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

MASIMO CORPORATION,) CASE
PETITIONER,) IPR2023-00745
v.)
APPLE INC.,) US PATENT
PATENT OWNER.) 10,076,257

DEPOSITION OF ALAN OSLAN
TAKEN REMOTELY VIA ZOOM VIDEOCONFERENCE
FRIDAY, JANUARY 12, 2024
10:07 A.M. EST

REPORTED BY AUDRA E. CRAMER, CSR NO. 9901

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1 DEPOSITION OF ALAN OSLAN, TAKEN REMOTELY VIA ZOOM
2 ON BEHALF OF THE PETITIONER, AT 10:07 A.M. EST, FRIDAY,
3 JANUARY 12, 2024, BEFORE AUDRA E. CRAMER, CSR NO. 9901,
4 PURSUANT TO NOTICE.

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1 APPEARANCES OF COUNSEL

2

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1 I N D E X

2 WITNESS

3 ALAN OSLAN

4

5 EXAMINATION PAGE

6 BY MR. BISENIUS 5

7 (P.M. SESSION) 77

8

9 QUESTIONS INSTRUCTED BY COUNSEL NOT TO ANSWER

10 PAGE LINE

11 11 15

12 12 3

13 12 16

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17 22 6

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19 REPORTER'S NOTE: All quotations from exhibits are
20 reflected in the manner in which they were read into the
21 record and do not necessarily indicate an exact quote
22 from the document.

1 REMOTELY VIA ZOOM VIDEOCONFERENCE
2 FRIDAY, JANUARY 12, 2024, 10:07 A.M. EST

3
4 ALAN OSLAN,
5 having been first duly sworn, was
6 examined and testified as follows:

7
8 MR. BISENIUS: We are here today
9 regarding IPR proceeding IPR 2023-00745
10 regarding US Patent No. 10,076,257.

11
12 EXAMINATION

13 BY MR. BISENIUS:

14 Q. You understand that you're under oath;
15 correct?

16 A. Yes, I do.

17 Q. Is there any reason that you cannot
18 give truthful and accurate testimony today?

19 A. There is no reason.

20 Q. To ensure clarity during this
21 deposition, I'm going to define several terms
22 that I'll be using throughout the deposition.

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1 When I use the terms "Petitioner" or
2 "Masimo," I'm referring to Masimo Corporation,
3 the petitioner in this proceeding.

4 Do you understand?

5 A. Yes, I do.

6 Q. When I use the term "Apple" or "Patent
7 Owner," I'm referring to Apple Incorporated.

8 Do you understand?

9 A. Yes, I do.

10 Q. When I use the term "the '257 patent,"
11 I'm referring to US Patent No. 10,076,257 titled
12 "Seamlessly Embedded Heart Rate Monitor."

13 Do you understand?

14 A. Yes, I do.

15 Q. When I use the phrase "this IPR" or
16 "this proceeding," I'm referring to IPR
17 Proceeding No. IPR2023-00745 filed against the
18 '257 patent.

19 Do you understand?

20 A. Yes, I do.

21 Q. When I use the acronym "POSITA," I'm
22 referring to a person of ordinary skill in the

1 art at the time of the alleged invention.

2 Do you understand?

3 A. Yes, I do.

4 Q. When I use the term "your declaration"

5 or the "Oslan declaration," I'm referring to

6 Exhibit 1003 in this proceeding.

7 Do you understand?

8 A. Yes, I do.

9 Q. Can you please describe how you

10 prepared for today's deposition.

11 A. So the past several days I reviewed the

12 pertinent materials, such as my declaration, the

13 '257 patent, the other supporting patents and

14 other documents.

15 Q. Approximately how much time did you

16 spend preparing for today's deposition?

17 A. Maybe approximately 10 hours, without

18 going back looking at my records.

19 Q. What documents did you review in

20 preparation for your deposition today?

21 A. So as I mentioned before, my

22 declaration, the '257 patent, the Mills and

1 Markel patents, and things like the Patent
2 Owner's response.

3 Q. When were you first contacted by
4 someone on behalf of Masimo?

5 A. Contacted about what?

6 Q. Contacted to work on this IPR
7 proceeding?

8 A. Oh, okay.

9 Probably about a year ago.

10 Q. What did you, if anything, before
11 agreeing to be retained on behalf of Masimo?

12 MR. EVERTON: Objection. I'll just
13 caution the witness not to divulge any
14 privileged information, communications or
15 information between you and attorneys.

16 THE WITNESS: Can you repeat the
17 question, please, Mr. Bisenius.

18 BY MR. BISENIUS:

19 Q. Yeah. What did you do, if anything,
20 before agreeing to be retained on behalf of
21 Masimo?

22 MR. EVERTON: Same objection.

1 THE WITNESS: It's been a while, but I
2 think I just looked at the general subject
3 matter involved to determine if I was qualified.

4 BY MR. BISENIUS:

5 Q. When did you first become aware of the
6 '257 patent?

7 A. It was early on when I started working
8 on this IPR.

9 Q. You are aware that the '275 -- sorry.
10 You are aware that the '257 patent is
11 currently involved in a district court
12 litigation between Apple and Masimo; correct?

13 A. I'm aware of that.

14 Q. And you have submitted a number of
15 reports for that district court litigation;
16 correct?

17 A. Yes, I have.

18 Q. Did you prepare your declaration in
19 this IPR proceeding before your reports in the
20 district court litigation, after your reports in
21 the district court litigation, between your
22 reports in the district court litigation

1 concurrently?

2 When in time in relation to those
3 reports did you prepare your dec in this case?

4 MR. EVERTON: Objection to form.

5 THE WITNESS: So I'd have to go back
6 and look at all my records and the time order of
7 things to properly answer that question.

8 BY MR. BISENIUS:

9 Q. Are you aware of any inconsistencies
10 between your expert reports in the district
11 court litigation regarding the '257 patent and
12 your declaration in this proceeding?

13 MR. EVERTON: Objection to form.

14 THE WITNESS: I'm not aware of any
15 inconsistencies.

16 BY MR. BISENIUS:

17 Q. Did you provide any opinions on claim
18 construction in any of your district court
19 litigation reports?

20 A. I'd have to go back and review of
21 reports to be sure.

22 Q. Without revealing any privileged

1 communications, can you please describe the
2 process by which you prepared your declaration.

3 For example, did you write every word
4 throughout the entire process? Did counsel for
5 the Petitioner prepare the first drafts that you
6 revised? Or was it another process?

7 A. So counsel provided the -- you know,
8 the legal framework for the report, and I
9 reviewed them and, you know, addressed the
10 technical subject matter.

11 Q. What percentage of the words in your
12 declaration did you write in this case as
13 opposed to merely reviewing words written by
14 someone else?

15 MR. EVERTON: Objection to form.
16 Caution the witness not to divulge any
17 attorney-client privileged information,
18 communications between the witness and counsel.

19 THE WITNESS: That's privileged
20 information.

21 BY MR. BISENIUS:

22 Q. What percentage of the arguments and

1 theories regarding validity in your declaration
2 did you develop on your own?

3 MR. EVERTON: Same caution and
4 objection.

5 THE WITNESS: Yeah, that's privileged
6 information.

7 BY MR. BISENIUS:

8 Q. I'm asking you which theories you
9 developed on your own prior to communicating
10 with -- absent of communication with counsel.

11 MR. EVERTON: Objection to form and
12 same caution.

13 THE WITNESS: That's privileged
14 information.

15 BY MR. BISENIUS:

16 Q. Did you develop any of the theories in
17 your declaration on your own, absent advice from
18 counsel?

19 MR. EVERTON: Same objection and
20 caution.

21 THE WITNESS: That's privileged
22 information.

1 BY MR. BISENIUS:

2 Q. So I'm specifically asking you which
3 theories you developed on your own that did not
4 involve communication with counsel, and so that
5 would not be privileged. And so I'll ask the
6 question again.

7 What percentage of your arguments and
8 theories in your expert report did you develop
9 on your own?

10 MR. EVERTON: Same objection and same
11 caution.

12 THE WITNESS: That's privileged
13 information.

14 BY MR. BISENIUS:

15 Q. As part of your work on this IPR, did
16 you ever communicate in any way with any of the
17 named inventors of the '257 patent?

18 A. No, I did not.

19 Q. As part of your work on this IPR and
20 the related district court litigation, have you
21 been in contact with anyone at Masimo other than
22 Masimo's attorneys?

1 A. Yes, I have.

2 Q. Who at Masimo other than Masimo's
3 attorneys have you been in contact with?

4 MR. EVERTON: I'll just caution the
5 witness not to divulge or disclose any --
6 anything that relates to attorney-client
7 privilege or communications between attorneys
8 and the witness.

9 THE WITNESS: That's privileged
10 information.

11 BY MR. BISENIUS:

12 Q. I'll ask a slightly different question.
13 Have you communicated with anyone at
14 Masimo other than Masimo's attorneys in
15 communications in which Masimo's attorneys were
16 not involved?

17 A. The communications always had a Masimo
18 attorney involved.

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

22 A. I'm not sure what you mean by an

1 assistant.

2 Q. Like, perhaps an employee or a research
3 assistant, an administrative assistant, a
4 secretary.

5 Did you have anyone help you with your
6 declaration on this IPR other than Masimo's
7 attorneys?

8 A. No, I did not.

9 Q. In forming your opinions in your
10 declaration, did you rely on any assumptions
11 that are not identified in your declaration?

12 MR. EVERTON: Object to form.

13 THE WITNESS: Can you clarify your
14 question, please.

15 BY MR. BISENIUS:

16 Q. In forming your opinions in your
17 declaration, have you relied on any assumptions
18 that are not identified in your declaration?

19 MR. EVERTON: Same objection.

20 THE WITNESS: I'd have to go back and
21 review my whole declaration to answer that
22 question.

1 BY MR. BISENIUS:

2 Q. Do you currently hold any opinions
3 regarding the '257 patent that are not contained
4 in your declaration?

5 MR. EVERTON: Object to form.

6 THE WITNESS: I'd have to review my
7 declaration to answer that question.

8 BY MR. BISENIUS:

9 Q. Since submitting your declaration in
10 this proceeding, have you changed any of the
11 opinions contained in your declaration?

12 A. No, I have not.

13 Q. Are you currently aware of any errors
14 that exist in your declaration?

15 A. I'm not aware of any errors in my
16 declaration.

17 Q. During your career, approximately how
18 many times have you been retained as an expert
19 in litigation or IPR matters as a testifying
20 expert?

21 A. I believe this is my fourth time being
22 retained as an expert witness.

1 Q. Approximately how many times have you
2 been deposed as an expert in a litigation or IPR
3 matter?

4 A. Like I said, I've been about --
5 approximately five times.

6 Q. All right. I'd like to turn to your --

7 A. I'm sorry. Can you just repeat that
8 question again. I'm sorry.

9 Q. Yeah. I asked how many times --
10 approximately how many times have you been
11 deposed as an expert in a litigation or IPR
12 matter?

13 A. In a litigation or IPR matter, did you
14 say?

15 Q. Yeah.

16 A. Okay. Yeah, so five, approximately.

17 Q. Okay. I'd like to talk about your
18 declaration in this proceeding. That's
19 Exhibit 1003. Can you please pull that up. And
20 I'm going to start at paragraph 32.

21 Do you have it open in front of you?

22 A. Yes.

1 Q. I'd like to turn to paragraph 32.

2 A. Okay. I have 32.

3 Q. In this paragraph you state, "I do not
4 believe that the inventors defined any claim
5 terms whose construction is necessary for my
6 analysis in a manner inconsistent with their
7 plain and ordinary meanings in view of the
8 intrinsic record."

9 Sitting here today, do you still
10 believe that statement to be true?

11 A. I believe that's still true.

12 Q. All right. Moving head to
13 paragraph 43 -- and collectively, actually,
14 paragraphs 43 to 53 -- in these paragraphs you
15 provide constructions for four different terms,
16 the terms "embedded," "lead," "pad" and
17 "pocket."

18 So is it your opinion that those four
19 terms should be given their plain and ordinary
20 meanings as you stated in paragraph 32, or
21 should those four terms be given special
22 constructions as you've articulated in

1 paragraph 43 to 53?

2 MR. EVERTON: Object to form.

3 Mischaracterizes.

4 THE WITNESS: So these four terms are
5 plain and ordinary meanings in view of the
6 intrinsic record, such as the '257 patent.

7 BY MR. BISENIUS:

8 Q. Looking at paragraph 46 you state that
9 "'Embedded' means 'an integral part of' such as
10 by 'being placed in the thickness of a
11 surrounding material, including forming an outer
12 and/or inner surface or placed underneath an
13 exterior surface and against an inner surface.'"

14 Is it your opinion that that is the
15 plain and ordinary meaning of the term
16 "embedded"?

17 A. So it's the meaning in view of -- plain
18 and ordinary meaning in view of the intrinsic
19 record.

20 Q. Turning to paragraph 51 -- and,
21 actually, the second half of paragraph 51, which
22 is on page 22 -- you state, "A POSITA would

1 understand a 'lead' in context of the
2 '257 patent to mean 'one or more conductive
3 components that form at least a part of an
4 electrical path from the user's skin to the
5 processor.'"

6 Is it your opinion that that is the
7 plain and ordinary meaning of the term "lead"?

8 A. It's the plain and ordinary meaning of
9 the term "lead" in view of the intrinsic record
10 of the -- namely, the '257 patent.

11 Q. Turning to paragraph 53 you state, "A
12 POSITA would define a pocket to mean 'any
13 pouch-like receptacle, compartment, hollow or
14 cavity.'"

15 Is it your opinion that that is the
16 plain and ordinary meaning of the term "pocket"?

17 A. It's the plain and ordinary meaning in
18 view of the intrinsic record.

19 Q. I want to go back to paragraph 3 of
20 your declaration.

21 A. Okay.

22 Q. You state, "The opinions so forth from

1 this deck are my independent opinions, formed
2 after conducting significant analysis over
3 several days, related to whether the claims of
4 the '257 patent would have been obvious in view
5 of the prior art discussed in this declaration."

6 In this sentence, approximately how
7 many days is the "several days" that you refer
8 to?

9 A. I'd have to go back and look at my
10 records to give an accurate answer to speak to
11 your question.

12 Q. Approximately when were these several
13 days?

14 A. So it's dated March 17, 2023, so it
15 would have been in the timeframe before then.

16 Q. Approximately how long before then?

17 A. I'd have to go back and look at my
18 records.

19 Q. During those several days, how did you
20 go about identifying the Mills and Markel's
21 references cited in your declaration?

22 MR. EVERTON: Objection to form.

1 MR. BISENIUS: I can reframe that
2 question.

3 Q. Did you identify the Mills and Markel
4 references, or were those references provided to
5 you by Masimo's attorneys?

6 MR. EVERTON: Objection to form. And I
7 caution the witness not to disclose any
8 privileged information.

9 THE WITNESS: Yeah, that's privileged
10 information.

11 BY MR. BISENIUS:

12 Q. Did you personally identify the Mills
13 and Markel references?

14 MR. EVERTON: Same objection and
15 caution.

16 THE WITNESS: It's privileged
17 information.

18 BY MR. BISENIUS:

19 Q. It's not privileged as to whether or
20 not you identified them yourself. You don't
21 have to reveal any information from a
22 communication with the attorneys. It's a

1 yes-or-no question.

2 And I'm asking you: Did you identify
3 either of the Mills or Markel references by
4 yourself?

5 MR. EVERTON: Same objection and same
6 caution.

7 THE WITNESS: It's privileged
8 information.

9 BY MR. BISENIUS:

10 Q. Without revealing any privileged
11 communications, did you independently develop
12 your opinions as to which structures disclosed
13 by Mills and Markel mapped to the elements
14 recited by the claims of the '257 patent?

15 A. Can you repeat the question, please.

16 Q. Without revealing privileged
17 communication, did you independently develop
18 your opinions as to which structures disclosed
19 by Mills and Markel mapped to the elements
20 recited by the claims of the '257 patent?

21 A. I think it's privileged information.

22 Q. Okay. I'd like to turn back to the

1 claim construction discussion, specifically
2 paragraph 48.

3 A. Okay.

4 Q. Paragraph 48 is part of your discussion
5 of the claim term "lead"; correct?

6 A. Correct.

7 Q. In paragraph 48 you provide a diagram
8 that includes labels for electrode or pad in
9 contact with either skin on the left and a lead
10 wire connecting the electrode or pad to the
11 processing circuitry; correct?

12 A. Correct.

13 Q. Is this diagram from any of the
14 references that you've cited?

15 A. In forming my opinion and coming up
16 with this diagram in the -- in Section -- or
17 paragraph 47, I have two references that a
18 POSITA would have used.

19 Q. My question is slightly different. I'm
20 not asking if it's based on the references. I'm
21 asking if this figure has come directly from one
22 of the references.

1 A. So it did not come directly from either
2 of those two references.

3 Q. Did you generate this diagram?

4 A. Yes, I put that.

5 Q. All right. In this example in the
6 diagram in paragraph 48, the electrode and the
7 lead wire together form a single lead; correct?

8 A. That's correct. Electrode or pad and
9 the lead wire and a connector form the lead.

10 Q. Can you think of other examples of
11 components that could form part of a lead in a
12 heart rate monitor other than the lead wire and
13 electrode or pad that you've shown here?

14 MR. EVERTON: Objection to form.

15 BY MR. BISENIUS:

16 Q. I'm asking if you know other examples
17 of components that could form part of a lead.

18 MR. EVERTON: Same objection.

19 THE WITNESS: I'd have to go back and
20 do some research and analysis to come up with an
21 answer to your question.

22

1 BY MR. BISENIUS:

2 Q. So, sitting here today, you can't think
3 of any other components that could form part of
4 a lead in a heart rate monitor?

5 A. I would need to go back and do research
6 and analysis, which would -- I'm not prepared to
7 do at this time.

8 Q. Have you ever been involved in
9 developing or designing a heart rate monitoring
10 device?

11 A. My experience in ECG and heart rate
12 monitors is very early on in my career as a
13 biomedical electronics technician, and I would
14 up on -- in patient rooms, ICUs troubleshooting
15 problems that the nursing staff was having with
16 a patient's ECG. From electrodes all the way
17 back into the machine, I repaired and calibrated
18 heart rate monitors.

19 Q. So in those devices that you just
20 mentioned, the lead would be made up of an
21 electrode or pad and the lead wire and not other
22 components; is that correct?

1 A. Can you repeat your question.

2 Q. In those heart rate monitoring devices
3 that you just discussed from earlier in your
4 career, is it correct that the leads in those
5 devices were made up of an electrode or pad and
6 a lead wire and no other components?

7 A. So using the definition of "lead" in
8 the context of the '257 patent -- and I'm
9 looking at the top of page 22. So a lead is one
10 or more conductive components that form at least
11 a part of an electrical pad from the user's skin
12 to the processor.

13 So the pad on the patient's skin and
14 the interconnecting wire to the processor would
15 be a lead in the context of the '257 patent.

16 Q. Is it possible for a lead in a heart
17 rate monitoring device to include multiple lead
18 wires?

19 A. So in the definition at the top of
20 page 22, a lead in the context of the
21 '257 patent would mean one or more components.

22 Q. So could that include more than one

1 lead wire?

2 A. So looking at the diagram on page 20 --
3 so you're asking if one lead could have more
4 than one lead wire?

5 Q. Correct.

6 A. It's possible to have a lead wire going
7 to some other circuitry that's not processing
8 circuitry.

9 Q. So that would be an additional lead
10 wire in addition to the lead wire connecting the
11 electrode to the processing circuitry; is that
12 correct?

13 A. It might be, or it might be considered
14 the same lead wire.

15 Q. Sticking with this diagram in
16 paragraph 48, you've labeled the structure on
17 the left as an electrode or pad.

18 In the context of heart rate monitoring
19 devices, is there a difference between an
20 electrode and a pad?

21 MR. EVERTON: Objection to form.

22 THE WITNESS: Can you repeat your

1 question, please, Mr. Bisenius.

2 BY MR. BISENIUS:

3 Q. Yes.

4 In the context of heart rate monitoring
5 devices, is there a difference between an
6 electrode and a pad?

7 MR. EVERTON: Same objection.

8 THE WITNESS: So incomplete
9 hypothetical looking at the definition at the
10 bottom of page 22 for a pad, which is "a thin
11 mat that may be part of the electrical path of a
12 lead, such as an electrode or a connection that
13 is part of the lead."

14 BY MR. BISENIUS:

15 Q. So is it your opinion that an electrode
16 is a subset of what would be considered a pad?

17 A. So a pad may be an electrode, but it
18 may not be.

19 Q. Can you think of an example in which a
20 pad in a heart rate monitoring device would not
21 be an electrode?

22 A. Some of the prior art that I've cited

1 in my declaration has a pad that is not an
2 electrode.

3 Q. Can you give an example from one of
4 those references?

5 A. So on document page 30 of my
6 declaration, there's actually two annotated
7 figures from Mills -- yeah, Mills. It shows on
8 the bottom picture, which is a detail, and 62 in
9 red is a pad, and it sits below first electrode
10 14.

11 Q. Going back to paragraph 52 in your
12 construction of the word "pad," is a pad, as
13 that term is used in the '257 patent required to
14 have any particular shape?

15 A. In the context of the '257 patent, a
16 pad as a shape would be a thin mat.

17 Q. Can a three-dimensional structure be a
18 pad?

19 A. A thin mat would have three dimensions.

20 Q. All right. I'd like to turn back to
21 paragraph 43 of your declaration.

22 From paragraphs 43 to 46 you have

1 provided a construction of the term "embedded";

2 is that correct?

3 A. That's correct.

4 Q. Does the term "embedded" have the same
5 meaning as the term "embedded in"?

6 MR. EVERTON: Objection to form.

7 THE WITNESS: I only address "embedded"
8 in my declaration.

9 BY MR. BISENIUS:

10 Q. If a device has a first component with
11 a flat surface and a second component with a
12 flat surface and those two flat surfaces are
13 placed against each other, would you consider
14 the first component to be embedded in the second
15 component?

16 MR. EVERTON: Objection to form.

17 THE WITNESS: So I'm referring to my --
18 the definition of "embedded" in paragraph 46.
19 So "embedded" means an integral part of.

20 And I believe you said that there are
21 two flat surfaces next to each other?

22

1 BY MR. BISENIUS:

2 Q. Next to each other and in contact.

3 A. I don't know if they're an integral
4 part.

5 Q. Let's say the two components are not
6 soldered to each other; they're not welded to
7 each other; they're not connected to each other
8 with any sort of fastener. They're simply --
9 the two flat surfaces are in contact with each
10 other.

11 Would the first component be embedded
12 in the second component?

13 MR. EVERTON: Objection to form.

14 THE WITNESS: So I don't have enough
15 information on exactly how these two materials
16 are placed to answer your question.

17 BY MR. BISENIUS:

18 Q. Well, I've got a book here. So the
19 book has a flat surface; my desk has a flat
20 surface.

21 If I place the book on my desk so the
22 two flat surfaces are in contact with each

1 other, is this book embedded in the desk?

2 MR. EVERTON: Objection to form.

3 THE WITNESS: It's not an integral part
4 of and -- such as -- you know, it's not being
5 placed in the thickness of the surrounding
6 material, including forming an outer or inner
7 surface, or placed underneath an exterior
8 surface and against an inner surface.

9 BY MR. BISENIUS:

10 Q. If I take the book and I put it under
11 my desk and I hold the flat surface against the
12 bottom flat surface of my desk, now it's
13 underneath the exterior surface.

14 Is this book embedded in the tabletop
15 of my desk?

16 MR. EVERTON: Objection to form.

17 THE WITNESS: It's not an integral part
18 of your desk.

19 BY MR. BISENIUS:

20 Q. You're aware that the claims of the
21 '257 patent recite the term "embedded in";
22 correct?

1 A. Yes, I see that, for example, in
2 Claim 1 it uses the phrase "embedded in."

3 Q. Would you agree that for a first
4 component to be embedded in a second component,
5 the second component would need to at least
6 partially surround the first component?

7 MR. EVERTON: Objection to form.

8 THE WITNESS: Can you repeat your
9 question, please.

10 BY MR. BISENIUS:

11 Q. Would you agree that for a first
12 component to be embedded in a second component,
13 the second component would need to at least
14 partially surround the first component?

15 MR. EVERTON: Objection to form.

16 THE WITNESS: So "embedded" means "an
17 integral part of" and, for example, being placed
18 in the thickness of a surrounding material.

19 BY MR. BISENIUS:

20 Q. Does the term "embedded in" have the
21 same meaning as the term "embedded adjacent to"?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: I have not done that
2 analysis in my declaration here, so I couldn't
3 answer that at this time.

4 BY MR. BISENIUS:

5 Q. Sticking with this section, we were
6 talking about your definition in paragraph 46.

7 Is it your opinion that a POSITA would
8 understand that the term "embedded" could mean
9 "placed under an exterior surface and against an
10 inner surface"?

11 MR. EVERTON: Objection to form.

12 THE WITNESS: So in paragraph 46 I have
13 "embedded" means "an integral part of, such as
14 being placed in the thickness of a surrounding
15 material, including forming an outer and/or
16 inner surface, or placed underneath an exterior
17 surface and against an inner surface."

18 MR. BISENIUS: We've been going for a
19 little over an hour. Maybe we should take a
20 ten-minute break.

21 THE WITNESS: Okay.

22 MR. EVERTON: Sounds good.

1 MR. BISENIUS: Let's say 12 minutes.

2 Come back at 15 past the hour?

3 MR. EVERTON: Okay.

4 THE WITNESS: Okay.

5 (Recess from 11:03 a.m. to

6 11:15 a.m. EST.)

7 BY MR. BISENIUS:

8 Q. I'm going to stick with your
9 declaration, and I am want to turn to
10 paragraph 59.

11 A. Okay.

12 Q. In this section you are discussing
13 Mills with respect to what you've identified as
14 Limitation 1[b(i)-(v)]; is that correct?

15 A. That's correct.

16 Q. And the beginning of this limitation
17 recites "a first lead comprising a first pad
18 that is embedded in a first portion of the
19 enclosure"; is that correct?

20 A. Correct.

21 Q. In your second sentence of paragraph 59
22 you state, "I note that Mills equates the term

1 'electrode' with a pad."

2 So here are you identifying the
3 electrode 14 of Mills as the claimed first pad?

4 A. So a little further down, the sentence
5 that starts at the bottom of page 26, "For
6 future reference, I associate the first
7 pad/electrode 14 with the first lead of the
8 claim."

9 Q. When you say you're associating it with
10 the first lead of the claim, my question is are
11 you associating the electrode 14 as the first
12 pad of the claim?

13 A. Yes, because I note that Mills equates
14 the term "electrode" with a pad. I have --
15 second sentence of paragraph 59.

16 Q. So in your interpretation of Mills, the
17 electrode 14 equates to the claimed first pad in
18 this claim limitation?

19 A. Yeah, I associate the first
20 pad/electrode 14.

21 Q. So is it your opinion that the
22 electrode 14 of Mills is a first pad that is

1 embedded in a first portion of the enclosure of
2 Mills' device?

3 A. Can you repeat your question, please.

4 Q. Is it your opinion that the electrode
5 14 of Mills is a first pad that is embedded in a
6 first portion of the enclosure of Mills' device?

7 A. So 14 is a first pad. It's on the
8 outer surface, so it's a pad as in the
9 '257 patent.

10 Q. Is it your opinion that the electrode
11 14 is embedded in a first portion of the
12 enclosure of Mills' device?

13 A. Just give me a minute. I'm looking
14 through my declaration for that.

15 It's on page 27 -- I'm not sure which
16 section -- about the middle of the page.

17 So electrode 14 and 16 are both --
18 actually, next sentence: "Figure 1 of Mills
19 shows a first pad 14 'integrally molded' that is
20 embedded into the housing."

21 Q. All right. Let me head to
22 paragraph 61.

1 Here you're addressing what you've
2 identified as Limitation 1[b(vi)-(viii)]; is
3 that correct?

4 A. Correct.

5 Q. Is it your opinion that the electrode
6 16 of Mills provides the claimed second pad?

7 A. In paragraph 16 I have electrode 16 in
8 Figure 3A of Mills as a second pad.

9 Q. So you found the claimed first pad and
10 the claimed second pad limitations disclosed by
11 the electrodes 14 and 16, respectively; correct?

12 A. Yes. Yeah, electrode 14 is a first
13 pad. Electrode 16 is a second pad.

14 Q. Is the electrode 14 part of the
15 enclosure of Mills' device?

16 MR. EVERTON: Objection to form.

17 THE WITNESS: Can you repeat your
18 question, please.

19 BY MR. BISENIUS:

20 Q. Is the electrode 14 part of the
21 enclosure of Mills' device?

22 MR. EVERTON: Same objection.

1 THE WITNESS: So on Figure -- sorry.

2 On page 27 of my declaration I have
3 Figure 1 of Mills shows a first pad integrally
4 molded/embedded into the housing. The housing
5 is the enclosure.

6 BY MR. BISENIUS:

7 Q. Is it your opinion that the first pad
8 14 is part of the housing?

9 MR. EVERTON: Objection to form.

10 THE WITNESS: Page 27 of my declaration
11 that it also -- Mills discloses that the heart
12 sensor comprises a housing 12, including first
13 and second dry skin electrodes 14 and 16.

14 BY MR. BISENIUS:

15 Q. So I guess my question is, is it your
16 opinion that the electrode 14 is embedded into
17 the enclosure of Mills' device, or is it part of
18 the enclosure of Mills' device?

19 MR. EVERTON: Objection to form.

20 BY MR. BISENIUS:

21 Q. Here's the reason I ask. So looking at
22 the claim language above paragraph 59 you've got

1 Limitation 1[b(i)-(v)], which recites in part "a
2 first lead comprising a first pad as embedded in
3 a first portion of the enclosure"; correct?

4 And so my question is, is the electrode
5 14 embedded in the housing, or is the electrode
6 14 part of the housing?

7 MR. EVERTON: Same objection.

8 THE WITNESS: So on page 27 again
9 and -- so there's two sentences -- you know,
10 Figure 1 of Mills. There's first pad 14
11 integrally molded that is embedded into the
12 housing, and it's a housing that includes
13 electrode 14.

14 BY MR. BISENIUS:

15 Q. What I'm asking is, is the housing
16 12 -- does the housing 12 include the electrodes
17 14 and 16 because it supports those electrodes
18 or because the electrodes are part of the
19 enclosure?

20 MR. EVERTON: Objection to form.

21 THE WITNESS: So I haven't analyzed
22 that in my declaration, so I can't opine on that

1 at this time.

2 BY MR. BISENIUS:

3 Q. Would you agree that for a first thing
4 to be embedded in a second thing, they would
5 need to be two different things?

6 MR. EVERTON: Objection to form.

7 THE WITNESS: Can you repeat your
8 question, please.

9 BY MR. BISENIUS:

10 Q. In order for a first structure to be
11 embedded in a second structure, wouldn't you
12 agree that they would need to be two different
13 structures?

14 MR. EVERTON: Objection to form.

15 THE WITNESS: In paragraph 45 there's
16 some dictionary meanings for "embedded" in the
17 context of the '257 patent, and it's -- sort of
18 example, it's "to cause to be an integral part
19 of a surrounding hole."

20 BY MR. BISENIUS:

21 Q. Other than the electrode 14, do you
22 identify any other components of Mills' device

1 as reading on the first pad recited by Claim 1?

2 A. So in addition to electrode 14 being a
3 pad in paragraph 60, there's the leaf spring 62,
4 which is also a pad.

5 Q. Well, I understand that you've
6 identified the leaf spring 62 as a pad, but
7 Claim 1 recites multiple pads. It's got a first
8 pad and a second pad, and it has different
9 requirements for those two pads.

10 So my specific question is have you
11 identified any other components of Mills other
12 than the electrode 14 as reading on the claimed
13 first pad?

14 A. So at the bottom of page 30 is -- the
15 top of the trapezoid-shaped leaf spring 62 is
16 also a pad.

17 Q. I understand that you've identified it
18 as a pad.

19 So my question is that -- there are
20 multiple pads recited by Claim 1, and Claim 1
21 recites several requirements for each of those
22 two pads, the first pad and the second pad.

1 I'm asking you: Do you believe that
2 the top of the trapezoid-shaped leaf spring 62
3 reads on the first pad recited by Claim 1?

4 MR. EVERTON: Objection to form.

5 THE WITNESS: So paragraph 60 is part
6 of the Limitations 1[b(i)-(v)], which concerns
7 the first lead and the first pad.

8 BY MR. BISENIUS:

9 Q. Is it your opinion that the top of the
10 trapezoid-shaped leaf spring 62 is the claimed
11 first pad?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So it's part of
14 Limitation 1[b(i)-(v)], which covers a first
15 pad, and leaf spring 62 is also a pad.

16 BY MR. BISENIUS:

17 Q. All right. I'm looking for a yes-or-no
18 answer here: Is the top of the trapezoid-shaped
19 leaf spring 62 the claimed first pad?

20 MR. EVERTON: Objection to form.

21 THE WITNESS: So under Limitation
22 1[b(i)-(v)], electrode 14 is the pad, and leaf

1 spring 62 is also a pad.

2 BY MR. BISENIUS:

3 Q. Is the leaf spring 62 part of the first
4 lead recited by Claim 1?

5 MR. EVERTON: Objection to form.

6 THE WITNESS: Could you repeat your
7 question, please.

8 BY MR. BISENIUS:

9 Q. Is the leaf spring 62 a part of the
10 first lead recited by Claim 1?

11 MR. EVERTON: Objection to form.

12 THE WITNESS: I'm looking at the
13 diagram now on page 20, and the pad is part of
14 the lead.

15 BY MR. BISENIUS:

16 Q. That's not my question. My question --
17 so -- all right.

18 You've provided your opinions as to
19 whether or not you think the device described by
20 Mills provides all of the structures and
21 limitations recited by the claims; is that
22 correct?

1 A. Correct.

2 Q. And so I'm asking you: In your
3 opinion, after your analysis of Mills, is the
4 trapezoid-shaped leaf spring 62 part of the
5 claimed first lead recited by Claim 1?

6 MR. EVERTON: Objection to form.

7 THE WITNESS: So again looking at the
8 figure on page 20, and the lead encompasses a
9 pad, and this is talking about a first lead. So
10 the pad -- so the first lead comprises the pad
11 62.

12 BY MR. BISENIUS:

13 Q. Okay. So then going back to my prior
14 question, is the top of the trapezoid-shaped
15 leaf spring 62 the claimed first pad recited by
16 Claim 1?

17 MR. EVERTON: Objection to form.

18 THE WITNESS: So the electrode 14 is a
19 pad, and the leaf spring 62 is a pad, and
20 they're both being discussed under Limitation
21 1[b(i)-(v)], which is about the first lead.

22

1 BY MR. BISENIUS:

2 Q. Do you believe that the electrode 14
3 meets all requirements for the first pad recited
4 by Claim 1?

5 MR. EVERTON: Objection to form.

6 THE WITNESS: So in paragraph 66 I have
7 that "a POSITA would have understood that Mills
8 teaches every limitation of Claim 1 of the
9 '257 patent."

10 BY MR. BISENIUS:

11 Q. I understand that.

12 But do you understand that in assessing
13 validity of a patent, that you need to
14 demonstrate where in the prior art each
15 limitation of the patent is disclosed --
16 sorry -- each limitation of the claim is
17 disclosed?

18 A. I understand that.

19 Q. So I'm asking your opinion -- I'm not
20 asking whether or not you think every limitation
21 has been disclosed. I'm asking you what
22 specific structures in Mills equate to the claim

1 structure.

2 And so my question is do you believe
3 that the electrode 14 provides all requirements
4 of the first pad recited by Claim 1?

5 A. So I don't have that -- I don't see
6 that analysis in my declaration, so I'd have to
7 go back and review that to answer your question.

8 Q. So, sitting here today, you cannot tell
9 me if the electrode 14 provides all requirements
10 for the first pad recited by Claim 1?

11 MR. EVERTON: Objection to form.

12 THE WITNESS: So to be sure, I'd want
13 to -- would want to analyze that electrode 14 --
14 you know, it goes on for several paragraphs --
15 that it meets all limitations. I don't see any
16 statement other than "Mills meets all of the
17 elements of Claim 1."

18 So to answer your question, I would
19 need to go back and go through all my arguments
20 to see if it answers your question.

21 BY MR. BISENIUS:

22 Q. Does the top of the trapezoid-shaped

1 leaf spring 62 provide all requirements for the
2 first pad recited by Claim 1?

3 MR. EVERTON: Objection to form.

4 THE WITNESS: So, again, I'd have to go
5 back and do an analysis of that, and I can't
6 answer that at this time.

7 BY MR. BISENIUS:

8 Q. Sitting here today, can you identify
9 any structure in Mills' device that provides all
10 requirements of the first pad recited by
11 Claim 1?

12 MR. EVERTON: Object to form.

13 THE WITNESS: So again at paragraph 66
14 I have that "Mills teaches every limitation of
15 Claim 1 of the '257 patent."

16 BY MR. BISENIUS:

17 Q. Does your declaration identify which
18 structure in Mills' device you believe is the
19 first pad recited by Claim 1?

20 A. So I've identified that electrode 14
21 and leaf spring 62 are pads, and it's under
22 Limitation 1[b(i)-(v)], which is -- concerns the

1 first pad.

2 Q. So I'll ask you again: Is the
3 electrode 14 the claimed first pad?

4 MR. EVERTON: Objection to form.

5 THE WITNESS: So there's the electrode
6 14 and the leaf spring 62, which are pads in the
7 discussion on the first pad.

8 BY MR. BISENIUS:

9 Q. All right. Sticking with this section,
10 paragraph 59 is pretty long, but I'm looking to
11 page 29, which is the end of paragraph 59.

12 About midway through page 29 you state,
13 "Thus, Mills teaches and a POSITA would
14 understand that this first pad, part of
15 electrode 14, is configured to detect an
16 electrical cardiac signal via the user's skin's
17 contact with the exterior surface of the first
18 portion of the enclosure."

19 Do you see that?

20 A. Yes.

21 Q. Can you identify what part of the
22 enclosure of Mills' device that the user

1 contacts to allow the electrode 14 to detect an
2 electrical cardiac signal via the user's skin's
3 contact with the exterior surface of the
4 enclosure?

5 MR. EVERTON: Objection to form.

6 THE WITNESS: Can you repeat your
7 question, please.

8 BY MR. BISENIUS:

9 Q. Can you identify what part of the
10 enclosure of Mills' device that the user
11 contacts to allow the electrode 14 to detect an
12 electrical cardiac signal via the user's skin's
13 contact with the exterior surface of the
14 enclosure?

15 MR. EVERTON: Same objection.

16 THE WITNESS: If I understand your
17 question, the user contacts the electrode 14.

18 BY MR. BISENIUS:

19 Q. So is it your opinion that the
20 electrode 14 is part of the enclosure?

21 MR. EVERTON: Objection to form.

22 THE WITNESS: I have it down in the

1 middle of page 27 that Mills discloses that the
2 heart sensor comprises a housing 12 including
3 first and second dry skin electrodes 14 and 16.

4 BY MR. BISENIUS:

5 Q. Electrodes 14 and 16 in Mills are on
6 the outer surface of the device housing; is that
7 correct?

8 A. Yes. It says electrodes 14 and 16 are
9 both on the outer surface of the device housing.

10 Q. So there are portions of both the
11 electrode 14 and the electrode 16 in Mills that
12 are exposed to the user; is that correct?

13 A. That's correct.

14 Q. So in your mapping of Mills to the
15 claim elements, is the electrode 14 the first
16 portion of the enclosure or the first pad?

17 MR. EVERTON: Objection to form.

18 THE WITNESS: Just to be sure, can you
19 repeat your question before I answer.

20 BY MR. BISENIUS:

21 Q. In your mapping of Mills to the claim
22 elements, is the electrode 14 the first portion

1 of the enclosure or the first pad?

2 MR. EVERTON: Objection to form.

3 THE WITNESS: It's the first pad.

4 And I'm the bottom of page 27. So,
5 "Figure 3A of Mills, shown with annotations
6 below, depicts that these electrodes, 14 and 16,
7 are located on different portions of the
8 enclosure, which may be referred to as an upper
9 portion and a lower portion, respectively."

10 BY MR. BISENIUS:

11 Q. So are those portions of the housing
12 that surround the electrode 14 what you consider
13 to be the first portion of the enclosure?

14 MR. EVERTON: Objection to form.

15 THE WITNESS: So page 30, the top
16 diagram, it shows in blue the first electrode 14
17 and the upper first portion.

18 BY MR. BISENIUS:

19 Q. So, in your opinion, the claimed first
20 portion is the surrounding housing; is that
21 correct?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: Again, as shown on the
2 diagram on page 30, the top housing is the upper
3 or the first portion.

4 BY MR. BISENIUS:

5 Q. So when you say "the top housing," are
6 you referring to the housing 12, the plastic
7 portion of the housing?

8 A. So the upper first portion consists of
9 the housing 12.

10 Q. Turning back to page 28, a couple
11 sentences in here, you state, "Thus, the pad
12 (base metal 14a) is positioned underneath the
13 exterior of the first portion."

14 When you say "first portion" in this
15 sentence, are you talking about the claimed
16 first portion of the enclosure?

17 MR. EVERTON: Objection to form.

18 THE WITNESS: I'm sorry. Can you
19 repeat your question again.

20 BY MR. BISENIUS:

21 Q. Yeah.

22 When you say "first portion" in this

1 sentence, are you talking about the claimed
2 first portion of the enclosure recited by
3 Claim 1?

4 MR. EVERTON: Objection to form.

5 THE WITNESS: So it says it's
6 positioned underneath the exterior of the first
7 portion.

8 BY MR. BISENIUS:

9 Q. And so what I'm asking here is, when
10 you say "first portion" in this sentence, are
11 you referring to the claimed first portion of
12 the enclosure?

13 MR. EVERTON: Same objection.

14 THE WITNESS: Of which enclosure?

15 MR. BISENIUS: All right. It's about
16 noon on the East Coast. I'm going to switch to
17 another exhibit going forward. I don't know --
18 I don't need a break for lunch, but if other
19 people want to do a lunch now -- or should we do
20 a short break and do lunch in an hour?

21 How are people feeling?

22 THE WITNESS: Yeah, I'd go for a short

1 break now and lunch in an hour.

2 MR. BISENIUS: All right. Let's meet
3 at ten after the hour?

4 THE WITNESS: Okay.

5 (Recess from 12:02 p.m. to
6 12:11 p.m. EST.)

7 BY MR. BISENIUS:

8 Q. All right. I'd now like to turn to
9 Mills, the Mills reference, which is US Patent
10 No. 5,351,695, Exhibit 1006 in this proceeding.

11 A. Let me download this.

12 Okay. I have it downloaded.

13 Q. All right. Let's turn to the paragraph
14 starting at Column 3, line 62.

15 Can you please read that full paragraph
16 to yourself, going into Column 4, and let me
17 know when you're done.

18 A. Starting at 62?

19 Q. Yeah, Column 3, line 62, going to
20 Column 4.

21 A. Okay. I've read it.

22 Q. This paragraph describes a multilayer

1 construction for the electrode 14; is that
2 correct?

3 A. That's correct.

4 Q. And this paragraph describes that the
5 electrode 14 is formed of a main layer, or
6 "expanse 14a formed of a base metal such as
7 stainless steel"; correct?

8 A. Correct.

9 Q. And this paragraph further describes
10 that the expanse 14a has a "skin-contactable
11 region or surface 14a'."

12 Do you see that?

13 A. Yes.

14 Q. So is it fair to say that the expanse
15 14a is intended to contact the skin of a user?

16 MR. EVERTON: Objection to form.

17 THE WITNESS: Can you repeat the
18 question, please.

19 BY MR. BISENIUS:

20 Q. Is it fair to say that the expanse 14a
21 is intended to contact the skin of a user?

22 MR. EVERTON: Same objection.

1 THE WITNESS: Looking at page 29 of my
2 declaration, Exhibit 1003, and it shows the user
3 tissue side is contacted by 14b.

4 BY MR. BISENIUS:

5 Q. Turning back to the paragraph that we
6 were discussing in Mills that starts at
7 Column 3, line 62, this paragraph describes the
8 composition 14b that you just mentioned as a
9 plating on the surface of the expanse 14a; is
10 that correct?

11 A. Yes.

12 Q. This paragraph also describes that
13 Figure 3B, which shows the layers of the
14 electrode 14, is not drawn to scale; is that
15 correct?

16 A. Correct.

17 Q. I'd like to turn to Figure 3B in Mills.
18 Figure 3B shows the layers of the
19 electrode 14 that we've been discussing; is that
20 correct?

21 A. Correct.

22 Q. And Figure 3B shows the expanse layer

1 14a as being flat on both sides; is that
2 correct?

3 A. Figure 3B, 14a, that partial section is
4 shown as being -- it looks like it's drawn as
5 flat on both sides.

6 Q. In this figure the layer 14b is shown
7 as being flat on both sides; is that correct?

8 A. As shown in Figure 3B and that partial
9 section, it's showing 4b [sic] as appears to be
10 flat on both sides.

11 Q. The layer 14b is shown as being
12 parallel to the layer 14a; is that correct?

13 A. So in -- as it's shown in Figure 3B,
14 that partial section of 14, it appears 14b is
15 parallel to 14a.

16 Q. Is the layer 14b embedded in the layer
17 14a?

18 MR. EVERTON: Objection to form.

19 THE WITNESS: Can you repeat your
20 question, please.

21 BY MR. BISENIUS:

22 Q. Is the layer 14b embedded in the layer

1 14a?

2 MR. EVERTON: Same objection to form.

3 THE WITNESS: So because this is only a
4 partial section, can't determine if, you know,
5 anything is embedded in something else.

6 BY MR. BISENIUS:

7 Q. Are you aware of any descriptions in
8 Mills of the layer 14a being embedded in the
9 layer 14b, or vice versa?

10 A. So Mills...

11 So Mills has an electrode 14 that's
12 integrally molded or embedded into the housing.

13 Q. So I understand that it's your opinion
14 that the entire electrode 14 is embedded into
15 the housing.

16 I'm wondering if you can identify any
17 description in Mills of the layer 14a being
18 embedded in the layer 14b or, vice versa, the
19 layer 14b being embedded in the layer 14a.

20 MR. EVERTON: Object to form.

21 THE WITNESS: So in my initial analysis
22 I don't see anything in Mills explicitly saying

1 14a is embedded in 14b, or vice versa.

2 BY MR. BISENIUS:

3 Q. All right. Continuing with Figure 3B
4 in Mills, is there any depiction in Figure 3B of
5 any portion of the plating 14b surrounding the
6 expanse layer 14a?

7 MR. EVERTON: Objection to form.

8 THE WITNESS: So your question is, is
9 there anything in Mills -- well, can you repeat
10 it, please.

11 BY MR. BISENIUS:

12 Q. Looking at the Figure 3B, is there any
13 depiction in Figure 3B of any portion of the
14 plating 14b surrounding the expanse layer 14a?

15 A. So this is just a partial depiction of
16 14, and what's shown is -- it doesn't show that
17 14b surrounds 14a.

18 Q. Are you aware of any description in
19 Mills of any portion of the plating 14b
20 surrounding the expanse layer 14a?

21 A. So in my initial review right now, I
22 don't see anything in Mills about 14b

1 surrounding 14a.

2 Q. Okay. I'm going to turn wack to
3 Column 4 of Mills, specifically the paragraph
4 that starts at line 32. Let me know when you're
5 there.

6 A. Okay.

7 Q. This paragraph identifies various
8 different materials that can be used for the
9 metal plating composition 14b; is that correct?

10 A. That's correct.

11 Q. This paragraph also specifies that the
12 metal plating 14b is approximately 3 microns
13 thick; is that correct?

14 A. Correct.

15 Q. Would a 3-micron-thick layer of any of
16 the materials identified by Mills for the metal
17 plating 14b have the structural integrity to
18 support any of the components of Mills' device?

19 MR. EVERTON: Objection to form.

20 THE WITNESS: Could you repeat the
21 question, please.

22

1 BY MR. BISENIUS:

2 Q. Would a 3-micron-thick layer of any of
3 the materials identified by Mills for the metal
4 plating 14b have the structural integrity to
5 support any of the components of Mills' device?

6 MR. EVERTON: Objection to form.

7 THE WITNESS: I'm not sure what
8 components 14b would support, because this is
9 the -- you know, the user or the skin side.

10 BY MR. BISENIUS:

11 Q. Would it be possible to manufacture a
12 3-micron-thick layer of one of the materials
13 identified by Mills independent of an underlying
14 base layer such as the base metal [inaudible].

15 (The reporter requested clarification.)

16 BY MR. BISENIUS:

17 Q. Would it be possible to manufacture a
18 3-micron-thick layer of one of the materials
19 identified by Mills independent of an underlying
20 base layer such as the base metal expanse 14a.

21 MR. EVERTON: Objection to form.

22 THE WITNESS: So I'm not familiar with

1 plating and -- but I -- at this point in time I
2 can't form an opinion if you could form a
3 3-micron layer or -- yeah, 3-micron-thick layer
4 without a base.

5 BY MR. BISENIUS:

6 Q. In Mills' device the composition 14b is
7 a plating on the layer 14a; correct?

8 A. Correct.

9 Q. So is it safe to say that the metal
10 plating 14b relies on the layer 14a for
11 structural integrity; right?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: I'm not sure what
14 structural integrity 14b needs to have.

15 BY MR. BISENIUS:

16 Q. Would the layer 14b be able to maintain
17 its own physical structure absent the layer 14a?

18 MR. EVERTON: Objection to form.

19 THE WITNESS: And it's similar to my
20 answer previously that, you know, I know
21 something about metal plating, but not enough to
22 opine if a 3-micron layer can, you know, be a

1 structure without a base.

2 BY MR. BISENIUS:

3 Q. I'm going to turn to Column 6 of Mills,
4 the paragraph starting at line 33.

5 Can you just read that paragraph to
6 yourself and let me know when you're finished.

7 A. Okay. I'm done.

8 Q. This paragraph describes that the
9 housing 12 of Mills was made from a molded
10 plastic; is that correct?

11 A. Yes.

12 Q. In your opinion, would the molded
13 plastic that forms the housing 12 be conductive?

14 MR. EVERTON: Objection to form.

15 THE WITNESS: So in my declaration on
16 paragraph 68 -- I'll read it: "Plastics in
17 general are well-known electrical insulators,
18 and ABS plastic is an electrical insulator."

19 BY MR. BISENIUS:

20 Q. If a user of Mills' device were to
21 contact only the housing 12, this would be
22 insufficient for the device to detect an ECG

1 signal; is that correct?

2 MR. EVERTON: Objection to form.

3 THE WITNESS: So in Mills the user
4 would have to contact electrode 14 at least to
5 get an ECG signal.

6 BY MR. BISENIUS:

7 Q. If a user were to contact the electrode
8 16 of Mills' device with one hand and the
9 housing 12 with the other hand, this would be
10 insufficient for the device to detect an ECG
11 signal; is that correct?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So in Column 6, starting
14 at line 63 it reads, "With apparatus 10 thus
15 positioned on the left wrist, the palm of the
16 right hand easily can be placed into contact
17 with electrode 14, thus impressing between upper
18 electrode 14 and lower electrode 16 a signal
19 representative of the patient's cardiography."

20 BY MR. BISENIUS:

21 Q. So that in Mills' device contact with
22 both the electrode 14 and the electrode 16 is

1 required to detect the ECG signal; is that
2 correct?

3 MR. EVERTON: Objection to form.

4 THE WITNESS: Okay. So in Mills'
5 device the -- the left wrist contacts electrode
6 16 and the palm of the other hand contacts 14 to
7 get an ECG signal.

8 BY MR. BISENIUS:

9 Q. Okay. I'm going to turn back to
10 Column 4 of Mills, the top of the column.

11 This paragraph describes that the
12 electrode 16 has the same dual-layer
13 construction as the electrode 14; is that
14 correct?

15 MR. EVERTON: Objection to form.

16 THE WITNESS: I see it says on
17 Column 4, line 10, it's understood that
18 electrode 16 is identical material content in
19 cross-sectional structure as electrode 14 but a
20 much greater surface area.

21 BY MR. BISENIUS:

22 Q. So the electrode 16 would have two

1 layers similar to the base metal layer 14a and
2 the plating 14b; is that correct?

3 A. Are you talking about electrode 16,
4 then?

5 Q. Electrode 16 would have similar layers;
6 correct?

7 A. Yes. It's of identical material
8 content and cross-sectional structures,
9 electrode 14.

10 Q. All right. Turning to Figure 2 in
11 Mills, this figure shows an exploded view of the
12 components of Mills' device; correct?

13 A. Yes.

14 Q. This figure shows that the electrode 16
15 is affixed to the housing 12 using screws;
16 correct?

17 A. Yeah, it shows electrode 16 attached to
18 housing 12 with screws. Yes.

19 Q. So is it fair to say that Mills
20 discloses that the dual-layered electrode 16 is
21 manufactured separately from the housing 12 and
22 then later affixed to the housing 12?

1 MR. EVERTON: Objection to form.

2 THE WITNESS: So looking at
3 paragraph 62 in my declaration, it shows --
4 actually, referring to Figure 3, which is the
5 flip side of Figure 2, it says, "Figure 3A of
6 Mills shows the electrode 16 attached by screws
7 and is integral with housing 12."

8 BY MR. BISENIUS:

9 Q. So is it your opinion that the
10 electrode 16 in Mills is embedded in the housing
11 12?

12 A. In paragraph 62 of my declaration,
13 electrode 16 of Mills is embedded in housing 12
14 because it is placed in the thickness of the
15 surrounding material and forms an outer surface.

16 Q. Looking at Figure 3A of Mills, this is
17 essentially showing an upside-down version of
18 Figure 2; correct?

19 A. Correct.

20 Q. And do you see the groove formed in the
21 housing 12?

22 I can ask that better.

1 Do you see a groove in the housing 12
2 for receiving the electrode 16?

3 A. So in my declaration on page 34 there's
4 a diagram on the left that shows an -- the color
5 is orange -- an inset groove.

6 Q. So is it your opinion that the
7 electrode 16 in Mills is embedded in the housing
8 12 because a portion of electrode 16 is inset
9 into that groove of the housing 12?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: On page 33 of my
12 declaration, the bottom sentence: "Comparing
13 this inset groove of Mills to the '257's
14 disclosure in 4A, the resulting embedded nature
15 of electrode 16 of Mills inserted into the inset
16 groove of its housing is nearly identical to the
17 embedded nature of the electrode (lead 422) of
18 Figure 4A of the '257 patent."

19 BY MR. BISENIUS:

20 Q. Turning back a couple pages from there,
21 page 31, where paragraph 61 begins in your
22 declaration, here you're discussing Limitation

1 1[b(vi)-(viii)]; correct?

2 A. Correct.

3 Q. And this limitation recites in part "a
4 second lead comprises a second pad that is
5 embedded in a second portion of the enclosure."

6 A. Correct.

7 Q. My question is -- sorry.

8 My question is in your mapping of Mills
9 to Claim 1, what are you identifying as the
10 second portion of the enclosure?

11 MR. EVERTON: Objection to form.

12 THE WITNESS: The second portion of the
13 enclosure would be the area surrounding the
14 perimeter of electrode 16.

15 BY MR. BISENIUS:

16 Q. And by "area surrounding the perimeter
17 of electrode 16," you mean the area of the
18 housing 12 surrounding the perimeter of
19 electrode 16?

20 MR. EVERTON: Objection to --

21 THE WITNESS: Yeah, the second -- oh.

22 So the second -- the second portion of

1 the housing consists of the area of housing 12
2 that surrounds electrode 16.

3 BY MR. BISENIUS:

4 Q. So turning back to page 30 of your
5 declaration and the diagram in the middle of the
6 page, you've labeled -- you've got a label that
7 says "Second Electrode (16)" pointing at the
8 electrode 16 and then also a label saying "Lower
9 (Second) Portion" with an arrow pointing at
10 electrode 16.

11 So is this label incorrect?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So in that figure it's
14 pointing to the lower second portion as the
15 electrode.

16 BY MR. BISENIUS:

17 Q. So in your mapping of Mills to the
18 claims, is the second portion of the enclosure
19 the electrode 16, or is the second portion of
20 the enclosure the area of the housing 12 that
21 surrounds the electrode 16?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: So, as shown in the
2 diagram, the lower second portion is pointing to
3 the second electrode 16.

4 BY MR. BISENIUS:

5 Q. So, in your opinion, the second portion
6 of the enclosure is the electrode 16?

7 A. So in the figure the second portion is
8 pointing to the electrode 16.

9 Q. I'm going to move forward a few pages
10 to page 35.

11 A. Okay.

12 Q. At the bottom of page 35 you begin your
13 analysis of Limitation 1[c]; correct?

14 A. Correct.

15 Q. And this limitation recites in part
16 "wherein the first lead further comprises a
17 first connector coupled to the first pad."

18 Can you please identify what component
19 in Mills' device you are mapping to the claimed
20 first connector?

21 A. So at the top of page 7, the diagram
22 shows that the leaf spring is the connector for

1 electrode 14.

2 Q. So is it your opinion that it's the
3 entirety of the leaf spring 62 that provides the
4 claimed first connector?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So the leaf spring 62 is
7 the connector for the electrode 14.

8 BY MR. BISENIUS:

9 Q. I understand that. I'm trying to map
10 Mills' device -- your read of Mills' device to
11 the claims.

12 Is it your opinion that the leaf spring
13 62 is the claimed first connector?

14 MR. EVERTON: Object to form.

15 THE WITNESS: The leaf spring is the
16 connector for the electrode 14.

17 BY MR. BISENIUS:

18 Q. Looking about the middle of
19 paragraph 65, you state, "Electrodes 14 and 16
20 are electrically connected to the PCB 50 via a
21 respective spring (60/62)."

22 Should those two numbers be reversed in

1 that sentence?

2 Specifically the numbers 60 and 62,
3 should those be reversed in that sentence?

4 MR. EVERTON: Object to form.

5 THE WITNESS: The connector for -- in
6 the diagram the connector for electrode 14 is
7 annotated as leaf spring 62, and the connector
8 for electrode 16 is annotated as coil spring 60.

9 BY MR. BISENIUS:

10 Q. Can you identify any other connectors
11 in addressing Limitation 1[c].

12 A. So for Limitation 1[c] the connector is
13 the leaf spring 62.

14 MR. BISENIUS: Now might be a good time
15 to break for lunch before my next line of
16 questions.

17 MR. EVERTON: What was that?

18 MR. BISENIUS: Now might be a good time
19 to break for lunch before my next line of
20 questions.

21 MR. EVERTON: Does that work for you,
22 Alan?

1 THE WITNESS: Yeah.

2

3

4

5

6

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8

9 (Whereupon, at 1:01 P.M. EST

10 the deposition of ALAN OSLAN was

11 adjourned for lunch recess.)

12

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1 (Whereupon, at 1:42 P.M. EST
2 the deposition of ALAN OSLAN was
3 reconvened.)
4

5 EXAMINATION (CONTINUED)

6 BY MR. BISENIUS:

7 Q. I'm sticking with your declaration,
8 Exhibit 1003.

9 Can you please turn to paragraph 82,
10 which is on page 46.

11 (Technical interruption in
12 the proceedings from 1:42 to
13 1:44 p.m. EST.)

14 BY MR. BISENIUS:

15 Q. All right. So we're at paragraph 82 of
16 your declaration.

17 In this paragraph you're discussing the
18 disclosures of Markel with respect to what
19 you've identified at Limitation 1[b(i)-(iv)]; is
20 that correct?

21 A. That's correct.

22 Q. And even though this paragraph is

1 discussing the disclosures of Markel, you're
2 addressing the combination of Markel and Mills
3 with respect to the challenged claims in this
4 section; is that correct?

5 A. That's correct.

6 Q. After paragraph 82 you've included
7 paragraph 4 of Markel.

8 Is it fair to say that Figure 4 of
9 Markel is showing a handheld cellular telephone?

10 MR. EVERTON: Object to form.

11 THE WITNESS: So Markel describes 400
12 as a mobile communications device, or MCD for
13 short.

14 BY MR. BISENIUS:

15 Q. In paragraph 82 you state that Markel
16 discloses a first electrode "placed on or molded
17 into the region 410b." You then state that
18 Markel describes a first pad formed of
19 conductive plastic.

20 Is it your opinion that the electrode
21 identified by reference numeral 410b of Figure 4
22 of Markel provides the claimed first pad of

1 Claim 1?

2 A. So in that figure on the right side, in
3 blue it says "1st portion. Electrode (pad)
4 molded into left side."

5 Q. Yeah. And I was a bit confused by that
6 label.

7 Turning to the claim language, which
8 you've reproduced on page 46, the beginning of
9 this Claim 1 limitation states "a first lead
10 comprising a first pad that is embedded in a
11 first portion of the enclosure."

12 So the claim is requiring that the
13 first pad be embedded in the first portion of
14 the enclosure, and here it appears that you've
15 labeled the same structure as both the first
16 portion and the first electrode.

17 So is this -- this electrode identified
18 by reference numeral 410b, are you reading that
19 on the first pad in the claim or the first
20 portion of the enclosure?

21 MR. EVERTON: Objection to form.

22 THE WITNESS: So what's outlined in

1 blue on the rear view at the right side of
2 what's called molded into the left side, so
3 that's the first portion, and it's the electrode
4 or the pad.

5 BY MR. BISENIUS:

6 Q. So is it your opinion that the
7 electrode 410b of Markel provides both the
8 claimed first portion of the enclosure and the
9 claimed first pad?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: So the diagram shows that
12 it's the first portion and it's the electrode or
13 the pad.

14 BY MR. BISENIUS:

15 Q. I realize that you identify it as an
16 electrode or a pad.

17 Similar to our discussion with Mills
18 earlier, I'm wondering if you are mapping this
19 electrode 410b to the claimed first pad.

20 MR. EVERTON: Objection to form.

21 THE WITNESS: So in reading 82, "Markel
22 discloses a first electrode 'placed on or molded

1 into the region 410b.' A POSITA would
2 understand from this disclosure that Markel
3 describes a first pad formed of conductive
4 plastic embedded in a first portion of the
5 enclosure."

6 BY MR. BISENIUS:

7 Q. So is the first portion of the
8 enclosure the area of the housing of Markel's
9 device surrounding the electrode in 14b, or is
10 the first portion of the enclosure the electrode
11 14b itself?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So in the annotated
14 diagram the -- it shows that -- what's outlined
15 in blue is the first portion, and it's the
16 electrode or the pad.

17 BY MR. BISENIUS:

18 Q. So it's your opinion that the electrode
19 located at region 410b shown in Figure 4 is a
20 part of the enclosure of Markel's device?

21 MR. EVERTON: Objection to form.

22 THE WITNESS: So it's a first pad

1 embedded in a first portion of the enclosure.

2 BY MR. BISENIUS:

3 Q. Yes. And I'm trying to identify what
4 part of Markel's device shown in Figure 4 you
5 consider to be the first portion of the
6 enclosure.

7 So are you identifying the electrode
8 located at region 410b as part of the enclosure
9 of Markel's device?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: So it's showing what's
12 outlined in blue is the first portion, and it's
13 the electrode or the pad.

14 BY MR. BISENIUS:

15 Q. So is that first portion part of the
16 enclosure of Markel's device?

17 MR. EVERTON: Objection to form.

18 THE WITNESS: Say first portion of the
19 enclosure.

20 BY MR. BISENIUS:

21 Q. The electrode located at region 410b
22 shown in Figure 4 is positioned on the exterior

1 of Markel's device; is that correct?

2 A. It's placed on or molded into the
3 region.

4 Q. Is it true that a user would directly
5 contact both the electrode 410b and the
6 electrode 420b in order for the device to read
7 an ECG signal?

8 MR. EVERTON: Object to form.

9 THE WITNESS: So in paragraph 83 of my
10 declaration the first and second electrodes --
11 just a minute.

12 So it's going to take me a minute or
13 two. I want to download Markel.

14 Does anybody know which exhibit Markel
15 is?

16 BY MR. BISENIUS:

17 Q. Yeah. It's 1005.

18 A. 1005.

19 So I think I've been confused about 410
20 and -- 410b and 420b.

21 I'm looking at paragraph 55 in my
22 declaration, and so it's a -- mobile

1 communication device 400 includes electrodes
2 placed on or molded into regions 410b and 420b.
3 So I mistook 410b and 420b as also the
4 electrodes. They are the portions...

5 Q. What paragraph of your declaration are
6 you referring to?

7 A. 55.

8 So 410b, 420b are the portions or the
9 regions, and it's where the electrodes are
10 placed on or molded into.

11 Q. Okay. So I'll rephrase my question.

12 In order for Markel's device as shown
13 in Figure 4 to detect an ECG signal, would a
14 user need to make direct contact with the
15 electrodes located at regions 410b and 420b?

16 A. So that's one way -- you know, one of
17 the embodiments in Markel to get an ECG is
18 touching 410b and 420b regions.

19 Q. But being specific to the embodiment
20 shown in Figure 4, the user would need to make
21 direct contact with the electrodes at regions
22 410b and 420b; is that correct?

1 MR. EVERTON: Object to form.

2 THE WITNESS: So the user, for example,
3 would need to touch the electrode in 410b with,
4 for example, you know, one finger or one hand
5 and the electrode in region or portion 420b with
6 the other hand or finger.

7 BY MR. BISENIUS:

8 Q. Is it correct to say that the electrode
9 at region 410b is located on the back of
10 Markel's device?

11 MR. EVERTON: Object to form.

12 THE WITNESS: So in my declaration the
13 annotated Figure 4 shows that they are -- that
14 they show up in the rear view.

15 BY MR. BISENIUS:

16 Q. So the electrode at region 410b and the
17 electrode at region 420b are on the same side of
18 the device; is that correct?

19 MR. EVERTON: Object to form.

20 THE WITNESS: So it depends on what you
21 call a side.

22

1 BY MR. BISENIUS:

2 Q. Is it fair to say that the electrode at
3 region 410b and the electrode at region 420b are
4 both located on the back side of Markel's
5 device?

6 MR. EVERTON: Object to form.

7 THE WITNESS: So they're both shown in
8 the rear view.

9 BY MR. BISENIUS:

10 Q. Is there any portion of the electrode
11 at region 410b of Markel's device that is
12 exposed to an interior portion [garbled]?

13 A. I'm sorry. Can you repeat again. I
14 didn't hear the end.

15 Q. Is there any portion of the electrode
16 of region 410b of Markel's device that is
17 exposed to an interior portion of Markel's
18 device?

19 A. So Markel does not get into the details
20 of how the -- you know, the inside of the
21 electrodes.

22 Q. As shown in Figure 4, the electrode at

1 region 410b takes up a majority of the length of
2 the back side of the device; is that correct?

3 A. You mean from the top to the bottom of
4 the figure?

5 Q. Correct. If we're -- yeah, I'm calling
6 the length the top to the bottom of the figure.

7 A. Yeah.

8 Q. Okay.

9 A. So --

10 Q. So I'll ask that cleanly.

11 The electrode at region 410b takes up a
12 majority of the length from top to bottom of the
13 back side of the [garbled]?

14 MR. EVERTON: Object to form.

15 THE WITNESS: So in this particular
16 drawing, which is an embodiment, and we don't
17 know how to scale it is, it appears that way,
18 but I don't know if it actually is.

19 BY MR. BISENIUS:

20 Q. Is this sizing of the electrode at
21 region 410b in Figure 4 necessary to detect a
22 sufficient signal to detect the heart rate of

1 the user?

2 MR. EVERTON: Object to form.

3 THE WITNESS: I don't believe Markel
4 gets into that detail.

5 BY MR. BISENIUS:

6 Q. In your opinion, would an electrode
7 that is half the length of the electrode at
8 region 410b be sufficient to detect the heart
9 rate of the user?

10 MR. EVERTON: Object to form.

11 THE WITNESS: I don't have enough
12 information to answer that question.

13 BY MR. BISENIUS:

14 Q. Would an electrode that is a quarter of
15 the length of the electrode at region 410b be
16 sufficient to detect the heart rate of the user?

17 A. I don't have enough information to
18 answer that question.

19 Q. Would an electrode that is an eighth as
20 wide and an eighth as long as the electrode at
21 region 410b be sufficient to detect the heart
22 rate of a user?

1 A. I don't have enough information to
2 answer that question.

3 Q. We moved around the paragraph a little
4 bit. I want to come back to page 46.

5 A. Okay.

6 Q. So once again I'm talking about
7 Limitation 1[b(i)-(iv)], which recites in part
8 "a first pad that is embedded in a first portion
9 of the enclosure."

10 What part of the enclosure do you
11 consider to be the claimed first portion of the
12 enclosure?

13 MR. EVERTON: Object to form.

14 THE WITNESS: The annotated Figure 4
15 diagram shows that the first portion 410b
16 contains the electrode or the pad.

17 BY MR. BISENIUS:

18 Q. Turning to page 52, here you're
19 discussing what you've labeled Limitation
20 1[b(v)-(vi)], and this recites in part "a second
21 lead comprises a second pad that is embedded in
22 a second portion of the enclosure."

1 What part of the enclosure do you
2 consider to be the claimed second portion of the
3 enclosure?

4 MR. EVERTON: Object to form.

5 THE WITNESS: On page 47, annotated
6 Figure 4, it shows the 420b, the second portion,
7 and that contains the second electrode or pad.

8 BY MR. BISENIUS:

9 Q. So are you mapping the electrode
10 located at region 420b to the claimed second
11 pad?

12 MR. EVERTON: Object to form.

13 THE WITNESS: As shown in the annotated
14 Figure 4, the portion of region 420b that's the
15 second portion, and it has the second electrode
16 or pad.

17 BY MR. BISENIUS:

18 Q. Turning to page 54, at the top you've
19 included what you identify as Limitation 1[c].
20 This limitation recites in part "wherein the
21 first lead further comprises a first connector
22 coupled to the first pad and configured to

1 provide the first electrical signal depicted by
2 the first pad to the processor."

3 So this limitation is addressing a few
4 different components; correct?

5 It's addressing the first connector,
6 the first pad and the processor; is that
7 correct?

8 A. Correct.

9 Q. Looking at paragraph 91 in this section
10 and the accompanying figures on pages 55 and 56,
11 what have you identified as the first pad
12 recited by this claim limitation?

13 A. You're asking about the first pad?

14 Q. Correct.

15 A. So on page 55, the annotated Figure 4
16 on the right side, that first portion 410b is
17 the first pad.

18 Q. You've included Figure 4 from Markel on
19 page 5 and Figure 20 from Markel on page 56, and
20 in Figure 20 you've labeled an electrode 2024 as
21 the first electrode/pad; is that correct?

22 A. Yes.

1 Q. Is it your opinion that the electrode
2 labeled with reference numeral 410b in Figure 4
3 is an example of an electrode with reference
4 numeral 4024 in Figure 20?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So in paragraph 91 I have
7 "Markel discloses a first and second lead
8 configured as a first pad 2024."

9 BY MR. BISENIUS:

10 Q. Are the devices shown in Figure 4 and
11 Figure 20 part of the same embodiment of Markel?

12 MR. EVERTON: Object to form.

13 THE WITNESS: So in paragraph 108 of
14 Markel it says that "Figure 20 is a block
15 diagram illustrating various portions of an
16 exemplary mobile communication device 2000."

17 And I'll skip -- well, no, I won't
18 skip: "The exemplary mobile communication
19 device 2000 may, for example and without
20 limitation, share various characteristics with
21 the exemplary mobile communication devices and
22 other devices illustrated in Figures 1 through

1 19," which includes Figure 4.

2 BY MR. BISENIUS:

3 Q. Continuing with Figure 20 that you show
4 on page 56 of your declaration, Figure 20 shows
5 that a portion of the electrode 2024 is exposed
6 to the outside of the device; is that correct?

7 MR. EVERTON: Object to form.

8 MR. BISENIUS: I can ask that a
9 different way.

10 Q. Is there any portion of the electrode
11 2024 that is exposed to the exterior of the
12 device?

13 MR. EVERTON: Same objection.

14 THE WITNESS: So Figure 20 is -- I just
15 want to go back to what I just read.

16 So basically Figure 20 covers Figure 4.

17 So looking at Figure 4 -- and then in 91,

18 "Markel discloses a first and second lead

19 configured as a first pad 2024 and a second pad

20 2022, respectively, on a portion of the exterior

21 housing."

22

1 BY MR. BISENIUS:

2 Q. Is this positioning on the exterior
3 housing to allow the user to directly contact
4 the electrodes?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So I'm looking at
7 paragraph 49 in Markel, and the last sentence to
8 "for example, provide for convenient access for
9 a user to contact both if the first and second
10 electrodes simultaneously, that is, with
11 different hands or different fingers," for
12 example.

13 BY MR. BISENIUS:

14 Q. Okay. Sticking with your annotated
15 version of Figure 20 on page 56, in this
16 annotated figure and in paragraph 92 of your
17 declaration you have identified a first
18 connector; is that correct?

19 A. Did you say also in paragraph 92?

20 Q. Yes.

21 A. It's discussed in paragraph 91.

22 Q. In your mapping of the Markel-Mills

1 combination in Claim 1, are you mapping what
2 you've labeled as the first connector in
3 Figure 20 as the claimed first connector?

4 A. That's the -- that's the first
5 connector that's associated with the first
6 electrode or pad. It's shown in green on -- in
7 Figure 20.

8 Q. So in your combination of Markel with
9 Mills, the connector is connected to an external
10 electrode on one side and the cardiac info
11 acquisition model on the other side; is that
12 correct?

13 A. It's shown schematically in Figure 20.
14 It may not be a physical representation.

15 Q. What physical structure would this
16 first connector have?

17 Would it be a wire?

18 A. I don't think Markel goes into detail
19 about that.

20 Q. In your combination of Markel with
21 Mills, how would the first connector be
22 connected to the electrode 2024 or the electrode

1 410b?

2 MR. EVERTON: Object to form.

3 THE WITNESS: So Markel doesn't have
4 details of the connectors that are part of -- or
5 that are included in Mills.

6 BY MR. BISENIUS:

7 Q. That's what I'm asking you: In your
8 combination of Markel with Mills, how would the
9 first connector be connected to the electrode
10 2024 or the electrode 410b?

11 MR. EVERTON: Object to form.

12 THE WITNESS: So in paragraph 92 of my
13 declaration, "Mills further discloses electrodes
14 14 and 16 are electrically connected to
15 processing circuitry (ECG amplifier 42), as
16 shown in annotated Figure 4 below."

17 BY MR. BISENIUS:

18 Q. In that Figure 4 that you just
19 mentioned, what component is providing the
20 claimed first connector?

21 A. So I need to download Mills, so give me
22 a minute, please.

1 Q. Yeah. That's Exhibit 1006. We were
2 talking about it earlier.

3 A. I'm sorry?

4 Q. That's Exhibit 1006. We were talking
5 about it a bit earlier.

6 A. Okay. Thank you.

7 THE WITNESS: The connector in Mills --
8 to go back to the earlier paragraphs -- so, for
9 example, page 36 of my declaration in
10 Section 65 -- so electrodes 14 and 16 are
11 electrically connected to the PCB by a
12 respective spring. So it's either the leaf
13 spring or the coil spring.

14 BY MR. BISENIUS:

15 Q. This section that you've just cited,
16 though, this is in your analysis of Ground 1,
17 the application of Mills alone to the claims; is
18 that correct?

19 A. Yes. I believe Grounds -- Ground 1.

20 Q. All right. Turn to page 30 in your
21 Ground 1 analysis.

22 In the last sentence on this page you

1 state, "The top of the trapezoid" -- sorry let
2 me start over.

3 "The top of the trapezoid-shaped leaf
4 spring 62 is also a pad."

5 A. Okay.

6 Q. Does the leaf spring 62 in Mills have
7 multiple surfaces?

8 A. So it has the two surfaces -- on the
9 bottom of page 30, the top of the trapezoid,
10 it's outlined in red, and the bottom of the
11 trapezoid that's attached to the PCB.

12 Q. Would you consider both of those
13 surfaces to be pads?

14 MR. EVERTON: Object to form.

15 THE WITNESS: So reading from the
16 bottom of page 30, the "leaf spring 62 connected
17 to a circuit pad" and "the top of the
18 trapezoid-shaped leaf spring 62 is also a pad."

19 BY MR. BISENIUS:

20 Q. Earlier when we were discussing the
21 multilayered configuration for electrode 14, you
22 agreed that both the top and bottom surfaces of

1 the electrode 14 would be flat surfaces.

2 Do you recall that?

3 A. So just from that particular section
4 that was shown in, I believe, Figure 3D and the
5 way it's drawn, it appears that just in that
6 section at least.

7 Q. All right. Turning to page 31 of your
8 declaration -- it's the next page -- in this
9 first sentence at the top of page 31 you state
10 that the top surface of the trapezoid-shaped
11 leaf spring 62 is "pressed against the inner
12 wall of electrode 14 in Mills."

13 So is it correct to say that the flat
14 surface of the top of the trapezoid-shaped leaf
15 spring 62 is pressed against the flat surface of
16 the electrode 14?

17 MR. EVERTON: Objection to form.

18 THE WITNESS: So the pad is pressed
19 against the inner wall of the electrode 14.

20 BY MR. BISENIUS:

21 Q. So it's the flat surface of the
22 electrode 14 pressed against the flat surface of

1 the leaf spring 62; is that correct?

2 A. Mills doesn't have any details about
3 it's flat or not.

4 Q. Well, just a little bit ago you agreed
5 that Mills disclosed that the electrode 14 is
6 flat on both sides; correct?

7 MR. EVERTON: Object to form.

8 THE WITNESS: Well, I stated that what
9 was shown -- you know, how it was drawn in 3D,
10 which is a -- just a sectional piece, it appears
11 flat.

12 BY MR. BISENIUS:

13 Q. All right. Let's turn to Mills
14 Exhibit 1006 and specifically Figure 3A.

15 Do you see the electrode 14 in
16 Figure 3A?

17 A. Yes. Okay. I see it now. Yes.

18 Q. Is the surface of electrode 14 shown in
19 Figure 3A the surface that would contact the top
20 of leaf spring 62?

21 A. The bottom of page 30 of my declaration
22 I quote from Mills, and "Mills teaches that the

1 electrode 14 is connected to the signal input
2 terminal of ECG amplifier 32 via a generally
3 trapezoid-shaped, split and thus slidably
4 yielding, leaf spring 62."

5 Q. My question was -- in Figure 3A
6 electrode 14 is shown, and it shows a large
7 surface of Figure 14 -- of electrode 14.

8 The question is, is that surface of
9 electrode 14 shown in Figure 3A the portion of
10 the electrode 14 that would contact the top of
11 the leaf spring 62?

12 MR. EVERTON: Object to form.

13 THE WITNESS: So -- I'm paraphrasing
14 from my declaration. So the electrode 14 is
15 connected to the amplifier by the leaf spring
16 62.

17 BY MR. BISENIUS:

18 Q. But you can't identify which surface of
19 the electrode 14 contacts the leaf spring 62?

20 A. Can you clarify what you mean by "which
21 surface."

22 Q. Yeah. So in Figure 2 of Mills it shows

1 an exploded view of the device, and the
2 electrode 14 is on top. That appears to be an
3 exterior surface of the electrode 14.

4 And then in Figure 3A it's showing
5 another exploded view of the device, which, as
6 you agreed earlier, is an upside-down version of
7 the exploded view from Figure 2. So this is
8 showing the opposite surface of the electrode
9 14.

10 So my question a few questions ago is
11 would you agree that this surface shown in
12 Figure 3A, the surface of electrode 14, is the
13 surface that contacts the top of the
14 trapezoid-shaped leaf spring 62?

15 Is that correct?

16 MR. EVERTON: Object to form.

17 THE WITNESS: So what 14 -- in
18 Figure 3A what the 14 is pointing to appears to
19 be the inner surface of the electrode, and in
20 Figure 2 it's showing that when things are
21 assembled, that the top portion of the trapezoid
22 that in another figure we outlined in red would

1 be contacting the underportion of 14.

2 BY MR. BISENIUS:

3 Q. Would you agree that the surface --

4 A. Or if I can just add: or the inner
5 surface of 14.

6 Q. Would you agree that the inner surface
7 of electrode 14 shown in Figure 3A is [garbled]?

8 A. I'm sorry. I didn't hear the last
9 word.

10 Q. Sorry. Would you agree that the inner
11 surface of electrode 14 shown in Figure 3A is
12 flat?

13 MR. EVERTON: Object to form.

14 THE WITNESS: So as it's drawn -- shown
15 in 3A, the electrode inner surface and in this
16 embodiment appears flat.

17 BY MR. BISENIUS:

18 Q. So, when assembled, would you agree
19 that the top flat surface of the leaf spring 62
20 contacts the interior flat surface of the
21 electrode 14?

22 MR. EVERTON: Object to form.

1 THE WITNESS: I'm looking at Figure 2,
2 and, when assembled, the top portion of the
3 trapezoid of 62 would be in contact with the
4 inner surface of electrode 14.

5 BY MR. BISENIUS:

6 Q. As we discussed earlier, you've
7 identified that the top of the trapezoid-shaped
8 leaf spring 62 is also a pad.

9 Is it your opinion that this pad of the
10 leaf spring 62 detects an electrical signal from
11 the user's contact with the exterior of the
12 electrode 14?

13 MR. EVERTON: Object to form.

14 THE WITNESS: So on page 31 of my
15 declaration, just before Section i: "The pad is
16 underneath the exterior surface, and the pad
17 is -- and it's talking about 62 -- and the pad
18 is configured to detect an ECG signal of the
19 user via its contact with electrode 14 located
20 on the exterior surface."

21 BY MR. BISENIUS:

22 Q. In the sentence right before that you

1 say, "The pad of leaf spring 62 is positioned
2 underneath the electrodes/first portion 410b,
3 exterior surface of Markel."

4 Is that a typographical error?

5 A. I'm sorry. Where are you reading from?

6 Q. I'm in paragraph 60, the very end, on
7 page 31.

8 The second sentence on page 31 you say,
9 "The pad of leaf spring 62 is positioned
10 underneath the electrodes/first portion 410b
11 exterior surface of Markel."

12 Since this section is analyzing Mills
13 with respect to the claims, I'm wondering if
14 that's a typographical error?

15 A. Oh, okay. It's the top of page 31.
16 I'm sorry. So let me...

17 Yeah, I'd have to say that that
18 sentence, "The pad of leaf spring 62 is
19 positioned underneath the electrodes/first
20 portion 410b exterior surface of Markel,"
21 appears to be a typo, typographical error.

22 Q. So would you agree that that statement

1 was not intended to be included in this section
2 of your report?

3 MR. EVERTON: Object to form.

4 THE WITNESS: So this section of my
5 report deals only with Mills, and this
6 references Markel. So it's an error.

7 BY MR. BISENIUS:

8 Q. Is it your opinion that the top of leaf
9 spring 62 is surrounded by the housing 12?

10 A. So at the top of page 31: "This pad is
11 pressed against the inner wall of electrode 14
12 in Mills and surrounded by the housing 12 of
13 Mills."

14 Q. So it's your opinion that the top of
15 leaf spring 62 is surrounded by the housing 12
16 of Mills even though it's not in direct contact
17 with the housing?

18 A. It's surrounded by the housing of
19 Mills.

20 Q. Okay. I want to jump ahead to
21 paragraph 86. This is on page 51 of your
22 declaration.

1 At the beginning of paragraph 86 you
2 state, "It would have been obvious to
3 incorporate the pad (leaf spring 62) teachings
4 of Mills into the device of Markel because Mills
5 provides details of internal physical
6 connections on which Markel is silent."

7 Do you see that?

8 A. Yes.

9 Q. And then on the next page, at the end
10 of paragraph 86, the last sentence, you state,
11 "Thus, a POSITA would utilize the leaf spring 62
12 taught by Mills to connect the electrodes 410b,
13 420b of Markel to internal [garbled]."

14 Do you see that?

15 A. I'm sorry. You kind of broke up at the
16 end.

17 Q. In the last sentence of paragraph 86
18 you state, "Thus, a POSITA would utilize the
19 leaf spring 62 taught by Mills to connect the
20 electrodes 410b, 420b of Markel to internal
21 processing components taught by Markel."

22 Do you see that?

1 A. Yes.

2 Q. In your proposed combination of Markel
3 with Mills, how would the leaf spring be
4 positioned to contact the electrode 410b?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So a POSITA would not
7 just look at what's drawn or described in Markel
8 or Mills in making these combinations. They
9 would use what's shown as basic principles, such
10 as a leaf spring, and they would be working with
11 a -- pretty much a design from scratch, and they
12 would have knowledge of various ways to connect
13 electrodes to circuit boards or amplifiers.

14 So that's a design detail that a POSITA
15 would know how to do. They wouldn't just work
16 with what was shown in the diagram in Markel and
17 try to put in exactly what was shown in Mills,
18 the trapezoid leaf spring. They would use these
19 teachings of these elements, such as electrodes
20 on a surface and leaf springs, which are very
21 well known, or very well known in electronic
22 assemblies, and that's how they would combine

1 the two elements.

2 BY MR. BISENIUS:

3 Q. All right. Turning to Mills again,
4 Exhibit 1006, I want to talk some more about
5 Figure 2, the exploded view.

6 A. Okay.

7 Q. The trapezoid leaf spring 62 we were
8 just talking about is shown in this figure;
9 correct?

10 A. Yes.

11 Q. And Figure 2 shows that the leaf spring
12 62 is mounted to a printed circuit board 50; is
13 that correct?

14 A. Did you say "mounted"?

15 Q. "Mounted."

16 A. Yes, it's -- so 62 is mounted or
17 attached to circuit board 50.

18 Q. And earlier we discussed that in
19 addition to that top surface, the trapezoid leaf
20 spring 62 has a bottom surface.

21 It's the bottom surface of the leaf
22 spring that's contacting the circuit board 50;

1 correct?

2 A. Correct.

3 Q. Is the leaf spring 62 embedded in the
4 printed circuit board 50?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So I have not done that
7 analysis in my declaration, so I can't comment
8 on it at this point.

9 BY MR. BISENIUS:

10 Q. So the flat bottom surface of the leaf
11 spring 62 being in contact with the printed
12 circuit board 50 by itself does not necessitate
13 that the leaf spring 62 is embedded in the
14 printed circuit board 50; is that correct?

15 MR. EVERTON: Object to form.

16 THE WITNESS: So I have not done the
17 analysis in my declaration, and so I can't
18 answer it at this time.

19 BY MR. BISENIUS:

20 Q. All right. Let's talk about the Markel
21 reference again, so Exhibit 1005, and I'm going
22 to start with paragraph 45.

1 Let me know when you get to
2 paragraph 45.

3 A. Yeah, I'm there.

4 Q. This paragraph is discussing Figure 4
5 of Markel that we were previously discussing
6 with respect to your declaration; correct?

7 A. Okay. I see Figure 4, yeah.

8 Q. Does paragraph 45 of Mills provide any
9 details on the physical configuration of the
10 first electrode located at region 410b?

11 MR. EVERTON: Object to form.

12 THE WITNESS: Can you repeat your
13 question again, please.

14 BY MR. BISENIUS:

15 Q. Does paragraph 45 of Mills provide any
16 details on the physical configuration of the
17 first electrode located at region 410b?

18 A. Did you say "Mills"?

19 Q. Sorry. Markel.

20 A. Okay.

21 Q. I'll repeat the question.

22 Does paragraph 45 of Markel provide any

1 details on the physical configuration of the
2 first electrode located at region 410b?

3 A. Does it provide details of what?

4 Q. The physical configuration --

5 A. Okay.

6 Q. -- of the electrode located at region
7 410b.

8 A. So this paragraph just describes
9 electrode locations.

10 Q. Does it describe anything about the
11 shape of the electrode at region 410b?

12 A. It doesn't get into any details about
13 electrode geometries or sizes.

14 Q. Can you identify any portions of Markel
15 that provide details on the physical
16 configuration of the first electrode located at
17 region 410b?

18 MR. EVERTON: Object to form.

19 THE WITNESS: So in paragraph 5 [sic]
20 it says that it can be placed on or molded into
21 region 410b.

22

1 BY MR. BISENIUS:

2 Q. So it's talking about the location of
3 the electrode at region 410b but not talking
4 about the physical shape; is that correct?

5 MR. EVERTON: Object to form.

6 THE WITNESS: So in paragraph 42 it
7 says that it could be a push button, scroll
8 button, volume control button, et cetera.

9 BY MR. BISENIUS:

10 Q. Moving on from paragraph 45 to
11 paragraph 46, this paragraph is discussing
12 Figure 5 of Markel; is that correct?

13 A. Correct.

14 Q. Jumping ahead to paragraph 58, this
15 paragraph is discussing Figure 10 "in accordance
16 with various aspects over the present
17 invention."

18 Do you see that?

19 A. Yes.

20 Q. So is it fair to say that Figure 10 is
21 describing aspects of the mobile communication
22 device that would be applicable in the

1 embodiment of Figure 4?

2 MR. EVERTON: Object to form.

3 MR. BISENIUS: I can reframe that.

4 Q. Do you believe that the descriptions in
5 Markel with respect to Figure 10 are describing
6 aspects of the mobile communication device that
7 would be applicable to Figure 4?

8 MR. EVERTON: Objection to form.

9 BY MR. BISENIUS:

10 Q. So you're taking quite a few minutes
11 here.

12 Do you have an answer, sir, to the
13 question?

14 A. I thought I answered this, basically, a
15 while ago, and I'm looking for it in Markel
16 where it says that, you know, this figure
17 covers -- or that block diagram covers the
18 embodiments in Figures 1 through 9 or something.
19 That's what I'm looking for, and I'm...

20 Q. We can move on.

21 Turning to paragraph 61, Markel begins
22 to discuss Figure 11, stating that it depicts

1 "an exemplary computer system 1100, including a
2 computer 1110 and an exemplary general-purpose
3 user interface device 1120."

4 Do you see that?

5 A. Yes.

6 Q. So would you agree that in this
7 paragraph Markel has transitioned from
8 describing mobile communication device
9 embodiments to describing embodiments involving
10 a general-purpose computer?

11 MR. EVERTON: Objection to form.

12 BY MR. BISENIUS:

13 Q. Well, moving ahead to paragraph 63,
14 here Markel describes that Figures 12 to 15 give
15 examples of "the user interface device 1120."

16 Do you see that?

17 A. Yes.

18 Q. And, as I just mentioned, at
19 paragraph 61 it describes that the user
20 interface device 1120 is part of the computer
21 system 1100.

22 So is it fair to say that Figures 12

1 to 15 are directed towards the same embodiment
2 as Figure 11?

3 MR. EVERTON: Objection to form.

4 THE WITNESS: Like I said before, I
5 thought there was a similar question asked
6 earlier, and I pointed to a section in Markel
7 where it said it -- you know, this covered all
8 these -- Figures, I think, 1 to 10 or something.

9 Is there a way to call that back?

10 Because I'm looking for that again, and it's
11 just -- I'm not finding it.

12 BY MR. BISENIUS:

13 Q. Well, can we at least agree that in
14 paragraph 61 Markel discloses that the user
15 interface device 1120 is part of Figure 11 and
16 then later in paragraph 63 discloses that that
17 same user interface device 1120 is also part of
18 the discussion in Figures 12 to 15?

19 Is that correct?

20 A. So I can see, you know, in paragraph 61
21 it says Figure 11 is a diagram illustrating an
22 exemplary computer system 1100. So it's

1 exemplary. And the discussion in -- that refers
2 to Figure 11 has occasional references to
3 Figure 12 to 15. I can see that.

4 Q. Figure 11 and Figure 12 are both on the
5 same page in Markel.

6 A. I see that.

7 Q. In these examples --

8 A. Can --

9 Q. I'm sorry. Go ahead.

10 A. Yeah. Can we take a -- maybe after
11 this question, take a break?

12 MR. BISENIUS: Well, we can take a
13 break now.

14 Shall we meet back at fifteen after the
15 hour?

16 THE WITNESS: Okay. Sounds good.

17 MR. EVERTON: Sounds good.

18 THE WITNESS: Thank you.

19 (Recess from 3:03 p.m. to
20 3:16 p.m. EST.)

21 BY MR. BISENIUS:

22 Q. Okay. So we're talking about

1 Figures 11 and 12 of Markel. These figures are
2 showing examples of a general-purpose computer,
3 such as a laptop computer or desktop computer,
4 with peripheral devices such as a monitor, a
5 keyboard and a mouse; is that correct?

6 MR. EVERTON: Objection to form.

7 THE WITNESS: Yeah, I'm not sure if you
8 were reading from one of the paragraphs.

9 BY MR. BISENIUS:

10 Q. Well, these paragraphs -- it starts --
11 Markel starts describing these at paragraphs 61,
12 62 and 63, but I'm really just asking about
13 what's shown in the figures.

14 Would you agree that the examples shown
15 here, one example that's being shown is a laptop
16 computer, and another example that's being shown
17 is a desktop computer with peripheral devices of
18 a monitor, a mouse and a keyboard?

19 MR. EVERTON: Objection to form.

20 THE WITNESS: I see from paragraph 62,
21 for example, referring to Figure 11, that it
22 might -- it's a computer system that may

1 characterize -- it may be a desktop computer,
2 laptop, notebook, et cetera.

3 Also, could I go back to a question
4 before the break?

5 BY MR. BISENIUS:

6 Q. Sure.

7 A. So it's actually in -- I found what I
8 was looking for. It's in paragraph 61.

9 And so it's saying that the user
10 interface device 1120, for example, "shares
11 various characteristics with the exemplary
12 mobile communication devices, and portions
13 thereof, illustrated in Figures 1 to 10 and
14 discussed previously."

15 Q. So I want to talk about the examples in
16 Figure 12 specifically. Figure 12 -- the
17 discussion of Figure 12 starts with
18 paragraph 74.

19 So this is showing examples of the
20 computing device of Figure 11, and it includes a
21 laptop computer and desktop computer; is that
22 correct?

1 A. So 74 refers to Figure 12. I believe
2 you said it's 11.

3 Q. Yes.

4 But would you agree that Figure 12 is
5 giving examples of the computing system of
6 Figure 11?

7 A. I don't see that discussed in Markel.
8 Am I missing something?

9 Q. Well, paragraph 61 starts to discuss
10 Figure 11, including the computer 1110 and the
11 user interface device 1120. Then later, in
12 paragraph 63, it says that Figures 12 through 15
13 are providing examples.

14 A. So you refer to the following
15 discussion but generally refer to Figure 11 with
16 occasional references to Figures 12 through 15?

17 Q. Correct.

18 A. Okay.

19 Q. So would you agree that in paragraph 74
20 Markel is indicating that Figure 12 is showing
21 examples of a desktop computer having peripheral
22 devices, such as a monitor, a mouse and a

1 keyboard?

2 A. Yeah, I see that in paragraph 74.

3 Q. And then looking at Figures 13, 14 and
4 15, these are showing specific examples of the
5 keyboard, mouse and monitor; is that correct?

6 A. So, yeah, I see 13 is a computer
7 keyboard, 14 is a computer mouse, and 15 is a
8 display device.

9 Q. So is it fair to say that the -- that
10 what's about being shown in Figure 15 is a
11 monitor for a desktop computer?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So paragraph 78 says
14 Figure 15 illustrates an exemplary computer
15 display device 1500.

16 BY MR. BISENIUS:

17 Q. But would you agree that Figure 15 is
18 showing a stand-alone display reference?

19 MR. EVERTON: Objection to form.

20 THE WITNESS: It just says it's a
21 exemplary computer display device.

22

1 BY MR. BISENIUS:

2 Q. Turning back to Figure 12 on the right
3 side here, this shows a display device 1222
4 that's separate from the computer; is that
5 correct?

6 A. So Figure 12 shows what appears to be a
7 display device 1222 that's separate from
8 computer 1220.

9 Q. So turning back to Figure 15 and the
10 discussion of Figure 15 in paragraph 78, does
11 Markel ever describe this display as being
12 integrated into a computing device?

13 MR. EVERTON: Objection to form.

14 BY MR. BISENIUS:

15 Q. The description in Figure 15 is fairly
16 short.

17 All I'm asking is does Markel describe
18 the display device of Figure 15 as being
19 integrated into a computing device?

20 MR. EVERTON: Objection to form.

21 THE WITNESS: In paragraph 79 in
22 Markel, you know, though not illustrated here,

1 it's referring back to Figures 1 to 10, which
2 includes Figure 4.

3 BY MR. BISENIUS:

4 Q. It's referencing Figures 1 to 10 in
5 paragraph 79 but referring to other user
6 interface devices described with respect to
7 those figures, such as a headset or earpiece; is
8 that correct?

9 A. It's talking about "the user interface
10 may comprise characteristics of a headset or
11 earpiece."

12 Q. So this still does not contain any
13 discussion of the display device at Figure 15
14 being integrated into a computing device; is
15 that correct?

16 MR. EVERTON: Object to form.

17 THE WITNESS: So Markel says that,
18 yeah, Figure 15 is an exemplary computer display
19 device.

20 BY MR. BISENIUS:

21 Q. I'm going to turn to the '257 patent.
22 This is Exhibit 1001.

1 A. Okay.

2 Q. Can you please turn to Column 10,
3 line 24.

4 I would like you to read that paragraph
5 to yourself and let me know when you're done.

6 A. Okay. I'm done reading it.

7 Q. About halfway through this paragraph it
8 states "one or more leads can be embedded in or
9 adjacent to the housing."

10 Does the term "embedded in" have the
11 same meaning or a different meaning than the
12 term "embedded adjacent to"?

13 MR. EVERTON: Objection to form.

14 THE WITNESS: So I haven't analyzed
15 this in my declaration, so I can't comment on it
16 at this time.

17 BY MR. BISENIUS:

18 Q. Would you at least agree that this
19 sentence indicates that a lead that is embedded
20 adjacent to the housing is somehow different
21 from a lead that is embedded in the housing?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: Yeah, I think I lost --
2 this is in the '257?

3 BY MR. BISENIUS:

4 Q. Yeah.

5 A. Can you repeat your question, please.

6 Q. Would you agree that a lead that is
7 embedded in the housing would be different from
8 a lead that is embedded adjacent to the housing?

9 MR. EVERTON: Objection to form.

10 THE WITNESS: I'd have to analyze that
11 in terms of the meaning of "embedded." I can't
12 answer it at this time.

13 BY MR. BISENIUS:

14 Q. You provided a construction for the
15 term "embedded" in your report; correct?

16 A. Yes.

17 Q. Did you analyze this portion of the
18 '257 patent in formulating your construction of
19 the term "embedded"?

20 MR. EVERTON: Objection to form.

21 THE WITNESS: So, in looking at my
22 declaration and the -- on page 17 for the term

1 "embedded," I don't see any reference to
2 Column 10, line 24.

3 BY MR. BISENIUS:

4 Q. So you did not consider this disclosure
5 in the '257 patent when formulating your
6 construction of the term "embedded"; is that
7 correct?

8 MR. EVERTON: Objection to form.

9 THE WITNESS: So my declaration at
10 Section 44 I use from the '275 patent [sic].

11 BY MR. BISENIUS:

12 Q. I think that a typo. I think you meant
13 the '257 patent there.

14 A. Yes, I'm sorry. The '257 patent I
15 used -- all my references are from Column 9.

16 Q. So did you analyze what it means for a
17 lead to be embedded in the housing as opposed
18 for the -- to the lead being embedded adjacent
19 to the housing in formulating your construction
20 of the term "embedded"?

21 MR. EVERTON: Objection to form.

22 THE WITNESS: So I used Figures 4A, 4B

1 in forming the meaning for "embedded."

2 BY MR. BISENIUS:

3 Q. In paragraph 44 you cite to Column 9,
4 lines 22 to 24.

5 That sentence reads in full, "Lead 422
6 can be embedded along the outer surface of bezel
7 410 such that lead 422 is exposed to the user
8 during use."

9 In forming your --

10 A. I'm sorry. I'm a little behind you.

11 Sorry.

12 Q. Okay.

13 A. So which sentence are you talking
14 about?

15 Q. You cited to Column 9, line 22, and
16 that sentence -- the sentence that starts at
17 line 22 reads, "Lead 422 can be embedded along
18 the outer bezel 410 such that lead 422 is
19 exposed to the user during use."

20 A. Okay.

21 Q. So this sentence includes the term --
22 the phrase "embedded along."

1 When forming your construction of the
2 term "embedded," did you consider any
3 differences between the term "embedded along"
4 and the term "embedded in"?

5 MR. EVERTON: Objection to form.

6 THE WITNESS: So my analysis in
7 paragraph 44 is on the term "embedded."

8 BY MR. BISENIUS:

9 Q. So you did not contemplate any
10 distinctions between the term "embedded in" and
11 the term "embedded along"?

12 MR. EVERTON: Objection to form.

13 THE WITNESS: So I analyzed it in terms
14 of the meaning for "embedded."

15 BY MR. BISENIUS:

16 Q. I want to turn to Column 13 of the
17 '257 patent, and specifically I'm looking at
18 Claim 12.

19 Claim 12 depends from Claim 1; is that
20 correct?

21 A. That's correct.

22 Q. And, as we earlier discussed, Claim 1

1 requires a first pad embedded in a first portion
2 of the enclosure; is that correct?

3 A. That's correct.

4 Q. All right. I want to go back to your
5 declaration -- your declaration at
6 paragraph 104.

7 I guess we're getting towards the end
8 of the day.

9 A. Yeah, I'm at 104.

10 Q. You're addressing the Markel-Mills
11 combination with respect to Claim 12 here; is
12 that correct?

13 A. Correct.

14 Q. In this paragraph you state that
15 "Markel provides an example of a display with
16 electrodes on a border of the display in
17 Figure 15."

18 Do you see that?

19 A. Yes.

20 Q. What portion of Markel's Figure 15 are
21 you mapping to the claimed [garbled]?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: So the electrode may be
2 disposed on a border of the display, that is,
3 the bezel.

4 BY MR. BISENIUS:

5 Q. You've identified a number of
6 electrodes in Figure 15.

7 Is it your opinion that those
8 electrodes are embedded in the bezel of the
9 display device shown in Figure 15?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: My declaration says that
12 Markel states that an electrode may be disposed
13 on a border of the display.

14 BY MR. BISENIUS:

15 Q. So as we discussed quite a bit today
16 Claim 1, on which Claim 12 depends, requires
17 that -- a first pad that is embedded in a first
18 portion of the enclosure.

19 So are you mapping the electrodes that
20 you've identified in Figure 15 to the claimed
21 first pad?

22 MR. EVERTON: Objection to form.

1 THE WITNESS: I don't get into those
2 details in my declaration at Claim 12.

3 BY MR. BISENIUS:

4 Q. Are you mapping the electrodes that
5 you've identified in Figure 15 of Markel to the
6 claimed first portion of the enclosure?

7 MR. EVERTON: Objection to form.

8 THE WITNESS: My declaration doesn't go
9 into those details at Claim 12 analysis.

10 BY MR. BISENIUS:

11 Q. Can you identify anywhere in your
12 declaration where you have mapped any portion of
13 Claim 15 -- sorry. Let me start over.

14 Can you identify anywhere in your
15 declaration where you have mapped any portion of
16 Figure 15 of Markel to the claimed first portion
17 of the enclosure or the claimed first pad?

18 A. I missed one thing in there. It was
19 Claim 12 -- oh, Claim 12 -- Figure 15 in
20 Claim 12; is that --

21 Q. Yeah, can you identify anywhere in your
22 declaration where you have mapped any portion of

1 Figure 15 to either the claimed first portion of
2 the enclosure or the claimed first pad?

3 MR. EVERTON: Objection to form.

4 THE WITNESS: I don't go into those
5 details in Claim 12 of my declaration.

6 BY MR. BISENIUS:

7 Q. Earlier when we were talking about
8 Markel, we discussed that what's shown in
9 Figure 15 is a visual display for a computing
10 device; correct?

11 A. Sorry. I'm getting lost with my
12 documents.

13 Q. It might be helpful to look at
14 paragraph 78 of Markel.

15 A. Okay. So now, paragraph 78 of Markel
16 says that "Figure 15 is a diagram illustrating
17 exemplary computer display device 1500."

18 Q. In your declaration, have you provided
19 any analysis as to how a POSITA would combine
20 the display device of Figure 15 with the
21 cellular phone of Figure 4?

22 MR. EVERTON: Object to form.

1 THE WITNESS: So in paragraph 99 of my
2 declaration at the bottom of page 61, so it
3 shows Figure 1 of Markel, and the display is
4 highlighted.

5 BY MR. BISENIUS:

6 Q. But this is a different display than
7 that shown in Figure 15; correct?

8 A. Well -- so we'll get to that.

9 So in it Markel says that an electrode
10 may be integrated or embedded into a touchscreen
11 display, and an example is shown in Figure 15
12 below.

13 Q. I'm going to jump ahead to
14 paragraph 114 of your declaration.

15 A. I'm sorry. Can you repeat the
16 paragraph.

17 Q. 114.

18 A. 114.

19 Q. Here you're analyzing the Markel-Mills
20 combination with respect to what you've
21 identified as Limitation 15[c(i)]; correct?

22 A. Correct.

1 Q. What component of the Markel-Mills
2 combination are you mapping to the claimed first
3 lead?

4 MR. EVERTON: Object to form.

5 THE WITNESS: So in paragraph 115 it
6 says, "Markel discloses a first electrode placed
7 on or molded into the region 410b."

8 BY MR. BISENIUS:

9 Q. Is it your opinion that that electrode
10 at the region 410b provides the claimed first
11 lead?

12 A. Yeah, so at the top of page 75 is
13 annotated Figure 20 from Markel, and it shows
14 the first electrode or pad is the first lead.

15 Q. Okay. I'm going to jump back to
16 paragraph 44 of your declaration that we were
17 just discussing.

18 Here you've reproduced Figures 4A and
19 4B from the '257 patent; correct?

20 A. Yeah, Figures 4A and 4B annotated from
21 the '257 are there.

22 Q. Is it your opinion that Figure 4B of

1 the '257 patent shows a bezel with an embedded
2 lead?

3 MR. EVERTON: Object to form.

4 THE WITNESS: Figure 4B shows embedded
5 lead 472.

6 BY MR. BISENIUS:

7 Q. Is it your opinion, though, that the
8 lead 472 is embedded into the bezel 460?

9 MR. EVERTON: Object to form.

10 THE WITNESS: So just reading from my
11 paragraph 44 of my declaration, "Figure 4B shows
12 embedded lead 472 well positioned against the
13 back [garbled]."

14 (The reporter requested clarification.)

15 THE WITNESS: So quoting from my --
16 paragraph 44 of my declaration, "Figure 4B shows
17 embedded lead 472 well positioned against the
18 back surface of the bezel 460."

19 BY MR. BISENIUS:

20 Q. So you describe the lead as an embedded
21 lead 472. I'm asking you what you believe that
22 it's embedded in.

1 Is it your opinion that the lead 472 is
2 embedded in the bezel 460?

3 MR. EVERTON: Objection to form.

4 THE WITNESS: So I didn't do that in my
5 analysis in my declaration, so I can't answer
6 that now.

7 BY MR. BISENIUS:

8 Q. So you have no opinion about whether or
9 not the lead 472 is embedded in the bezel 460?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: I just state in my
12 declaration it's an embedded lead.

13 BY MR. BISENIUS:

14 Q. All right. I'm going to turn to
15 paragraph 87 of your declaration.

16 Can you take a moment to read that
17 paragraph and let me know when you're ready.

18 A. Okay.

19 Okay.

20 Q. This paragraph's [garbled] discussing
21 the Markel-Mills combination; correct?

22 A. You said it's discussing the

1 Markel-Mills combination?

2 Q. Yeah, my question is, is this paragraph
3 [garbled] portion of your report that discusses
4 the Markel-Mills [garbled]?

5 A. I'm sorry. You're kind of breaking up
6 there.

7 Q. Is this -- is paragraph 87 in the
8 section of your declaration that discusses the
9 Markel-Mills combination?

10 A. Yes, it is.

11 Q. Is it your opinion that the first half
12 of this Markel-Mills combination is embedded in
13 the enclosure?

14 MR. EVERTON: Objection to form.

15 THE WITNESS: So it says, "Once
16 incorporated into the internal components of
17 Markel, the leaf spring 62 of Mills would be
18 embedded in the housing."

19 BY MR. BISENIUS:

20 Q. Is it your belief that the leaf spring
21 is embedded in the housing because it's placed
22 underneath the exterior surface material of the

1 enclosure and against an inner wall of the
2 exterior surface material?

3 A. It's embedded in the housing of Markel
4 because it's top pad portion is placed
5 underneath an exterior surface material and
6 against an inner wall of the exterior surface
7 material.

8 Q. Has a court ever precluded you from
9 offering an opinion?

10 MR. EVERTON: Objection to form.

11 THE WITNESS: I'm not sure about your
12 question.

13 BY MR. BISENIUS:

14 Q. Are you aware of any rulings from a
15 court that precluded you from offering an
16 opinion?

17 A. You mean a court told me I couldn't
18 opine on something?

19 Q. Or the court either excluded all or a
20 portion of your opinion.

21 A. Would that be, for example, like, a
22 Daubert opinion?

1 Q. Or any expert opinion that you've
2 submitted in a court proceeding.

3 Have you ever had all or a portion of
4 one of your opinions excluded?

5 A. I'm not sure, but I don't believe so.

6 Q. As far as you're aware, has a court
7 ever criticized one of your opinions?

8 A. I don't believe so.

9 MR. BISENIUS: All right. No further
10 questions.

11 MR. EVERTON: Okay. Can we take maybe
12 a ten-minute break so I can look over my notes,
13 and then we can come back on?

14 MR. BISENIUS: Sounds good.

15 MR. EVERTON: Okay.

16 THE WITNESS: Okay.

17 (Recess from 3:58 p.m. to
18 4:13 p.m. EST.)

19 MR. EVERTON: Masimo doesn't have any
20 questions for the witness at this time, so I
21 think that ends the deposition.

22 MR. BISENIUS: Well, thank you

1 everybody for your time today.

2 (Whereupon, at 4:13 p.m. EST
3 the deposition of ALAN OSLAN was
4 adjourned.)

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15 Witness my hand this 12th day of January,
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1 Alan Oslan, c/o
KNOBBE MARTENS OLSON & BEAR, LLP

2 2040 Main Street, 14th Floor
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4 Date of deposition: January 12, 2024
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