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

MASIMO CORPORATION,

Petitioner,

U.S. Patent

10,076,257

APPLE INC.,

Patent Owner.

Page 1

Deposition of ALAN L. OSLAN, taken in the above-captioned cause, remotely via Zoom, before Rachel F. Gard, CSR, CCR, RPR, CRR, Notary Public, commencing at the hour of 10:00 a.m. Eastern on Friday, July 12, 2024.

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Page 4
                            (Witness sworn.)
 1
 2
      WHEREUPON:
                        ALAN L. OSLAN,
 3
      called as a witness herein, having been first duly
 4
      sworn, was examined and testified as follows:
 5
 6
                       CROSS-EXAMINATION
 7
      BY MR. BISENIUS:
          O All right. We are here today regarding
 8
      IPR proceeding IPR 2023-00745 regarding U.S.
9
      Patent No. 10,076,257.
10
             Is there any reason that you cannot give
11
      truthful and accurate testimony today?
12
13
          A No, there is not.
          Q To ensure clarity, I will define a few
14
15
      terms that will be used throughout this
      deposition.
16
17
             When I use the terms "petitioner" or
      "Masimo," I'm referring to Masimo Corporation, the
18
      petitioner in this proceeding.
19
             Do you understand?
20
          A Yes, I do.
21
          Q When I use the term "Apple" or patent
22
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Page 5
      owner, I'm referring to Apple Inc.
 1
             Do you understand?
 2
          A Yes, I do.
 3
          Q When I use the term "'257 patent," I'm
 4
      referring to U.S. Patent No. 10,076,257 titled
 5
 6
      Seamlessly embedded heart rate monitor.
 7
             Do you understand?
          A I understand that.
 8
          Q When I use the phrases "this IPR" or "this
 9
      proceeding, " I'm referring to proceeding number
10
      IPR2023-00745 filed against the '257 patent.
11
12
             Do you understand?
13
          A I understand that.
          Q When I use the acronym "POSITA," I'm
14
15
      referring to a person of ordinary skill in the art
      at the time of the alleged invention.
16
17
             Do you understand?
18
          A Yes, I do.
          Q How does a capacitive touch sensor work?
19
20
          A So I'd like to look at my fourth
      declaration.
21
22
                  (Exhibit Number 1069.)
```

Page 6 That would be Exhibit 1069, correct? 1 I'm not sure of the exhibit numbers. 2 Ι think it's titled Fourth Declaration. 3 That should be at the download link. 4 provided the download link to your counsel. 5 A Okay. All right. Okay. Can you repeat 6 7 the question, please? O How does a capacitive touch sensor work? 8 A So in Exhibit 1069, paragraph 342 on 9 page 16, and so sensor pad 122 is a portion of 10 capacitive sensor 116 and detects changes in 11 12 capacitants on the pads 122 specifically when a 13 user touches bezel with a fingertip, it can sense various electrical properties of the human body. 14 15 (Exhibit Number 1068.) 16 Q And in this paragraph, you're discussing 17 the Lyons reference, which is Exhibit 1068; is 18 that correct? A Yes, that's correct. Lyons, Exhibit 1068. 19 20 Q Let's turn to that exhibit, and I'd like 21 to start at Figures 1 and 2 of Lyons. A Okay. Okay. So you mentioned Figures 1 22

Page 7 and 2 of Lyons? 1 2 O Correct. A Okay. I'm there. 3 Q Can we agree that what's being shown here 4 in Figures 1 and 2 is a watch? 5 6 A So I see in the abstract of Lyons, it does 7 say a watch device. O What portion of this watch is the bezel? 8 A So the bezel is referred to as item 114 in 9 Figures 1 and 2. 10 O What characteristics of item 114 make this 11 12 the bezel to the watch? MR. EVERTON: Objection to form. 13 A So I'm relying on Lyons calling it a 14 15 bezel. I didn't do any further analysis on that. Q So you have no opinion on what 16 17 characteristics of the bezel 114 make it a bezel; 18 is that correct? MR. EVERTON: Objection. Form. 19 So in -- well, it's in Lyons. But in my 20 declaration, Exhibit 1069, page 17, in footnote 2, 21 now, Lyons describes that the bezel 114 and/or the 22

- 1 sensor 116 may be comprised of two C-shaped
- 2 regions positioned on either side of display 110
- 3 and comprised of two or more curvilinear segments
- 4 based around the display 110 or the like.
- 5 Q So is it your opinion that the fact that
- 6 the bezel is comprised of two C-shaped regions
- 7 positioned on either side of the display 110 is
- 8 what makes it a bezel?
- 9 MR. EVERTON: Objection to form.
- 10 A So I didn't do an analysis. But one thing
- 11 that Lyons mentions is that it's -- the bezel is
- 12 spaced -- surrounding display 110 or the like.
- 13 Q I'd like to move forward to paragraph 120
- of Lyons.
- 15 A Okay.
- 16 Q This paragraph is describing a, quote,
- touch sensitive sensor 116, end quote, of the
- 18 device; is that correct?
- 19 A It says as shown in Figures 3 through 6, a
- 20 ring-shaped touch-sensitive sensor 116 is disposed
- 21 beneath the bezel 110.
- 22 Q What types of user inputs is the sensor

- 1 116 capable of detecting?
- 2 A So in Exhibit 1069, paragraph 342, sensor
- 3 pad 122 is a portion of capacitive sensor 116 and
- 4 detects changes in capacitives on the pad,
- 5 specifically when a user touches the bezel with a
- 6 fingertip and can sense various electrical
- 7 properties of the human body for determining
- 8 contact with the user.
- 9 I'm sorry. You're on mute.
- 10 Q Sorry. Can the sensor 116 detect a user's
- 11 cardiac signal?
- 12 A Can you repeat the question again, please?
- 13 O Can the sensor 116 detect a user's cardiac
- 14 signal?
- 15 A So the purpose of using Lyons is not so
- 16 much for its actual function, it's the structural
- 17 placement of the sensor pad -- actually, sorry, a
- 18 reading from Exhibit 1069, paragraph 343, it says:
- 19 A POSITA would have combined Markel and the
- 20 structural placement of the sensor pad in Lyons.
- 21 O So is it --
- 22 A Because Lyons -- I'm sorry. Because Lyons

- 1 explicitly states that a sensor placement may be
- 2 applied to other types of sensors.
- 3 Q So is it true that in Lyons' disclosure,
- 4 sensor 116 cannot detect a user's cardiac signal?
- 5 MR. EVERTON: Objection to form.
- A So again, the use of Lyons is not to rely
- 7 on the function of the sensor pad. It's to rely
- 8 on the structure of placing the sensor pad under a
- 9 bezel.
- 10 Q That's not quite the question I was
- 11 asking.
- 12 In Lyons' disclosure, can the sensor 116
- detect a user's cardiac signal?
- MR. EVERTON: Objection to form.
- 15 A So further down in paragraph 343, it's
- 16 actually on page 18: Therefore, Lyons' sensor pad
- 17 placement on the inner surface of the bezel is not
- 18 limited to capacitive sensors. Its teachings
- 19 regarding electrical placement may also apply to
- other sensors, such as Markel's conductive
- 21 electrodes.
- 22 Q But is there any disclosure in Lyons

- 1 itself that the sensor 116 can detect a user's
- 2 cardiac signal?
- 3 MR. EVERTON: Objection to form.
- 4 A There might be, but I did not do that
- 5 analysis. I just relied on the structure in
- 6 Lyons.
- 7 Q I'd like to move to paragraph 26 of Lyons.
- 8 Can you please read that paragraph to yourself and
- 9 let me know when you're done.
- 10 A Okay. Okay. I'm done reading it.
- 11 Q This paragraph is disclosing details about
- the sensor 116; is that correct?
- 13 A So it talks about sensor 116 might
- 14 comprise a capacitive sensor, et cetera.
- 15 Q This paragraph describes the sensor 116
- 16 as, quote: A capacitive sensor capable of
- 17 detecting single presses, including tap and/or
- 18 press-and-hold presses, end quote. Is that
- 19 correct?
- 20 A That's what it says in paragraph 26.
- 21 Q When the user touches the sensor 116, is
- the user's finger electrically connected to the

- 1 sensor pad 122?
- 2 A Could you repeat the question, please?
- 3 Q When the user touches the sensor 116, is
- 4 the user's finger electrically connected to the
- 5 sensor pad 122?
- A So reading from my fourth declaration,
- 7 Exhibit 1069, paragraph 342, and taking parts from
- 8 Lyons, so the capacitive sensor 116 detects
- 9 changes in capacitants on the pad specifically
- when the user touches the bezel with a fingertip
- 11 and can sense various electrical properties of the
- 12 human body for determining contact with the user.
- 13 Q That's not quite my question.
- My question is: When the user touches the
- sensor 116, is there a direct electrical
- 16 connection between the user's finger and the
- 17 sensor pad 122?
- MR. EVERTON: Objection to form.
- 19 A So for my declaration, I did not do that
- 20 particular detailed analysis because I was just
- 21 relying on the structure that's shown in Lyons and
- 22 not the function.

- 1 Q Is it true that the sensor pad 122 is
- 2 electrically isolated from the user's finger when
- 3 the user touches the sensor 116?
- 4 A So in Exhibit 1069, paragraph 342 on
- 5 page 18, so different Lyons sensor pad placement
- on the inner surface of the bezel is not limited
- 7 to capacitive sensors. Its teachings regarding
- 8 electrode placement may apply to other sensors,
- 9 such as Markel's conductive electrodes.
- 10 Q That wasn't exactly my question.
- 11 What I was asking is in Lyons' disclosure,
- is it true that the sensor pad 122 is electrically
- isolated from the user's finger when the user
- touches the sensor 116?
- MR. EVERTON: Objection to form.
- 16 A I'm sorry. Could you just repeat the
- 17 question one more time?
- 18 Q Is it true that the sensor pad 122 is
- 19 electrically isolated from the user's finger when
- the user touches the sensor 116?
- 21 A So again, based on what's in paragraph 343
- of Exhibit 1069, you know, it could be capacitive

- 1 or it could be conductive.
- 2 Q Can you show me a disclosure in Lyons that
- describes it as being a conductive sensor rather
- 4 than a capacitive sensor?
- 5 A So in paragraph 343 of Exhibit 1069, so
- 6 quoting from Lyons, paragraph 27: While the
- 7 capacitive flex sensor is shown specifically in
- 8 the drawing and discussed herein, it is
- 9 contemplated other touch-based sensor
- 10 technologies, for example, resistive may be
- 11 utilized.
- 12 Q Would a resistive sensor include direct
- 13 electrical connection between the user's finger
- 14 and the sensor?
- 15 A It might, but I did not do that analysis.
- 16 Q Going back to the capacitive sensor of
- 17 Lyons, how does the capacitive sensor 116
- described by Lyons detect a user's touch?
- 19 A So in paragraph 342 of Exhibit 1069,
- 20 capacitive sensor 116 -- well, sensor pad 122 is a
- 21 portion of capacitive sensor 116 that detects
- 22 changes in capacitants on the pads 122

- 1 specifically when a user touches the bezel with a
- 2 fingertip.
- 3 Q How does the capacitive sensor described
- 4 by Lyons detect a change in capacitants?
- 5 A So I did not do that analysis in my
- 6 report. I was only relying on the structures
- 7 shown in Lyons, not functions.
- 9 the sensor 116 change the capacitants on the pads
- 10 122?
- 11 A So in Exhibit 1069, paragraph 342 again,
- when the user touches the bezel with a fingertip,
- it can sense various electrical properties of the
- 14 human body for determining contact with the user.
- 15 Q But that's not exactly my question.
- 16 What I was asking is: How does contact of
- the user's finger with the sensor 116 change the
- 18 capacitants on the pads 122?
- MR. EVERTON: Objection to form.
- 20 A So I did not do that analysis in my
- 21 report. I was only relying on the structure shown
- in Lyons, not the functions.

- 1 Q I'd like to move ahead to paragraph 27 of
- 2 Lyons. Can you please read that paragraph to
- 3 yourself and let me know when you're done.
- 4 A Okay.
- 5 Okay. I'm done reading paragraph 27 in
- 6 Lyons.
- 7 Q At one point this paragraph states, quote:
- 8 The capacitants around the successive sensor pads
- 9 122 is changed by the user's fingertip as his or
- 10 her fingertip slides around the circumference of
- 11 the bezel 114.
- 12 Do you see that?
- 13 A Yes.
- 14 Q How does motion of the user's fingertip
- 15 cause the capacitants around successive sensor
- 16 pads 122 to change?
- 17 A So I did not do that analysis in my
- 18 declaration. I only relied on the structure of
- 19 the bezel and the sensor pad in Lyons, not the
- 20 function.
- 21 Q So sitting here today, you can't actually
- 22 describe how the capacitive sensor in Lyons

Page 17 functions; is that correct? 1 2 MR. EVERTON: Objection to form. A Well, I did not do the analysis in my 3 report, but I could do that given time. And 4 again, I merely used Lyons for the structure shown 5 6 between the bezel and the sensor pad and not the 7 function. O Can you describe some differences between 8 a capacitive sensor and a direct contact sensor? 9 10 A So I did not do that analysis in my report, so I cannot answer that at this time. 11 merely relied on the structural elements or 12 13 structural construction in Lyons. (Exhibit Number 1075.) 14 15 O I'd like to now turn to the Larson 16 reference, which is Exhibit 1075 in this 17 proceeding. It should be in the download link. 18 A Okay. Okay. I have -- yeah, I have Larson, Exhibit 1075, open there. 19 20 Q Can you please read the abstract on the 21 front page to yourself and let me know when you're 22 finished.

- 1 A Okay. I'm done reading the abstract of
- 2 Larson.
- 3 Q This paragraph describes that in a
- 4 capacitive sensor, a dielectric material is
- 5 positioned over a metal layer to electrically
- 6 isolate the user's finger from the metal layer
- 7 when the user touches the device; is that correct?
- 8 A So I see that the sentence in the
- 9 abstract, the second electrode consists of a metal
- 10 layer on which is placed a dielectric material and
- 11 when the finger is placed on top of the dielectric
- 12 material, a capacitor is formed in the electric
- 13 signal, the finger is transferred to the metal
- layer.
- 15 Q Would you agree that a POSITA would know
- 16 that a dielectric material is nonconductive? I
- 17 think this is a fairly straightforward question.
- 18 Would a POSITA understand that a dielectric
- 19 material is conductive or nonconductive?
- 20 A I just wanted to see if I had anything in
- 21 my report on this, but ... so a POSITA would
- 22 understand that a dielectric could be considered a

- 1 resistive-type material.
- 2 O Would a dielectric be a resistive
- 3 material, or would it be a nonconductive material?
- 4 MR. EVERTON: Objection to form.
- 5 A So a POSITA would understand that the
- 6 terms "resistive" and "nonconductive," they're on
- 7 a spectrum and, depending on the particular
- 8 application at hand, you know, what the resistive
- 9 value is, it would be considered conductive or
- 10 resistive.
- 11 Q If you were to design a capacitor that had
- 12 a resistive but not completely nonconductive
- 13 material between the two plates of the capacitor,
- would the capacitor function correctly?
- MR. EVERTON: Objection to form.
- 16 A So it's an analysis that I did not do in
- 17 my declaration and that I could do given the time,
- 18 so I can't answer that question on the spot here.
- 19 Q Can you describe the typical construction
- of a generic capacitor?
- 21 MR. EVERTON: Objection to form.
- 22 A So it's not something I did in my

- declaration, so I can't opine on that on the spot
- 2 right now.
- 3 Q You can't opine as to what the structures
- 4 of a typical capacitor are --
- 5 MR. EVERTON: Objection.
- 6 Q -- off the top of your head?
- 7 A I could but not on the spot here. It's
- 8 not something that I included specifically in my
- 9 declaration.
- 10 Q For the second electrode described in the
- 11 abstract here, is there a direct electrical path
- 12 from the user's finger to the metal layer in this
- 13 sensor?
- 14 A Can you repeat the question again, please?
- 15 O For the second electrode described in the
- 16 abstract of Larson, is there a direct electrical
- 17 path from the user's finger to the metal layer in
- 18 the sensor?
- 19 A So it says the electric signal on the
- 20 finger is transferred to the metal layer.
- 21 Q But is there a direct electrical -- sorry.
- 22 But is there a direct electrical path from the

- 1 user's finger to the metal layer?
- 2 MR. EVERTON: Objection to form.
- 3 A So other than what's explicitly stated in
- 4 Larson that the signal on the finger is
- 5 transferred to the metal layer, I did not do that
- 6 analysis in my declaration so I can't opine on
- 7 that on the spot.
- 8 O Can you please turn to column 1, line 60
- 9 of Larson? I'd like you to read that paragraph to
- 10 yourself and let me know when you're done.
- 11 A Okay. Okay. I'm done.
- 12 Q This paragraph describes that in a
- 13 capacitive sensor, a dielectric material is placed
- over a metal material and that it functions such
- that, quote, the body acts as one plate and the
- 16 metal material as the second plate of a capacitor,
- 17 end quote. Is that correct?
- 18 A Yes. It says at line 65: The body acts
- as one plate and the metal material as the second
- 20 plate of the capacitor.
- 21 Q So this is describing that the user's
- 22 finger or another portion of their body is

- 1 separated from the metal material by the
- 2 dielectric material; is that correct?
- 3 A Can you repeat the question, please?
- 4 Q So in this paragraph, Larson is describing
- 5 that the user's finger or another portion of their
- 6 body is separated from the metal material by the
- 7 dielectric material; is that correct?
- A Again, it says: The body acts as one
- 9 plate and the metal material is the second plate
- of a capacitor, and it includes a metal material
- 11 to which is attached a dielectric material.
- 12 Q But due to the positioning of the
- dielectric material over the metal material, that
- 14 would cause the dielectric material to separate
- the user's body from the metal layer; is that
- 16 correct?
- 17 A So if there was a dielectric material over
- 18 the metal material, then a finger placed on the
- 19 dielectric material would be physically separated
- 20 from the dielectric.
- 21 Q Would you agree that due to the placement
- 22 of the dielectric material over the metal

- 1 material, the user's body is electrically isolated
- 2 from the metal material?
- 3 A So in this particular configuration of a
- 4 capacitive electrode, it might be.
- 5 Q Can you please move forward to column 3 of
- 6 Larson, at line 27. I'd like you to read this
- 7 paragraph to yourself and let me know when you're
- 8 done.
- 9 A Okay. It's a long paragraph, so ... okay.
- 10 I'm done.
- 11 Q This paragraph describes a capacitive
- 12 sensor 16; is that correct?
- 13 A Actually, I kind of lost where that
- 14 paragraph is. Can you repeat it again, please?
- 15 Q Yeah. Column 3, line 27.
- 16 A Okay. All right. Repeat your question,
- 17 please.
- 18 Q Yeah. This paragraph describes a
- 19 capacitive sensor 16; is that correct?
- 20 A It says electrode 16 is a capacitive-type
- 21 electrode.
- 22 Q And this paragraph describes that the

- 1 capacitive sensor 16 includes an external
- 2 dielectric material that the user contacts and
- 3 that the dielectric material positioned over a
- 4 conductive material; is that correct?
- 5 A It says starting at paragraph -- or
- 6 line 44: The dielectric material is facing the
- 7 outside of monitor 10 and covers the conductive
- 8 material.
- 9 Q So would you agree that the dielectric
- 10 material separates the user's body from the
- 11 conductive material?
- 12 A Can you repeat the question, please?
- 13 Q Would you agree that the dielectric
- 14 material separates the user's body from the
- 15 conductive material?
- 16 A So the dielectric material is on the
- 17 outside and it covers the conductive material and
- if the person's finger was touching the
- 19 dielectric, there would be a dielectric between
- 20 the finger and the conductive material.
- 21 Q Where is the electrode 16 positioned in
- 22 Larson's device?

- 1 A So Exhibit 1069, paragraph 344, Larson
- teaches electrode 16, a capacitive-type electrode,
- 3 embedded adjacent to a display screen in a device.
- 4 Q Can you please turn to Figure 1 of Larson?
- 5 A Okay.
- 6 Q Reference numeral 18 is identifying a
- 7 display screen in Figure 1; is that correct?
- A Let me just double-check. So Larson
- 9 refers to item 18 as a display.
- 10 Q And both the display screen 18 and
- 11 electrode 16 are positioned on a front face of the
- 12 watch; is that correct?
- 13 A So looking at Figure 1, it appears that
- 14 display 18 and electrode 16 are on the front face
- of a watch device.
- 16 Q So would you agree that the electrode 16
- is not positioned in a bezel of Larson's device?
- 18 A Can you repeat the question again, please?
- 19 Q Would you agree that the electrode 16 is
- 20 not positioned in a bezel of Larson's device?
- 21 A So my declaration does not rely on Larson
- 22 to show an electrode in the bezel of the device.

22

Taheri?

Page 26 In paragraph 344 of Exhibit 1069, so starting --1 although Lyons' sensor is a capacitive touch 2 sensor, capacitive ECG sensors were known for 3 several decades prior to the '257 patent as 4 evidenced by Larson. 5 6 And Larson teaches electrode 16, a 7 capacitive-type electrode embedded adjacent to a display screen in a device. Therefore, it is my 8 opinion that a POSITA would have seen the 9 10 teachings related to capacitive sensors, capacitive ECG sensors, and conductive sensors as 11 familiar items, and a POSITA would have been able 12 13 to fit the teachings of these patents together like pieces of a puzzle. 14 15 MR. BIENIUS: Off the record. 16 (A short break was taken.) 17 (Exhibit Number 1076.) 18 Q All right. Next I'd like to talk about the Taheri reference, which is Exhibit 1076. 19 20 A Okay. I have it open. 21 Q Can you please turn to Figure 12 of

- 1 A Okay.
- 2 Q Looking at Figure 12 of Taheri, what
- 3 portion of the display sensory component 1200 does
- 4 the user contact?
- 5 A So my fourth declaration, Exhibit 1069,
- 6 paragraph 344, top of page 19, so -- which
- 7 illustrates an ECG electrode with a metallic
- 8 contact 1202 that is exposed to the skin 1208.
- 9 Q Would you agree that the sensory component
- 10 1200 of Figure 12 in Taheri is a capacitive
- 11 sensor?
- 12 A So again, from Exhibit 1069, starting
- 13 right at the end of 18, for example, a POSITA
- would have known that capacitive ECG electrodes
- may have a metallic layer such as a metal bezel
- 16 provided on their outermost surface. This is
- 17 taught by Taheri.
- 18 Q So you agree that the sensory component
- 19 1200 in Figure 12 is a capacitive sensor; is that
- 20 correct?
- 21 A So it's a capacitive ECG electrode, and
- this particular one is shown with a metallic

- 1 layer.
- 2 Q Figure 12 of Taheri shows a dielectric
- 3 layer positioned between the metallic contact 1202
- 4 and the metallic contact 1206; is that correct?
- 5 A Yes, I see in Figure 12, dielectric 1204
- 6 is between metallic contact 1 1202 and metallic
- 7 contact 2 1206.
- 9 require some sort of dielectric material
- 10 positioned between the underlying metal layer and
- 11 the user's skin?
- MR. EVERTON: Objection to form.
- 13 A Could you repeat the question, please?
- 14 Q Is it fair to say that capacitive sensors
- 15 require some sort of dielectric material
- 16 positioned between the underlying metal layer and
- 17 the user's skin?
- 18 A So what you described might be a type of
- 19 capacitive electrode.
- 20 Q Can you identify any examples in Taheri
- 21 that disclose a metallic layer positioned under
- 22 the surface of the device that do not also include

Page 29 a dielectric layer positioned over the underlying 1 2 metallic layer? A So I have not done that analysis for 3 Taheri to form an opinion at this time. 4 Q But in the example that you did identify 5 6 in Figure 12, there is a dielectric layer over the 7 lower metal layer; is that correct? So Figure 12 shows the dielectric 1204 8 between metallic contact 1 1202 and metallic 9 10 contact 1206. (Exhibit Number 1074.) 11 12 Q I'd like to turn to the Rytky reference, which is Exhibit 1074. 13 A Okay. Okay. I have Rytky open. 14 15 Q Can you please turn to Figures 10 and 11? 16 Okay. Α 17 O Would you agree that these figures show electrode pads attached to the skin of a user? 18 A Can you repeat the question, please? 19 20 Would you agree that Figures 10 and 11 show electrode pads attached to the skin of a 21 22 user?

- 1 A So paragraph 75 of Rytky shows Figure 10
- and describes sensors 922A and 922B whereby the
- 3 flexible film structure is lightly set against the
- 4 skin.
- 5 Q In Figure 10, sensors 922A and 922B are
- 6 shown as connected by wires to a belt-worn device;
- 7 is that correct?
- 8 A So in paragraph 77 of Rytky, it says:
- 9 Then the electric signal induced in the sensors
- 922A, 922B is applied from the sensors 922A, 922B
- 11 to the transmitter unit 928, for instance, by
- means of transfer conductor films 924A, 924B.
- Q Can you please turn to paragraph 46 of
- 14 Rytky and read that paragraph to yourself and let
- me know when you're done.
- 16 A Okay. I'm sorry. Can you repeat -- I was
- 17 just finding the figure that it refers to.
- 18 Q Oh, yeah. Paragraph 46.
- 19 A Okay. I'm done reading paragraph 46.
- 21 Rytky in your most recent declaration?
- 22 A Let me see. So I see in paragraph 347 of

- 1 Exhibit 1069, I do refer to paragraph 46.
- 2 Q Paragraph 46 of Rytky is describing an
- 3 electrode area 208 of Rytky's electrode; is that
- 4 correct?
- 5 A So Rytky refers to 208 as the electrode
- 6 area.
- 7 Q This paragraph states in the last
- 8 sentence, quote: Conducting material may be
- 9 provided between the surface of the skin and the
- 10 electrode area, end quote.
- 11 Do you see that?
- 12 A I see that as the last sentence of
- paragraph 46, yes.
- 14 Q Does Rytky provide any description of what
- 15 material or materials would be used for this
- 16 conducting material?
- 17 A Rytky may have provided information about
- 18 the conducting material, but I don't have that in
- 19 my report.
- 20 Q Does Rytky provide any description of a
- 21 physical shape for this conducting material?
- 22 A Rytky may have provided information on the

- 1 shape, but I don't have that in my analysis.
- 2 Q Does Rytky include any description of this
- 3 conductive material forming a portion of an
- 4 enclosure of a device?
- 5 A Rytky may have something about it forming
- 6 an enclosure of a device, but I did not include
- 7 that in my analysis.
- 9 type of conductive material for use with ECG
- 10 electrode pads that a POSITA would have been aware
- 11 of?
- 12 A Can you repeat the question again, please?
- 13 Q Would electrode gel be an example of a
- 14 type of conductive material for use with ECG
- 15 electrode pads a POSITA would have been aware of?
- 16 A So a POSITA would have been aware that
- 17 electrode gel material may be one type of
- 18 conductive material that could be used.
- 19 Q Would an electrically conductive adhesive
- 20 have been an example of the type of conductive
- 21 material for use with ECG electrode pads that a
- 22 POSITA would have been aware of?

- 1 A So a POSITA might have been aware of an
- 2 actual -- I'm sorry. How did you describe it
- 3 again?
- 4 O Conductive adhesive.
- 5 A A POSITA might have been aware of a
- 6 conductive adhesive.
- 7 Q Can you please turn to paragraph 6 of
- 8 Rytky and read that to yourself and let me know
- 9 when you're done.
- 10 A Okay. I'm done reading it.
- 11 Q This paragraph discloses that the
- 12 electrode area is part of a flexible film
- 13 structure of a sensor system; is that correct?
- 14 A So I see it says sensor system comprises
- 15 at least one flexible film structure.
- 16 Q And the electrode area is part of that
- 17 flexible film structure; is that correct?
- 18 A Can you repeat the question, please?
- 19 Q The electrode area is part of the flexible
- 20 film structure; is that correct?
- 21 A So the structure in Figure 2B of Rytky and
- looking at paragraph 42, so the whole structure

- 1 200B is a film structure. It might be flexible.
- 2 Q But in paragraph 6, it's describing that
- 3 the electrode area is part of a flexible film
- 4 structure; is that correct?
- 5 A Yeah, so it might be a flexible film
- 6 structure.
- 7 O And Rytky as a whole describes this as
- 8 being a film structure that adheres to a patient;
- 9 is that correct?
- 10 MR. EVERTON: Objection to form.
- 11 A Can you repeat the question, please?
- 12 Q In paragraph -- sorry.
- Rytky as a whole is describing that the
- 14 electrode area is part of a film structure that
- adheres to the patient; is that correct?
- MR. EVERTON: Object to the form.
- 17 A So I don't see anything in Rytky that says
- 18 the structure adheres.
- 19 Q So looking back at Figures 10 and 11 that
- 20 we discussed earlier, do you believe there's a
- 21 relationship between the sensors 922A and 922B
- shown in those figures and the flexible film

Page 35 structure having the electrode area shown in the 1 earlier figures? 2 A Can you repeat the question, please? 3 Q Looking at these sensors in -- sorry. 4 Looking at Figures 5 -- sorry. I'll start 5 6 over. 7 Looking at Figures 10 and 11, and specifically the sensors 922A and 922B in those 8 figures, do you believe that there's a 9 10 relationship between those sensors and the flexible film structure having the electrode area 11 12 shown in the earlier figures? MR. EVERTON: Objection to form. 13 A There might be a relationship, but I 14 15 didn't do that analysis in my report, so I can't opine on that at this time. 16 I'd like to return to your most recent 17 declaration, Exhibit 1069. 18 19 A Okay. 20 Q Specifically paragraph 347. 21 A Okay. Q You're discussing Rytky in this paragraph; 22

- 1 is that correct?
- 2 A Correct, yeah. 347 discusses Rytky.
- 3 Q At the end of this paragraph, you've
- 4 included an altered version of Figure 2A of Rytky
- 5 in which you've drawn a layer you've identified
- 6 as, quote, additional conducting material, end
- 7 quote; is that correct?
- 8 A That's correct. Paragraph 347 shows an
- 9 additional conducting material in Figure 2A of
- 10 Rytky.
- 11 Q Is it correct that this layer of
- 12 additional conducting material is not shown in the
- original Figure 2A of Rytky?
- 14 A The sentence above that diagram says:
- 15 Conductive material added between the surface of
- 16 the skin and Rytky's electric conductive layer
- 17 206, a pad could have been configured as shown
- 18 below with the dashed lines indicating the added
- 19 layer. So that's an added layer to Figure 2A.
- 20 Q So the layer labeled as additional
- 21 conducting material does not appear in the
- original Figure 2A of Rytky; is that correct?

- 1 A Yeah, that has been added to Figure 2A to
- 2 show that it could have been configured with that
- 3 added layer.
- 4 Q Is it possible that this additional
- 5 conducting material positioned on the external pad
- 6 206 could be electrode gel or a conductive
- 7 adhesive?
- 8 MR. EVERTON: Objection to form.
- 9 A It could be, but I have not done that
- 10 analysis.
- 11 Q Do you believe that the pad 206 is
- 12 embedded in the additional conducting material in
- 13 your altered version of Figure 2A?
- MR. EVERTON: Objection to form.
- 15 A I have not done that analysis in my
- 16 report, so I can't opine on that at this time.
- 17 MR. BISENIUS: All right. We have no
- 18 further questions.
- 19 MR. EVERTON: Okay. Yeah, Masimo does not
- 20 have any questions for this witness.
- 21 (Witness excused, 11:31 a.m. Eastern.)

22

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1	CERTIFICATE
2	
3	I, RACHEL F. GARD, RPR, CCR, CRR, CSR No.
4	084-3324, No. 9315, No. 1010, a Certified
5	Shorthand Reporter in and for the States of
	Illinois, Michigan, Nevada at large, do hereby
6	certify that ALAN L. OSLAN, the deponent herein,
	was previously duly sworn to tell the truth, the
7	whole truth, and nothing but the truth in the
	aforementioned matter;
8	That the foregoing deposition was taken on
	behalf of Patent Owner on the 12th day of July,
9	2024, at 10:00 a.m. Eastern, pursuant to the
	applicable rules;
10	That said deposition was taken down in
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12	testimony given by the said deponent; and that
13	signature was requested by the deponent and all
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14	That the parties were represented by their
	counsel as aforementioned.
15	I do further certify that I am a disinterested
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16	relative or attorney of either party or otherwise
	interested in the event of this action, and that I
17	am not in the employ of the attorneys for any
	party.
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	IN WITNESS WHEREOF, I have hereunto set my
19	hand and affixed my seal on this 12th
20	day of July, 2024.
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22	
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