

RECORD OF ORAL HEARING
U.S. PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner
v.
MASIMO CORPORATION,
Patent Owner.

Case IPR 2024-00294
Patent 10,736,507 B2

Oral Hearing Held: May 22, 2025

Before RICHARD H. MARSCHALL, DAVID COTTA, and
ALYSSA A. FINMORE, Administrative Patent Judges.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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Ted Cannon, Brian Classen, and Doug Wentzel. And virtually
attending are Matthew Ruth and Paul Spiel.

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The above-entitled matter came on for hearing Thursday,
May 22, 2025, commencing at 1:00 p.m., at the U.S. Patent and
Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P-R-O-C-E-E-D-I-N-G-S

(1:02 p.m.)

JUDGE COTTA: Okay. All right. Good afternoon.

This is the final hearing in IPR 2024-00294 regarding U.S. Patent Number 10,736,507. The Petitioner is Apple Inc. Patent Owner is Masimo Corporation. This hearing is open to the public and a full transcript of the hearing will be made part of the record.

I'm Judge Cotta. With me are Judges Marschall and Finamore.

Let's start with appearances. Counsel for Petitioner, could you please identify yourself and your colleagues for the record?

MR. RENNER: Sure, Your Honor. Good afternoon. Karl Renner on behalf of Petitioner Apple. I'm joined today by Fish & Richardson colleagues Andrew Patrick, Rick Bisenius, and Grace Kim. And also by Apple representatives, Natalie Pous and Tucker Terhufen.

JUDGE COTTA: Okay. Thank you. And Counsel for Patent Owner, could you please identify yourself and your colleagues for the record?

MR. NELSON: Yes. This is Philip Nelson for Masimo, Knobbe Martens Olson & Bear. With me in the room are Ted Cannon, Brian Classen, and Doug Wentzel. And virtually attending are Matthew Ruth and Paul Spiel.

JUDGE COTTA: Okay. Thank you. So the argument will proceed as set forth in our hearing order. Each side will have 90

1 minutes to make their argument. We look forward to the party's
2 presentations today, but before we get there, I'd like to cover a few
3 points.

4 First, as I mentioned earlier, the hearing is open to the
5 public. So please be aware that we have provided a public access line
6 for the public to watch or at least listen in on the hearing. Second, for
7 clarity of the record, please mute your microphone when not speaking.

8 Third, we have access to the entire record, including demonstratives.
9 So when you refer to a demonstrative, a paper, an exhibit, please do so
10 by slide or page number and then pause a few seconds so we have
11 time to find it. Finally, for both parties, if you experience any
12 technical issues, because we're conducting this argument by video,
13 please let us know, wave your hand, speak up, or if that's not possible,
14 contact one of the team members at PTAB who's been assisting you
15 with setting up today's hearing.

16 Before we begin, I also have two housekeeping issues
17 that I'd like to address. First, there's a pending motion to strike in this
18 proceeding. We are not going to rule on that motion today, but we
19 will address it in our final written decision. We're not going to hear
20 separate argument on that motion, but the parties should feel free to
21 address the motion to strike in the 90 minutes of argument time that
22 they've been allotted if they feel that would be useful.

23 The second housekeeping issue relates to Exhibit 2039,
24 which is a video exhibit that was filed by Patent Owner. We've tried
25 to watch the video, but we've been unable to get it to download. So at

1 some point in the next few days, I would ask Patent Owner to work
2 with our technical team and try and make the video accessible to the
3 panel, either by breaking it down into smaller videos or changing the
4 file format, or whatever it takes so that it can be played. I will say that
5 I have been on cases where we have had video exhibits before, so I
6 know it is possible to make them playable.

7 I will also add that I think the Panel is familiar enough
8 with the video from the party's descriptions and from screen captures
9 to understand the arguments that have been presented. That said, if
10 either party has the ability to share their screen and they want to play
11 the video, either before or during the argument, because they think it'll
12 clarify the argument, they're welcome to do so. And if you do so, at
13 least for the first time through, we will not count the playing time
14 against your argument.

15 MR. NELSON: Thank you very much. We'll be happy
16 to do that.

17 JUDGE COTTA: Thank you. Having addressed those
18 preliminary matters, I think we're almost ready to begin. As I
19 mentioned before, each side has 90 minutes for argument.

20 Petitioner, you'll go first because you bear the burden of
21 showing un-patentability. Would you like to reserve any time for
22 rebuttal?

23 MR. RENNER: Yes, please, Your Honor. We'll reserve
24 20 minutes.

1 JUDGE COTTA: Okay. You can begin whenever you're
2 ready.

3 MR. RENNER: May it please the Board, Karl Renner on
4 behalf of Petitioner Apple. At the outset, I'd like to thank Your
5 Honors for the extended 90 minutes that we have today. There's a
6 great number of issues that are involved in this dispute and time
7 permitting, my colleague, Rick Bisenius is looking to address those,
8 walking through them, using the order that's outlined in the Slides 2 to
9 3 for your convenience.

10 But before he begins, I wanted to, given the great number
11 of issues that are here, call attention to just two issues in particular and
12 highlight a couple items with respect to them. One deals with the
13 original claims and the other with the amendments that are pursued by
14 that pending revised motion to amend. And I'll address this in reverse
15 order for just a moment.

16 That revised motion to amend has several problems that
17 we'll not address here at the opening that deal with the merits. For
18 instance, there are issues of indefiniteness and obviousness that you're
19 going to hear from Rick on and that are outlined in the -- the case and
20 -- and even the mapping of the claim elements of newly introduced
21 into the record and the lack of support there. But there's actually also
22 a related fatal defect that you're going to hear about. And I wanted to
23 call that to the attention in particular. And that is the failure relating
24 to the threshold showing that's necessary for support of a motion to
25 amend, of the specification support for claims, and Masimo itself has

1 identified a great number of new elements that are introduced by those
2 motion to amend claims.

3 For instance, for Claim 21, which is a replacement of
4 Claim 13, it indicates as many as 16 new elements, but for that claim
5 and for others alike, Masimo's motion provides really nothing more
6 than a single string cite to a variety of places into the specification and
7 four figures, 22 paragraphs, I think I counted. That'll be shown by
8 Rick in great detail. This is consistent with each of the claim elements
9 and we offered authority to Masimo and -- and the record
10 demonstrating how this approach is not just disfavored, but one that
11 has been rejected as insufficient, leaving the Board and the parties to
12 try to hunt and find what might be -- might be support. There was no
13 further detail in response. And this is just one of the reasons that Rick
14 is going to outline that that motion should be denied. But I wanted to
15 call that one in particular since the threshold to attention.

16 The other item, returning to the original claims, has to do
17 with some claim language appearing in Claims 1 and 13 -- 1B and
18 13A as it's identified in the briefing. And the language in play is one
19 or more signals responsive to light from a light source attenuated by
20 tissue of the user. And while the parties, they agree that this language
21 should be interpreted based on the plain and ordinary meaning of
22 those words that are recited, the parties do in fact disagree regarding
23 what interpretation should really be applied here.

24 Rick's going to step through each party's position. But as
25 he does, I'm going to ask for particular attention to the interpretation

1 that has been offered by Masimo, their approach to this. Because
2 Rick is going to detail how Masimo's approach, this claim language, it
3 would've -- it would have Your Honors introduce unrecited details
4 into what we think are unambiguous terms. Terms that we've all
5 agreed are, in fact, subject to plain ordinary meaning.

6 An example of that is the injection of a requirement for
7 the recited signals that is the subject of the term, to be subject to some
8 pre-processing while remaining foreclosed from other pre-processing.
9 And this, despite the absence of any claim language speaking to pre-
10 processing in general.

11 Well, with the time short, I just wanted to highlight those
12 two issues because there are a great number of things that Rick's going
13 to be stepping through. And I'll ask Rick now to join and -- and start
14 walking through if Your Honors --

15 JUDGE COTTA: Thank you.

16 MR. BISENIUS: Good afternoon, Your Honors. I'd like
17 to start at Petitioner Slides, Slide 6. This is an overview of the pulse
18 oximetry system of the '507 Patent. On the right side, we have Figure
19 1A. On the left of Figure 1A, it starts with a sensor 110. And now I
20 want to point out that the '507 Patent uses the term sensor 110 to refer
21 to the entire finger clip assembly. The term sensor 110 does not refer
22 to only a photo diode or a photo detector, but the entire assembly, the
23 entire finger assembly. That sensor 110 is connected to a processing
24 module 130, which contains the claimed processing board. And the

1 processing module is connected to a smartphone 160, which provides
2 the claimed mobile computing device.

3 In Figure 1A, these connections are shown as being
4 cables 120 and 140, but the specification of '507 Patent makes clear
5 that these cables could be replaced by a wireless communication
6 between those three different elements.

7 Skipping ahead a few slides to Slide 11, we have an
8 overview of the primary reference in all of the grounds of this
9 proceeding, the Mendelson reference. And we can see on the right
10 side here, Mendelson has a sensor module, which reads on the claim
11 sensor, and the receiver module, which reads on the claim processing
12 board. And we can see the board, the processing board, in that figure.

13 Turning to Slide 12, the top rectangle here represents the
14 sensor module of Mendelson. And I want to be clear on how we're
15 reading this on the claims. We are reading the entire sensor module
16 onto the claim sensor. This is clear from pages 10 to 11 of the
17 petition. We are not reading only the photo diode on the left side of
18 the claim sensor, but rather the entire sensor module onto the claim
19 sensor, and as such, the one or more signals that are output by the
20 sensor, the sensor module here, are the signals output by the PCV
21 antenna on the right side.

22 Turn to Slide 13. On the right here, we have
23 Mendelson's PDA, which reads on the claim mobile computing
24 device. There is not really any dispute with respect to the PDA here,
25 and so we won't be talking about the PDA all that much.

1 Turning to Slide 15. I want to talk to an issue that my
2 colleague, Karl Renner, alluded to; what we believe is the most
3 pertinent issue in this proceeding. Claim construction that the -- what
4 we're referring to is the one or more signals element. Here we have
5 13A, but there's a similar recitation in Claim 1. And here it recites,
6 "Outputting from an optical sensor of an SpO2 measurement system,
7 one or more signals responsive to light from a light source attenuated
8 by tissue of the user at a measurement site, said one or more signals
9 responsive to an oxygen saturation of said tissue."

10 A few things I want to point out about this claim element.
11 First off, notice that it recites optical sensor, it doesn't recite photo-
12 detector or a photodiode, or more broadly, an optical sensor. A
13 specification of a '507 Patent makes clear this is a broad term. For
14 example, in Column 4 of the '507 Patent at the paragraph starting at
15 Line 9, it states, "The sensor 110 can be a pulse oximeter capable of
16 being secured to a digit such as a finger, for example, the Masimo
17 rainbow pulse oximeter." That paragraph then goes on to give
18 numerous other examples of different configurations for the sensor.
19 So here, the optical sensor is not limited to strictly only a photodiode,
20 but rather the entire sensor assembly.

21 The other terminology I want to discuss is the highlighted
22 terminology here, "One or more signals responsive to the light from a
23 light source."

24 We believe the plain and ordinary language should apply
25 here and that the word claim terms -- means exactly what it says, one

1 or more signals responsive to light. So one or more signals that
2 respond to a change in the light, the signals change in response to a
3 change in the light. That's all that's required here by Claim 13. We
4 believe the specification supports this.

5 Turning back to Column 4 of the '507 Patent, the
6 paragraph starting at line 46 recites, "In various oximeter
7 embodiments, the sensor 110 provides data in the form of an output
8 signal indicative of an amount of attenuation of predetermined
9 wavelengths, ranges of wavelengths of light by body tissues." So
10 what this is saying is the output signal, all it requires is that it is
11 indicative of an amount of attenuation through the user's tissue.
12 Exactly what the claim language said. One or more signals responsive
13 to light that's been attenuated through the user's tissue. And as we'll
14 discuss, this is exactly what's disclosed by the Mendelson reference.

15 We turn to Slide 16. We see a couple of quotes from
16 Mendelson that we cited in both the Petition and the Petitioner's reply.
17 Mendelson disclosed that the sensor -- the information acquired by
18 the sensor module is transmitted wirelessly being RF linked over a
19 short range to a body-worn receiver module. So the data actually
20 acquired -- the data indicative of the light attenuated through the user's
21 finger.

22 This next quote is discussing the information received at
23 the receiver module and it says, "Signals acquired by the sensor
24 module are received by the embedded microcontroller." That's the
25 embedded microcontroller of the receiver module. It then states that -

1 - that that embedded microcontroller synchronously converts the
2 corresponding PD output to R and IR PPG signals. The term PD here
3 refers to the term photo-detector, so it's expressly telling us the
4 receiver module receives the output of the photo-detector, so it's
5 responsive to the light detected by the photo-detector, and it's the
6 receiver module that converts those to R and IR PPG signals. Exactly
7 what the claim language requires.

8 Skipping ahead to Slide 18, Dr. Kenny, Petitioner's
9 expert, stated that under the plain and ordinary meaning of this claim
10 language, the signals resulting from the system of Mendelson are
11 responsive to light from a light source attenuated by tissue and
12 captured in output by the photo diode.

13 If this were not the case, the PDA of Mendelson would
14 be unable to display SpO2 values.

15 Turn to Slide 19. And we can see in this proceeding,
16 both parties have advocated for the plain and ordinary meaning of this
17 claim term. Petitioner stated in the petition that no claim terms need
18 to be construed. Patent Owner stated in the Patent Owner's response
19 that the Board should give the claims that are ordinary and customary
20 meaning consistent with the specification, as a POSITA would
21 understand them.

22 So looking at both of these statements from the petition
23 and the Patent Owner's response, we see both parties are saying plain
24 and ordinary meaning should apply to the one or more signals term in
25 this proceeding.

1 Turn to Slide 20. We see that Patent Owner has provided
2 a pseudo-construction for the plain ordinary meaning. They state,
3 "The plain and ordinary meaning of one or more signals responsive to
4 light output by the optical sensor refers to data that is actually
5 acquired with the optical sensor." And this is exactly what Mendelson
6 discloses. We talked about these two quotes a few slides ago, but we
7 can see Mendelson states, "The information acquired by the sensor
8 module that is transmitted to the receiver module."

9 Later on it says, "The receiver module receives those
10 signals acquired." It's receiving the actual photo-detector output, and
11 then it converts that photo-detector output to the red and infrared PPG
12 signals.

13 Turning to Slide 22.

14 JUDGE COTTA: Counsel, before you move on, I've got
15 a quick question. I -- I see in the language of Claims 1 and 13 there is
16 language about the optical sensor outputting one or more signals, but I
17 don't see anything about acquiring one or more signals.

18 That said, is there any other source from which the one or
19 more signals could be acquired?

20 MR. BISENIUS: So -- so first off, I want to point out
21 that this language of the signal actually acquired, this is language
22 coming from Patent Owner. We were addressing this based on their
23 pseudo-construction in order to identify that Mendelson meets that
24 pseudo-construction.

1 But to answer your question, it appears that really the
2 only way those signals could be acquired, because they're signals that
3 are responsive to light, would be with the photo-detector. We think
4 that's consistent with the specification of the '507 Patent.

5 But you're correct. There is no language actually saying
6 it needs to be the signals acquired. It just says that there's signals that
7 are responsive to light. We believe this is a broad term. Responsive
8 really just means that it responds to -- it changes in response to a
9 change in that detected light. So there is no requirement that it be the
10 actual signal acquired.

11 And actually, Patent Owner hasn't said that here. They
12 said it just needs to be the data that is actually acquired. And we
13 believe that that's the case here. Mendelson discloses the photo-
14 detector output that is received at the receiver module.

15 But we would -- you know, to answer your question, we
16 don't believe it needs to be construed that narrowly. We believe it's a
17 fairly broad term. The signal just needs to be responsive to that
18 detected light.

19 JUDGE COTTA: And is your position still that we don't
20 need to construe the claims at all?

21 MR. BISENIUS: Correct. We think the plain ordinary
22 claim language here, one or more signals, responsive to light from the
23 light source attenuated by tissue, is straightforward. Responsive is a
24 broad term. And there's no dispute here that there's light attenuated by

1 -- through tissue in Mendelson. There's no dispute here that a photo-
2 detector detects changes in light.

3 The dispute is, can -- is there allowed to be some certain
4 amount of pre-processing? Is it no longer responsive to the light if
5 you do some pre-processing at the sensor module? And our belief is
6 that under the plain ordinary meaning, responsive to light is a broad
7 term, so as long as the signal is changing in response to a change in
8 the light, it means that plain language.

9 JUDGE COTTA: And if we were to accept Patent
10 Owner's claim instruction, would that matter? I mean, particularly
11 given the disclosure in Mendelson with respect to the receiver
12 module, where it says that the receiver acquires the corresponding PD
13 output.

14 MR. BISENIUS: So to answer that question, it really
15 depends on what you mean by accept the Patent Owner's claim
16 instruction, because as we're going to discuss soon, Patent Owner has
17 offered several different framings of this element, and has changed
18 their position throughout the briefing. But if specifically you're
19 referring to what's being shown on Slide 20, the statement from the
20 Patent Owner's response that the plain and ordinary meaning would
21 refer to data that is actually acquired with the optical sensor, in that
22 case, Mendelson fully meets this, because it expressly states the
23 sensor module is sending the information acquired, the data acquired.

24 There's no requirement that that data be in the exact
25 precise format that it's in when it's acquired, just that it's the data

1 acquired. If the data acquired weren't transmitted to the receiver
2 module, there'd be no way for the receiver module to calculate the
3 SpO2 values, as Dr. Kenny testified.

4 Turning to Slide 22. Patent Owner, in the District Court,
5 has said that it is common for sensors to perform pre-processing on
6 signals, that pre-processed signals are responsive to detected light.
7 Dr. Kenny observed that Masimo does not put any constraints on this
8 pre-processing in the joint claim construction brief. And that's true.
9 They said pre-processing is acceptable as long as that signal that's sent
10 out is still responsive to light. In our opinion, changes in response to a
11 change in the light.

12 But if we turn to Slide 21, Masimo is now trying to draw
13 an arbitrary line between pre-processing that at least is acceptable and
14 pre-processing that alleges falls outside the scope of claims.

15 The last box here, they stated that, "Average PPG
16 samples are not data actually acquired with the optical sensor." We
17 have two arguments in response to this assertion by Patent Owner.
18 First off, there's no support in the '507 Patent itself for drawing an
19 arbitrary line between some forms of pre-processing and other forms
20 of pre-processing that involve averaging PPG samples. There's no
21 discussion of averaging the samples in the '507 Patent, and the '507
22 Patent does not draw a line between averaging samples and other
23 forms of pre-processing.

24 But beyond that, if we turn to Slide 23, these are two
25 quotes from Mendelson that I've already discussed at a few different

1 slides, but Mendelson does not disclose averaging of signals.
2 Mendelson, as I pointed out before, this discusses that the information
3 acquired by the sensor module that's transmitted to the receiver
4 module. It's the actual photo-detector output that's received at the
5 receiver module. So there's no averaging of signals in Mendelson.
6 We pointed this out in the Petitioner's reply, and we pointed out that
7 there was no support for drawing this arbitrary line where Masimo
8 had drawn it in the Patent Owner's response.

9 And in response to that, Masimo moved the field goal, or
10 moved the goalpost and decided to come up with another
11 construction. And we've seen this in Slide 26. In their server line, the
12 first time, Masimo has asserted that the one or more signals term
13 requires analog signals actually acquired. This is the first time that
14 they've narrowed it to analog signal actually acquired in their server
15 line. And we see how that differentiates from, in their Patent Owner's
16 response, where they said it's the data that is actually acquired. Data
17 is a broader term than the -- a specific analog signal. It had no
18 requirement for analog signal in their Patent Owner's response. This
19 is an impermissible new argument. And as we identified in the
20 motion to strike, it should not be entertained.

21 But to dig into this a little bit, I want to turn to Slide 27.
22 I want to look at the Patent Owner's response. The term analog is
23 only used twice in the Patent Owner's response. The term digital only
24 appears twice in the Patent Owner's response.

1 Here's the first place they both appear. This is in the
2 background discussion of the '507 Patent, and it's discussing an
3 unclaimed embodiment in which there is both an analog processing
4 board and a digital processing board. No discussion of analog to
5 digital conversion, no discussion of strictly analog signals, and no
6 discussion that somehow digital signals would fall outside the scope
7 of the claim, one or more signals responsive to light.

8 Slide 28. This is the second and last appearance of the
9 terms analog and digital in the Patent Owner's response. And here,
10 the Patent Owner was simply walking through everything that
11 Mendelson's sensor module does. And they stated that, "The photo
12 diode with signals amplified filter to remove ambient light, amplified
13 again, converted from analog to digital by an ADC and received by a
14 microcontroller." There's no statement here that somehow the analog
15 to digital conversion will call -- cause that signal to fall outside the
16 scope of the claims. And then the Patent Owner's response did not
17 draw a line between filtering and amplification and this analog to
18 digital conversion step.

19 And indeed, in the very next paragraph, they tell us why -
20 - their original theory why they felt that Mendelson did not disclose
21 the one or more signals term. They stated, "Mendelson's sensor
22 module does not output data actually acquired with the sensor module.
23 Instead, the sensor module computes and outputs average red and
24 infrared PPG samples to the receiver module." So in the Patent
25 Owner's response, they articulated their averages theory. And as we

1 pointed out, there's no support for that in the specification, and
2 Mendelson does not actually average the signals.

3 Now, Patent Owner is going to get up here and say we're
4 taking this out of context, so I want to give you the full context for
5 this quote.

6 We turn to Slide 29. We have the full paragraph that this
7 second description of analog to digital appears in. And in the first
8 sentence they state, "Mendelson fails to disclose outputting one or
9 more signals responsive to light under the plain meaning of that
10 phrase." This is really just a topic sentence for the whole section,
11 because after this they just start describing what the sensor module
12 does, and this includes their description of the amplification filtering
13 and analog to digital conversion that occurs at the sensor module.

14 In the Patent Owner's response, they never drew a line
15 between the filtering and amplification and the analog to digital
16 conversion, but now in the server line, for the first time ever,
17 impermissibly, it's drawn an arbitrary line between filtering and
18 amplification and analog to digital conversion. This is a new
19 argument that should not be entertained.

20 But beyond the fact that it's new, it's also incorrect. If we
21 turn to Slide 31, the term analog only appears in the '507 Patent
22 specifications six times in two different spots. On the left, we have
23 the first spot where it appears. This is in Column 9. And this is
24 discussion of the unclaimed embodiment in which there are both an
25 analog processing board and a digital processing board. No

1 discussion of analog to digital conversion, no discussion of analog
2 signals, and no discussion that a digital signal will somehow fall
3 outside the scope of claims.

4 On the right side, we have the second place where the
5 term analog appears. This is from Column 19, starting at Line 34. It
6 states, "Although described herein, primarily with respect to digital
7 technology, a processor can also include primarily analog
8 components." So we see here the '507 Patent specifications is
9 actually saying the opposite of what Patent Owner is advocating for.
10 It's saying, sure. We've talked about digital processing a lot, but you
11 know, it could be analog, analog digital. It all falls within the scope
12 of claims unless we expressly state otherwise. And now Patent Owner
13 is asking you to read in a limitation, a limitation that doesn't even
14 appear in the specification, but a limitation they've invented from the
15 ether. Even though the specification makes clear, analog and digital
16 are interchangeable, the plain claim language just says, "one or more
17 signals responsive to light." It doesn't require them to be analog or
18 digital. Just that that signal changes in response to a change in the
19 light.

20 Turning to Slide 33. The last issue I want to address with
21 respect to claim construction for the one or more signals turning, is
22 the alternative differing claim instruction that Petitioner offered in the
23 District Court. But it's entirely permissible and encouraged by the
24 Board for a Petitioner to adopt Patent Owner's District Court claim
25 instruction and advance it in these proceedings. We see this in

1 Western Digital where they stated we agree with Petitioner that 37
2 CFR 104 B 3 does not require a Petitioner to express its subjective
3 agreement. They went on to state that Petitioner's statement in this
4 petition is based on the claim construction urged by the Patent Owner
5 and related to District Court litigation suffices to identify claim
6 construction Petitioner's adopting for purposes of the requested
7 review. That's all the Petitioner has done here.

8 And to be clear, the petition addresses this specific patent
9 because it was asserted by Masimo. And the petition cites here
10 Exhibits 1014, 1015, which show that Masimo is alleging
11 infringement based on the plain and ordinary meaning and a broad
12 interpretation of the plain and ordinary meaning that Apple embraces
13 in this petition. Patent Owner seeks a broad reading of that term for
14 purposes of infringement, and therefore, under that interpretation, that
15 proper, plain, and ordinary meaning, these claims are obvious based
16 on the priority date and the petition demonstratives obviousness based
17 on that understanding.

18 Now, it's true that in the co-pending litigation, Apple has
19 demonstrated that there's an alternative interpretation that is not
20 infringed by the accused product. The -- that argument there is really
21 just hedging because we don't know how the Court in Delaware or
22 how Your Honors are going to ultimately interpret this claim term.
23 We have presented an alternative argument there that if it's interpreted
24 broadly, then it's not infringed. But under the plain and ordinary
25 meaning one or more signals respond to the light really just means the

1 signal changes in response to a change in the light. And that's what
2 Mendelson discloses.

3 If there are no further questions on construction of one or
4 more signals, I'd like to turn to availability of D'Angelo's Prior Art.
5 I'm going to turn to Slide 35. So we see here that the earliest possible
6 priority date for the '507 Patent is September 20th, 2012, and that
7 D'Angelo was presented and distributed at a conference of -- held
8 August 30th through September 3rd, 2011, over one year before the
9 earliest possible priority date of a '507 Patent. And as such D'Angelo
10 is 102(b) prior art and cannot be sworn by.

11 But you don't have to take our word for it. We turn to
12 Slide 36. We went and we asked the IEEE and we received a
13 declaration from Gordon MacPherson, who is the director of board
14 governance and policy development at the IEEE.

15 Turning to Slide 37, we can see that he testified the
16 D'Angelo reference was part of that conference proceedings. The
17 conference was held on August 30th to September 3rd, 2011, and
18 copies of the conference proceedings were made available no later
19 than the last day of the conference. And as such, D'Angelo was
20 distributed to interested parties, practitioners in the area of
21 physiological sensors, and made widely available to the attendees of
22 the conference no later than September 3rd, 2011. And as such, is a
23 102(b) prior art reference.

24 We skipped forward a few slides to Slide 41. Pat Luner
25 had requested to depose Mr. MacPherson, and under a cross

1 examination we asked him: "Based on all of your years" -- is on the
2 right side, Line 13 -- "Based on all of your years of experience, you
3 have any reason to believe that the D'Angelo paper, Exhibit A in your
4 declaration, was not provided by the last day of the 2011 annual
5 conference?" Line 19, he responds: "I don't have a reasonable doubt
6 about it." If we can't believe the IEEE when they tell us when their
7 papers are published, I don't know who we can trust. This is clearly a
8 business rule exception under the hearsay rules and is admissible to
9 demonstrative that D'Angelo was published no later the September
10 3rd, 2011 and is thus 102(b) prioritized.

11 JUDGE COTTA: Counsel, can you tell me what we
12 know about the IEEE conference based on the information of record
13 and how that aligns with the factors in -- that the Federal Circuit has
14 told us that we should be looking at, for example, *In re: Klopfenstein*,
15 which includes -- think the length of time the reference was displayed,
16 the expertise of the target audience, the existence or lack thereof of an
17 expectation that the material would be copied, and the ease with
18 which the material could be copied, as well as any other factors you
19 can think of that might relate to whether this is publicly available?

20 MR. BISENIUS: So this goes beyond some of those
21 cases in which it was a poster or something that was merely displayed
22 at the conference. This was actively distributed as part of the
23 conference proceedings by September 3rd, that all attendees were
24 permitted to take home. There was no restriction on copying of any of
25 that material. And as such, it was actually distributed. It wasn't just

1 displayed for a brief period of time. These attendees were allowed to
2 take it home with no requirement of confidentiality. And this one --

3 JUDGE COTTA: And for that, you're drawing from the
4 MacPherson declaration?

5 MR. BISENIUS: I don't know if the no expectation of
6 confidentiality is actually stated in his declaration, but he does say that
7 the -- it was part of the conference proceedings, the -- where
8 conference proceedings were actually distributed to the attendees.
9 Beyond that, those factors, this particular conference was directed at
10 persons interested in physiological symptoms.

11 Turning to Slide 43, beyond the fact that D'Angelo is
12 102(b) priority cannot be sworn behind, Masimo has also failed to
13 establish an earlier date of invention for the '507 Patent. And we see
14 that on Slide 43 here, the only analysis that they offered in their Patent
15 Owner's response is the statement, "And indeed, the inventions recited
16 in the independent Claims 1 and 13 were reduced to practice by
17 August 31st, 2011." That's it. No comparison of the evidence of
18 earlier invention to the claim terms themselves, no analysis actually in
19 the Patent Owner's response. Rather, just a citation to 48 paragraphs
20 of their expert declaration. And that expert declaration is by an expert
21 who also did not have personal knowledge of earlier date of invention.
22 He himself cites to 17 paragraphs of a second declaration by one of
23 the named inventors. This is clearly an improper incorporation by
24 reference of these arguments, 48 paragraphs worth of arguments from
25 the expert declaration, 17 more additional paragraphs from the named

1 inventor declaration into the POR. And as such, Masimo has failed to
2 establish an earlier date of invention to the '507 Patent.

3 JUDGE COTTA: Counsel, I understand that you're
4 focusing on the -- the one limitation about the processing board that
5 generates the SpO2 measurement. Is there -- and -- and I guess your
6 argument is that the -- the prototype video doesn't show what
7 component is doing what function. Are there other components that
8 are part of the prototype that could be performing that function?

9 MR. BISENIUS: Yes. If we turn the Slide 46, this to a
10 screenshot from the video and it is entirely unclear from the video or
11 the other supporting documents that were provided by the inventor as
12 to where the SpO2 calculation is occurring. That calculation could be
13 occurring at the iPhone machine here. It's possible the calculation
14 could be occurring at some place in the finger sensor as well. Just
15 guessing, it's -- the most likely place would be software operating on
16 the iPhone. But nevertheless, the evidence is unclear to where that
17 calculation happens. And yet the claims themselves are very specific
18 about where that calculation happens. That being said, this argument
19 doesn't appear in the Patent Owner's response. This argument is only
20 articulated in the expert declaration cited to you by the Patent Owner's
21 response.

22 If there are no further questions on earlier date of
23 invention for D'Angelo, I'm going to move ahead to the combination
24 of D'Angelo and Mendelson or -- or Mendelson modified based on
25 D'Angelo.

1 I'd like to start at Slide 49. So we can see here,
2 Mendelson and D'Angelo present two very similar systems. They
3 both have sensors, which we -- on the claim sensor. They both have
4 processing boards. It's also referred to as a receiver module in
5 Mendelson, referred to as a management device in D'Angelo. And
6 they both have mobile computing devices, a PDA in Mendelson and a
7 smartphone in D'Angelo. In the Petition, we have proposed three
8 different modifications of Mendelson based on D'Angelo, but only
9 one of those proposed modifications is really at issue here based on
10 the arguments raised in the Patent Owner's response.

11 Turn to Slide 50, the relevant disclosures of D'Angelo
12 with respect to that proposed modification are highlighted here. The
13 second edition is a connection between the smartphone's power output
14 pin and the management device's charging pin allowing to read out the
15 management device with the smartphone, even when its battery is
16 empty. And we see that charging pin up in the figure on top. And so
17 one of our proposed modifications was we would take this backup
18 power functionality from D'Angelo. And so in situations in which the
19 receiver module of Mendelson had a depleted battery, you'd be able to
20 provide backup power from Mendelson's PDA, now turned into a
21 smartphone, in order to read real time physiological parameter data
22 off the receiver module even if it had a depleted battery.

23 JUDGE COTTA: Counsel, can you address Patent
24 Owner's argument that you wouldn't be motivated to have backup
25 power in -- for, among other things, the reason that Mendelson's

1 device lacks the memory to display data after its battery has been fully
2 drained, after the battery is empty?

3 MR. BISENIUS: Yeah. So with respect to that issue, if
4 we turn to Slide 59, this is just the claim -- language of claims 1 and
5 13. The claims don't require reading back previously-stored
6 information. And so our proposal was that you would use this backup
7 power to power the receiver module, and then the receiver module
8 would operate the way it normally does in conjunction with the sensor
9 module to receive real-time physiological information from the user,
10 and that this would be useful in emergency scenarios. And so --

11 JUDGE COTTA: I understand the claims don't require
12 that, but does your theory as to why these would be combined require
13 for that?

14 MR. BISENIUS: It -- our theory of combination does
15 not require reading out of previously stored information. We're taking
16 this broader suggestion from D'Angelo that, in some scenarios where
17 this intermediate device is -- has a depleted battery, it'd be useful to
18 provide backup power to it. And that's really the only relevant
19 modification here. Once you start providing that backup power to
20 receiver module from the PDA turned smartphone, everything else
21 would operate the same way in the Mendelson device. Mendelson's
22 receiver module would be receiving real-time information from the
23 sensor module. It would process that information into the heart rate
24 and SpO2 values and then provide those values to the PDA turned

1 smartphone. It would all be occurring in real time and would not
2 require any sort of backup storage or memory on the receiver module.

3 Turning back to a few of the other issues that Masimo
4 raised with effective proposed combination. If we can go back to
5 Slide 53, Masimo had alleged that Apple's proposed modification
6 would defeat Mendelson's intended purpose of providing remote
7 monitoring without exposing the first responders to increased risk. So
8 first off, we're not proposing removing any of the remote monitoring
9 capability from Mendelson's system. Under normal operation, when
10 the receiver module does not have a -- a depleted battery, everything
11 in Mendelson's system would stay the same. It would remotely
12 monitor those different receiver modules. This is really just a backup
13 functionality. If a particular patient or user has a depleted battery in
14 the receiver module, Mendelson's PDA would be able to provide
15 backup power to receive real-time physiological measurement data
16 from that receiver module.

17 But if we look at Slide 53, Mendelson also expressly
18 discloses numerous other use cases that are not hazardous combat
19 zones, situations in which a medic would likely be in close physical
20 proximity to the patient being monitored. On the upper left here, we
21 see it states that it has broad and important implications for civilian
22 and military applications. Notice it lists civilian applications first.
23 And then when addressing military applications, it said it would be
24 useful for soldiers during training exercises and combat. So they
25 listed training exercises first, non-hazardous situations, in which it

1 would not be dangerous for a medic to be in close physical proximity
2 to the patient to provide backup power to the receiver module.

3 On the lower left, Mendelson states that, "The system
4 would offer far forward medics numerous advantages, such as
5 continuously tracking the injured condition until they arrive safely at a
6 medical care facility." So in other words, while the patient's being
7 transported. When they're being transported, they would be in close
8 physical proximity to some medic or some caretaker that could use
9 their PDA to provide backup power to the receiver module in
10 scenarios where the receiver module has a depleted battery.

11 On the upper right, once again, it states, "During
12 emergency transport, as they are being moved from a remote location
13 to a hospital, between hospital wards." So another scenario in which a
14 medical professional would be in close physical proximity to the
15 patient.

16 Mendelson also states in the lower right here, "Can be
17 used to monitor soldiers during training exercises," so once again,
18 non-combat scenarios. And that it can be critical in helping to
19 stabilize following a civilian mass casualty. So for example,
20 something like a tornado or a hurricane, after the danger had passed,
21 when it's no longer dangerous for the medic to be in physical -- close
22 physical proximity to the patient, if that particular patient had received
23 a module with a depleted battery, the medic would be able to provide
24 backup power to the receiver module and read the real time
25 physiological information for that patient.

1 Touching briefly on some other alleged deficiencies with
2 proposed combination, Masimo argued that, "Instead the medic would
3 have directly monitored the person right in front of them using typical
4 medical equipment such as a finger clip pulse oximeter, or
5 stethoscope, and apply the emergency medical care deemed
6 necessary." So first off, this is really just a proposed potential
7 alternate solution to the power of a depleted battery in the receiver
8 module and does not rise to the level of teaching away. But
9 additionally, as Dr. Kenny testified, a POSITA would've understood
10 that traditional medical equipment usually was bulky and difficult to
11 transport and require a wall plug, unlike the much simpler solution of
12 providing backup power from handheld PDA to the receiver module.

13 Masimo also argued that instead the medic would have
14 simply the receiver module's AA batteries, allowing the medic to
15 quickly resume remote monitoring of the field. Once again, this is
16 merely an alternative -- potential alternative solution. And as Dr.
17 Kenny pointed out, this would've required the medic to carry,
18 potentially, a large number of AA batteries with them, which could
19 slow down the medic.

20 Masimo argued that applicable code modification
21 requires using the PDA to re-update it from a single receiver module
22 to which it was connected. But if we turn to Slide 61, we can see that
23 in Mendelson's unmodified system it is only displaying information
24 for one patient at a time. On the left side here, we see the wave form
25 SpO2 value, heart rate, activity level, and orientation for up -- all for

1 the same single patient. And so while it allows the medic to monitor
2 multiple different patients by switching between the receiver modules,
3 in the original unaltered system, it's still only monitoring one patient
4 at a time, and states this expressly on the right side here, where it says
5 that, "In cases of multiple wearable devices, it also allows the user to
6 select which individual to monitor. And then once a specific wearable
7 unit is selected, the user connects to that remote device." So even in
8 the wireless implementation, the PDA is still only connecting to one
9 wireless receiver module at a time.

10 And so providing this backup power in situations in
11 which a receiver module has a depleted battery would not detract from
12 the functionality of Mendelson. The medic would attach the receiver
13 module with the PDA, provide backup power, read the real time
14 physiological information from the receiver module until they had
15 enough information to make whatever decision they make, and then
16 move on to the next receiver module, whether that be a wireless
17 connection or a physical connection, that next receiver module.

18 Masimo also alleges that an easier solution would be to
19 ensure that every receiver module always has a full battery. But as we
20 discussed, Mendelson's system is intended to be used in emergency
21 scenarios, which are unpredictable, so it would not necessarily be
22 possible to predict when an emergency is going to happen, and
23 therefore make sure that all receiver modules have full batteries at that
24 point in time.

1 And once again, this is simply a proposed potential
2 alternative solution, does not rise to the level of the teaching away, as
3 the case law we cited in the Petitioner's Reply demonstratives.

4 Masimo also argued that a POSITA would not have used
5 the PDA to power a receiver module, because doing so would drain
6 the PDA battery more quickly. We pointed out that our proposed
7 modification does not require the medic to always use their PDA to
8 provide backup power to the receiver module. It simply provides the
9 option. So in a particular scenario where the medic is worried about a
10 low battery on the PDA turned smartphone, they would be able to
11 choose to not provide backup power to a receiver module on a case by
12 case basis. But they would have that option in scenarios in which it
13 could be potentially lifesaving, or to get that physiological
14 information from the user that has a depleted battery in the receiver
15 module.

16 And if we turn to Slide 65, we also cited corroborating
17 references that demonstrate the smartphones and other PDAs at the
18 relevant time frame generally had a long battery life. And so the brief
19 amount of time, 30 seconds to two minutes, that it might take to
20 connect to the receiver module, provide backup power, and receive
21 those physiological signals would be a drop in the bucket compared to
22 the overall battery life and battery size of -- of these smartphones and
23 PDAs during the relevant time frame.

24 Masimo also argues that Apple's proposed modification
25 would've run contrary to Mendelson's design by adding components

1 that makes its receiver module larger, heavier, and more expensive to
2 produce. But we pointed out, if we look at Slide 67, that the
3 unmodified receiver module Mendelson already has a serial port. It
4 has this connection already. We're simply proposing we take one of
5 those pins from the serial port and use it as a -- a backup power
6 source.

7 And if we look at Slide 68, we can see in D'Angelo that
8 does have this backup power functionality. Its management device
9 has a very compact design. It's not large. It's not bulky. It's not
10 heavy. It's actually smaller than the receiver module in Mendelson's
11 original system.

12 Finally, Masimo had alleged that Apple's expert revealed
13 in his deposition that his obvious -- his opinions for modifying
14 Mendelson's receiver module to draw backup power from the PDA are
15 based on what a POSITA might or would consider or what could be
16 useful, but really just mincing words of what -- the way Kenny -- Dr.
17 Kenny phrased things under questioning in his deposition. He did not
18 say anything that was contrary to his testimony in his declaration.
19 Nothing is disavowed in his testimony in his declaration. He was
20 simply stating, you know, hey, a POSITA would've considered these
21 things and would've -- could have found these to be useful in certain
22 scenarios. Exactly consistent what he stated in his declaration, that a
23 POSITA would've recognized providing this backup power
24 functionality could provide potentially lifesaving intervention in

1 scenarios in which the receiver module has depleted battery and will
2 require that backup power in order to function.

3 This -- if there's no more questions on the
4 D'Angelo/Mendelson combination, I would want to briefly touch on
5 the application of Goldsmith to the Mendelson/D'Angelo
6 combination.

7 If we turn to Slide 70, Masimo gave a few reasons why
8 they argue Goldsmith should not be applied to the
9 Mendelson/D'Angelo combination. We relied on Goldsmith as
10 identifying that a PDA or smartphone could be given a wristwatch
11 form factor. It would essentially be a wristwatch PDA.

12 And the first two arguments, pretty much the same as
13 before, combining D'Angelo with Mendelson. They argued that this
14 would remove the remote monitoring functionality from Mendelson.
15 As we pointed out, we would retain all that remote monitoring
16 functionality in Mendelson. We would simply -- the modification
17 would allow backup power to receive at the receiver module in
18 limited scenarios. And in this case, the PDA providing that backup
19 power would be a wristwatch form factor PDA.

20 They also argued that -- that the proposed modification
21 would only be able to monitor one patient at a time. As we discussed,
22 Mendelson's original unaltered system only monitors one patient at a
23 time.

24 And then finally, they argued that a -- a wristwatch, a
25 smartwatch, would have a much smaller form factor and therefore a

1 smaller battery and therefore would not be able to provide backup
2 power to receiver modules. What we pointed out -- and all of these
3 sections are cited in the Petitioner's Reply -- that Goldsmith's system,
4 its wristwatch, smartwatch system, in which the smartwatch is
5 providing this PDA functionality, that it's using that wristwatch to
6 already provide power to peripheral devices.

7 You can see in slide -- or sorry, Paragraph 52, it says --
8 like, it has a characteristic determining device. On the right, it says
9 that, "Optional peripheral devices may include a physiological
10 characteristic sensor device." So Goldsmith was already
11 contemplating having its smartwatch provide power to these
12 characteristic -- the physiological characteristic sensing devices. And
13 not just backup power, but all the power for all the operation of those
14 ancillary devices.

15 And Goldsmith contemplated the need for battery power
16 for that, as you see on the lower right, Goldsmith's Case, "The
17 electronics architecture includes a removable battery and an internal
18 backup battery." So Goldsmith was already contemplating powering
19 these peripheral devices using the batteries of its smartwatch.
20 Therefore, the argument that there would not be sufficient battery
21 power for -- from the smartwatch of Goldsmith in order -- or provide
22 backup power to the receiver model simply does not have a basis in
23 the record.

24 This is my last slide with respect to the original claims in
25 the original petition.

1 If Your Honors don't have any questions with respect to
2 the original petition, I will move on to the Revised Motion to Amend.

3 Turning to Slide 72, we see Claim 21, Substitute Claim
4 21 from the Revised Motion to Amend. This is the only independent
5 claim. And as we can see, it's a very lengthy claim. There's a lot of
6 underlying. There's a lot of newly added limitations in Claim 21.

7 Skipping ahead to Slide 77. In our opposition to the
8 Revised Motion to Amend, we identified the *Neuroderm* case to
9 identify to the Patent Owner that the Patent Owner fails to explain
10 how the materials cited in the claim chart supports the claims. And as
11 the Board found in that case, when the Patent Owner provides only a
12 claim chart with fair citations leaving it to the panel to discern how
13 the cited material supports the claim limitations, this is not sufficient.
14 That court said, "Patent Owner's failure to explain the citations
15 constitutes a fatal error." That's exactly the case here. Masimo
16 provided one single string citation as the alleged support for every
17 single limitation in Substitute Claim 21. And it's Patent Owner's
18 burden to show not only the support for the newly added limitations,
19 but to show support for all the limitations of Claim 21, yet they
20 provided only a single string citation.

21 Masimo responded in their reply that a strict -- a single
22 string citation is sufficient, and cited some case law to support that
23 argument.

24 Turning to Slide 78, we dug into that case law cited by
25 Patent Owner, and it simply doesn't support their position. For

1 example, in the *PEAG LLC* case, the Board stated, "Patent Owner
2 provides citations to specific paragraphs and figures of the 117
3 application for each annotated claim element of each proposed
4 substitute claim."

5 So here, the Board found that the identified support was
6 sufficient, because the Patent Owner had identified specific support
7 for each claim element, not the entire claim as a whole single string
8 citation. And the Board differentiated that scenario from the scenario
9 *Intel Crop.* Case, stating that, "There, the Patent Owner provides the
10 same string citation for all the elements of Substitute Claim 23." So
11 providing one string citation for all elements of a substitute claim is
12 simply not sufficient.

13 Turning to the *VE Technology* case, once again, the
14 Board said that it was acceptable to provide string citations for each of
15 the proposed substitute limitations. There, the Patent Owner had
16 identified separate distinct support for each limitation in the substitute
17 claim, not a single string citation for the entire substitute claim.

18 Jumping ahead to Slide 80, we can see this is what Patent
19 Owner provided for support in its Revised Motion to Amend. A
20 single claim chart and all of the support from the original disclosure of
21 Claim 21 is this one string citation in this one box in the upper left.

22 Now, I'll note that this appears on Page 12 of the Revised
23 Motion to Amend. There's only one more page after this. Patent
24 Owner had 11 pages they could have used to explain the support for

1 the limitations of Claim 21. This is not a space issue. They just
2 simply show -- chose not to show where the support is.

3 And if we look at Slide 81 on the left here, these bullet
4 points come directly from the Revised Motion to Amend. This is
5 what Patent Owner identified as all of the new limitations in Claim
6 21, and all -- this is just Claim 21, not all the substitute claims. And
7 as you can see, there's so many new limitations we can't even read
8 what they are on this slide. And yet Patent Owner is alleging that it's
9 sufficient for them to show one single string cite in the claim chart to
10 provide support for not only all 16 of these bullet points, but all the
11 original claim elements as well -- as well.

12 And then after we pointed out that this was not sufficient,
13 Patent Owner did not even attempt to correct this. Patent Owner did
14 not go back and show where the support was in their reply document.
15 They simply argued that they didn't have to.

16 If there are no questions on that, I shall turn to a few
17 specific instances where we believe that the claims are lack -- the
18 substitute claims are lacking support.

19 If you could turn to Slide 83. Here we're discussing
20 Element 21N, which recites in part, "A rounded rectangular enclosure
21 forming a cavity with upper and lower openings. The openings
22 having an inner ledge and a perimeter lip sized and configured to
23 receive the upper and lower shells to fill the openings such that the
24 perimeter lip surrounds at least a portion of perimeter size of the upper
25 and lower shells."

1 So here we have both upper and lower shells, we have
2 upper and lower openings for the enclosure, and each of those upper
3 and lower openings has an inner ledge and a perimeter lip. The terms
4 inner ledge and perimeter lip do not appear anywhere in the
5 specification. And in fact, the term ledge and lip don't appear
6 anywhere in the specification. The Patent Owner has not identified
7 any language in the written description that they believe is equivalent
8 to these terms. They've left it completely up to the Board and
9 Petitioner to guess at what the support for this limitation is. And so
10 we guessed the best we could in our opposition.

11 We turn to Slide B4. We looked at Figure 1C because
12 Figure 1C is the only figure that shows the inside of this enclosure
13 132 and Element 21N recites requirements for the inside of that
14 enclosure. The upper and lower inner ledge, and the upper lower
15 perimeter lip.

16 We have identified some structures in our opposition that
17 could possibly be an upper perimeter lip and an upper inner ledge, but
18 even in the reply, Patent Owner didn't adopt those as their own. They
19 just said, oh, well, Apple identified some stuff. In their reply, Masimo
20 is still refusing to identify what they believe provides support for this
21 claim term. And as we identified in our opposition, there is simply no
22 support for the lower perimeter lip and the lower inner ledge.

23 If we turn to Slide 87, we zoom in on this enclosure of
24 132. Masimo's entire theory is based on some sort of alleged
25 symmetry between the top and the bottom. And they say because

1 there's a symmetry between the upper opening and the lower opening,
2 this provides support for a lower perimeter lip and inter ledge. But if
3 we look at Slide -- slide or Slide 87 at the enclosure 132, we can see
4 that it is not symmetrical from top to bottom. We can see five parallel
5 lines near the lower opening and then there's an open space near the
6 upper opening. Those five parallel lines do not appear near the upper
7 opening.

8 Looking at this portion of -- of the enclosure, it's clear
9 that it's not symmetrical from top to bottom. And that is Masimo's
10 entire for written descriptions report for 21A. They allege that
11 because there's symmetry here, there would have to be a perimeter lip
12 and an inner lip. And that's simply not the case, not just because those
13 aren't depicted anywhere in the figure, but even though there's
14 symmetry theory, there is no symmetry in this enclosure.

15 If we go back a couple slides to Slide 85, we asked their
16 expert about this. "Do you believe the inner ledge for the lower
17 openings depicted in figure 1C?" "I don't believe we can because of
18 the perspective, we can see the inner ledge on the lower opening."
19 We asked him, "Do you believe that the perimeter lip or the lower
20 openings depicted in figure one C?" "Again, because of perspective, I
21 don't believe we can see that."

22 So going back to slide --

23 JUDGE FINAMORE: Counsel?

24 MR. BISENIUS: Yes?

1 JUDGE FINAMORE: This is Judge Finamore. Why
2 can't we discern a lower perimeter lip and an inner ledge from that
3 bottom piece, 131, in Figure 1C?

4 MR. BISENIUS: If we -- the lower shell, 131. So the
5 inner ledge and perimeter lip are requirements of the lower opening of
6 the enclosure 132. They're components of the lower opening of the
7 enclosure 132, not components of that lower shell. And because
8 there's no description, as you can see, the lower shell is identifiable in
9 referencing rule 131. There's no referencing rules identifying any
10 other components, any of those other lines or structures on the lower
11 shell or the upper shell. So there's -- there's no discussion in the
12 written description of what the function of any of those are. We
13 would be guessing as to if -- well, maybe part of the structure is
14 designed to engage with a perimeter lip or designed to engage with an
15 inner ledge. That's not described and it's not shown in the figures.

16 If we turn back to Slide 82, the Federal Circuit case law
17 is clear. The second case here *In re. Houston*. "Entitlement to a
18 filing date does not extend to subject matter which is not disclosed,
19 but would be obvious over what is expressly disclosed." It might be
20 obvious to configure the lower shell in the same manner as the upper
21 shell, but that's not disclosed in the specification, it's not disclosed in
22 the figures and there's no disclosure of a lower perimeter lip and inner
23 ledge.

24 And as I identified, Masimo has not even identified what
25 they believe to be the support for the upper perimeter lip and inner

1 ledge. They simply said, well, Apple identified some stuff that might
2 be. We're going to roll with that. And turning back to the claim
3 language again, Slide 83, there's this requirement at the end that such
4 that the perimeter lip surrounds at least a portion of perimeter size of
5 the upper and lower shells. The figures never show that lower shell
6 engaged with the enclosure and so we have no way of knowing
7 whether the perimeter lip surrounds at least a portion of that lower
8 shell. It might be obvious to configure it that way based on views of
9 the upper shell, but it's not actually disclosed in the specification.

10 If there are no further questions on Element 21, I'm
11 going to move to Claim 23, lack of written description support for
12 that. We made a number of arguments with respect to lack of written
13 description support of 21, 23B. Those are in the papers and in interest
14 of preserving time, we're going to rest on our arguments and papers on
15 that because we think it's a much more straightforward issue if we turn
16 to Slide of 100 -- or sorry, Slide 99 regarding lack of written
17 description support for Element 23C, causing all of Claim 23C to fall
18 -- all of Claim 23 to fall.

19 As we see here, Element 21E, on which Claim 23
20 depends, requires a smartphone mobile computing device. And then
21 Element 23C recites wearing the sensor and processing board
22 provided together with a wrist mounted device. So Element 23C
23 requires that there's a smartphone mobile computing device and also a
24 wrist mounted device. There is no disclosure in the specification that

1 a system that includes both a smartphone mobile computing device
2 and a wrist mounted device.

3 Turn to Slide 100. There is only one mention of a wrist
4 mounted device anywhere in the original disclosure of the '507
5 Patent. This is that Paragraph 23 of Exhibit 2045. And here it's
6 listing various different alternative configurations for the mobile
7 computing device. And so one of those configurations could be a
8 mobile communication device such as a smartphone. Then later as
9 another alternative, identifies a wristwatch as a possible mobile
10 computing device.

11 There's no disclosure of a smartphone and a wrist
12 mounted device in the same system. There's no disclosure of a system
13 that would have multiple mobile computing notices. And in fact,
14 Patent Owner did not even bother to address this claim element in
15 their reply. They still have not identified anywhere that they believe
16 provide support for Element 23C. The fact that we are talking about
17 Paragraph 23 here only comes from the opposition. Masimo has not
18 demonstrated support for this, and they haven't even alleged where
19 they believe the support is for Element 23C.

20 If there are no questions on written description support,
21 I'm going to move ahead to Slide 108. Masimo has alleged that
22 Apple's opposition improperly incorporates by reference arguments
23 from the Petitioner. This is simply not the case. So Masimo cites to a
24 number of cases, and we have those up top here, and they allege that
25 these cases represent a blanket ban on any reference back to the

1 petition in -- in a motion to amend paper. That's simply not the case.
2 Both of these cases are unique circumstances. They involve remand
3 from the Federal Circuit in response to the *Aqua Products* decision
4 and the Federal Circuit remanded both of these cases for additional
5 briefing. And in these specific cases, the Board said there was no
6 need to incorporate arguments from older papers by reference because
7 the parties only needed to address the new limitations. The new
8 elements in the claims. They weren't required to address limitations
9 that they'd already addressed.

10 And that's exactly the case here. In the opposition, when
11 addressing application of the Kianl reference to original claim terms,
12 already existing claim terms, we sent it back to the petition because in
13 the petition, we also relied that Kianl was one of the secondary
14 references. And in the petition, we provided the sufficient arguments
15 to demonstrate that Kianl met those original claim elements. So there
16 already is an analysis of the application of Kianl to those original
17 claim elements on a paper of record. We simply cited back to that
18 analysis that already exists in the record, which is totally permissible.
19 It's not an incorporation by reference. We're simply identifying the
20 fact that we've already made this argument. This is already a record.

21 This is consistent with the Federal Circuit's opinion in
22 *Nike v. Adidas* in which they stated, "We held that the Board may not
23 base its patentability determinations with respect to amending claim
24 solely on the face of the motion to amend without regard to the
25 remainder of the IPR record. Rather, the Board must consider the

1 entirety of the record before it when assessing the patentability of
2 amending claims."

3 The Petitioner already demonstrative how Kianl met
4 these original claim terms in the Petition for simply guiding the Board
5 to those portions of the petition that identify how Kianl already meets
6 those original claim terms. And I'll note that Masimo does not argue
7 that Kianl does not meet those original claim terms in any of its
8 papers. It's just simply saying we had to repeat that analysis in the
9 opposition. That is simply not a requirement.

10 If there are no further questions on this issue, just fairly
11 briefly, we -- we'd also identified additional, and again, unique
12 freestanding points of further failure in the revised motion to amend
13 under indefiniteness under 112. Specifically, we have called out two
14 independent points of indefiniteness in subsequent claims 21 and 22,
15 but in the interest of time, as we're getting along into our time, I'll
16 simply ask you if there are any questions with respect to the
17 indefiniteness arguments, otherwise we would rest on the papers on
18 those arguments.

19 Hearing no questions --

20 JUDGE COTTA: Just a question. Does -- does the term
21 "advanced processing" have a known meaning in the art?

22 MR. BISENIUS: We don't believe there's a known
23 meaning in the art for it. Their expert did not testify there was a
24 known meaning. Our expert testified that a POSITA would not
25 understand what separates advanced signal processing from other

1 forms of signal processing. I don't believe our experts precisely used
2 the term having a known meaning in the art, but he said that a
3 POSITA would not understand what would separate advanced signal
4 processing from other forms of signal processing.

5 JUDGE COTTA: Okay. Thank you.

6 MR. BISENIUS: Turning forward to Slide 114, I want to
7 talk briefly about application of the prior art raised in the opposition to
8 the substitute claims. So on Slide 114, here we see Elements 21A and
9 21C. Here, Masimo has affirmatively amended the claims to require
10 the signals are analog signals, but Poeze is clear that the signals
11 received at its monitor 118 are analog signals.

12 We turn to Slide 115. We see on the left side here
13 Poeze's system. It's got the sensors 116 on the left and the monitor
14 118 on the right. Now in our opposition, we equated the monitor 118,
15 the claim processing board. And as we'll discuss in a little bit, we
16 proposed modifying Poeze based on the Pakula reference in order to
17 take the components of the monitor 118 and meld them to a single
18 printed circuit board, therefore making it a processing board. But for
19 the purposes of this discussion, the monitor 118 represents the claim
20 processing board, which would receive the analog signals.

21 So here we can see the output of detectors 506, referred
22 to the signals 524. They're received at the front-end of interface 508.
23 On the upper right, Masimo's expert stated, "Dr. Kenny and I agree
24 that the signal 524 from the detector's 506 of Poeze's sensor 116 is an
25 analog signal."

1 And as we identified in our opposition, paragraph 120 of
2 Poeze says that the front-end interface 508 could be in a lot of places
3 and that includes in the monitor 118. So in configurations in which
4 the front-end interface 508 is configured in the monitor 118, the
5 monitor 118 receives analog signals. Both experts agree the signals
6 524 are analog, Poeze expressly tells us the front-end interface, which
7 receives those signals, can be in the monitor 118 and therefore the
8 monitor 118 and those configurations receives analog signals.

9 That's not the only disclosure imposed that provides to
10 this supplement. If we look to Slide 116, Poeze is also clear in
11 Paragraphs 122 through 124, that there is an analog to digital
12 converter in the monitor. Paragraph 122 discusses that the front-end
13 interface 508 is coupled to one or more analog to digital converters,
14 ADCs, which can be in the monitor 118.

15 It repeats this in Paragraph 124. It states, "The output of
16 a trans impedance based front-end interface 508 could be output to a
17 PGA that is coupled with an ADC in the monitor 118. Poeze is clear.
18 There -- has these primary embodiments in which the analog to
19 digital conversion is in the monitor. That means that the analog to
20 digital converter is receiving an analog signal in the monitor and the
21 monitor is receiving an analog signal.

22 Now turning to Slide 117, we believe Masimo's argument
23 of this point is a bit hard to follow, but we did the best we could.
24 Masimo stated -- they quoted a part from our opposition, from Poeze,
25 of the front-end interface 508 adapts a signal 524 received from one or

1 more of the detectors 506 into a form that can be processed by the
2 monitor 118.

3 We agree, but as we just discussed, the monitor 118
4 includes analog to digital converters. And so a form that can be
5 processed by the monitor 118 is an analog signal that's then converted
6 from analog to digital by those ADCs in the monitor 118.

7 A couple sentences later, Masimo asserted that the analog
8 signal must be converted, adapted into a digital signal, another form,
9 before it can be processed by the signal processor 510 in the monitor
10 118. And this assertion is true, but the signal processor 510 is not the
11 only component of the monitor 118. If we look back to slide 116, on
12 the left side here, we see the signal process at 510 is one component
13 of the monitor 118. And the analog to digital converters are not
14 shown in Figure 8, but Paragraphs 122 and 124 make clear that the
15 analog/digital conversion happens after the front-end interface 508
16 and happens in the monitor.

17 And so the monitor 118, converts those analog signals
18 received at the monitor 118, the digital signals that can be processed
19 by the signal processor 510. Therefore, Poeze is clear that the monitor
20 receives analog signals.

21 Now, Masimo has asserted in their reply that Apple only
22 relied on embodiments in which analog to digital conversion happens
23 before the monitor 118 in our opposition, but it's simply not true. If
24 we look at Slide 118, this is the entirety of the analysis for Element
25 21A in the opposition. And you can see here we identified the

1 disclosures imposed that if there's a front-end interface that adapts a
2 signal in 524 received from one or more of the detectors 506 into a
3 form that can be processed by monitor 118 and can have its
4 components assembled in the sensor in the monitor 118 or in
5 connecting cable.

6 So we expressly identified scenarios in which the front-
7 end interface is in the monitor 118. A few sentences later, we talked
8 about the analog to digital conversion and then expressly cited to you
9 and quoted Paragraphs 122 to 124, where it describes ADCs in the
10 monitor 118. In the opposition, Apple is clearly relying on
11 embodiments in which the analog to digital conversion occurs in the
12 monitor 118 and as such, the monitor 118 receives a digital -- oh,
13 sorry. Receives an analog signal.

14 Turn to slide 118. Masimo has also alleged that Apple
15 improperly relies on different exclusive embodiments from Poeze and
16 combines those embodiments without providing motivation to
17 combine, but that's simply not the case. In their reply document,
18 Masimo really focuses on this use of the term various embodiments in
19 this sentence, but we identify what those various embodiments are in
20 the previous sentence.

21 As I just discussed, Poeze -- we stated here in our
22 opposition that Poeze's system includes the front-end interface and
23 that that front-end interface could have its components assembled in
24 the sensor 116, in the monitor 118 or in connecting cabling. Those
25 are the various embodiments we were talking about. There's different

1 arrangements for where the front-end interface 508 could be and we
2 stated that depending on which of those arrangements is used, the
3 claimed sensor would be read on either the sensor 116 on Poeze alone,
4 or a combination of the sensor 116 and the front-end interface 508.
5 We were simply demonstrating here that multiple different
6 embodiments of Poeze read on this claim, though. We were not
7 combining different disparate elements -- different embodiments from
8 Poeze.

9 Turning to Slide 1.

10 JUDGE COTTA: Counsel, just to give you a heads-up,
11 you're down to about two minutes left, but certainly feel free to
12 continue into your rebuttal time if you'd like.

13 MR. BISENIUS: Turning very quickly to Slide 120.
14 Masimo alleged that we were relying on different embodiments from
15 Figures 1B, 2B, Figure 7 and Figure 8, but Figure 7, Figure 8, and
16 Figure 2B all are talking about the same components. They're talking
17 about the Health Data Collection System 112, that includes the sensor
18 116 and the monitor 118. They all use the same terms and the same
19 reference numerals for those components. They're all talking about
20 the same embodiment.

21 Figure 1B is a slightly different embodiment, but the
22 difference is that in Figure 1B, there's a dedicated device 110 that
23 displays the physiological information, and in Figure 2B, there's a
24 smartphone running software that displays the physiological
25 information. We relied on some disclosures with respect to Figure

1 1B, but only the disclosures relating to the Health Data Collection
2 System 112, which includes the sensor 116 and the monitor 118.
3 Those teachings for Figure 1B are fully applicable to the embodiment
4 of Figure 2B. We were not combining different embodiments, there
5 was no need for motivation to combine because we were referring to
6 one specific embodiment of Poeze: the embodiment of Figure 2B as
7 supported by disclosure with respect to Figures 1B, 7 and 8.

8 Turning ahead briefly to Slide 124, the combination of
9 Pakula with Poeze. Masimo alleges that our motivations to combine
10 in the opposition only discussed motivations for using the improved
11 electronic device housing of Pakula imposes monitor and did not
12 address the issue of mounting the internal components of the
13 monitoring device onto a processing board, but that's simply not the
14 case. We see how our entire motivation to combine, analysis from the
15 opposition of applying Pakula to Poeze, and there we propose that to
16 modify Poeze's system based on Pakula to include improved
17 electronic housing -- device housing for mounting and protecting the
18 display and internal electronics of Poeze's monitor 118.

19 So part of our proposed combination in the opposition
20 was mounting internal electronics of Poeze's monitor 118 within the
21 device housing. We gave numerous reasons that this would've been
22 beneficial as would've been recognized by a POSITA and Masimo did
23 not dispute any of these possible benefits in their briefing. Instead,
24 they just ignored this discussion of mounting internal electronics of
25 Poeze's monitor 118 as leading to those benefits.

1 Then later, if we turn to Slide 125, when addressing
2 Element 21B, we discussed how Pakula discloses mounting those
3 electronic components within its protective housing and one of those
4 examples was they use a printed circuit board. So the printed circuit
5 board disclosed by Pakula is simply one of the methods that Pakula
6 expressly discloses on how electronic components of a handheld
7 device would be mounted within protective enclosure. And therefore,
8 using this teaching, one of the ways to mount those electronics within
9 a protective enclosure would've led to all of those benefits that we've
10 discussed on Slide 124 as recited in the opposition.

11 Very briefly turning to Slide 127, we proposed modifying
12 Poeze based on Kianl to include a display that would include
13 information. Not a bodily incorporation, but the information
14 considered by Kianl on Slide 127. Numeric values for SpO2 and
15 heart rate, a trend grasp for SpO2 and heart rate, and then on the right
16 side, input buttons that can be selected using Poeze's touchscreen.

17 And now, Masimo has alleged that a POSITA would've
18 actually preferred to just display this information on the monitor 118,
19 because that's what happens in Kianl's system, but this ignores the
20 express disclosures of Poeze that we identified in the opposition.

21 We turn to Slide 132. Poeze has expressed its handheld
22 smartphone is going display full screen trending data. Trending data
23 is displayed to the user in various graphic formats on the smartphone.
24 It also shows that the smartphone receives input from a user via the
25 input 234 and/or display touch panel 206. So Poeze is expressly

1 describing the fact that it's going to display trend data, it's going to
2 display physiological data, it's going to receive user input via its touch
3 screen. Kianl just gives us an example, as we see on 126 -- slide 127 -
4 - of a -- the information that could be provided. Numeric values for
5 SpO2 and heart rate, trend graphs and user input keys that, in Kianl,
6 are selected using soft keys next to the screen, but in Poeze would be
7 selected using the touch screen.

8 And then turning to Slide 135, Masimo had all alleged
9 that a POSITA would not possess the skill to put all of those displays
10 from Kianl onto a handheld smartphone, but Poeze expressly discloses
11 the smartphone could be an iPhone. And as we identified, D'Angelo
12 shows that all of this information would very easily fit on the screen
13 in a smartphone. Two trend graphs, two numeric values, several
14 different input piece selectable on the smartphone.

15 The very last issue that I want to touch on briefly, slide
16 137. Our motivation to provide Moon with Poeze. Masimo alleges
17 that our entire argument for motivation to provide is an improper
18 incorporation by reference. That's not true. As we can see here, we
19 did cite back to the Petitioner. We mentioned that the reasons that a
20 POSITA would've applied Moon to Poeze are similar to the reasons
21 that if a POSITA would've applied Moon to Mendelson. But as we
22 can see here, then after making that statement, we expressly listed out
23 what those benefits would be and Masimo has not disputed or refuted
24 any of those benefits that would result from applying Moon to Poeze.
25 We did not incorporate by reference application Moon to Poeze. We

1 explained it here and we explained what the benefits would've been in
2 the actual opposition proof.

3 With that, if there are no further questions, I'll reserve the
4 remainder of our time for rebuttal.

5 JUDGE COTTA: Okay. Thank you. It looks like
6 you've got about 16 minutes for rebuttal. Okay. Patent Owner, you
7 can begin when you're ready. Would you like to reserve any time for
8 rebuttal?

9 MR. NELSON: Yes. I'd like to reserve 10 minutes, if I
10 may.

11 JUDGE COTTA: 10-minute rebuttal. Okay.

12 MR. NELSON: And I'd like to share my screen. Can
13 you see that okay?

14 JUDGE COTTA: Yes, I can. Thank you.

15 MR. NELSON: Okay. May it please the Board, this is
16 Philip Nelson for Masimo Corporation, the Patent Owner. And as
17 you've seen, the relevant subject matter here is the '507 Patent. It
18 relates to accurate measurement of SpO2 outside the hospital
19 environment. The optical sensor acquires the signal, a dedicated
20 SpO2 board processes the signal, and a smartphone displays
21 measurement.

22 So I'm going to move to Slide 2, which shows these
23 things. The optical sensor, the board, and the smartphone displaying
24 measurement. Turning to Slide 3, we also will focus on the claim
25 construction similar to what Apple did earlier and we're going to

1 emphasize the construction of this phrase, "signals responsive to
2 light."

3 Now signals -- turning to Slide 4, "signals responsive to
4 light" is part of every claim. It appears in Claim 1 and in Claim 13 as
5 we saw earlier. And Masimo proposes to construe this phrase in --
6 consistent with its ordinary meaning, but that meaning is data actually
7 acquired with the optical sensor. And as we saw earlier, Apple
8 purports to use ordinary meaning but does not provide that meaning.
9 Here, just saying ordinary meaning, not construing it is not enough,
10 because there is a dispute that needs resolution. And the *O2 Micro*
11 case says we need to construe it at this point.

12 Turning to Slide 5, this is the context of claim one. We
13 saw this earlier. You can see that "signals responsive to light" is
14 there. It's in a separate paragraph from the processing board and we
15 think that the structure of the claim is consistent with our claim
16 construction proposal. This says, "The optical sensor is configured to
17 output one or more signals responsive to light from a light source."
18 And then later, "A processing board is configured to receive said one
19 or more signals. It's important that the signals that are output initially
20 and that are responsive to light are also received by that processing
21 board."

22 Turning to Slide 6, you can see a very similar structure.
23 This is a method claim, but it also has outputting one or more signals
24 responsive to light and then via a processing board receiving said one
25 or more signals.

1 So you can see the structure of the claim itself, both in
2 Claim 1 and in Claim 13 separates the optical sensor from the
3 processing board. Turning to Slide 7, you can see that same
4 separation in the Figures from the '507 Patent. The optical sensor
5 there is at the left, the sensor data is transferred as shown by the red
6 arrow, and the processing board is 130 in the middle. This is a
7 quotation straight from the specification. "Sensor data is transmitted
8 from the sensor 110 along the first cable, 120, to the processing
9 module 130, which can apply noise filtering and signal processing
10 techniques." So those are examples of the processing that's reserved
11 here for the processing board.

12 Turning to Slide 8. You can see here an important
13 passage from the specification that was glossed over by Apple earlier.
14 Here, it's LEDs that transmit the optical radiation. And on Slide 9,
15 we've highlighted the next section in the same paragraph. It says that
16 -- that it's a detector that responds to the intensity of the optical
17 radiation after absorption. So the LEDs and the detector are part of
18 that finger clip that you saw in the figure and together, those are the
19 sensor. But importantly, the detector is right there responding to the
20 light and it's occurring after the LEDs.

21 This was a passage that Apple emphasized more, but it's
22 consistent with our construction. It says, "The sensor 110 provides
23 data in the form of an output signal and it's important that it's the
24 sensor that's providing that data."

1 Turning to Slide 11. Just wanted to remind the Board
2 that no terms -- the Board stated in the Institution Decision that no
3 terms required express construction at that stage, according to the
4 board's decision, but we think that it is now required to resolve the
5 dispute based on the *O2 Micro* case.

6 So now I'll show why this is relevant and you have a hint
7 of this in --

8 JUDGE COTTA: Before you get there, counsel, I would
9 like --

10 MR. NELSON: Go ahead.

11 JUDGE COTTA: -- to ask you a question similar to a
12 question I asked to Petitioner, which is the claims mentioned that the
13 optical sensor outputs one or more signals. But where -- where are
14 you getting the acquired language that's in your claim construction?

15 MR. NELSON: Well, the word "acquired," I don't
16 believe appears in the specification, but it says here that the optical
17 sensor puts out the light and then the one or more signals responsive
18 to light are obtained in the optical sensor. So the word "acquiring" is
19 not super important. It's the fact that it does get somehow, that sensor.
20 So is there -- if you could explain further, what's the question about
21 acquiring in particular?

22 JUDGE COTTA: Well, I was trying to -- where your
23 proposed construction departs from the language in the claim -- of the
24 claim, seems to be that it's adding the word, actually acquired, by the
25 optical sensor. And if you look at the language of the claims, I don't

1 see that. Instead, I see that the optical sensor has to output a signal.
2 It's not clear to me that there is a source for the signal, a possible
3 source for the signal, other than the optical sensor. But still, it also
4 wasn't clear to me what your basis was for adding that to the claim
5 line.

6 MR. NELSON: Well, we get it from this -- this portion
7 right here, the LEDs transmit the optical radiation into a tissue site,
8 and then the detector acquires it. It's kind of implied here. The
9 detector responds to the intensity of the optical radiation after
10 absorption, and the acquisition is described by this sentence right here.

11 JUDGE COTTA: So, just for the record, you're referring
12 to demonstrative of Slide 9 --

13 MR. NELSON: Yes. This is Slide 9.

14 JUDGE COTTA: -- apparently citing Exhibit 101,
15 Column 1, Line 28 to 34?

16 MR. NELSON: Yes. Exhibit 1001, Column 1, Lines 28
17 to 34. And of course, when you read the whole specification in
18 context, it's clear what's acquiring the signal. It's -- after the LED puts
19 the light out, there's an acquisition sensor in that finger clip. And here
20 it's referred to as a detector. So detection is equivalent to acquisition.

21 JUDGE COTTA: I guess the other thing I was struggling
22 with in -- in your proposed construction is whether your proposed
23 construction is different from basically saying that the signal can't be
24 processed. It seems to me what you're saying is that the photo diode
25 has to acquire the signal, and nothing can be done to the signal before

1 it's sent on to the processor. It -- at least that seems to be the effect of
2 your construction. Can you explain to me how that -- how, if at all,
3 your construction is different from saying that the signal can't be
4 processed?

5 MR. NELSON: Well, we did not actually say that no
6 processing is allowed. But certainly as applied to the Mendelson
7 reference, the processing that occurs within the Mendelson sensor
8 module is too much processing so that it changes it, and it's no longer
9 the -- the light that was actually acquired, that the -- it's no longer
10 responsive to the light.

11 JUDGE COTTA: So you mentioned that -- you didn't
12 say that there's any processing that's required. Is there any processing
13 that's permitted?

14 MR. NELSON: Well, again, we think that the -- the
15 proper construction is the thing that comes out of the photo diode is
16 responsive to light. And at some point during the Mendelson long
17 chain of processing, it's no longer -- certainly by the time it comes out
18 the other end, it's no longer responsive to light. But this is something
19 that Apple accused us of doing, was drawing some sort of arbitrary
20 line. And Masimo has not done that. We haven't drawn a specific
21 line at what point during that long chain of processing occurs.

22 Now, we have pointed to some particular things.
23 Certainly by the time the signal has been converted into a digital
24 signal from its original analog form, then that demonstrates that it's no
25 longer responsive to light. But we have not drawn a specific line after

1 a particular portion. And I'll get more into that when we look at the
2 Mendelson figure.

3 JUDGE COTTA: Well, why is a signal that's been
4 amplified or filtered or converted to -- from analog to digital, or all of
5 the above -- you know, it's a compound question. But why is such a
6 signal not -- no longer responsive to light?

7 MR. NELSON: Well, because when you read this
8 specification and the structure of the claims, it shows that the signal
9 that comes out of the detector originally is responsive to light. And
10 that by the time it's transferred to the processing board, it's the same
11 signal in the claims. It's only under a broad and incompatible reading
12 of this specification, would you get to the -- this more general content.

13 And I'll illustrate with an example. You may be able to
14 have information in smoke signals that is transmitted to somebody.
15 And then that same information is conveyed by, say, a telegraph. And
16 so that may be responsive in some broad sense, but that's certainly not
17 what's going on here. If you read this, the sequence of the description
18 here, where LEDs transmit optical radiation into a tissue site, the
19 specification then, immediately after in that sequence, shows that the
20 detector responds. And that -- because of that sequence and the
21 specification and the structure of the claim, that separates signal
22 acquisition responsiveness from then transmission later to the board.
23 Those two -- or I should say, separates it from processing by the
24 board. The structure of the claim and the sequence in the

1 specification shows that the proper instruction is the signal is
2 responsive to light, are those that are actually acquired by the sensor.

3 JUDGE COTTA: Do you -- would you agree that the
4 claims don't require that one or more signal be a raw or unprocessed
5 signal?

6 MR. NELSON: Well, the raw or unprocessed language
7 is consistent with our construction, but that's not what we're proposing
8 here. The signal that comes out of the photo diode is responsive to the
9 light. And the signal that comes out the other end is responsive to the
10 processing. And so that's the distinction we're trying to -- to draw. So
11 we agree that -- that raw and unprocessed are fully consistent with our
12 construction.

13 JUDGE COTTA: And in terms of support for your
14 proposed construction, is there anywhere that we should be looking
15 beyond -- I mean, you've identified the sites of the patent on
16 Demonstrative Slide 9. Is there other evidence we should be looking
17 to to support your construction?

18 MR. NELSON: Well, we think the whole specification
19 read together, but certainly this phrase right here, the sensor data is
20 transmitted from the sensor 110. I'm looking at Slide 7, for example.
21 This is Exhibit 1001, Column 4, 60 -- line 67 through Column 5, Line
22 4. And of course, the figures show it as well. I'll show more on our
23 slides later. There are some additional passages that we refer to. I
24 would also refer to this Column 46 to 51. This is consistent with our

1 construction. And our expert, Dr. Duckworth, explains this in more
2 detail.

3 So as you already know the Mendelson attorney to Slide
4 13, the Mendelson reference is really -- really what draws this dispute
5 into focus, because it's the primary reference that Apple relies on for
6 all of its claims, for all of its grounds. And turning to Slide 14,
7 Mendelson does not disclose outputting from an optical sensor, one or
8 more signals responsive to light, and receiving said -- saying one or
9 more signals via processing board, as Claim 13 phrases it. So I think
10 this might be a good illustrated -- illustration to discuss this.

11 Now, turning to Slide 15, Mendelson transmits
12 something different, not the signal that its sensor actually acquires.
13 You can see the signal actually acquired by the sensor is highlighted
14 here on the left-hand side. And the LEDs are down below, and the
15 photo diode acquires the sensor or obtains the -- the reading using the
16 actual analog physical effect of light impinging on it and outputting an
17 electrical signal. Now earlier, Apple -- earlier today, Apple admitted
18 that a photo detector is the only thing that can acquire the signal
19 responsive to light, in response to your question. And that's true.
20 That's what's being shown here. It comes out. It goes into the
21 transimpedance amplifier into a -- the ambient light reject, which is a
22 type of filter. And here, the -- it goes into another amplifier and the
23 ADC, which we'll discuss in much more detail later. But ADC stands
24 for analog to digital converter. Importantly -- go ahead.

1 JUDGE COTTA: Can you address how your proposed
2 construction distinguishes the claims over the disclosure on Page 913
3 of Mendelson where it's talking about the receiver module? And it
4 says, quote, "Signals acquired by the sensor module are received by
5 the embedded microcontroller, which synchronously converts the
6 corresponding PD output, the R and IR PPG signals." And I
7 understand PD there to refer to photo detector, and embedded
8 microcontroller to refer to a microcontroller that's embedded in the
9 receiver module. So how does your proposed claim construction
10 distinguish the -- the challenged claims over that disclosure in
11 Mendelson?

12 MR. NELSON: Well, I thought I had that passage handy
13 here in the slides, but I'll refer to the Slide 15 to discuss it. The
14 difference is that Mendelson sensor module is outputting this signal.
15 And it's -- and it describes it as information. Information is not the
16 same thing as the signal actually acquired by the photo detector, or the
17 photo diode. And so when Mendelson describes their output signal,
18 it's the signal being output at the right-hand side of this -- of this
19 figure right here. It's the information transmitted to the receiver
20 module, and it's already gone through these many processing steps.
21 It's no longer the signal that is actually acquired. And it's -- go ahead.

22 JUDGE COTTA: I'm sorry to interrupt. But the
23 language that I'm looking at in Mendelson, it's talking about the
24 receiver module. And it says, "The receiver module converts the
25 corresponding DD output to R and IR PPG signals." So it's -- at least

1 I read that as saying that the receiver module is receiving photo
2 detector output.

3 MR. NELSON: That's correct. But that's only after the
4 signal from the sensor module is received by the receiver module.
5 And so if you see these two figures together -- let me look at
6 Mendelson. This is Mendelson Figure 2, and it's Exhibit 10, 11, Page
7 2, and it's labeled Figure 2. So the one that we've shown right here is
8 situated immediately above in a system block diagram of the -- of the
9 wearable wireless pulse oximeter sensor module on the top and the
10 receiver module on the bottom. What I've shown you here is the top
11 of that figure, and below it is the receiver module. So --

12 JUDGE COTTA: If I understand your position, it's that
13 the disclosure on Page 913 of Mendelson has to be informed by the
14 figure. And therefore, the PD output that the receiver module is
15 receiving is actually the PD output that has gone through the
16 processing steps that are illustrated in Figure 2. Is that -- is that right?

17 MR. NELSON: That's correct. And the -- the disclosure
18 explicitly says that it's the sensor module output that's being received.
19 So all of this discussion of the -- this portion of the figure is what's
20 been sent out after. But it's after the processing has occurred. That's
21 correct.

22 JUDGE COTTA: And it's those processing steps that
23 prevent, at least in your opinion, the one or more signals from meeting
24 the language of the claim?

1 MR. NELSON: That's correct. That's correct. The
2 sensor --

3 JUDGE COTTA: It's not any one particular processing
4 step that you can't draw a line as to which one converts it so that it's
5 no longer one or more signals, but it's all of them together. We know
6 that at the beginning, it was a signal, and at the end, it wasn't. Is that
7 your position?

8 MR. NELSON: That's correct. And it's not that you
9 couldn't draw a line, but we have not done so, even though Apple
10 accuses us of shifting the line around. We have argued that
11 collectively, these processing steps change the signal so that it's no
12 longer the one that's actually acquired by the photo diode or stated in
13 the claim of -- in the phrasing of the claim, the responsive to the
14 length. That's correct. And this is supported by the fact that the only
15 sensing step in this sensor module is actually performed by the photo
16 diode. So the portion that we've highlighted there is where the actual
17 acquisition, the signal acquisition, the sensing actually occurs.

18 So turning to Slide 16, Apple purports to use Masimo's
19 claim construction, but it adds further concepts and subtly changes
20 that construction so that it doesn't actually apply, and so that under
21 Masimo's construction, Mendelson doesn't demonstrate obviousness.
22 Those concepts are summarized here. They're the concept of
23 information and representing, as I'll show further coming turn to Slide
24 17. So this is Apple's argument. Therefore, Mendelson expressly
25 describes that its receiver module, that's what you were asking about

1 just a moment ago, receives from the sensor module the information
2 required by the sensor module. So it's not emphasized on this slide,
3 but it's the module as a whole, which does all the processing that we
4 showed you before, that's actually putting something out that is then
5 received by the other module. And then Apple adds this argument,
6 this is not a quote from Mendelson, they say, "Which is the
7 information output by the photodetector of the sensor." As we saw
8 before, that's simply not true because the output of the photodetector
9 is the signal that's actually acquired, and that's not the same thing
10 that's then transmitted from Mendelson's sensor module. So the '507
11 Patent does not describe sensors outputting information, it talks about
12 the signal actually acquired. The -- it says that it's -- the signal
13 responsive to light, as we saw.

14 Now, then Apple goes on to make a strange argument
15 where they refer to an -- a -- a prior reference in part of their claim
16 construction argument, and they do this because -- sorry, this is not a
17 prior reference. This is the prototype. They refer to the -- to the
18 statements of the inventor in his swear behind testimony arguing that
19 it helps them in their interpretation. But it actually -- when read
20 carefully, this -- this shows that the -- this prototype, the way the
21 prototype worked, was actually very similar to the way the claims
22 should be read here, and it supports Masimo's claim construction
23 argument. As you can see here, it says, "The prototype provided
24 Elements 13A and 1B, because the sensor generated one or more
25 signals based on the light it detected and output those one or more

1 signals." So the sensor did its thing and it -- and it output those
2 signals.

3 That's the way it's claimed, that's what we think is the
4 proper construction, and it's consistent with the way the vendor
5 described the prototype. But even putting that aside, characterizing
6 the prototype certainly does not prove that Mendelson is similar and
7 that's what Apple tries to do. Turning to Slide 18, this is where
8 Masimo explains that -- that distinction in the -- in the briefs. You
9 can see here that the prototype is discussed above, all the processing
10 in the prototype even, the processing occurs after the data reaches the
11 processing board. And the highlighting at the bottom shows that it's
12 different from Mendelson. Unlike the '507 Patent's optical sensor,
13 Mendelson's sensor module processes the acquired photodiode signal
14 before outputting information to the aligned -- to the alleged
15 processing board. Turning to Slide 19, this is another distraction.
16 This is another of the subtle shifts that Apple performs in purporting
17 to apply Masimo's claim construction.

18 So they say, "Therefore, under Masimo's proposed plain
19 and ordinary meaning for the term one or more signals of data that is
20 actually acquired with the optical sensor, Mendelson provides
21 Elements 13A and 1B because Mendelson's sensor module outputs,
22 quote, "information," there's the first subtle shift, "acquired by the
23 sensor module," and then they end the quote, "representing the data
24 output by the photodetector." So there's another distinction that's
25 another level of abstraction that takes it away from the signal that is

1 responsive to light or the signal that is actually acquired by the
2 photodetector. So just to summarize, starting at Slide 20, Mendelson
3 transmits something different, not the signal that its sensor actually
4 acquires. The left-hand side, the signal comes out of the photodiode,
5 and then, by the time it comes out of the sensor module, it has been
6 transformed by multiple steps. And at least the -- the aggregated
7 effect of all of those is to change the signal away from what is output
8 from the photodiode.

9 JUDGE FINAMORE: Counsel --

10 JUDGE COTTA: Counsel, before we move on from --
11 from what Mendelson discloses with the one or more signals, can you
12 point me to what supports your argument that the signal that's output
13 in Mendelson is an average and what specifically in Mendelson
14 supports that?

15 MR. NELSON: It's my understanding that the -- the
16 evidence for that comes from the inventor or the author of Mendelson,
17 who is our expert, and the -- it's his understanding of the
18 microcontroller that added that additional wrinkle. So there's
19 averaging that occurs within the microcontroller, there's packetization
20 that occurs within the transceiver, but although one of ordinary skill
21 would've understood from reading Mendelson that this is in there,
22 there's no explicit citation to the particular averaging step as explained
23 expressly in the Mendelson reference itself. So that's -- that evidence
24 is in the record, but -- but the Mendelson reference, I don't think we
25 have a citation to align for you on the averaging for Mendelson.

1 JUDGE COTTA: All right. And then can you also -- I
2 don't want to jump, but I -- we spent a lot of time arguing about claim
3 construction. You also explain to me why your analog to digital
4 argument is not a new argument?

5 MR. NELSON: Certainly. And in fact, those are the
6 next slides I have here, so let's turn those now. Turning to Slide 21,
7 Mendelson's actually acquired signal is analog. And the A to D
8 conversion is one reason Mendelson fails to transmit a signal
9 responsive to light. But it's not the only reason, it's one of the many
10 processing steps in the chain that we just discussed.

11 JUDGE COTTA: Is the analog to digital conversion by
12 itself -- is that sufficient to prevent it from being one or more signals?

13 MR. NELSON: Masimo has not taken a position on that
14 and I don't think we need to resolve this dispute. But it's certainly
15 strong evidence that it's different because of this passage that I'm
16 going to point you to here. The -- well, I guess I don't have the
17 passage here in the slides, but -- and so there's a passage that talks
18 about the transformation of the signal from analog to digital and by
19 changing to a different form, it's no longer responsive in the claimed
20 manner. So although amplification changes the signal in a different
21 way, it's not as much of a transformation as the analog to digital
22 conversion. And so we think that's a very significant support and
23 evidence that the change is significant.

1 JUDGE COTTA: And is that paragraph you're referring
2 to -- is that in Mendelson? Is that in your expert report? Just where
3 should I look for that?

4 MR. NELSON: I'm going to have to get that information
5 to you in a moment.

6 JUDGE COTTA: Okay. Thank you.

7 MR. NELSON: But our focus is on the entire process.
8 The analog to digital conversion is part of the -- one part of the entire
9 process. And this entire process is shown in the POR, as -- as this
10 slide indicates. So I'm now looking at Slide 22. This argument is the
11 same one that I just discussed earlier. It says that, "The sensor module
12 has a photodiode that outputs a signal responsive to the detected
13 light." That's the one at the left-hand side. "The photodiode signal is
14 amplified, filtered, amplified again," and then I've highlighted here,
15 "converted from analog to digital by an ADC and received by a
16 microcontroller. The microcontroller processes the signal and
17 provides the resulting information to the RF transceiver. The RF
18 transceiver then processes that information into packets that are
19 transmitted to and received by Mendelson's receiver module."

20 Now, I wanted to emphasize here that the entire section
21 arguing this point runs from Page 18 to 205 in the POR. So Apple has
22 selected a portion of that section to argue it's a new argument, but this
23 paragraph that I showed you right here and this figure squarely puts
24 the analog to digital processing as among the supporting evidence for
25 our theory. And Apple didn't provide the full context because the

1 portion of the brief under that heading is several pages long. So here,
2 you can see that, at the very next sentence, it says, "As Dr. Duckworth
3 explains, and a person of ordinary skill would've understood,
4 Mendelson's sensor module does not output data actually acquired
5 with the sensor module."

6 So that paragraph -- that statement immediately follows
7 the figure and the description of the figure. And so this is all part of
8 our argument. It was all squarely within there. The analog to digital
9 conversion was in the figure, it was in the description of our theory,
10 and the -- the briefs are very clear on this. And it's not a matter of
11 how many times you say it in the briefs, if it's in there, it's not a new
12 argument. So again, Mendelson processes the signal in the
13 microcontroller and in the analog to digital conversion, it occurs in all
14 of these things, and all of them were listed in this paragraph.

15 JUDGE FINAMORE: Counsel, this is Judge Finamore.
16 What is Patent Owner's response to Petitioner's argument that
17 Petitioner is relying on Mendelson's entire sensor module for
18 disclosure of the recited optical sensor, not just the photodiode?

19 MR. NELSON: Who is relying on that? That -- that
20 Apple is relying on that?

21 JUDGE FINAMORE: Correct. I believe Counsel on the
22 other side said that in their opening statements today.

23 MR. NELSON: Well, that's correct. I think that actually
24 identifies the dispute here. The signal that is actually acquired is not
25 the one that comes out of the module because it's been processed by

1 then, but we can't emphasize this enough, that the signal that is
2 responsive to light is the one that comes from the photodiode. Photo
3 means light and the photodiode responds by putting out an analog
4 signal, and that -- that occurs within the module, but it's not the output
5 of the module by the time it comes out the other side. So --

6 JUDGE COTTA: But I think Petitioner's point is that
7 photodiode is part of the module and it's identifying the module is
8 performing that function. So why wouldn't that then meet the claim
9 limitation?

10 MR. NELSON: Well, because the processing with the
11 Mendelson sensor module makes it more similar to the processing in
12 the next limitation of the claim, and so it's not the same sensor -- it's
13 not the same signal that comes out of the -- of the photodiode. That's
14 the one that has to -- that's mentioned in the claim, it's the signal that's
15 actually acquired. So it's because of the processing that we've been
16 emphasizing that makes the Mendelson sensor module not fit the
17 claim limitation for the sensor.

18 JUDGE COTTA: But at least under your claim
19 construction, which doesn't mention processing, if the sensor module
20 is Mendelson's entire sensor module, the signal is the signal that's
21 acquired by that module because the module includes the photodiode.

22 MR. NELSON: Well, the module doesn't acquire a
23 signal. The only thing that does signal acquisition, the only thing that
24 it's responsive to light, as understood by the specification, is the
25 photodiode. And the best clue, I think, is the fact that it's a

1 photodiode. It's the thing that actually receives and responds to a
2 photo signal. So they -- by combining the processing onto this sensor
3 module, that's what takes Mendelson out of the claims. And what
4 Apple is doing is they're arbitrarily calling it a sensor, but the only
5 thing that senses is the photodiode itself. And by the way, I heard
6 Apple admit earlier that the photodiode is the thing that sense -- that
7 senses, when you asked the -- when this question was asked earlier
8 today.

9 So turning to Slide 21 -- well, we can talk about it here,
10 for Slide 22. Analog is not a requirement of claim construction. So
11 this goes to some of your questions. Rather, it's Mendelson's analog
12 to digital converter is a fact that shows Mendelson processes the
13 signal, so it is not the claim signal responsive to the light. The one
14 actually acquired by the sensor. So this is why it's not a new
15 argument. Get -- the analog to digital converter was a fact that was
16 listed in support of our arguments earlier in the DOR. And it's not a
17 new argument because it's listed right there, as you see on Slide 22.
18 So turning to D'Angelo, D'Angelo has not been shown to be priority.
19 Apple relied solely on D'Angelo for the claim one limitation requiring
20 the processing board to draw power for operation from the mobile
21 computing device.

22 JUDGE COTTA: Counsel, can I -- I just wanted to see if
23 I could jump you right to what I think is one of the critical issues.
24 And that is -- it's actually the same question I asked to Petitioner,
25 which is what do we know about the IEEE conference? And how

1 does that align with the factors that the Federal Circuit has told us to
2 look at as to whether something is publicly available?

3 MR. NELSON: Yes. Happy to discuss that. And -- and
4 to do that, let's turn to Slide 26. So importantly, with respect to the in
5 *re Klopfenstein* elements that you mentioned earlier, the time display,
6 the expertise of the audience, the expectation of copying and the ease
7 of copying, there is no evidence in the record for any of those items.
8 The only evidence is because -- because this was a document
9 summarizing a conference or related to a conference, but it was not a
10 presentation put up just on slides at the conference. And in fact, none
11 of the declarants attended that conference. So there is no evidence in
12 the record for any of those factors. Rather, all we have is that this
13 document -- this reference was added to IEEE Xplore on December
14 1st, 2011, and then speculation by Dr. Kenny, which is shown here in
15 this answer, about his general expectation, because he didn't attend the
16 conference, and I -- and Dr. Kenny doesn't speak for the IEEE.

17 He said his general expectation is the conference
18 proceedings are made available within weeks, maybe up to a month or
19 so. You can see the speculative nature of this testimony. And it's his
20 understanding that those proceedings generally are made available to
21 the public soon after the conference. So we have some speculation
22 from Dr. Kenny, who didn't attend, and then there's a declarant from
23 the IEEE, who also did not attend this conference, and this is Mr.
24 MacPherson. And his admissions show that the IEEE business rule

1 for publishing on the last day of the conference is not definitive
2 evidence. Importantly, here's his admission.

3 He was asked, even if an article was not distributed
4 during the conference, as a business rule, the IEEE still recognizes the
5 conference paper's date of publication as the date that the conference
6 open; is that right?

7 He agreed, yes, that's right. So the business rule cannot
8 be the same as the business records exception to hearsay that they --
9 that Apple mentioned earlier, because of this admission. This actually
10 shows that the business rule doesn't reflect the true thing that
11 happened. It's just a convenient assumption. It's kind of a fiction that
12 the IEEE uses in order to come up with some date for these
13 documents. But there is no evidence in the record that goes to these
14 important factors that you mentioned, and that in fact, the only record
15 evidence is this December 1st date shown on Slide 25.

16 JUDGE COTTA: Is there any evidence that the
17 conference attendees were under any kind of confidentiality
18 obligation, with respect to the materials that they received?

19 MR. NELSON: Well, we know very little about the
20 conference, because it simply hasn't been put in the record. There's no
21 evidence about that. We -- no attendees at the conference were
22 interviewed. There's no evidence about the conference itself at all in
23 the record, because neither Dr. Kenny nor Dr. -- nor Mr. MacPherson
24 attended that conference. So in response, there is no information in

1 the record about that, and that's one of the reasons we say that it has
2 not been shown by evidence to be prior art.

3 JUDGE COTTA: Can you address the testimony of Mr.
4 MacPherson that's quoted on Petitioner's demonstrative Slide 41,
5 where he basically says that he doesn't see any reason to doubt, for
6 example, that the exhibit was provided to participants and that that
7 was the normal practice?

8 MR. NELSON: Well, I would note that this was Apple's
9 witness, and it was not on cross-examination that this testimony was
10 given. This was on redirect. So after the admissions that Mr.
11 MacPherson made that I have on the screen here, that's when Apple's
12 Counsel asked him some additional questions to try to -- to get him to
13 take back his admissions. And that's when they -- they applied this --
14 this incorrect standard of, you know, in your opinion, is it more likely
15 than not that it would have been? It's still speculation.

16 So that's the context of that testimony. And we think that
17 the -- because he didn't attend, he didn't know for sure, he was
18 speculating. He mentioned his business rule, which is not a -- a strict
19 standard and cannot be trusted, because sometimes they use it --
20 whether the conference paper was actually distributed or not --

21 JUDGE COTTA: Isn't the testimony on Slide 41
22 consistent with his testimony that it's a business rule and that he
23 doesn't know for sure?

1 MR. NELSON: I think it is. He doesn't know for sure.
2 That's correct. And that's not enough to show that it was publicly
3 available.

4 JUDGE COTTA: Can I also jump you to the question
5 about -- I understand there's principally one claim element that's in
6 dispute with respect to the prototype video. And could you explain to
7 me how the prototype video corroborates that it's the processing board
8 that generates the SpO2 values, rather than some other component?

9 MR. NELSON: Well, there are numerous -- first of all,
10 there's no record evidence that anything else does the processing. We
11 have the inventor who provided a summary of what the prototype did,
12 and that's -- turning to Slide 28, that's the user interface summary at
13 Exhibit 2040. And this was a contemporaneous piece of evidence that
14 he did while he was inventing. So this was back in 2011, I believe.

15 JUDGE COTTA: The video is contemporaneous, not --

16 MR. NELSON: And the video. No, the user interface
17 summary is also contemporaneous. So Exhibits 2040 and 2039 are
18 both contemporaneous, and they're both explained by the declaration
19 of the inventor, which is Exhibit 2038. So both 2039 and 2440 are
20 corroborative of what the inventor explained later in his declaration.
21 And so there's no suggestion that anything else did the processing.
22 You can see in the video -- there's a screenshot, of course, from this
23 video at Apple Slide 46 that you referred to. You can see the finger
24 clip on the left-hand side. You can see the connecting cable, which

1 goes to the processing board, which is shown in a white portion of the
2 top of the screen. And then it's all plugged into the iPhone.

3 So we'll get you the video shortly, but the video basically
4 shows the two -- the compliments are separated, the phone is sitting
5 there on the table, and the inventor is whose reflection is -- is visible
6 briefly on the screen of the iPhone, he picks up the finger clip, he puts
7 it on his finger. He plugs the various components together. And then
8 initially the phone shows a zero reading. And then after a few
9 seconds, you see that it then changes to what's shown in this
10 screenshot, which is some numbers indicating that it's working.

11 Now, is there a way to zoom into the -- into the
12 electronics and see which things were doing the processing? That's
13 not available in the video, but the best and the only way to tell that is
14 by understanding what the inventor said in his declaration and in his --
15 his summary. And so there's no evidence to the contrary that the
16 processing isn't being performed exactly as claimed. That's explained
17 by the -- that's explained by the inventor. And under the rule of
18 reason, you have to combine all of the evidence and -- and understand,
19 is it more likely than not that this is -- is the inventor credible? So we
20 think that, under the rule of reason, in the absence of any other
21 evidence, and based on all of this existing evidence that is credible,
22 and the contemporaneous documents show that.

23 So you're right to focus on this one aspect. None of the
24 other aspects of that corroboration evidence or challenge. And so

1 when you evaluate sufficiency under this rule of reason, we think that
2 -- that standard is met.

3 So going to the question of whether this is --

4 JUDGE MARSCHALL: Excuse me, this is Judge
5 Marschall. Could we skip back to the --

6 MR. NELSON: Go ahead.

7 JUDGE MARSCHALL: -- IEEE issue again are?

8 MR. NELSON: Yes.

9 JUDGE MARSCHALL: Are you saying that, in order to
10 prove that something was publicly available when it's a paper that's
11 distributed at a conference, that you need a declarant who is actually
12 there and recalls the paper being published?

13 MR. NELSON: Well, that would be one way to show it.
14 They certainly didn't have that here. It may not be the only way to
15 show it. You could show some sort of newsletter that mentions the
16 publications that were presented. You could have any number of
17 ways of showing it that -- that simply aren't here.

18 JUDGE MARSCHALL: Okay. It seems like they have a
19 pretty good declarant who knows the customary practice of how
20 things are published at conferences, and the testimony is certain in
21 that regard. So I'm wondering why that isn't enough, and if there are -
22 - it seems like there are cases in the past where that is enough, where
23 somebody with knowledge of how a business operates states that, in
24 the customary practice, things are published in a certain manner,

1 without necessarily having personal recollection of exactly how a
2 particular publication was published.

3 So I'm just wondering if -- if you're making too broad of
4 a point here, that is undermined by existing case law?

5 MR. NELSON: Well, all I know is what he says in this
6 case. And so whether or not it's -- it's possible, I don't know, but the
7 declarant here knew very little, and that's why I think this admission is
8 so important. He admitted he did not know. And he also admitted
9 that the business rule would essentially assume something that's
10 counterfactual. And that's why this admission is important as well.

11 So in this case, that declarant, which purported to
12 represent the IEEE, admitted that the business rule would not prove
13 publication. And so they were not asserting something that was
14 standard and that can -- and can be sufficient to prove publication in
15 this case.

16 JUDGE MARSCHALL: Okay. I understand your
17 position. Thank you.

18 MR. NELSON: So I would just point out that there is no
19 evidence in this case that it was published at the time. Putting aside
20 the questions of the IEEE's credibility and who it puts out, there --
21 there's no evidence here.

22 So turning to Slide 27, we saw that D'Angelo's earliest
23 proven publication is December 1st, 2011, and the inventions in
24 Claims 1 and 13 were reduced to practice by August 31st, 2011, as

1 shown by the inventor's contemporaneous evidence and his
2 declaration. So therefore, D'Angelo is not prior art under 102(a).

3 Turning now to Slide 35, the revised motion to amend
4 claims satisfied 35 USC 112. And I would just point out that the
5 discussion by Apple I think shows that these -- the support is
6 sufficient, because they were able to label the relevant portions of the
7 specification in order to have the back and forth in the briefing. And
8 so we show that it was supported, and Apple was able to figure out
9 which elements mattered, based on what was provided in the table.
10 So let's turn first with -- go ahead.

11 JUDGE COTTA: Can you address Petitioner's argument
12 that the -- I don't know what to call it, but the -- element 132 is not
13 vertically symmetrical.

14 MR. NELSON: Well, I think that's not shown by this
15 figure, and I've been studying this. The perspective here would not
16 show even spacing between the lines inside that enclosure 132. So
17 because the lines toward the top of the figure have a little bit larger
18 spacing shown, because of the perspective view, that's not proof that
19 the spacing isn't the same on the lower lines. So -- but moreover, the
20 symmetry is not required. The relevant symmetry would've been
21 understood by a person of ordinary skill in the art, based on the
22 structures that we label, and I'll show you that in these figures.

23 So again, it's the characteristics of Item 132, which is the
24 -- the enclosure forming a cavity with upper and lower openings. The
25 rounded rectangular enclosure is Item 132. So here we have labeled

1 walls that are for seating against lips. And you can see that each of
2 the upper and lower shells, 135 and 131, have a wall for seating
3 against the lid. So when you see the upper wall in the -- that's visible
4 in 132 on the upper opening. That would go against these walls in
5 both cases. So the fact that there's a wall down below shows there's a
6 wall in the lower opening as well. The same is true for the surface for
7 seating against the ledge. And this relates to a question that was given
8 to Apple earlier. Because you see that surface, and because in this
9 exploded view, a very conventional, standard thing for mechanical
10 inventions, you can understand a person of ordinary skill in the art
11 would have known that that would seat against the ledge in the lower
12 opening in the very same way that it's illustrated here in the upper
13 opening.

14 JUDGE COTTA: So could -- can I ask you a question? I
15 just want to make sure I understand what I'm looking at. You have
16 that annotated arrow pointing to the surface receding against the
17 ledge. Is that the -- I guess for Element 131, is that the upper surface
18 of the wall that -- that's pointing at?

19 MR. NELSON: No. No. It's a surface proceeding at a
20 ledge that protrudes laterally out from the side. So the wall protrudes
21 vertically, and then the ledge is next to that, and it -- and it goes out at
22 a greater radius, and it grows it expands sideways and it sits, on the
23 ledge that's shown --

24 JUDGE COTTA: Well, it's the underside of the lid, for
25 lack of a better word.

1 MR. NELSON: Yes. It's the underside of the lateral
2 perimeter of the lid as it pokes out there a little bit. And this is just a -
3 - a very natural and standard way that many objects are provided with
4 water proofness. You can put a seal in between those structures, but
5 the walls are the edges of the vertical portion, and then the ledge is the
6 lateral portion that sits on -- sorry, the ledge supports this lateral
7 portion in the opening. So it nests in there.

8 And this is shown in the figures, by the way. The figures
9 show embodiments or the same embodiment, where all of these
10 limitations or all of these features have been collapsed in and are
11 tightly put together to make a little waterproof box.

12 Here are a few more indicia -- turning to Slide 38.

13 JUDGE COTTA: Can you go back -- I'm sorry.

14 MR. NELSON: Go ahead.

15 JUDGE COTTA: Can you go back to the -- where would
16 be -- the ledge is supposed to be in the opening? Where's the ledge in
17 the opening?

18 MR. NELSON: The ledge in the opening is, it's basically
19 where the thicker line is shown around the interior of the opening on
20 top.

21 So I apologize that it's somewhat granular in this picture.
22 This is the best we could do, but the -- you can tell that it sits in there
23 and doesn't drop all the way through the opening, because the other
24 figures show that when you have this box, the shells sit at the top and
25 at the bottom and they're held up by this ledge, and so by that --

1 JUDGE COTTA: And that the ledge in the opening
2 would be below the top surface of the opening by an amount that's
3 equal to thickness of the lid; is that right? Is that what's going on?

4 MR. NELSON: That's correct. That's right. Because
5 when you see the other figures, you can see that the outer surface of
6 this little box is pretty much smooth around it. So you're right about
7 the open -- the distance down from the upper edge of the box. That's
8 correct.

9 And the top and bottom are symmetrical, as shown here.
10 A person of ordinary skill would've looked at this and seen that these
11 shells are symmetrical. And so both the upper and lower openings in
12 Item 132 are essentially the same and the clues for that are shown in
13 these figures at that Slide 38. So you can see that there are
14 corresponding protrusions shown from different perspectives. So 131
15 has the skinny protrusion -- the skinny protrusion labeled in red and a
16 corresponding skinny protrusion is shown at the other end, but in a
17 different view on 135. Similarly for the fatter protrusions labeled in
18 blue, you can see that if you were to invert Item 131 around its -- its
19 transverse axis, it would then look like what is shown in 135.

20 JUDGE COTTA: Is there any textual description of this
21 mating structure and the protrusions that you labeled on this slide?

22 MR. NELSON: Well, the waterproof nature of the box is
23 described in the specification, but these particular structures that are
24 labeled here don't have additional explanation. But certainly the fact
25 that it forms a waterproof protective blocks and then the additional

1 structures that make that waterproof nature come to pass, are shown in
2 the figures themselves.

3 And here on the right, you can see -- we're still on Slide
4 38. You can see these mating structures. So symmetry would've been
5 understood by a person of ordinary skill because this lower shell
6 shows this skinny protrusion and a place for that long skinny
7 protrusion to fit within the opening of the upper portion. And so that
8 shows that there is symmetry between the upper and lower Shells 131
9 and 135.

10 JUDGE COTTA: And I guess one other question. Just
11 kind of looking at the figure, it looks like the mating structure that
12 you've annotated, it looks like it's almost flush with the bottom of the
13 structure for 132. But as I understand your position, that's probably
14 not the case because it's symmetrical, and that's just a -- a consequence
15 of having a perspective view.

16 MR. NELSON: Yes, I believe that's right. And you can
17 see that by looking at the -- the mating structure that's labeled in
18 green. Within the opening itself, if you look to the right-hand side of
19 the bottom corner there, you can see that it's actually spaced up a little
20 bit from the lower curved edge of the wall. Without a laser pointer,
21 it's hard for me to -- to show that to you, but it's -- it's at the base of
22 the -- the green mating structure within the opening itself.

23 So you can see there's some perspective there. It's spaced
24 up from the bottom of the opening by enough that, I think it's
25 inconclusive exactly where it sits within there. But keep in mind, the

1 important part is not that the mating structures are all exactly
2 identical. The -- all that needs to be shown here is that there is a
3 sufficient lip and ledge to establish this waterproof nature. And
4 because that's shown and would've been understood by a person of
5 ordinary skill based on these figures, we think it's well -- it's well
6 supported here and would have been well understood.

7 The reason I'm pointing to these mating structures is to
8 help show the various clues that a person of ordinary skill in the art
9 would've seen to understand the symmetry and make them understand
10 how the shells would fit within openings that are the same in the top
11 and the bottom, at least to the extent that there's a lip and a ledge as
12 claimed.

13 JUDGE COTTA: Okay. I think I understand your
14 position on this.

15 MR. NELSON: Okay. Moving ahead to the included
16 together limitations, this is on Slide 40. Apple also attacks the
17 included together limitations under Section 112, and they say that
18 they're indefinite. I wanted to show you Dr. Duckworth's analysis on
19 this. He provides an example. One great way to show that a
20 specification is not ambiguous or indefinite is to show an example of
21 what is claimed. And here in the figures, 1A through 1C, the
22 specification provides an example of including the sensor and
23 processing board together.

24 Now, Apple attacked Dr. Duckworth later, saying he
25 didn't understand it and couldn't apply this notwithstanding this

1 analysis. But this was a distraction. I want to explain why. He was
2 asked questions beyond the scope of his declaration. And these
3 limitations did not form the basis of his opinion regarding the Poeze
4 reference. So Apple says that he was unable to determine something
5 that this was with respect to applying these -- this terminology to a
6 reference that had not been analyzed in his declaration.

7 So here's what happened. They said, "In your expert
8 opinion, looking at Figure 7," -- this was of the Poeze reference, not
9 the '507 Patent -- "are you unable to determine if the sensor 116 and
10 monitor 118," again, elements of the Poeze reference, "are included
11 together; is that correct?"

12 The witness said, "I've not said I'm unable to do that. I
13 said I'm not prepared to provide a new opinion on that at the
14 moment."

15 This is very appropriate and it does not show that he
16 doesn't understand. As I mentioned before, he showed this example,
17 this shows that it was definite and it's supported by the specification
18 and not ambiguous at all.

19 There's a very similar discussion that occurs in the -- for
20 the advanced signal processing limitations. Dr. Duckworth's analysis
21 pointed to Paragraph 32, and he identified, again, examples.

22 JUDGE COTTA: So Counsel, if I could interrupt and
23 just ask the same question I asked to Petitioner, does advanced signal
24 processing, is -- is that a term of art? Does it have a known meaning?

1 MR. NELSON: Well, Masimo has not argued that that
2 has a known meaning because it's sufficiently described in the
3 specification, what's meant by that. Paragraph 32 identifies these two
4 examples, and these are enough to help a person of ordinary skill
5 understand what that means in this context.

6 JUDGE COTTA: Are there other examples that would
7 constitute advanced signal processing beyond including parallel
8 engines and adaptive filters?

9 MR. NELSON: There may be other examples, but not in
10 this specification. There is the Masimo SET technology, S-E-T, I
11 think would be included in there. But that's to the extent that's
12 included in this specification, that could be another example. But
13 importantly, it's the examples we point to are the parallel engines and
14 adaptive filters. We think those are sufficient to -- to help a person
15 with ordinary skill understand what it means.

16 JUDGE COTTA: What -- what is the commonality
17 about those two examples that would help the ordinary artisan
18 understand what advanced signal processing means?

19 MR. NELSON: Well, I don't know if -- if the
20 commonality is what really helps. It's just the fact that parallel
21 engines is different from a standard engine and adaptive filters is
22 different from a standard filter. So these are a little bit higher level
23 processing techniques. Parallel engines aren't in -- aren't always
24 included. Adaptive filters aren't always used. Sometimes it's kind of
25 a dumb filter that doesn't adapt.

1 So the fact that these two things go beyond a little bit the
2 normal standard engine or standard filter, I think is a commonality
3 that might help that person of ordinary skill understand what this
4 means when it says Advanced.

5 JUDGE COTTA: Oh, just to make sure I understand
6 your position, is it that advanced means a little bit beyond standard?

7 MR. NELSON: Well, in this context, I think it's fair to
8 say that the parallel engines and the adaptive filters do exceed the
9 standard. And the person of ordinary skill would've understood, okay,
10 this isn't just your run of the mill engine. It's not your run of the mill
11 filter. So we haven't taken the position on a little bit beyond because
12 parallel engines may involve quite a bit more processing or quite a bit
13 more work to make them work in synchronicity. The adaptive filters
14 may take a lot of work. So I don't know if that's a little bit beyond or
15 not. But in any case, a person of ordinary skill would've seen this and
16 thought, okay. I now understand parallel engines, adaptive filters. I
17 understand what advanced signal processing means in this context.

18 JUDGE COTTA: What are we to make of Dr.
19 Duckworth's difficulty answering deposition questions about what
20 advanced signal processing means?

21 MR. NELSON: But I'll -- let's look at that. I don't think
22 he had difficulty answering those questions. I think that's a
23 mischaracterization. And I'll show you why I say that.

24 I'm now turning to Slide 43. He was asked, "So sitting
25 here today, you don't know whether or not noise filtering that does not

1 use adaptive filters would fall within the scope of the claim advanced
2 signal processing algorithm; is that correct?" This was a hypothetical
3 question asked by counsel on cross examination, and it was beyond
4 the scope of his declaration and he hadn't been asked to apply this to
5 some hypothetical in his earlier analysis.

6 So the witness actually responded and pushed back and
7 said, "Counselor, I did not say I did not know. You are giving an
8 example." It was a hypothetical example. "That is, you were saying
9 without the use of adaptive filters. I explained, and I've explained
10 many times in Paragraph 51, that signal processing algorithm is
11 advanced based on use of parallel engines and/or adaptive filters."

12 So the hypothetical question I think was answered well
13 here. He referred back to the analysis he actually did, and these two
14 examples I think are sufficient to show what it means and would've
15 helped a person of ordinary skill be able to apply it.

16 JUDGE COTTA: So I -- I'm sorry to belabor the issue,
17 but I just want to make sure I know. What does advanced signal
18 processing mean?

19 MR. NELSON: Advanced signal processing
20 encompasses these two examples, adaptive filters and parallel engines.
21 And it goes beyond standard processing and a person of ordinary skill
22 in the art would be able to see from those two examples, what it
23 would mean and apply it in -- in various cases.

24 JUDGE COTTA: So based on those two examples, the
25 person of ordinary skill would understand how much beyond what

1 you're calling standard processing something would need to go in
2 order to qualify as an advanced signal processing?

3 MR. NELSON: Yes. In the context of these claims, they
4 would be able to apply the claims to something and see whether or not
5 they've satisfied advanced signal processing in this context.

6 JUDGE COTTA: Okay. I understand your position.

7 MR. NELSON: So turning to Slide 44, Apple fails to
8 show obviousness of the revised Motion to Amend claims.
9 Importantly, Apple's grounds rely upon putting an analog to digital
10 converter in the sensor. And I'll show why, but they cite to Paragraph
11 106. I'm at Slide 45. This is from Apple's revised Motion to Amend
12 Opposition. And you can see here that they have specifically cited
13 Paragraph 106 for the sensor. They say the sensor 116 includes an
14 emitter 504. And then they explain that some more and they cite to
15 Paragraph 106.

16 Slide 46 shows that Paragraph 106, and it relates to
17 Figure 8. In the depicted embodiment shown in Figure 8, the sensor
18 116 includes an emitter 504 -- these things are all highlighted there --
19 tissue shaper 522, set of detectors 506, and front-end interface 508.
20 Importantly, the front-end interface 508 is included within the sensor
21 116 in the embodiment that Apple relies on here.

22 So in Paragraph 120, which Apple also refers to and now
23 argues much more extensively in their sur-reply, this purpose of the -
24 front-end interface 508 is explained further. The front-end interface
25 508 provides an interface that adapts the output of the detectors 506,

1 in -- which is responsive to desired physiological parameters. For
2 example, the front-end interface 508 can adapt a signal 524 received
3 from one or more of the detectors 506 into a form that can be
4 processed by the monitor 118.

5 So once again, here, this is fully consistent with that
6 Paragraph 106, I pointed you to. The front-end interface and its
7 analog to digital converter, which is what adapts the signal into a form
8 that can be processed, those are both placed within the sensor 116. So
9 then what Apple emphasizes next is the following sentence. They
10 say, the front-end interface 508 can have its components assembled in
11 the sensor. Well, that's what we already saw. That's consistent with
12 Paragraph 106. But it provides alternatives, in the monitor 118, and in
13 connecting cabling. But importantly, these are different
14 embodiments, and Apple never explains -- this would require a
15 modification, and Apple's opposition never explains that modification.

16 It never provides a motivation for why you would take the front-end
17 interface and essentially put it in the back end. Yes, that possibility is
18 discussed right here in this -- in this sentence, but that modification is
19 not discussed or explained or motivated by Apple in its briefs or
20 anywhere. They just point to the fact that it can be there, but not that
21 there's a modification or why to make that modification.

22 So this is important because -- I guess I don't have the
23 case on there. There's a -- this is important because, even if you
24 modify embodiments that are within a single reference, you still need
25 to explain -- here's the case. *In re Stepan Company*, 868 F.3d 1342 --

1 1346, Federal Circuit 2017. Apple's obviousness analysis fails
2 because motivation to combine or modify is required, even when
3 relying on "multiple embodiments from a single reference." That's
4 certainly what's happening here in this Poeze reference. And they
5 have not explained how or why to modify the various embodiments
6 provided here.

7 Now, turning to Slide 49, I wanted to just mention that,
8 in obviousness analysis, no hint of hindsight is allowed. And so when
9 -- when Apple addresses the Poeze reference, I think that provides
10 more than a hint of hindsight, because it doesn't explain these
11 modifications to the various embodiments. But I wanted to run
12 through a few more examples of hints of hindsight.

13 For example, Apple does not provide a motivation to
14 provide an ADC on a board of Poeze's monitor. In Masimo's reply,
15 we explained this, and that's what I'm quoting on Slide 50. Apple's
16 assertion that mounting components on a circuit board was well
17 known does not show a motivation to combine, because it's done
18 generically. They just say, components in general can be mounted on
19 a printed circuit board. But the claims do not generically recite
20 mounting components on a PCB. So there's no motivation for the
21 specifically asserted modifications to meet features of claim
22 limitations. That is more than a hint of hindsight.

23 Here's another example. Apple refers to this Pakula
24 reference, Exhibit 1113, and they cite it as alleged support for the
25 same thing. But it does not even mention an analog to digital

1 conversion or a component that does that. So it has a long list of
2 options at the bottom left of Slide 51, you can see it refers to PCB,
3 flex, solder, SMT, wires, connectors, or combinations of these. None
4 of this is specific enough to where those components would be placed,
5 in particular the analog to digital converter, and why it would be put
6 in a specific place as required in the claims.

7 Turning to Slide 52, here's another example of more than
8 a hint of hindsight. Apple cites to this Goldreich reference as alleged
9 support, but its analog to digital converter is not shown and not placed
10 anywhere, so it can't provide the specifics required by the claims.

11 Turning to Slide 53, once again, more than a hint of
12 hindsight here Apple cites the Stodden reference as alleged support,
13 but this also is not mentioned in ADC, and it discloses an electric
14 vehicle charger, as you can see, and not an SpO2 measurement
15 system.

16 Turning to the Kianl and Poeze combination, this is at
17 Slide 54, Apple never accounts for the physical buttons and soft keys
18 of Kianl. You can see that there are physical buttons shown
19 underneath that screen. There are four of them in a row, at the right-
20 hand side of this Slide 54, upper-left portion of that figure. And there
21 are three buttons up the side of the screen there. These are the keys
22 that are used for Kianl to interact with the screen. There's -- in some
23 cases, it's similar to the sorts of soft keys that you use at a gas station,
24 when you say whether you want a receipt or not. That's where I've
25 interacted with these. And these are -- Apple never accounts for how

1 this would be changed and how the interaction would require
2 modifications in order to put any of the information or the interaction
3 onto the Poeze device.

4 And I should mention here that Kianl is wrong. It's
5 actually Kiani. That's the founder of Masimo. It should be spelled K-
6 I-A-N-I, but we've referred to it as Kianl in the papers just to avoid
7 confusion with reference to the exhibits.

8 Importantly, there's an admission in the papers that I
9 didn't want the Board to miss. Apple's revised motion to amend
10 opposition failed to even assert a reasonable expectation of success for
11 combining the Poeze and Kianl references for these limitations. It
12 should say limitations 21F -- at Slide 55, it should say limitations 21F
13 through 21L in the first bullet point there. I apologize for that typo.
14 But as you can see here, the yellow portion is pure attorney argument,
15 and there's no citation at the end of that. So when -- when Masimo
16 pointed out that there was no sufficient support for asserting a
17 reasonable expectation of success in the original RMTA opposition,
18 Apple responded with this argument.

19 They say, the fact that Figure 1A of Kianl expressly
20 shows its display device easily fitting in a user hand -- user's hand
21 indicates that such information would have been predictably and
22 easily displayed in Poeze's smartphone. That is brand new. It's a
23 fresh argument. It was not -- they don't have a cite to anything
24 previously. It's not only new, but it's pure attorney argument, because
25 it doesn't cite to the reference either.

1 And then in the green portion, they also add this
2 reference to D'Angelo, but that is also new argument. There is no
3 reference in their opposition to the revised motion to amend to
4 D'Angelo in support of this proposition at all. D'Angelo, yes, it's part
5 of the record, but it was never cited as evidence, and is therefore
6 brand new here. So none of Apple's motivations relate to the actual
7 modifications.

8 Now, I wanted to point to something on -- on Slide 56.
9 There were some questions earlier about the table format that was
10 used to support the substitute claims, and I just wanted to mention that
11 Apple didn't have an issue with the same table format used in
12 Masimo's first motion to amend, but maybe more importantly, Apple
13 used this same format, and I wanted to cite this for the Board, in
14 IPR2023-00664, Paper 27 at Pages 19 to 23, this same format was
15 used. And in Paper 38 at Pages 9 to 10, Apple cited to this same
16 *PEAG* case, which is listed on Slide 56, in order to argue that string
17 citations are sufficient. So we agree with -- with that position here.

18 And moreover, Masimo has elaborated on the material
19 provided in that. And in fact, the earlier arguments about the
20 protrusions all stem from that argument. So when -- in the upper and
21 lower shells and the enclosure, the rounded rectangular enclosure, all
22 of that is in the briefing, and those are the very few items that Apple
23 pointed to that said supposedly weren't supported. But the full and
24 robust record was developed starting with the basis of that table. And
25 so Masimo should be allowed to elaborate on its arguments, and --

1 and Masimo did respond and elaborate, and that's why we're able to
2 have this discussion with those figures.

3 So with that, I'll pause, and if there are no questions, I'll
4 wait for the rebuttal time.

5 JUDGE COTTA: I was going to warn you, you had
6 about four minutes left. I do have one question I wanted to ask,
7 before you wrap up, and that relates to Element 23C.

8 And I wonder if you could address Petitioner's argument
9 that there's no support for having both a watch and a PDA?

10 MR. NELSON: Well, the watch and the PDA are both
11 listed in the specification. A watch is specifically recited -- a
12 wristwatch is specifically recited. So I'll be able to provide a better
13 citation momentarily, but they're both there, and so we disagree with
14 Apple's position.

15 JUDGE COTTA: Is there an embodiment that has both
16 of those, or is it just they're both listed?

17 MR. NELSON: Let me turn to Slide 67. You can see
18 that Slide 67 shows a network of devices. And so they are provided
19 both on this figure, for example.

20 JUDGE COTTA: Okay. Thank you. I don't have any
21 further questions. Any other further questions?

22 JUDGE FINAMORE: None from me.

23 JUDGE COTTA: No? Okay. We'll add three minutes to
24 your rebuttal time.

25 MR. NELSON: Thank you.

1 JUDGE COTTA: Okay. Is everyone good to just keep
2 on steaming through?

3 MR. NELSON: Actually, Your Honor, Petitioner was
4 going to request a short break here. We've both been talking for quite
5 a long time. Would a five-minute break be amenable to the Court?

6 JUDGE COTTA: Yeah, that's fine.

7 MR. NELSON: Okay. Perhaps reconvene at 45 after the
8 hour?

9 JUDGE COTTA: Sounds good.

10 MR. NELSON: Thank you.

11 (Whereupon, the above-entitled matter went off the
12 record at 3:39 p.m. and resumed at 3:46 p.m.)

13 JUDGE COTTA: All right. Back on the record, please.

14 MR. BISENIUS I'd like to -- oh, sorry.

15 JUDGE COTTA: Petitioner, you have 16 minutes, and
16 you can begin whenever you're ready.

17 MR. BISENIUS: I'd like to start at Patent Owner's slides,
18 where Patent Owner just left off, so Slide 67 of Patent Owner's slides.

19 Patent Owner alleged support for Element 23c in this figure. This is
20 a new argument, they did not actually raise this in the reply. But
21 beyond that, I'm not seeing a wrist-mounted device in this figure
22 shown on Slide 20 -- 67. There's a number of computing devices
23 there, but not a smart watch, not a wrist-mounted device. But beyond
24 that, looking at the claim language of Element 23c, it doesn't just
25 require a wrist-mounted device somewhere. It's specifically recites,

1 "Wherein the sensor and processing board" -- so the claim sensor, the
2 claim processing board recited in Claim 21, "Wherein the sensor and
3 processing board are provided together with a wrist-mounted device."

4 It requires the claim sensor and the claim processing board to be
5 provided together with that wrist-mounted device.

6 But Claim 21, as we stated, requires that those two
7 sensors be in communication with a smartphone. So looking at Slide
8 67, even if we replaced one of those two smartphones on the lower
9 left with a smart watch, that smart watch would not be provided
10 together with the sensor and the processing board that are in
11 communication with the smartphone. It would be provided together
12 with a different sensor and a different processing board. There's no
13 support for Element 23c in the original disclosure of the '507 Patent.

14 If there are no questions on that issue, I'm going to stick
15 with Patent Owner's slides, and I'm going to go back to Slide 26 of
16 Patent Owner's slides. This is regarding the testimony of the IEEE
17 declarant, Gordon MacPherson. And I'd like to point out Mr.
18 MacPherson does not appear on behalf of Apple. He's actually a third
19 party neutral witness, as evidenced by the fact that we needed to seek
20 a subpoena in order to depose him. He is not representing one party
21 or the other. He is a neutral declarant.

22 But looking at his actual testimony here, Patent Owner
23 spent a lot of time on this question on Slide 26. They asked, "Even if
24 an article was not distributed during the conference as a business rule,

1 the IEEE still recognizes a conference paper's date of publication as
2 the date that the conference opened, right?"

3 And he agreed. "Yes, that's right."

4 But what is not asked here, and was never answered in
5 the deposition is, is that reason, is that specific rule why Mr.
6 MacPherson believes that D'Angelo was distributed at the conference?
7 That's -- that specific rule does not form the only basis of Mr. -- Mr.
8 MacPherson's testimony. Mr. MacPherson's testimony is based on his
9 knowledge of how the IEEE works, how the IEEE conferences work,
10 and what happens at these conferences.

11 And so turning back over to Petitioner's slides, I want to
12 go to Slide 36 of the Petitioner's slides. And we see here that what
13 Mr. MacPherson testified to at Point Number 5 is, "I make this
14 declaration based on my personal knowledge and information
15 contained in the business records of IEEE." And so his personal
16 knowledge is not just what's listed in the business record. It is his
17 personal knowledge of how the IEEE works, how these IEEE
18 conferences work, and how papers are distributed at these
19 conferences. So contrary to Patent Owner's Counsel's statement that -
20 - that he did not know, you'll not see that answer in the transcript, that
21 he did not know if it was published or not. He tells us in his
22 declaration, it was published at that conference. And he knows this
23 because of his knowledge of how the IEEE works.

24 Additionally, the standard does not require testimony
25 from an actual attendee of the conference. A representative of IEEE,

1 based on his knowledge here, has testified the annual was published at
2 no later than the last day of the conference. Turn to Slide 37, thus we
3 have it underlined here. He testified that the annual was part of the
4 conference proceedings. He testified that the conference occurred
5 from August 30th to September 3rd, 2011. And he testified that his
6 belief, not that maybe this happened, or I don't know, he said it's his
7 belief, based on his knowledge, that copies of the conference
8 proceedings were made available no later than the last day of the
9 conference.

10 When it comes to the issue of confidentiality, I'll note
11 that Masimo has never mentioned or argued that this -- in its briefing
12 any requirement of confidentiality of this paper distributed here. And
13 Mr. MacPherson testified that IEEE is a large organization with a lot
14 of members. In his deposition testimony, this is Exhibit 2057 on
15 Page 34, starting at Line 8, Mr. MacPherson testified, "IEEE is -- it's
16 the largest technological professional association on earth. It's a
17 professional associations for electrical engineers, computer scientists,
18 and technologists who revolve around those core areas. Well over
19 400,000 members." This is not a secret society. This is a very well-
20 respected organization that publicly distributes this type of
21 information to interested parties.

22 Further evidence that this publication -- that D'Angelo
23 was published and made publicly available without a confidentiality
24 requirement was, looking at Slide 37 again, his statement at Point 11,
25 that the D'Angelo article was published in the 33rd annual conference

1 -- international conference. Not provided to attendees, but published.
2 The intent here is public availability.

3 And we can see that in the case law. If we turn to Slide
4 40 of Petitioner's slides, the *Medtronic* case on the upper left here, the
5 Federal Circuit found that, "A paper that was orally presented at a
6 conference to a group of cell culturalists interested in the subject
7 matter was considered a printed publication." People interested in that
8 subject matter attended this IEEE conference, and it wasn't just orally
9 presented. It was actually distributed as part of the conference
10 proceedings, as testified to by Mr. MacPherson.

11 If there are no questions on that issue, I -- I'd like to talk
12 about claim construction for one or more signals for a little bit. So if
13 we turn back to Slide -- oh, I'm sorry. I'm going to go back to the
14 Patent Owner's slides. Patent Owner's slides, and their Slide 7. So we
15 can see here, the -- the -- the -- the -- the recitations from the '507
16 Patent that Patent Owner's Counsel insists supports their narrow claim
17 construction, well, look what -- what it actually says. It says, "Sensor
18 data is transmitted from the sensor 110, along the first cable 120, to
19 the processing module 130, which can apply noise filtering and signal
20 processing techniques." Note that it doesn't say photo detector data,
21 or the raw signal detected from a photo detector or photo data. It says
22 the sensor data.

23 And as I described before, in Column 4 of the '507
24 Patent, it refers to that entire finger clip assembly as the optical sensor
25 110. It's not just the photodetector or photodiode. And in fact, the

1 terms photodetector and photodiode don't appear anywhere in the '507
2 Patent. Patent Owner is now attempting to restrict this claim language
3 to descriptions that appeared nowhere in the specification.

4 So with that in mind, I'm going to go back to Petitioner's
5 slides. Sorry, that I'm changing around a lot, but I'm going to go to
6 the Petitioner's Slide 15. And here we have the plain language, and
7 what does it say? "Outputting from an optical sensor." So the optical
8 sensor is the entire assembly. That's actually the only example in the
9 '507 Patent, because the '507 Patent doesn't talk about photo detectors
10 or photodiodes. It says, an optical sensor. So "Outputting from an
11 optical sensor of an SpO2 measurement system, one or more signals
12 responsive to light from a light source attenuated by tissue of the user
13 at a measurement site."

14 Keeping that plain claim language in mind, if we turn to
15 Slide 17, we see the signal -- the sensor module on top, the top right
16 over here. We've identified the sensor module, the entire assembly as
17 the claim sensor. And so what are the one or more signals? The
18 claims don't require it to be the one or more signals acquired at a
19 photodiode, because a photodiode or a photo detector is never
20 discussed in the '507 Patent. We identified in the petition, the one or
21 more signals of a signal output by the PCB antenna. And they're
22 responsive to light, because as the light changes, as the light detected
23 by that photodiode changes, those signals change, in response to those
24 changes detected by the photodiode. So all the processing that
25 happens in between is really of no import, because those signals are

1 responsive to the light because they change in response to detected
2 changes in the light.

3 Going back to Slide 15, I just want to look at the claim
4 language one more time. The signal here is not the signal detected at
5 the sensor, not the signal acquired at the sensor, it's the signal output
6 by the sensor. All the claim language requires is that the signal that is
7 output by the sensor be responsive to light, and that's exactly what
8 Mendelson teaches.

9 Very quickly, I'm going to switch back over to Patent
10 Owner's slides, Slide 55 of Patent Owner's slides. So first off, Patent
11 Owner asserted that we never cited to the reference in the yellow
12 highlighted part, but the citation appears right in the sentence itself.
13 Figure 1A of Kianl. The citation didn't need to be at the end of the
14 sentence because we had already cited to it. With respect to D'Angelo
15 confirming a reasonable expectation of success, this was responsive to
16 an argument raised by Masimo. We felt that it was pretty evident that
17 by 2012, a POSITA would understand that information displayed on
18 one screen could be displayed on the screen of another device. We
19 didn't need to do a full analysis of reasonable expectation of success
20 on such a simple modification. But in response to Masimo's
21 arguments that there wouldn't have been a reasonable expectation of
22 success, we identified D'Angelo, that D'Angelo provides all that same
23 information on an iPhone.

24 Switching back over to Petitioner's slides one more time.
25 Turning all the way to -- sorry, I need to get very deep into my slides

1 here -- Slide 132 in Petitioner Slides. So as we demonstrated in these
2 portions quoted and cited in the opposition, we are starting with
3 Poeze. Poeze is the base frame, and Poeze is expressed. It's going to
4 display trend data for physiological parameters that are determined.
5 And Poeze has also expressed that it's going to receive input at its
6 smartphone via the touch screen. So Patent Owner's arguments, with
7 respect to Kianl's soft keys, if we look back at Slide 127, we didn't
8 start at Kianl.

9 We don't have to address Kianl's soft keys, because all --
10 the only suggestion we're taking from Kianl is, hey, Poeze already
11 told us it's going to receive touch screen user input. Kianl gives us
12 examples of a bunch of icons. It shows four of them right here, but
13 we actually identified several figures with a lot of other input icons
14 that also would've been applicable to Poeze. And we simply said,
15 hey, Poeze already tells you how to use a touch -- that it has a touch
16 screen. Dr. Kenny testified by 2012, that understood how touch
17 screens on iPhones work, and Kianl gives you examples of icons that
18 could have been placed on the touch screen. There's no need for Kianl
19 to have a touch screen because Poeze already had the touch screen,
20 and there's no need for Kianl's soft keys to be imported into the
21 smartphone of Poeze because Poeze has an input -- an ability to
22 receive those inputs -- the touch screen.

23 With those issues, I'd like to turn to, lastly, written
24 description support for Element [21n]. And I'm going to go back to
25 Patent Owner's slides again. Specifically, I'd like to start at Patent

1 Owner's Slide 37. So during Patent Owner's counsel's presentation
2 and during a round of questioning, Patent Owner pointed to a -- a dark
3 line near the top opening and said that that is the inner ledge. This is
4 the first time that Patent Owner in any place on the record has
5 identified what they believe is the support of the inner ledge. And
6 that's why there's no arrow here in this figure identifying that dark line
7 as the inner ledge, or in any of the other slides here, or in any of
8 Patent Owner's papers because they never identified what they believe
9 was the support for the perimeter of the inner ledge.

10 Rather, Apple identified some structures that may or may
11 not support that and based our argument on that because we were left
12 -- left guessing as the actual support because of the single string
13 citation for the length in Claim 21. But looking here at this figure on
14 Slide 37, that line could be anything. We don't know if that line
15 protrudes out from the wall or if it's an indentation of the wall.
16 There's really no guidance here because there's no written descriptions
17 support discussing this.

18 Your Honor should ask Patent Owner's counsel, is there
19 any written description of the structures of the inside of the enclosure
20 132 or the upper and lower shells 135 and 131? There simply is not.
21 All of this is attorney argument in conjuncture presented for the first
22 time during this oral hearing as to what these lines mean. And once
23 again, it's not -- it is Patent Owner's responsibility to show the written
24 description support. It's not Petitioner's responsibility to prove that
25 the inside of that enclosure is not symmetrical or prove that those lines

1 are not in their length. Patent Owner has to show those actually
2 provide written description support for structures that they're now
3 claiming and want to pull monopoly over -- over the public.

4 JUDGE COTTA: You've got about a minute --

5 MR. RENNER: Oh --

6 JUDGE COTTA: You've got about a minute and a half
7 left.

8 MR. RENNER: Yeah. Very quickly. The very last
9 thing I want to touch on is the written description support in the form
10 of a string citation. Patent Owner has -- I want to re-emphasize,
11 Patent Owner has mischaracterized the case law paper. The case law
12 says a string citation is sufficient per element. We identified these
13 portions of the cases in our citation, but that's not what Patent Owner
14 has done here. Patent Owner only provided one single string citation
15 for a very lengthy case Claim 21 with many new amendments. The
16 case law does not support their argument that one string citation for all
17 the elements is sufficient. In fact, the case law demonstrates the
18 opposite. Each element itself, at a minimum, requires its own string
19 citation. If there are no further questions, Your Honor, we will cede
20 the rest of our time. Thank you.

21 JUDGE COTTA: Sorry, I was muted. No further
22 questions. Thank you.

23 MR. NELSON: Okay. I have located the video, and I --
24 as long as it doesn't count against my time, I'm ready to show it to
25 you. Does that sound okay?

1 JUDGE COTTA: That sounds excellent. Yes.

2 MR. NELSON: Okay. Let me get it on the screen. Let
3 me know if you can see that okay.

4 JUDGE COTTA: I can see that.

5 MR. NELSON: Okay. We'll also get this to you
6 separately, but just for the sake of discussion, I'll show it to you now.
7 I apologize.

8 (Video played.)

9 MR. NELSON: There are some artifacts, but we can get
10 the general idea from this player. Okay. Anyone want to see it again?

11 JUDGE COTTA: Thank you. That's as much as I
12 envisioned it based on the descriptions and the screen captures. I do
13 have one quick question. Was there supposed to be sound because we
14 didn't hear any?

15 MR. NELSON: I didn't hear any sound on my end
16 either, so I believe no, but I'll verify that. I think there may be some
17 sound that wasn't coming through that I was unable to hear as well.

18 JUDGE COTTA: Okay.

19 JUDGE FINAMORE: Counsel, just -- it looks like your
20 player might be muted on our screen. Oh, there you go.

21 MR. NELSON: I just found that. Thank you very much.
22 Let's -- if you don't mind, let's play it again just to see if there's better
23 sound this time. Just a moment. Is it still shared properly?

24 JUDGE COTTA: Yes.

1 MR. NELSON: Okay. I heard some very authentic
2 sounding rustling going on there. All right. Thank you. Okay. Can
3 you see the slides now?

4 JUDGE COTTA: Yes. And I'm sorry if I -- if you were
5 waiting for me. You can certainly begin whenever you're ready.

6 MR. NELSON: Okay. First, I'd like to just touch on two
7 issues briefly -- on the publication date issue. The evidence shows
8 that the IEEE did not follow its business rule here. And I heard
9 Counsel for Apple mention that it's a very large organization. We
10 agree. We're not impugning the reputation of the IEEE at all. We just
11 can't take from the existing testimony sufficient evidence to show that
12 the particular paper here was published at the date that they assert.
13 The only evidence in the record here is for December 1st, 2011, and
14 the rest is just speculation. So Apple failed to carry its burden on this
15 one paper.

16 And turning to the signals responsive to light question.
17 As we discussed at great length, the problem with Apple's argument is
18 that it ignores where within the structural limitations of the claim the
19 processing occurs. So our Slide 5, which I'll turn to now, shows that
20 processing occurs in the processor separate from the optical sensor.
21 This is from the structure of the claim itself. It's also shown in Claim
22 13 at Slide 6. Our Slide 9, shows that the specification uses the word
23 detector -- Apple said that we didn't point to a detector, but there it is.
24 The detector that responds to the intensity of the optical radiation
25 after absorption that places it close in time and in position to the LED.

1 So we have the LEDs that transmit optical radiation into
2 a tissue site and a detector that's recited in sequence, right there, that
3 responds to the intensity of the optical radiation after absorption. So
4 this shows that the specification uses the word detector as the part that
5 responds to light. And Apple had admitted earlier that it's the photo
6 diode that does that in the Mendelson reference. The output of the
7 detector is then processed by a different component, as you see at the
8 bottom of this quotation here. This is in our patent.

9 Turning now to the written description, the figures. The
10 figures provide written description support for the lips and the ledges
11 that we discussed earlier. That's at Slide 37. So they say that there's
12 no written description, and they were emphasizing the notion of
13 written as if it can be separate from the figures themselves. But of
14 course, the description is right there. A person of ordinary skill in the
15 art would not just be reading the text of the specification, but they
16 would also be referring to the figures. And so as we noted earlier,
17 these are -- would've been well understood to show how this box seals
18 up, we would've done it with lips and ledges exactly as claimed.

19 So if there are no more questions, I think that's all we
20 have.

21 JUDGE COTTA: No questions here. Thank you. Are
22 there any questions?

23 None here.

24 JUDGE FINAMORE: None from me. Thank you.

1 JUDGE COTTA: Okay. With that, I'd like to thank the
2 parties for their attendance and the presentations today. I think
3 they've both been very helpful. I'd also like to thank the parties for
4 keeping this to a somewhat tight briefing schedule, trying to keep it
5 for our statutory one-year date. I know that's been a lot with the all
6 the issues we have in play. With that, the matter is submitted to the
7 Panel for determination and preparation of final written decision. We
8 are now adjourned.

9 (Whereupon, the above-entitled matter went off the
10 record at 4:09 p.m.)