessarily need
12 to be displaying that measured value but simply
13 be able to, if needed?

14 A. I don't recall saying anything along
15 those lines, Counselor.

16 Q. Because you said that a display
17 capable of displaying a measured value shows that
18 it has the capacity or is capable of displaying
19 the parameter.

20 A. Well, you know, just to be totally
21 clear, when we look at Figures 4 and 5 again,
22 where Paragraph 67, describes, you know, what is

1 going here, going on, for example, in Claim 1.

2 And Figures 4 and 5 illustrate how
3 display Figure 3 replaces a measured value of
4 first physiological parameter with a measured
5 value of a second physiological parameter,
6 showing how we have that common display in pink,
7 as we talked about before.

8 So, you know, I don't want to, you
9 know, give you the impression I'm saying anything
10 other than what I have described in my
11 declaration there.

12 Q. But you do agree that the language,
13 "a display capable of displaying" is different
14 than "a display displaying"?

15 A. Well, again, so there is no
16 confusion, I have analyzed and interpreted
17 Claim 1 in its entirety. And that is how I have
18 described and provided my opinions here.

19 So, you know, I can't really be any
20 clearer than I have, you know, fully explained my
21 opinions, you know, based on the claim language
22 there.

1 Q. Could we go back to Claim 1 and its
2 recitation of the common display area?

3 What is your understanding of the
4 claim meaning of the word "common display area"?

5 MR. KIANG: Object to form.

6 THE WITNESS: I'm sorry, Daniel?

7 MR. KIANG: Objection to scope.

8 THE WITNESS: I think we have a good
9 example as we have talked about before in
10 Figures 4 and 5.

11 We've got the upper pink display
12 area. And, again, we've talked about this at
13 length, where that upper display area shows
14 on the left, we had a first physiological
15 parameter, SPO2 in Figure 4.

16 And this has now been replaced with
17 the second physiological parameter, HbCO in
18 Figure 5.

19 So, there we have the common display
20 area.

21 BY MS. KIM:

22 Q. In your declaration, you also opined

1 on the re-examination procedure, correct?

2 A. Can you -- I remember doing that.
3 If you are looking at that, can you point me to
4 the paragraph? Or I can find it myself.

5 Q. Yes. Can you take a look at
6 Paragraph 77, starting with Paragraph 77.

7 A. Yep. Got it. I'm at 77.

8 Q. So, do you see that image that you
9 annotated, bottom of Paragraph 77?

10 A. I do.

11 Q. It states in your declaration that
12 you provided these annotated versions to visually
13 exemplify switching from displaying one parameter
14 to displaying all of the parameters, allowing the
15 user to view the entirety of the patient's
16 condition. Correct?

17 A. I see that, yes.

18 Q. What is the common display area of
19 that -- of those images that you show in your
20 declaration?

21 MR. KIANG: Objection, scope. Calls
22 for speculation.

1 THE WITNESS: Yes. The common
2 display area is what we have just been
3 talking about in the patent, '223. I am not
4 referring to a common display here.

5 BY MS. KIM:

6 Q. So, in your opinion, Figures 16A and
7 16B do not have a common display area?

8 MR. KIANG: Objection. Misstates
9 testimony. And objection to form.

10 THE WITNESS: When we are talking
11 about the common display area, we have to be
12 specific about the '223 patent. And that is
13 the context in which we were referring to the
14 common display.

15 BY MS. KIM:

16 Q. You have a section of the figures in
17 16A and 16B also annotated in pink coloring.

18 What does that -- what is that meant
19 to reflect?

20 A. It shows as you read out that last
21 sentence of Paragraph 77, "16A and 16B are
22 reproduced below to visually exemplify switching

1 from displaying one parameter," which is shown as
2 152, "to displaying all of the parameters,
3 allowing the user to view the entirety of the
4 patient's condition."

5 So, on the right there, you see not
6 only 152, but also 98 and 88 there.

7 Q. What is considered -- what was
8 considered by the examiners as being the first
9 measured value in this figure as shown?

10 MR. KIANG: Objection, scope, calls
11 for speculation.

12 BY MS. KIM:

13 Q. Why don't you look at your
14 Paragraph 78 and read it to yourself.

15 Let me know when you are ready.

16 A. I have read Paragraph 78.

17 Q. Okay. So, it states in your
18 declaration that examiner reaffirmed under the
19 ordinary and customary meaning of replaced, the
20 first measured value is not displayed after it
21 has been replaced by the second measured value.

22 And you are showing the figures

1 above for 16A and 16B. What in those figures was
2 considered as not -- what falls within the
3 examiner's reaffirmation that the first measured
4 value is not displayed after it has been replaced
5 by the second measured value?

6 Which one is the first measured
7 value?

8 MR. KIANG: Objection to form.
9 Calls for speculation.

10 THE WITNESS: That was a long
11 question. I got confused.

12 Can you repeat the question, please?

13 BY MS. KIM:

14 Q. Can you explain your last sentence
15 in that declaration?

16 A. "The examiner reaffirmed that under
17 the ordinary and customary meaning of replaced,
18 the first measured value is not displayed after
19 it has been replaced by the second measured
20 value."

21 The examiner distinguished --
22 earlier in that same paragraph. "The examiner

1 distinguished replacing, as required by the
2 claims, from switching from displaying the first
3 value to displaying first and second values."

4 So, the examiner, you know, made
5 that distinction. And that is why the examiner
6 allowed the claims there.

7 Q. Yes. I'm not understanding.

8 So, like in your Figures 16A and
9 16B, what was not -- what was replaced? Or what
10 was supposed to be replaced?

11 MR. KIANG: Objection to form.
12 Scope. Speculation. Misstates the exhibit.

13 THE WITNESS: Paragraph 77 describes
14 the references to Figure 16A and 16B. So the
15 left is what is referred to as a single-site
16 display. That is shown in Figure 16A. And
17 then the multi-site display.

18 So, we are talking about two
19 different things here.

20 The Paragraph 77 is showing an
21 example of what switching means. When you
22 are talking about 78, we are talking about

1 replacing which is different.

2 BY MS. KIM:

3 Q. Okay. So when it is talking about
4 the one parameter, is it --

5 In your declaration, Paragraph 77,
6 when you are talking about the one parameter, are
7 you referring to the 152 value?

8 MR. KIANG: Objection to form.

9 THE WITNESS: So, if we look in my
10 previous Paragraph 75, we see, "The Examiner
11 stated."

12 And about the second sentence there,
13 "while Al-Ali does not replace the first
14 value but switches from displaying the first
15 value to displaying first and second values."

16 So, if we now look -- what I would
17 want to do -- I want to be accurate in how I
18 am referring to the 152 and the 98 and 88 and
19 152 values in Figure 16B.

20 So, what I will need to do is look
21 at Al-Ali, because I think, you know, we
22 are -- or you seem to be, you know, trying to

1 merge descriptions in 78, Paragraph 78 with
2 77. You know, they are two separate things.

3 One is switching and the other one
4 is replacing. And one is one patent and the
5 other one -- one is '223 patent. And the
6 other one is the Al-Ali patent.

7 So, we can't just, you know, try
8 and -- so, I want -- I don't want to say
9 something inaccurate.

10 So, let's see. I mean --

11 BY MS. KIM:

12 Q. Understood.

13 A. Okay. So, let me see. Can I try
14 and find the Al-Ali reference then?

15 Q. Yes.

16 MR. KIANG: Counsel, can we have a
17 copy?

18 MS. KIM: Do you have that exhibit?

19 MR. KIANG: Counsel, do you have a
20 copy of that exhibit to show Dr. Duckworth?

21 THE WITNESS: Yeah, I don't see
22 that.

1 MS. KIM: Yeah, I can get it. Well,
2 I did include the file history for the
3 re-examination where you are citing to in
4 that paragraph, so that should be sufficient.

5 THE WITNESS: Well, you will -- you
6 are specifically asking me, though, about
7 what those numbers are in Figure 16A and 16B.

8 So, you know, I don't want to be
9 inaccurate here.

10 MS. KIM: Oh, okay. Let me see
11 here. Why don't we come back to that.

12 I'm going to have my colleague find
13 it and then drop it into the chat. So, let's
14 come back to this. Okay.

15 BY MS. KIM:

16 Q. So, let's turn for the moment to
17 your declaration, Paragraph 68.

18 A. Yes, I am there.

19 Q. Now in your declaration you state
20 that, "The '223 patent explains that the purpose
21 of the invention is to enable more parameter," I
22 think that is supposed to be parameters, "to be

1 displayed than the available physical display
2 real estate permits."

3 Correct?

4 A. So, yes, just to be clear, so my
5 sentence there is, "The '223 patent also explains
6 that the purpose of the invention is to enable
7 more parameters to be displayed than the
8 available physical display real estate permits."

9 So, yes, that is a quotation from
10 the patent.

11 Q. Is it your opinion that the
12 advantage of the --

13 Is it your opinion that to enable
14 more parameters to be displayed, certain
15 displayed items must be removed from the display
16 screen? Is that your opinion?

17 MR. KIANG: Objection. Misstates
18 testimony.

19 THE WITNESS: Yeah, I mean I don't
20 recall making that -- having that opinion
21 stated how you just did.

22 If you can point me to it, I will be

1 happy to look at it again.

2 BY MS. KIM:

3 Q. Yes. Can you take a look at
4 Paragraph 79 of your declaration.

5 A. Yes, I am at 79.

6 Q. Yes.

7 A. I am sorry. Was there a question
8 about 79?

9 Q. Yes. So, is it your opinion to
10 enable more parameters to be displayed that
11 certain display parameters must be removed from
12 the display screen?

13 A. 79 is -- that is different to what
14 you just, I think, stated as of my opinion. So,
15 I'm confused.

16 79 is, you know, I am explaining
17 thus a POSITA, "would have understood that when a
18 measured value of a first parameter is replaced
19 by the measured value of a second parameter, the
20 measured value of the first parameter is removed
21 from the display."

22 So, you know, I don't see anything

1 in there that was what you just asked me.

2 Q. Well, isn't that how you would
3 enable more parameters to be displayed when they
4 are limited physical display real estate, to
5 remove a parameter from the display?

6 MR. KIANG: Objection to form.

7 THE WITNESS: I am -- yes. I am
8 confused by your question.

9 We just, Paragraph 68 where it
10 said -- it explains the purpose of the
11 invention is to enable more parameter to be
12 displayed than the available physical display
13 real estate permits.

14 So, can you ask your question again,
15 then?

16 BY MS. KIM:

17 Q. So, how do you achieve the purpose
18 of the invention?

19 A. How do I achieve the purpose of the
20 invention?

21 Q. How does the '223 patent achieve its
22 purpose?

1 MR. KIANG: Objection to form.

2 THE WITNESS: If we continue in
3 Paragraph 68, I say, "The '223 patent
4 accomplishes this goal by removing one
5 measured value of a parameter from the
6 display of the patient monitor and displaying
7 the measured value of a different parameter
8 in its place."

9 And then, I continue with an example
10 there.

11 BY MS. KIM:

12 Q. So, then going back to my question,
13 based on what you just read in Paragraph 68, is
14 it your opinion that to enable more parameters to
15 be displayed that certain displayed items must be
16 removed --

17 MR. KIANG: Objection. Misstates
18 the testimony.

19 BY MS. KIM:

20 Q. -- from the display?

21 A. In what -- what is the context of
22 your, your question?

1 Because, in the context of the '223
2 patent, I think I spell it out very clearly in
3 that Paragraph 68.

4 So, I am unclear in what context you
5 are now asking the question.

6 Q. I mean I think I -- what I am asking
7 is consistent with what you stated in your
8 declaration which is that the '223 patent
9 accomplishes its goal by removing a measured
10 value of a parameter from its display.

11 Do you agree with that?

12 A. Yes. The 22 -- yes, just so we are
13 clear, though --

14 What I state is the '223 patent
15 accomplishes this goal by removing one measured
16 value of a parameter from the display of the
17 patient monitor and displaying the measured value
18 of a different parameter in its place.

19 Q. Are there other advantages of the
20 claimed invention of the '223 patent?

21 MR. KIANG: Objection to scope.

22 Calls for speculation. And relevance.

1 BY MS. KIM:

2 Q. So, let me ask another question.

3 Is the purpose to enable more
4 parameters to be displayed than the physical
5 display real estate permits the only advantage of
6 the '223 patent?

7 MR. KIANG: Objection, misstates
8 testimony, scope, and relevance.

9 MS. KIM: Counsel, that was a
10 question. It doesn't misstate testimony.

11 THE WITNESS: So, Counselor, the
12 claim, Claim 1 and, you know, we could talk
13 about lots of the other claims, it is talking
14 about detecting worsening state of the
15 patient.

16 Let's see. So, could you ask me
17 again?

18 The question was, is that all that
19 the patent is innovative about; is that
20 correct?

21 BY MS. KIM:

22 Q. Your first sentence in Paragraph 68,

1 is that the only purpose of the '223 patent?

2 A. I am now lost as regards to where we
3 are looking.

4 Can you remind me which paragraph it
5 was that we were looking at.

6 Q. Paragraph 68.

7 A. Okay, thank you.

8 Q. You state that, "The '223 patent
9 also explains that the purpose of the invention
10 is to enable more parameters to be displayed than
11 the available physical display real estate
12 permits."

13 My question is, is that the sole
14 purpose of the '228 patent?

15 A. The '223.

16 Q. The '223 patent, thanks.

17 MR. KIANG: Objection to scope and
18 relevance.

19 THE WITNESS: I can read the
20 abstract that I think gives a quite good
21 summary.

22 "Embodiments of the present

1 disclosure include a handheld multi-parameter
2 patient monitor, capable of determining
3 multiple physiological parameters from the
4 output of a light sensitive detector capable
5 of detecting light attenuated by the body
6 tissue.

7 "For example, in an embodiment, the
8 monitor is capable of advantageously and
9 actively displaying one or more of pulse
10 rate, PPG data, perfusion quality, signal
11 confidence and values of blood constituents
12 in body tissue, including, for example,
13 arterial carbon monoxide saturation (HbCO),
14 HbMet, total hemoglobin, oxygen saturation,
15 SPaO2 or the like.

16 "In an embodiment the monitor
17 advantageously includes a plurality of
18 display modes enabling more parameter data to
19 be displayed than the available physical
20 display real estate."

21 And I could, you know, probably find
22 other descriptions in '223 describing other

1 advantages of the invention.

2 BY MS. KIM:

3 Q. Thank you, Dr. Duckworth. In the
4 passage that you just read, in that last
5 sentence, it says, "In an embodiment." Correct?

6 A. The last sentence says, "In an
7 embodiment, the monitor advantageously includes a
8 plurality of display modes enabling more
9 parameter data to be displayed in the available
10 physical display real estate."

11 Q. Is it understood that "in an
12 embodiment" means at least one embodiment but not
13 necessarily all embodiments?

14 MR. KIANG: Objection to form and
15 scope.

16 BY MS. KIM:

17 Q. In your opinion?

18 A. Looking specifically at that
19 sentence, says yes, in that, in an embodiment
20 then the monitor advantageously includes a
21 plurality of display modes, et cetera.

22 Q. Thank you.

1 MS. KIM: So my colleague, Gretchen,
2 has found that reference that we were talking
3 about earlier.

4 Would you, Gretchen, be able to
5 share that in the chat?

6 THE WITNESS: Can you point it to
7 the folder, the marked exhibits so I can open
8 it up?

9 MS. KIM: Can you see in the chat
10 that it has been loaded, Dr. Duckworth?

11 THE WITNESS: What is?

12 MS. KIM: It is Exhibit 2038.

13 (Whereupon, previously marked
14 Exhibit 2038,
15 first referral.)

16 THE WITNESS: 2038. Let me have a
17 look.

18 MS. KIM: You just need to click on
19 the chat icon.

20 THE WITNESS: Okay. Here it is.
21 All right. Okay. So, it is the -- okay, I
22 see that now.

1 That was the one that we saw. Okay.

2 Okay. I've now got 2038 open and available.

3 BY MS. KIM:

4 Q. Great. So, going back to our
5 previous discussion, we were discussing your
6 declaration at paragraph, or Paragraphs 75
7 through 77, 78, talking about the Al-Ali
8 reference.

9 And my question to you was, what is
10 the one parameter that is identified in your
11 declaration referring to?

12 MR. KIANG: Objection to form.

13 THE WITNESS: So, the last sentence
14 in Paragraph 77 shows, "switching from
15 displaying one parameter to displaying all of
16 the parameters."

17 So, on the left, you see the one
18 parameter in pink, and then you see all of
19 the parameters on the right.

20 So, on the left, we had one
21 parameter 152. And now on the right, we have
22 all of the parameters, 152, 98 and 88.

1 Does that answer your question?

2 BY MS. KIM:

3 Q. It does, thank you.

4 In Paragraph 75 that you had
5 highlighted that discusses this re-exam, you
6 state that, "After Masimo amended Claims 1, 15,
7 18 and 27" --

8 A. I'm sorry. Can I -- I just need to
9 make sure that I'm on the same place you are.

10 Q. Sure.

11 A. Which paragraph were you looking at?

12 Q. Paragraph 75 --

13 A. Oh, I'm sorry. I thought --

14 Q. -- of your declaration.

15 A. Okay, 75, yes.

16 Q. Great. In the second sentence --
17 actually, I'm going to go to that second
18 sentence.

19 It says a statement of reasons for
20 patentability -- "In the statement of reasons for
21 patentability, the Examiner reaffirmed that the
22 replaced, replacing and replaces limitation

1 require that the first measured value is no
2 longer displayed after it is replaced."

3 Do you see that?

4 A. Yes. That is my statement in
5 Paragraph 75.

6 Q. And then you go on to say that, in
7 the last sentence, the Examiner -- "Thus, the
8 Examiner again distinguished replacing a first
9 measured value with a second measured value from
10 switching to displaying both measured values."

11 A. I see that.

12 Q. So, then going back to Figures 16A
13 and 16B, was the examiner, in your opinion,
14 distinguishing Al-Ali from the claimed invention
15 because 152 is still visible in the display
16 annotated and shown in Figure 16B?

17 A. So, yes, what we have is 16A is
18 showing one parameter, and then 16B is now
19 showing that one parameter and all of the
20 parameters.

21 THE WITNESS: Counselor, we have
22 been going another hour. Would you mind if

1 we take another break?

2 MS. KIM: Sure. Ten minutes.

3 THE WITNESS: That sounds good. So,

4 5:17. Thank you.

5 (Recess taken -- 5:07 p.m.)

6 (After recess -- 5:17 p.m.)

7 BY MS. KIM:

8 Q. Excellent. Dr. Duckworth, we were
9 talking about the re-exam prior to the break.

10 So, going back to your declaration,
11 Paragraph 77. I had asked about the value 152 in
12 Figures 16A and 16B and whether the statement for
13 reasons of patentability by the examiner related
14 to the fact that 152 is displayed in both
15 Figures 16A and 16B, just to provide some
16 context. That is not a question.

17 So my question is: Could the 152
18 value be rearranged so that it would be located
19 outside of the pink area to allow this prior art
20 to replace 152 with the values 98 and 88?

21 MR. KIANG: Objection to scope,
22 form. Calls for speculation.

1 THE WITNESS: Yes, Counselor. I'm
2 confused about what you are asking me. You
3 know, we have the '223 patent, and then we
4 have the Al-Ali patent.

5 So, can you -- you seem to be asking
6 a hypothetical something, you know, outside
7 the -- something different to, you know,
8 those two -- to the '223 patent descriptions
9 there.

10 So, I'm confused about what exactly
11 you are asking.

12 BY MS. KIM:

13 Q. I guess I just want some
14 clarification.

15 In your declaration you state that
16 the first -- the examiner reaffirmed that
17 replacing -- replace, replacing and replaces
18 limitation requires that the first measured value
19 is no longer displayed after it is replaced.

20 So, does that mean that the -- does
21 that require the 152 value in Figures 16A and B
22 to be removed from the entirety of the display?

1 MR. KIANG: Objection to form.

2 Scope. Calls for speculation.

3 THE WITNESS: When you mean the
4 entirety of the display, you know, again, I
5 prefer to talk specifically about the '223
6 patent in my declaration, because we can get
7 ourselves confused about, you know, these
8 terms there.

9 So, when you say from the entirety
10 of the display, are we talking about a common
11 display area like we have in the '223 patent,
12 you know, Claim 1, for example?

13 BY MS. KIM:

14 Q. Possibly. Can you explain in your
15 declaration when you stated that the first
16 measured value is no longer displayed after it is
17 replaced, what it means in context to Figures 16A
18 and 16B?

19 A. 16A and 16B are not figures, though,
20 from the '223 patent.

21 Q. They are, nonetheless, figures that
22 you analyzed in your declaration, correct?

1 A. I analyzed them in the context of
2 the re-examination to show that the prior art
3 there doesn't meet the claim requirements of
4 '223.

5 Q. Before the break you said that I
6 believe, correct me if I'm wrong, that the 152
7 value had not been removed from a display.

8 Is that correct?

9 A. The last sentence in Paragraph 77
10 shows switching from displaying one parameter to
11 displaying all of the parameters.

12 So, the 152 was, has not been
13 removed from the display.

14 Q. And you stated in Paragraph 75 that
15 in order --

16 In the statement of the reasons for
17 patentability, the Examiner reaffirmed that the
18 replaced, replacing and replaces limitations
19 require the first measured value to be no longer
20 displayed?

21 So, where does the 152 not need to
22 be displayed?

1 MR. KIANG: Objection to form.

2 THE WITNESS: I am, again, confused
3 by your question.

4 Where does it not need to be
5 displayed, to do what? I don't understand
6 the question.

7 BY MS. KIM:

8 Q. Does the 152 need to be on display
9 in order to meet the claims of the '223 patent?

10 A. Which specific claim are you
11 referring to?

12 Q. To the replace, the replace
13 limitation.

14 MR. KIANG: Objection to form.

15 THE WITNESS: We need to look at the
16 claim in its entirety, not just -- I would be
17 speculating and answering correctly if I, you
18 know, try and respond to just one, you know,
19 one, one piece like you seem to be asking me
20 there.

21 BY MS. KIM:

22 Q. Okay. Looking at Claim 1. When it

1 recites, "Wherein the common display area the
2 display of one of the measured values of the
3 first or second parameters is replaced with the
4 other of the measured values based on the
5 occurrence in the event."

6 Do you see that language?

7 A. In, yes. Claim language for
8 Claim 1, yes.

9 Q. Can you identify the common display
10 area in the references that you have shown in 16A
11 and 16B?

12 MR. KIANG: Objection, scope. Calls
13 for speculation.

14 THE WITNESS: The Al-Ali reference
15 doesn't, I believe, refer to a common display
16 area.

17 Can you point me to where it refers
18 to that?

19 BY MS. KIM:

20 Q. I was asking you whether the Al-Ali
21 reference has a common display area.

22 MR. KIANG: Same objections.

1 THE WITNESS: I don't remember
2 Al-Ali referring to a common display area
3 like we are talking about specifically in the
4 '223 patent.

5 I can search through the Al-Ali
6 reference, if you would like. Let me see.

7 But, you know, if you know where
8 that is in the Al-Ali patent to save me some
9 time, can you, can you point me to it, just
10 so I know what you are referring to?

11 BY MS. KIM:

12 Q. Well, I mean, your declaration,
13 Paragraph 77, you do annotate the figures with
14 pink highlighting.

15 Can you tell me what the pink
16 highlighting denotes?

17 A. It is showing switching from
18 displaying one parameter to displaying all of the
19 parameters.

20 Q. So, the pink section is not the
21 common area?

22 MR. KIANG: Objection, misstates

1 testimony.

2 THE WITNESS: I am not, I am not
3 stating that the pink area is that.

4 All I'm using are Figures 16A and
5 16B to show how it switches from displaying
6 one parameter to displaying all of the
7 parameters.

8 BY MS. KIM:

9 Q. Dr. Duckworth, have you reviewed
10 Dr. Cockburn's declaration, Exhibit 1003?

11 A. Yes.

12 Q. Do you understand the basis for the
13 rejections proposed in petitioner's petition?

14 MR. KIANG: Objection to form.

15 THE WITNESS: I am confused by your
16 question. You just asked me if I had
17 reviewed Exhibit 1003.

18 And now are you asking me something
19 different?

20 BY MS. KIM:

21 Q. It is related.

22 Based on your review of

1 Dr. Cockburn's declaration, do you understand the
2 basis for the rejections proposed in this
3 proceeding in this petition?

4 A. For --

5 MR. KIANG: Objection to form.

6 BY MS. KIM:

7 Q. In the petition in this proceeding.

8 MR. KIANG: Same objections.

9 THE WITNESS: I am afraid you've
10 lost me again. You had asked me if I had
11 reviewed Exhibit 1003 declaration of
12 Dr. Cockburn.

13 So, can you point me to something in
14 there that will help me understand your
15 question?

16 BY MS. KIM:

17 Q. Why don't you refer to Paragraph 87
18 of your declaration.

19 A. Okay. My declaration. Okay. Okay.
20 Uh-huh.

21 Q. Can you state what the basis for the
22 rejections are in this proceeding?

1 And that is the different grounds
2 being proposed by the petition in this
3 proceeding.

4 A. So again, I am a little bit
5 confused.

6 So, are we no longer talking about
7 the declaration of Dr. Cockburn then?

8 Q. Right now we are looking at your
9 declaration.

10 A. Okay. Okay.

11 Q. Paragraph 87.

12 A. Right, okay. Uh-huh, okay.

13 So, on Paragraph 87, I state my
14 opinions there. And then Paragraphs 88 and
15 beyond, I provide my analysis supporting those
16 opinions.

17 Q. Do you understand that there are
18 three grounds being proposed by the petition?

19 A. My understanding is ground 1A, 1B,
20 and 1C.

21 Q. Do you remember understand what is
22 in each of the grounds?

1 A. Yes, I believe so.

2 Q. And that there are multiple
3 references being used to challenge the claims of
4 the '223 patent?

5 A. I didn't hear part of the question.
6 And do I understand what? Sorry.

7 Q. And understand that there are
8 multiple references being used to challenge the
9 claims of the '223 patent?

10 A. Yes. I believe I state those in
11 Paragraph 87.

12 Q. What references are being used to
13 challenge Ground 1A?

14 A. Naghavi, Hochstedler and Burnes.

15 Q. What is the proposed combination in
16 your own words of Ground 1A?

17 MR. KIANG: Objection to form.
18 Calls for speculation.

19 THE WITNESS: I didn't propose
20 Ground 1A. Apple did.

21 And they based their Ground 1A on
22 the combination of Naghavi, Hochstedler and

1 Burnes.

2 BY MS. KIM:

3 Q. Can you describe in Ground 1A, how
4 those three references are being combined to
5 reject the claims?

6 MR. KIANG: Objection, scope. Form.
7 Calls for speculation.

8 THE WITNESS: I would prefer to
9 state why Apple was combining them, by
10 looking at the petition.

11 Do you want me to open up the
12 petition and do that?

13 BY MS. KIM:

14 Q. Did you not analyze how the
15 combination is being used to reject the claims in
16 your declaration?

17 A. Yes, I did.

18 Q. Can you refer to your declaration?

19 MR. KIANG: Objection to form.

20 THE WITNESS: So, I start with,
21 "Ground 1A does not demonstrate obviousness.
22 Apple's obviousness grounds rely on a core

1 combination of Naghavi, Hochstedler and
2 Burnes."

3 I go through -- that is, so then,
4 for example in 93, I state that, "Apple and
5 Dr. Cockburn assert that Hochstedler offers
6 examples of GUI configurations and changes
7 consistent with those recited in the claims."

8 I talk about, you know, their
9 transitions trying to show how Hochstedler
10 meets the claim requirements, you know,
11 through the next paragraphs that go through
12 all of those descriptions.

13 I then, starting in Paragraph 112,
14 talk about Burnes. Paragraph 114, I talk
15 about Naghavi. 117, I talk about the
16 combination.

17 It does not disclose replacing one
18 measured value with another measured value.
19 You know, really this is my declaration is
20 responding to Apple's grounds.

21 So I am, you know, confused by your
22 question.

1 I believe I adequately, you know, I
2 discuss all of the reasons that Apple's
3 combination does not demonstrate obviousness.

4 BY MS. KIM:

5 Q. How does the combination teach, for
6 example, a patient monitor recited in Claim 1?

7 MR. KIANG: Objection, scope. Form.
8 Calls for speculation.

9 THE WITNESS: So, Counselor, are you
10 asking me how Apple's proposed combination
11 does what? Sorry.

12 BY MS. KIM:

13 Q. How is the combination teaching a
14 patient monitor in Claim 1?

15 I assume you analyzed Apple's
16 proposed combination.

17 A. Yes. And I believe I tried to
18 answer that by pointing out my descriptions here
19 in my declaration.

20 Q. Where in your declaration does it
21 state how the combination teaches a patient
22 monitor?

1 MR. KIANG: Objection to scope.

2 Form. Calls for speculation. And a legal
3 conclusion.

4 THE WITNESS: So again, Counselor,
5 I'm confused about your question.

6 Are you asking me to explain how
7 Apple's proposed combination of Naghavi,
8 Hochstedler and Burnes does, does what again?

9 BY MS. KIM:

10 Q. Well, how is Apple proposing its
11 combination to show that a patient monitor is
12 obvious in Claim 1?

13 MR. KIANG: Objection to form and
14 scope. Calls for speculation and legal
15 conclusion.

16 BY MS. KIM:

17 Q. So, in other words, what teaches a
18 patient monitor according to Apple's analysis?

19 MR. KIANG: Objection to form.
20 Scope. Calls for speculation and legal
21 conclusion.

22 THE WITNESS: Let me look at the

1 petition then to try and find out, you know,
2 the answer to your question there.

3 Because I, I don't remember, you
4 know, Apple specifically, you know, using
5 that description that you just provided me.

6 So, I don't recall that, you know,
7 I, my declaration -- you are asking me for
8 information beyond my declaration.

9 You seem to be asking me to put
10 myself in Apple's position and try and
11 explain, you know, how their combination
12 works, whereas I don't believe the
13 combination does work -- well, I don't
14 believe the individual claims meet the claim
15 requirements. I don't believe the
16 combination meets the claim requirements.

17 So, you know, can you help me out
18 here by showing me something that Apple has
19 stated? And then I will show you how I
20 refuted that in my declaration.

21 BY MS. KIM:

22 Q. Sure. I mean, I, you are arguing

1 that Apple's combination is allegedly flawed and
2 you can't tell me what the combination allegedly
3 was.

4 MR. KIANG: Objection, misstates
5 testimony.

6 THE WITNESS: I think that is
7 totally incorrect, Counselor.

8 I have made it very clear, starting
9 on Page 43, my -- the bulk of my declaration
10 here is refuting, well, my opinion is that
11 those grounds would not have been obvious to
12 a POSITA, Ground 1A, 1B, and 1C.

13 And then I proceed at length to
14 explain my reasoning here in detail.

15 So, to say I'm not, you know,
16 responding there, I don't understand. It
17 doesn't make sense to me.

18 BY MS. KIM:

19 Q. Okay. Well, Claim 1 in its preamble
20 recites, "A patient monitor capable of measuring
21 at least two physiological parameters."

22 In Ground 1A, can you tell me what

1 primary reference is being relied upon in that
2 ground?

3 A. I need to refresh --

4 MR. KIANG: Objection --

5 THE WITNESS: Sorry, Daniel?

6 MR. KIANG: Sorry. Objection to
7 form, scope. Calls for speculation.
8 Document not being presented to the witness.

9 THE WITNESS: So again, Counselor,
10 you are asking me which one of Apple's
11 references meets the requirements of Claim 1,
12 the preamble of Claim 1; is that correct?

13 BY MS. KIM:

14 Q. Yes.

15 A. Well, then, I would like to refer to
16 the petition to refresh my memory about which one
17 of those references Apple was using.

18 Q. It is not -- you can refer to
19 Dr. Cockburn's declaration, Exhibit 1003, which
20 you said you reviewed.

21 (Whereupon, previously marked
22 Exhibit 1003,

1 first referral.)

2 MR. KIANG: Is that document being
3 presented to Dr. Duckworth?

4 THE WITNESS: I don't see --

5 MS. KIM: It is being uploaded.

6 THE WITNESS: Okay. Here we go.
7 Exhibit 1003. Okay.

8 MR. KIANG: Sorry, where is that
9 document?

10 MS. KIM: It was uploaded in the
11 link.

12 MR. KIANG: Okay.

13 THE WITNESS: It would be helpful,
14 Counselor, rather than me trying to find out
15 how Apple was refuting the claims, to point
16 me to, you know, what you are asking here.

17 I mean, I still, you know, am
18 confused about, you know, about this.

19 BY MS. KIM:

20 Q. So, the preamble of Claim 1 recites
21 a patient monitor, correct?

22 A. A patient --

1 Q. Dr. Cockburn -- sorry, go ahead.

2 A. Yes, "A patient monitor capable of
3 measuring at least two physiological parameters."

4 Q. Dr. Cockburn in his declaration,
5 Exhibit 1003, Paragraph 59, identifies his basis
6 for how the combination teaches the patient
7 monitor.

8 Do you see that?

9 A. Not yet, no. Paragraph 59, you say?

10 Q. Yes.

11 A. I see the paragraphs now, yes.

12 Q. So, my question is, isn't it true
13 that in the combination, Naghavi's personal
14 healthcare management system is being relied upon
15 to show a patient monitor?

16 MR. KIANG: Objection to form.

17 Scope. Calls for speculation.

18 THE WITNESS: So, all I can state
19 here is that it looks like Dr. Cockburn's
20 declaration is saying, that, "The combination
21 system is a personal healthcare management
22 system, e.g. a patient monitor."

1 And then he continues to say, "The
2 combination patient monitor is capable of
3 measuring at least two physiological
4 parameters."

5 So, I'm just reading from
6 Dr. Cockburn's declaration there.

7 MS. KIM: Okay. Counsel, we are
8 going to take a break here.

9 MR. KIANG: Okay.

10 (Recess taken --5:48 p.m.)

11 (After recess -- 5:58 p.m.)

12 BY MS. KIM:

13 Q. Did you speak with anyone regarding
14 the substance of your testimony at any time today
15 after you were sworn in by the court reporter,
16 Dr. Duckworth?

17 A. No.

18 Q. Have you ever been convicted of a
19 felony?

20 A. No.

21 Q. Have you ever been convicted of a
22 crime related to acts of dishonesty or fraud?

1 A. No.

2 MS. KIM: Counsel rests.

3 MR. KIANG: I have no redirect.

4 MS. KIM: Great.

5 (Whereupon, signature not having been waived,

6 the deposition suspended at 5:59 p.m.)

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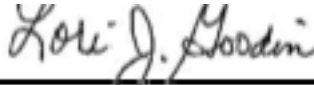
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1 R. James Duckworth, Ph.D., c/o
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2 2040 Main Street, 14th Floor
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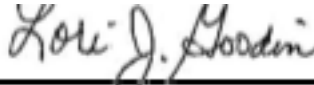
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1 CERTIFICATE OF NOTARY
I, LORI J. GOODIN, RPR, CRR,
2 CA CSR # 13959 the Notary for this deposition, do
hereby certify that the witness whose testimony
3 appears in the foregoing deposition was sworn by
me; that I am neither counsel for, related to,
4 nor employed by any of the parties to the action
in which this deposition was taken; and, further,
5 that I am not a relative or employee of any
attorney or counsel employed by the parties
6 hereto, or financially or otherwise interested
in the outcome of this action.

7



8

LORI J. GOODIN, RPR, CLR, CRR
Notary Public in and for:

9

STATE OF FLORIDA, COUNTY OF SARASOTA
10 Notary Commission Number: GG987804
My Commission expires: May 12, 2028
11 STATE OF CALIFORNIA, CA CSR# 13959
12 My Commission expires: February 22, 2025
13
14 STATE OF MARYLAND, COUNTY OF ANNE ARUNDEL
15 My Commission expires: August 2, 2025
16 DISTRICT OF COLUMBIA, WASHINGTON DC
17 My Commission expires: June 1, 2026
18
19 STATE OF DELAWARE, COUNTY OF KENT
20 My Commission expires: September 9, 2025
21 COMMONWEALTH OF PENNSYLVANIA, COUNTY OF LEHIGH
22 My Commission expires: April 5, 2025