

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

MASIMO CORPORATION,
Patent Owner.

IPR2024-00290
Patent 8,190,223 B2

Record of Oral Hearing
Held: April 2, 2025

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

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Patent 8,190,223 B2

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The above-entitled matter came on for hearing at 1:00 PM EST on
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Teleconference.

P R O C E E D I N G S

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JUDGE MARSCHALL: Good afternoon, everyone. This is a hearing in IPR2024-00290 between Petitioner, Apple Inc., and Patent Owner, Masimo Corporation, addressing U.S. Patent Number 8,190,223. I'm Judge Marschall. With me are Judges Cotta and Finamore. And we'll start with the parties' appearances, and we'll start with Petitioner's Counsel.

MR. RENNER: Thank you, Your Honor. This is Karl Renner from Fish & Richardson on behalf of Petitioner, and I'm joined in the room by each of Andrew Patrick, Grace Kim, and Dr. Gretchen DeVries.

JUDGE MARSCHALL: Thank you. And for Patent Owner?

MR. HUGHES: This is Daniel Hughes from Knobbe, Martens, Olson & Bear on behalf of Masimo, Patent Owner, and with me in the room are Ashley Morales, Daniel Kiang, Ben Katzenellenbogen -- all from Knobbe, Martens -- and also, Doug Wentzel attending by Zoom for Knobbe, Martens.

JUDGE MARSCHALL: Thank you and welcome. This argument is going to proceed as set forth in the Hearing Order, with one exception I'll get to in a minute. During your presentation, please refer to exhibit or slide numbers to aid us in following along and to make the transcript clear. Please do not interrupt the other party's presentation. You may object only during your argument time or following the rebuttal. Please be aware that we have provided a public access line for the public to watch this hearing, or at least listen in.

As set forth in the Hearing Order, each side is provided 45 minutes

1 of total argument time, and you may reserve time for rebuttal. Since that
2 Order went out, Petitioner has been granted its request to have a LEAP
3 Practitioner argue on its behalf, and Petitioner will be afforded an extra 15
4 minutes of argument time, for a total of 60 minutes of time.

5 With that, are there any questions before we get going? Okay.
6 Hearing none, Petitioner will start, and before you start, if you could let us
7 know if you have a specific amount of time you would like to reserve for
8 rebuttal.

9 MR. RENNER: Thank you, Your Honor. We wanted to reserve
10 15 minutes, please.

11 JUDGE MARSCHALL: Okay. I do have a clock here in the
12 courtroom, which is a bit odd because nobody is in here with me, but I
13 believe you can see the numbers above my head. If not, it'll just be for us as
14 a reminder, but I will start you. You've got 45 minutes in this session, and
15 of course, if you don't use some of your time at the end, we'll add that to
16 your rebuttal time. So you may proceed when ready.

17 MR. RENNER: Thank you, Your Honor. This is Karl Renner for
18 Petitioner, Apple, and may it please the Board. Today, we've organized our
19 presentation into three segments. I'll begin by offering brief remarks to
20 frame the issues in dispute. I'll then welcome my colleague, Dr. Gretchen
21 DeVries, who you saw was identified as a LEAP Practitioner, to speak in
22 greater detail to a threshold claim construction issue, which focuses on the
23 term "replaced" and to explain how the advanced grounds meet that
24 limitation when not improperly narrowed.

25 Grace Kim will then join and round out the presentation by
26 demonstrating how the claims would've been obvious, even if the claim is

1 interpreted improperly and narrowly based on Masimo's theories.

2 Now, the issues. Most claims that are directed to a very simple
3 idea, a patient monitor that has a display, that changes one of its areas, and
4 that makes this change in response to a non-specified change in patient's
5 condition, and importantly, disputed issues are few.

6 For instance, there's really no dispute over displays being known in
7 the prior art, nor prior art displays being updated to reflect changes in
8 something monitored or even displays being updated to reflect changes in a
9 patient's condition that might be monitored. Rather, the primary dispute
10 centers on what kind of display changes are required by the claims, and
11 relatedly, disclosures in the prior art.

12 And as to the claim scope, Petitioner's position is rather simple, we
13 believe. The claim recites words that are not ambiguous and that do not
14 require construction. Among them are words like “replaced,” which is well
15 understood. It simply means displaying a replaced item at a location of the
16 replaced item.

17 Importantly, Patent Owner does not credibly dispute that the
18 claims, if not otherwise narrowed, would be rendered obvious by the applied
19 art. And with that, the Patent Owner's dispute is primarily focused on
20 whether the obviousness has been established and demonstrated that the
21 claims are narrowed based on its construction theory. So as a threshold
22 matter, we see that the case turns largely on claim construction.

23 Can we go to Slide 5, please? Here we show you the claim, claim
24 1, which we believe is representative, and in pertinent part, you can see
25 some italicized text that has been applied or highlighted in this claim. Now,
26 I'll read from a little of that. The key phrase at issue is “the display of one of

1 the measured values” is said to be “replaced with the other of the measured
2 values.” That is, claim 1 calls for display of a first value to be replaced by
3 display of a second value. Straightforward. Unambiguous.

4 And yet as Dr. DeVries will explain in greater detail, Patent Owner
5 suggests otherwise, they focus on the word “replaced.” And based on that
6 limitation, Patent Owner insists the claim must be limited in each of two
7 different ways. First, per their formal construction, Patent Owner urges that
8 whatever is “replaced” cannot be thereafter concurrently displayed
9 elsewhere.

10 Second, through arguments, Patent Owner urges that whatever is
11 “replaced” cannot have been previously displayed elsewhere at the time of
12 the replacing. And together, these two limitations align with Patent Owner's
13 narrative, that the claim is limited to a space-constrained display. But the
14 claim says nothing about any of these limitations. It instead simply calls for
15 “replaced.” No limitation on prior art -- or a prior display, that is -- of
16 replacing a value, and no limitation on further display of the replaced value.
17 And even more broadly, no indication that the claim requires space
18 constraints, for that matter.

19 So how does Patent Owner attempt to justify these limitations?
20 Well, this is really the focus of Dr. DeVries’s presentation, and as
21 previewed, she will now address the “replaced” limitation that Patent Owner
22 seeks to narrow, and she'll debunk each of the Patent Owner's theories for
23 narrowing that limitation, as well as briefly revisit the basis for obviousness
24 of that limitation when properly interpreted.

25 DR. DEVRIES: Good afternoon, Your Honors. My name is
26 Gretchen DeVries, and as Mr. Renner previewed, the construction of the

1 term "replaced" is really at the heart of this proceeding, and so this is where
2 I am going to start today. So would you turn to Slide 13 of our
3 demonstratives, please? And as part of our discussion, I'm going to refer not
4 only to our demonstratives, but also occasionally to the '223 patent itself.
5 That's Exhibit APPLE-1001. So I just wanted to give you some advance
6 warning so you can have that available, if you'd like.

7 Now, when we talk about the term "replaced," I'll first address two
8 aspects of Patent Owner's interpretation of this term. One aspect that's
9 presented in a formal claim construction, and the other aspect that's
10 implicitly asserted as part of the interpretation of this term, and I'll
11 demonstrate why neither one of these aspects of Patent Owner's construction
12 should be adopted. And I'll then briefly show you how our advanced
13 combination of references satisfies the claims when they're properly
14 interpreted.

15 So let's turn to Slide 14, please. Most of the independent claims of
16 the '223 patent use the term "replaced" when specifically they recite
17 something like what you see here in the excerpts at the left from claims 1
18 and 27. They say something like, the display of one value, let's say the first
19 value, is replaced by another value, which is the second value. This is a
20 straightforward limitation that means just what it says. Simply, it means that
21 the second value is displayed in the place that was previously occupied by
22 the first value. Notably, the claims say nothing about where that replaced
23 first value goes when it's replaced by the second value.

24 Slide 15, please. Patent Owner, though, has offered a construction
25 for the term "replaced" that attempts to import exactly such a requirement
26 into the claims. Patent Owner's construction is at the bottom left of Slide 15,

1 and you see that they've asserted that “replace” means that when a first value
2 is replaced by a second value, this means that the first value must be
3 removed from the display. This is certainly not recited in the claim language
4 itself, and so the Patent Owner has attempted to justify its inclusion through
5 an explicit claim construction argument.

6 There are several reasons why we believe this construction should
7 not be adopted, and I'll discuss each of these in turn. First, this is improperly
8 focused on fewer than all of the embodiments in the specification of the '223
9 patent. Second, there was an *ex parte* re-examination of the '223 patent and
10 Patent Owner has cited to that EPRx file history in support of its
11 construction, but we'll demonstrate that the EPRx record does not, in fact,
12 count in its adoption of Patent Owner's narrow construction. And third, if
13 Patent Owner's construction were adopted, this would render meaningless
14 other limitations that are present in some of the claims.

15 I'm going to go through the slides now slightly out of order here,
16 so please jump ahead just a little bit to Slide 17. Now, Patent Owner's
17 advanced claim constructions for the term “replace” are in service of an
18 attempt to focus the claims on a subset of the embodiments that are disclosed
19 in the specification of the '223 patent. Patent Owner would like us to read
20 the claims to be directed to a space-limited display device that only has room
21 to display a single parameter value at a time.

22 Now, it's certainly true that the '223 patent discloses devices with
23 space-constrained displays, but that's not all that's disclosed. Notably, the
24 '223 patent consistently refers to these space-constrained displays as just
25 embodiments or examples. And so here, I'd like to ask Your Honors to
26 please turn to the '223 patent itself for just a moment. Again, that's Exhibit

1 APPLE-1001.

2 And if you start by looking at Figures 2 and 3 of the '223 patent,
3 these figures show a handheld patient monitor with a display that does only
4 have a limited amount of space available for display of parameter values.
5 But if you look into the specification's discussion of these figures, the
6 specification makes clear that these figures are just examples. Now, for
7 instance, at column 9, lines 11 through 13, the specification identifies Figure
8 2 as showing an exemplary monitor. And similarly, at column 14, lines 20
9 through 21, the specification likewise identifies Figure 3 as showing just an
10 exemplary display.

11 There are two other figures here that I'd like to discuss, as well.
12 Patent Owner relied on Figures 4 and 5 of the '223 patent in advancing its
13 narrative that the patent and its claims are directed to particular problems,
14 such as space-limited displays, but these figures, too, Figure 4 and 5, are also
15 just examples.

16 So for instance, we can see at column 4, lines 15 through 21,
17 Figures 4 and 5 are illustrations specifically of the display of Figure 3, and
18 we just discussed that Figure 3 is identified in the '223 patent as an example.
19 So that means that all Figures 4 and 5 are doing are giving detail about an
20 example display.

21 Now that these particular figures that we've just discussed, Figures
22 2 through 5, are identified as just examples of space-limited displays it's a
23 clear indication that the scope of the '223 patent's disclosure is not limited
24 solely to space-limited displays. And I'd like to just point out that this is
25 consistent with what the '223 patent says generally elsewhere, too, even
26 when it's not specifically referring to figures.

1 For instance, right in the Abstract, the '223 patent clarifies that
2 space-limited displays are just an embodiment. The Abstract says that in an
3 embodiment, the monitor includes a plurality of display modes, enabling
4 more parameter data to be displayed than the available physical display real
5 estate.

6 And similarly, in column 3, lines 10 through 14, the '223 patent
7 also describes that a display with limited display area is just an embodiment.
8 So these more generic statements, too, confirm that the '223 patent is not
9 limited just to space-constrained displays. And in fact, there are other
10 displays described in the '223 patent that are not limited to just displaying
11 only a single parameter at a time. And so now I'll ask you please to turn
12 back to Petitioner's demonstratives and we'll go to Slide 18.

13 Slide 18 is another pair of figures that are from the '223 patent.
14 This is an example of another patient monitor display that the '223 patent
15 describes. And clearly, this is a display that has room for lots of parameters,
16 not just one. And as you can also see here, there's a rearrangement of values
17 that takes place between the Figure 11B display on the left and the Figure
18 11C screen on the right. And specifically, there's a 1.2 that's highlighted in
19 red and a 3.25 that's highlighted in green, and these two numbers switch
20 places between the 11B display and the 11C display.

21 So, that is, the 1.2 that's highlighted in red occupies the space
22 previously occupied by the 3.25 that's highlighted in green. So the red 1.2
23 replaces the green 3.25. But the green 3.25 isn't removed from the display
24 as part of this replacement. It's simply moved elsewhere. So these two
25 figures demonstrate that the '223 patent specifically contemplates that
26 replacing a value in the context here of a multi-parameter display can

1 involve moving a value around on a display without removing it entirely.

2 Now, Patent Owner in its Sur-reply argued that these figures that
3 we're looking at right now, Figures 11B and 11C of the '223 patent, are not
4 within the scope of the claims. That's pages 7 through 8 of Patent Owner's
5 Sur-reply. And they specifically state that the claims require the
6 replacement to occur based on the occurrence of an event, and they go on to
7 say that nothing in the specification discloses changing from Figure 11B to
8 11C based on an event. That's, again, from pages 7 through 8 of Patent
9 Owner's Sur-reply.

10 But this argument just isn't accurate. It ignores clear disclosure in
11 the '223 patent to indicate that this display change from Figure 11B to 11C
12 can, in fact, occur responsive to some kind of event and specifically
13 responsive to some kind of physiological change that occurs in the patient.

14 So I'd like to explain this, again, with reference to the '223 patent,
15 so I'll ask you to turn back to the '223 patent, again, one more time, please.
16 That's Exhibit APPLE-1001. And these displays that we were just looking
17 at in Figures 11B and 11C are displays of a patient monitor that's at some
18 point numbered 1000 in the patents. You can see that in Figure 11A, if
19 you'd like to take a look.

20 And so we need to look at what the patent says -- what the '223
21 patent says about this monitor numbered 1000. And we can find this at
22 column 19, lines 24 through 36 of the '223 patent. And here, the '223 patent
23 explains that this monitor 1000 -- so that is the monitor that's shown in these
24 Figure 11 displays that we've been discussing -- "may advantageously
25 employ enlargement or reorganization of parameter data based on, for
26 example, the severity of the measurement."

1 And the '223 patent goes on to say that this display change can
2 occur when a parameter “begins to approach abnormal levels.” So this is,
3 we believe, a pretty clear indication that the reorganization of parameters
4 that we see in Figures 11B to 11C that we've just been discussing, can in fact
5 occur based on some sort of physiological event occurring.

6 There are also some more general statements in the '223 patent that
7 additionally indicate that multi-parameter displays, such as those Figure 11B
8 and 11C displays, are properly within the scope of the claims. Most notably,
9 I'd like to point you to the field of invention statements in the '223 patent.
10 That's at column 1, lines 54 through 57, and this makes clear that the patent
11 is not in fact limited to any particular display configuration. The field of
12 invention says just that, “the present disclosure relates to the field of
13 noninvasive patient monitors.” And “more specifically, the disclosure
14 relates to monitors displaying measurements derived using signals from
15 optical sensors.” So nothing about space-limited displays.

16 And elsewhere, at column 2, lines 51 through 53, the summary of
17 the disclosure similarly says, “there is a need to provide patient monitors
18 capable of displaying multiple physiological parameters.” So what we get
19 from this discussion is that the '223 patent itself describes embodiments
20 related to both space-limited displays and multi-parameter displays, and
21 there are no statements in the patent itself, in the '223 patent itself, that is,
22 that would justify limiting the claims to fewer than all of these disclosed
23 embodiments.

24 Patent Owner also relied on the file history of the earlier *ex parte*
25 re-examination of the '223 patent in further support the narrow construction.
26 And I would like to turn to that --

1 JUDGE MARSCHALL: If I could step in for a second here?

2 DR. DEVRIES: Um-hum, sure.

3 JUDGE MARSCHALL: This is Judge Marschall. I know one of
4 your arguments, which you're probably going to get to, talks about the
5 common display area language in --

6 DR. DEVRIES: Yes.

7 JUDGE MARSCHALL: -- claim 1 and other independent claims,
8 and let's say that we find that argument persuasive and some of these other
9 arguments persuasive, too. For claim 1 and similar claims with a "common
10 display area" language, in your claim construction argument in the Reply,
11 you didn't address claims that lack that language, such as claims 27 and 28,
12 and it seems that at least one arguable interpretation of those claims is that
13 they, on their face -- you know, regardless of getting into the spec and the
14 file history -- on their face, they talk about replacing one value with another
15 on a display --

16 DR. DEVRIES: Um-hum.

17 JUDGE MARSCHALL: -- which does suggest removing that first
18 parameter from the display. What is your response to that argument?

19 DR. DEVRIES: Yeah. That's an excellent question, and that's
20 something that we've thought through quite a bit. And we believe that the
21 "common display area" language informs the interpretation of the term
22 "replaced," and it tells us that "replaced" can't be interpreted to be limited to
23 needing to remove a value from display or other similar limitations. So
24 based on the use of "common display area" in some of the independent
25 claims, we gain an understanding of what the term "replaced" means. And
26 now we know that it's important to interpret a term consistently throughout

1 the claims of a single patent.

2 And so once we have this understanding of the term “replaced,”
3 that it doesn't necessarily require removal of a parameter from the display,
4 we can apply that same understanding to claims that don't recite the
5 “common display area,” like claims 27 and 28. And we've construed
6 “replaced,” generally in those claims, as well, to simply require that the
7 replacing value be displayed in the space previously occupied by the
8 originally displayed first value.

9 JUDGE MARSCHALL: Okay. Well, I see how “replace” in
10 isolation may not require Patent Owner's construction; however, in the
11 context of the whole claim, it seems as though the other claim language
12 really helps your argument for most of the claims, but it arguably hurts your
13 argument here for claims 27 and 28. So in your view, when you have a
14 display capable of displaying two values and you replace the first value with
15 the second value, that first value could still be hanging around somewhere
16 on the display?

17 DR. DEVRIES: Yes, we believe that's the case.

18 JUDGE MARSCHALL: Okay. I think I understand your position.
19 Thank you.

20 DR. DEVRIES: Okay, thank you. All right. So I'd like to talk a
21 bit more about that “common display area” language in a moment, but I'm
22 going to just go through the EPRx file history first. So I'm on Slide 19 to
23 start talking about that. A significant portion of Patent Owner's briefing in
24 support of its narrow construction of “replaced” relates to the *ex parte* re-
25 examination history.

26 But as we'll show here, there's simply nothing in that record that

1 rises to the level of a disavowal of claim scope that the Patent Owner would
2 need to show in order to justify its narrow construction of the term
3 “replace.” The thrust of Patent Owner's argument with respect to the EPRx
4 record pertains to the figure that you see at left on Slide 19, which is from a
5 reference, Al-Ali that was cited in the EPRx. And Patent Owner has argued
6 that the examiner's allowance of the claims over this reference gives support
7 to its position that replacing a value means that the replacement value must
8 be fully removed from the display. But this isn't the right conclusion to
9 draw from this reference.

10 Let's zoom in on this figure, which I'd like to be clear, was
11 annotated by Patent Owner, and we can do that on Slide 20. Slide 20 is
12 simply showing that same figure we just saw from the Al-Ali reference,
13 cited during EPRx prosecution and its figure, so we can see what's really
14 going on with the parameter values on Al-Ali's display. This figure shows a
15 display that's displaying parameters, and the display of these parameters
16 changes from what's shown in Figure 16A at left to what's shown in Figure
17 16B at the right.

18 And as you can see in the left display, there's a 152 that's shown in
19 the red highlighted area, and then the display changes and now right inside
20 that same red highlighted area, there are now three things displayed. There's
21 a 98, an 88, and that same 152. Patent Owner has characterized this change
22 as a switch as distinguished from a replacement. But you can see from this
23 figure that while the 152 value shrinks, it's still occupying some of its
24 previous space. So, that is, the 98 and the 88 aren't replacing the 152.
25 They're just added to the screen, and the 152 is still displayed in the same
26 place it was previously.

1 So that the claims were certified in EP Rx over this figure -- over
2 these figures from Al-Ali -- doesn't in fact support Patent Owner's
3 contention that replacing necessarily has to involve removal of the replaced
4 value from the displays. Slide 21, please. That's the next slide.

5 JUDGE MARSCHALL: Excuse me. Before you move on, would
6 that prosecution history argument apply more readily to claims 27 and 28?

7 DR. DEVRIES: Well, we believe that because we can understand
8 the term "replaced" to have a consistent meaning throughout the entirety of
9 the claim set, then yes, we believe this argument applies, likewise to claims
10 27 and 28.

11 JUDGE MARSCHALL: Okay, thanks.

12 DR. DEVRIES: Sure. All right. On Slide 21, we see on the left-
13 hand side the examiner's statements in its notice of intent to issue a re-
14 examination certificate. And Patent Owner has pointed to the examiner's
15 statements here as another reason in support of their position that the EP Rx
16 file history backs Patent Owner's narrow interpretation, but the examiner's
17 statements also don't do the work that Patent Owner wants them to, with
18 respect to its advanced narrow construction. And I'd like to talk about two
19 pieces of the examiner's statement on the left.

20 The first is the highlighted statements at the top left. The examiner
21 here says that Al-Ali does not replace the first value, but switches from
22 displaying the first value to displaying first and second values. This merely
23 acknowledges that the Al-Ali figures that we just discussed do not show
24 replacements, but we've already established that the claims are distinguished
25 over these -- sorry. We've already established that the fact that the claims
26 are distinguished over these figures is not enough to support Patent Owner's

1 construction of the term “replace.”

2 Patent Owner in its Sur-reply also pointed to the last few sentences
3 of the examiner's statement on the left-hand side of the screen, and you'll see
4 in the -- about the middle of the left-hand side, the examiner states that in
5 addition, when an alarm condition is detected, Al-Ali switches from
6 displaying one parameter to displaying all of the parameters. So the
7 examiner here is acknowledging that Al-Ali is talking about adding
8 parameters. It's not talking about switching from one parameter to another.
9 It's just talking about putting more parameters onto the screen.

10 And then the examiner goes on to say in the next sentence that, as
11 such, there would be no motivation to replace the first parameter with the
12 second, as it would contradict the direct teaching of the reference of
13 allowing the user to see the entirety of the patient's condition. That is, the
14 examiner is indicating here that he has reached this conclusion of allowing
15 the claims over Al-Ali in the specific context of his understanding of Al-
16 Ali's particular additive display change.

17 Patent Owner seems to want to use the examiner's reasoning here
18 to inform its understanding of “replace,” but we just don't see enough here to
19 meet the high bar that's required to support the disavowal of claim scope that
20 Patent Owner is seeking, and this is for two reasons. First, the examiner's
21 conclusion here, like I just said, is specific to the context of Al-Ali's teaching
22 to add parameters to a display. Not to switch parameters. That is, the
23 examiner has affirmed patentability of these claims over Al-Ali in the
24 specific context of a reference that emphasizes the importance of adding
25 parameters to a display.

26 And second, quite frankly, we find the examiner's reasoning here a

1 bit unclear, and accordingly, so is the examiner's precise understanding of
2 the term "replaced." The examiner hasn't provided a definition nor a
3 statement of his understanding of exactly what the term "replaced" means.

4 And so the examiner's position that's set forth here on the left side
5 of this slide is certainly not an unambiguous statement that meets the
6 exacting standard required for a prosecution history statement to justify a
7 disavowal of claims scope. So we believe that neither the substance of
8 distinction of the claims over Al-Ali, nor the examiner's reasoning in finding
9 this distinction, is enough to support Patent Owner's desire to read very
10 specific limiting language into the claim term "replaced."

11 Now I'd like to just come back to this "common display area"
12 language that we already touched on a little bit, so we have to go back a few
13 slides to Slide 16 for this. And as we've already noted, this is a problem
14 with Patent Owner's construction that manifests itself particularly with
15 respect to just some of the independent claims. Then at the top left, you'll
16 see an excerpt from claim 1. We've seen this limitation before in other
17 slides, but here, we've also highlighted in green language that we haven't yet
18 focused on, that the replacement occurs in the common display area.

19 Patent Owner wants the term "replaced" to mean that the first
20 value is fully removed from the display, of course. But if this is the case,
21 then there's no need for the claim to specify that the replacement happens in
22 the common display area. That is, said another way, if the common display
23 area is less than the entire area of the display, which it can be, then requiring
24 the replacement with one -- I'm sorry -- requiring the replacement of one
25 value with another over the entirety of the display, which is essentially what
26 Patent Owner is proposing, effectively gives no meaning to the "common

1 display area” phrase.

2 Instead, when we understand “replaced” properly to require only
3 that the second value take the place of the first value, do we breathe meaning
4 into that “common display area” language of claim 1. That is, the
5 replacement would occur in the common display area, but what happens
6 elsewhere on the display is simply left open.

7 Now, as we've discussed previously, this particular issue doesn't
8 pertain directly to all of the claims because not all of the claims recite the
9 “common display area” or something similar to that, but at least for those
10 claims that do include the “common display area” language, this is a specific
11 focused reason why Patent Owner's narrow construction should not be
12 adopted. And even for those claims that don't specifically recite “common
13 display area,” we can still use this logic to inform our understanding of those
14 claims.

15 Let's turn to Slide 22, please. Now, we've just discussed the
16 problems with Patent Owner's explicit construction of the term “replaced”
17 and I've reproduced that, again, here at the bottom left, but it requires that
18 the originally displayed value should be removed entirely from the display.
19 But as Mr. Renner previewed earlier, this isn't the only aspect of Patent
20 Owner's construction of the term “replace.” As you can see at the bottom
21 right of this slide, Patent Owner also proposed another unrecited aspect to
22 the term “replace.” They've argued that the replacement parameter also has
23 to be not displayed on the display screen at all prior to the replacement.

24 So effectively, Patent Owner is proposing inserting not one, but
25 two limitations into this one single word “replace.” They like the term
26 “replaced” to mean first, that the originally displayed parameter is removed

1 entirely from the display. And second, that the replacement parameter is not
2 displayed at all prior to the replacement.

3 Slide 23, please. The way that Patent Owner worked the second
4 aspect of its construction into its discussion was not through a formal claim
5 construction analysis, though, but simply by implicitly assuming this to be
6 the case. They provided no evidence or even explanation that would justify
7 the inclusion of the second aspect of its construction into the claim term
8 “replace.”

9 Slide 24 shows the extent of Patent Owner's arguments introducing
10 this aspect of its construction -- its implicit construction. These two sections
11 here on this slide are from the Patent Owner's Response and this is what they
12 argued to support that the replacement parameter is not previously displayed
13 on the screen at all. They say first -- this is highlighted at the top left -- that
14 the claims require currently monitoring two parameters. They say second --
15 highlighted at the bottom left -- that the first parameter is removed from the
16 display but I discussed that this is the formal part of the construction. And
17 then at the top right, they simply conclude with no support that it follows
18 that the second replacement parameter must not be initially displayed.

19 This is an implicit conclusory approach that's just not the way to
20 conduct the claim construction analysis. So simply because Patent Owner
21 has not justified this second aspect to its construction, it should not be
22 adopted. But more substantively, this implicit construction also fails for the
23 reasons that we just discussed for Patent Owner's formal construction.
24 There's simply nothing in the '223 patent or in the prosecution history that
25 would justify a requirement that the replacement value must necessarily not
26 be displayed prior to the replacement occurring.

1 Slide 25, please. There's just one more claim construction issue
2 that I'd like to briefly touch on. Most of the claims recite that one value
3 replaces another and we've talked extensively now about what the term
4 "replaced" means, but there are two claims, 13 and 28 shown here, that
5 instead use the term "changes." And Patent Owner has asserted that in the
6 context of the '223 patent, "change" and "replace" have a similar meaning,
7 as you see here at the bottom of the slide. And I'll also direct you to page 18
8 of their Patent Owner's Response where they also state that "changes"
9 should be interpreted the same way as "replaced."

10 So when we follow Patent Owner's lead, we determine that both of
11 these terms, "change" and "replace," mean simply that one parameter value
12 is displayed in the place previously occupied by another value. There's no
13 requirement on where that replaced parameter goes after the replacements,
14 nor on where the replacement parameter was or was not prior to the
15 replacement.

16 Now I'd like to just take a few minutes to tell you about our
17 advanced prior art combination and why it satisfies the challenged claims
18 under the appropriate understanding of the term "replace." So if you could
19 jump to Slide 32, please. The challenged claims are fundamentally directed
20 to a very simple idea. The idea that on a display, the display of one
21 physiological parameter value is replaced with another when some kind of
22 physiological triggering event occurs. The exact nature of the event varies
23 from claim to claim, but generally, these events are some sort of indication
24 that the patient's condition is worsening.

25 Now, the Petition advanced a three-reference combination. The
26 combination, starting with Naghavi and adding Hochstedler and Burnes,

1 renders the challenged claims obvious. I'd like to give you a brief overview
2 of how these references come together and how they render the claims
3 obvious when interpreted properly. Naghavi is the primary reference of our
4 combination, and Naghavi alone gets nearly all the way to the '223 patent
5 claims.

6 You'll see a brief excerpt from Naghavi at the top right of the slide.
7 Naghavi is about a patient monitoring system, and you can see that Naghavi
8 describes a GUI that displays icons and health objects. And also, the GUI
9 changes and shows different types of icons and health objects based on the
10 physical condition of the patient.

11 So this is already pretty close to the '223 patent claims. Naghavi
12 has the idea that a display of health information has changed responsive to
13 the patient's physiological condition. Naghavi just lacks the implementation
14 details. It lacks, first, what exactly those icons and health objects are.
15 Second, what it looks like to implement this kind of display change. And
16 third, what it means to have a display change based on patient condition.

17 For the first and second items that are lacking in detail in Naghavi,
18 our expert, Dr. Cockburn, explains that the contribution of Hochstedler helps
19 to fill these gaps. Hochstedler is also about a patient monitoring system, and
20 specifically, Hochstedler describes various types of display layouts for
21 displaying real-time vital science information. You can see a brief excerpt
22 from Hochstedler at the lower right of the slide.

23 Excuse me. We're getting a little bit of interference on someone's
24 microphone. Can we see if everyone can mute their microphone?

25 JUDGE MARSCHALL: Yeah. If everyone could mute, except
26 for the Judges, of course -- if everyone else could mute, because we're

1 hearing some of that, too, and I'm sure --

2 DR. DEVRIES: Thank you very much.

3 JUDGE MARSCHALL: -- it's distracting.

4 DR. DEVRIES: Appreciate it. Thank you. All right. So we're
5 talking about Hochstedler, which is displaying real-time vital science
6 information. I'd like to talk a little bit more about Hochstedler in a moment,
7 but briefly, I'll just mention that in the context of Naghavi's display of icons
8 and health objects, Dr. Cockburn explained that a POSITA would've
9 implemented these icons and health objects as real-time vital signs
10 information, as taught by Hochstedler.

11 The second item that lacks a detailed implementation in Naghavi,
12 which is what it looks like to actually have a display of icons and health
13 objects that changes, a POSITA also would've turned to Hochstedler, and I'll
14 get to this more on the next slide. And the third detail that Naghavi lacks,
15 what exactly it means to have a display change based on patient condition.
16 For this detail, a POSITA would've looked to Burnes, which is yet another
17 patient monitoring system that describes changes to a display, responsive to
18 monitored parameters approaching or crossing a threshold.

19 I'm not planning to focus on Burnes much because the discussion
20 in this proceeding hasn't really gotten into the details of Burnes. Instead, I'd
21 like to discuss further Naghavi's teaching to change the display of icons and
22 health objects, which is implemented based on the teachings of Hochstedler.

23 Slide 33, please. Hochstedler describes various display layouts
24 that can display measured patient vital signs, and two of these example
25 layouts are shown here. At the left, we have an example from Hochstedler's
26 Figure 9, and at the right, we have one based on -- I'm sorry -- at the left is

1 Figure 2 and on the right is an example based on Figure 9. And in the
2 Naghavi-Hochstedler-Burnes combination that we discussed in the Petition,
3 the icons are health objects, that is the information about real-time patient
4 vital signs, are displayed in layouts like those described by Hochstedler.

5 So the display layouts, as you can see on Slide 33, include boxes
6 that correspond to icons or health objects, and inside these boxes, real-time
7 patient vital signs are displayed. So values that have been measured and that
8 correspond to these real-time patient vital signs. And when some sort of
9 physiological trigger event occurs, the display changes to show different
10 types of icons and health objects, again, consistent with what Naghavi has
11 already taught.

12 And this is implemented. What exactly this display change looks
13 like is implemented as taught by Hochstedler. The display layout changes to
14 a different arrangement and that different arrangement includes the display
15 of at least some different vital signs measurements.

16 Now, Figures 2 and 9 on Slide 33 show an example of this
17 replacement -- or of this change -- and it clearly illustrates that there's
18 replacement of one parameter value with another. On the left, you see a first
19 icon or health object, that is a first patient vital sign measurement that's in
20 the blue highlighted box, and then the display changes responsive to some
21 kind of trigger event to the layout shown at right, where there's now a
22 different icon or health object that is a different patient vital sign displayed
23 in the purple highlighted box.

24 So after the display changes from the left layout to the right layout,
25 the vital sign that's represented in the purple box is displayed in the place
26 previously occupied by the vital sign in the blue box. So the purple value

1 replaces the blue value.

2 So I'd like to touch on just one other issue that has to do with this
3 specific figure, and around the addition of -- the Petitioner's addition of the
4 pound signs to the left-hand figure here. It's Figure 2. And to discuss this,
5 I'd like to turn to Slide 34, please. And as we discuss the addition of these
6 pound signs, I'd like to emphasize that the Naghavi-Hochstedler-Burnes
7 combination that was advanced in the Petition was not limited to display of
8 the exact parameters that are illustrated in Hochstedler's layout.

9 Instead, the combination, the three-reference combination that was
10 advanced involves displaying icons and health objects, as taught by
11 Naghavi, and these icons and health objects are specifically real-time patient
12 vital signs based on Hochstedler and these real-time patient based vital signs
13 are displayed in display layouts such as those that are illustrated in
14 Hochstedler.

15 So, that is, the combination that was advanced in the Petition does
16 not require adoption of the precise parameters that Hochstedler shows. Just
17 the arrangement of relevant vital signs into layouts such as those that are
18 described by Hochstedler. And with this context, the addition of the pound
19 signs to some of the Hochstedler-based figures is simply an indication that
20 the particular highlighted boxes in the combination are provided as examples
21 of boxes where real-time vital signs information would be displayed.

22 So I'd like to stop here and turn the floor over to my colleague,
23 Grace Kim, who's first going to turn back to another disputed claim
24 construction for her discussion point. Thank you for your time, Your
25 Honors.

26 MS. KIM: Thank you, Dr. DeVries. Good afternoon, Your

1 Honors. May it please the Court. I am Grace Kim, and I will be arguing on
2 behalf of Petitioner today, as well. Your Honors, you just heard from my
3 colleague regarding Masimo's claim construction for “replaced,” and an
4 overview of Apple's prior art and proposed construction in accordance with
5 Apple's interpretation of “replaced.”

6 I wanted to tell you that there is another claim construction in
7 dispute here. It's for the term “measured value,” which I'll be addressing
8 here next because both claim constructions need to be adopted in order for
9 Patent Owner to succeed in this proceeding. In order to prevail, Masimo had
10 to win on its proposed construction for “replaced” and “measured value,”
11 and that's what I'm going to discuss, Masimo's construction for “measured
12 value” next. And after that, I'm going to continue to discuss how even if
13 Patent Owner's claim constructions were adopted, the prior art still renders
14 unpatentable all the challenged claims.

15 So with that, I'd like to turn to Slide 26. Masimo introduced its
16 claim construction for this term in its Patent Owner Response. Here with
17 this term, again, we see a disconnect between what Masimo wishes were in
18 its claims versus what is actually written in the claims.

19 When we skip forward to Slide 28, here it is shown that Masimo's
20 improper position of “measured value” is for both the first and second
21 parameter -- physiological parameters. That they must both be a value of a
22 parameter currently detected and determined by the monitor. Yet when one
23 looks at the plain language of the term “measured value” as applied in, for
24 example, claim 1, there is no explicit language supporting Masimo's
25 construction. We do not see any temporal language in this claim. We do not
26 see any language dictating where the determination must happen.

1 If we step back to Slide 27, we see here the full language of claim
2 1 in which the relevant language recites displaying a measured value of a
3 first physiological parameter or displaying a measured value of a second
4 physiological parameter, and if one continues on, we also see that the claim
5 addresses a particular event occurring in which the language recites the
6 event being the measured value of one of the first or second physiological
7 parameters approaching more or more threshold values indicative of a
8 worsening state of a patient.

9 Apple, in its Petitioner's Reply, has stated that the claim language,
10 at most, implies that a single one of the two parameters must be currently
11 monitored, not both. The reason for this would be due to the clause -- that
12 last clause in the claim -- pertaining to the “one or more threshold values,”
13 not from the “measured value” term itself.

14 Turning to Slide 29, the claim construction for “measured values,”
15 is improper for multiple reasons. First, the meaning of “currently detected
16 and determined” as proposed by Masimo is unclear because it's unknown to
17 what extent a parameter must be periodically detected and determined.
18 Furthermore, Patent Owner's expert has not addressed this point and
19 Masimo's attorney arguments are deficient.

20 For instance, it's unclear whether or not the parameter has to be
21 continuously monitored or periodically monitored, and if periodic, what is
22 sufficient for it to be considered periodic. A parameter could be a person's
23 weight. Does that need to necessitate continuous updating if it were the first
24 parameter indicated on a display? Second, when must the parameters be
25 currently detected and determined relative to the replacement occurring?
26 Does the detection and determination need to happen during replacement?

1 After? Before? All three? For these reasons, the claim construction is
2 improper. Now --

3 JUDGE MARSCHALL: This is Judge Marschall. If I could step
4 in with a question. I assume it's your position that even if we adopted Patent
5 Owner's construction, that your proposed combination would teach the
6 detection of the "measured values" as shown, at least in Naghavi, correct?

7 MS. KIM: Thank you, Your Honor, for your question. Yes, it is,
8 and I will be getting to that in my next slides.

9 JUDGE MARSCHALL: Okay.

10 MS. KIM: So any other further questions?

11 JUDGE MARSCHALL: No. I'm having doubts you're going to
12 get through everything in four minutes, but we'll give you a few extra
13 minutes because of the transition time and there was some audio interference
14 there, but I'm hoping to hear that next argument before you get done.

15 MS. KIM: Okay. So -- and let me skip to the "measured value"
16 and how it is disclosed by our prior art references. So Naghavi is our
17 primary reference, as you know. We are also relying on Burnes, as well as
18 Hochstedler. And when you take a look at our reliance on Burnes -- if we go
19 back to Slide 10, for instance -- you can see that the disclosure provided by
20 Burnes indicates that the narrow construction of "measured value" would be
21 rendered obvious by the combination because Burnes's disclosure, as shown
22 on Slide 10, it states "upon updating a summary display with current
23 categorized parameter values or symbols, a clinician alert may be
24 generated." And it further goes on to say "alarm or warning messages may
25 be displayed based on summary parameter values."

26 So based on the summary parameter values which are displayed --

1 these are health parameters that are displayed -- Burnes informs a POSITA
2 that alarms are displayed based on these health parameters that are currently
3 detected and determined because if it uses updated current categorized
4 parameter values or symbols, Burnes needs to in turn update its summary
5 display.

6 Furthermore, if we turn to Slide 46, here we turn to Hochstedler's
7 disclosure. We rely upon Hochstedler as indicated in our Petition for a
8 disclosure of a GUI that includes parameter blocks, which display real-time
9 information about patient vital signs. So here again, another prior art
10 reference that we're relying on, displaying real-time information in which
11 information includes health parameters.

12 Hochstedler's disclosure and our reliance on it demonstrates that
13 the parameters in the combination are currently detected and determined
14 because real-time indicated information would be understood as being
15 physiological parameters currently detected. Does that answer your
16 question, Your Honors?

17 JUDGE MARSCHALL: Yes, yes. I do have a question on your
18 reliance on Naghavi. If we get into the issue of -- let's say we adopted
19 Patent Owner's construction -- or let's say we adopted, just for claims 27 and
20 28, where I think you've got more weaknesses in your argument on claim
21 construction, how can we -- or can we allow you to rely on aspects of
22 Naghavi in a different way than you did in the Petition? Because in your
23 Reply, although you rely on some paragraphs that were cited in Naghavi in
24 the Petition, you're kind of using them in a different way, as I read it. Would
25 you address that issue, please?

26 MS. KIM: Yeah. Thank you, Your Honor. Again, good question.

1 So as we indicated in our Petitioner's Reply in footnote 4, page 27, we
2 identified that to the extent Patent Owner attempts to characterize our
3 reliance on Naghavi as a new argument, it is not, because Petitioners are
4 entitled to rely on arguments that are responsive to a new claim construction
5 argument for the first time in the Patent Owner Response. That being said,
6 we are relying on Naghavi for its rearrangement of parameters, and I'd like
7 to direct you back to Slide 8 that shows the overview of Naghavi.

8 You can see here in the highlighted text that we relied on Naghavi
9 as a primary reference for all it teaches, with the exception of the
10 modifications that we made in the combination. Naghavi teaches that the
11 GUI may further change and show different types of icons and health
12 objects, according to different diseases and other physiological conditions of
13 the patient.

14 And furthermore, it goes on to automatically detect changes in the
15 health status and the health plan for a patient, and automatically reacts and
16 rearranges the available options to best suit the conditions. We have cited
17 those sections throughout our Petition. We've relied on them in not only the
18 overview, but the combination and motivation, as well as the specific
19 elements. Does that answer your question?

20 JUDGE MARSCHALL: Yes, I understand your position. And it's
21 an interesting issue because you are entitled to respond to a new claim
22 construction, and certainly, you've cited these paragraphs before, but as I
23 think you had acknowledged, you haven't used these paragraphs in this way.
24 In the Petition, you're using them in a different way than in Reply, and
25 perhaps that's okay, but it's a bit unclear and I'm wondering if you have any
26 case law. I know you cited *Axonics*, which we're well aware of. Do you

1 have any case law that suggests you can kind of change the thrust of your
2 obviousness argument in Reply, in response to a new claim construction
3 argument?

4 MS. KIM: We do feel -- we did cite *Axonics* as our relied-upon
5 case. And in addition to that, I'll -- I'd like to reserve my response for
6 redirect to answer your question, if that's all right, Your Honor.

7 JUDGE MARSCHALL: Sure.

8 MS. KIM: So with that, I just -- I wanted to quickly just touch
9 upon one more slide, if I may. Slide 45. Here, going back to our reliance
10 for Naghavi, we -- it's our, you know -- Naghavi is Apple's primary
11 reference, and it states that the GUI may further change and show different
12 types of icons and health objects. We did further provide testimony from
13 Apple's expert, Dr. Cockburn, which I want to point out was unrebutted at
14 this point.

15 In paragraph 12 of his Second Declaration, he testified that this
16 disclosure in Naghavi informs one of two things. First, that changing the
17 display to show a different type of icon/health object that was not previously
18 displayed, and further, that Naghavi's disclosure here informs one of
19 changing the display to remove an icon or a health object from the display.

20 So as I mentioned earlier, this is unrebutted testimony because
21 Masimo did not challenge Dr. Cockburn during his second deposition on this
22 point, and although they had the opportunity to, they did not. And with that,
23 Apple rests on its direct portion of this hearing.

24 JUDGE MARSCHALL: If I could have a follow-up here on that
25 issue. Let's say Naghavi discloses or displays all of the icons, all the
26 parameters at once and let's say we agree with Patent Owner's construction,

1 at least for claims 27 and 28. Where would Naghavi support this
2 interpretation by Dr. Cockburn, where they're saying remove it entirely from
3 the display? I'm just not seeing that in paragraph 59. Because it seems
4 possible that you could rearrange the icons and replace one in a certain area
5 of the screen, but there's not necessarily a description there of taking an icon
6 off the screen or parameter off the screen. So if you could help me with that
7 issue.

8 MS. KIM: Your Honor, Naghavi discloses, as you said, the
9 general premise, and it's our expert's -- Apple's expert's -- opinion that its
10 disclosure is sufficient to inform a POSITA and -- of the fact that the
11 different types of icons and health objects, you know -- that it would show
12 icons that were not previously displayed and that it could also include the
13 understanding that you can change a display to remove a different type of
14 icon. So we rely on our expert testimony for that piece.

15 JUDGE MARSCHALL: Okay, fair enough. And I understand it's
16 unrebutted by Patent Owner's declarant because they weren't allowed to put
17 in a declaration in the Sur-reply. Would Petitioner have any opposition to
18 Patent Owner being allowed to submit an expert declaration or a short brief
19 to address this argument, if we ever reach that point where we thought that
20 might be a good way to resolve any dispute over the newness of the
21 argument?

22 MS. KIM: Yeah, that's an interesting question. I -- again, if I may
23 revisit this answer in redirect.

24 JUDGE MARSCHALL: Certainly.

25 MS. KIM: I'd like to do that. Great.

26 JUDGE MARSCHALL: I do have another question about claim

1 18. It wasn't briefed by either party after the Patent Owner Response, but in
2 the Patent Owner Response -- I'm sure you're aware of this -- but Patent
3 Owner added in an argument and separately addressed claim 18. This is at
4 page 61 and going on to page 62 of the Patent Owner Response. And there's
5 no response to that in the Reply and therefore, there's no response in the Sur-
6 reply either. I'm just wondering if that was intentional by Petitioner or if
7 there's anything Petitioner wanted to say about this argument, because as it
8 stands now, this argument is unrebutted and there's some declarant support
9 for it from Patent Owner's declarant, as well.

10 MS. KIM: So it's our position that our arguments that have been
11 asserted against independent claim 1 would also apply to independent claim
12 18, as it does recite the "common display area," and our arguments
13 pertaining to that limitation would therefore be applicable.

14 JUDGE MARSCHALL: Okay.

15 MS. KIM: Thank you, Your Honor.

16 JUDGE MARSCHALL: That's all I had. Anything else from the
17 other Judges before we move on?

18 JUDGE COTTA: Nothing here. Thank you.

19 JUDGE FINAMORE: Nothing from me.

20 JUDGE MARSCHALL: Thank you. All right. Patent Owner,
21 you are up. You'll have to unmute yourself, and if Petitioner could mute
22 your microphones, that would help. And before you get going, Patent
23 Owner, if you could -- or Counsel for Patent Owner, if you could tell me
24 how much time you'd like to reserve for rebuttal.

25 MR. HUGHES: Yes, Your Honor. I'd like to reserve 10 minutes
26 for rebuttal. And with Your Honor's permission, I'd like to share my screen

1 so that I can share my slides.

2 JUDGE MARSCHALL: Yes.

3 MR. HUGHES: Hopefully Your Honors can now see my slides.
4 Let me know if they're not appearing. I'm seeing thumbs up and nods, so I'll
5 assume that they're viewable. So good afternoon. My name is Daniel
6 Hughes. I represent Patent Owner, Masimo, during this proceeding, and I'd
7 like to start with some of the -- a few of the questions that were raised in the
8 previous presentation.

9 And particularly, I'd like to start with how -- what sort of claim
10 constructions and how does it affect later grounds, and there was some
11 argument or suggestion that we need to win in all claim constructions in
12 order to prevail. I don't think that's true, so I'd like to set the stage a little bit
13 there.

14 So originally -- and I was sort of surprised to hear -- that now
15 Naghavi is the primary reference because the actual combination is
16 Hochstedler, Naghavi, and Burnes, and in fact, we'll discuss -- Apple says
17 that for the key limitation -- the “replacing” limitation, in their Sur-reply --
18 excuse me, in their Reply -- they only rely on Hochstedler for that limitation,
19 and only now are they trying to add Naghavi in, which I think Your Honors
20 noticed.

21 And so our position is that for the term “measured value,” under
22 any construction of “replaced,” Hochstedler doesn't have the necessary
23 measured values. It's only if they're allowed to now import Naghavi in and
24 make some new arguments on Naghavi that “replaced” even comes into
25 effect. And so I just wanted to clarify that right from the start.

26 And I think the other thing I wanted to clarify is, as Your Honor's

1 questions indicated, there's some differences between these claims and those
2 differences are important. And in particular, some of the claims recite a
3 “common display area,” but some do not, and I believe that Petitioner really
4 ignored the claims that don't recite a “common display area.” And similarly,
5 some of the claims recite “replace” and some of the claims recite “changes,”
6 and we have completely un rebutted non-addressed evidence for both the
7 plain and ordinary meaning and the specification on the proper interpretation
8 of “changes” that the Petitioner ignores.

9 So with that sort of setting the stage, what I'd like to do is to walk
10 through the background of the invention here, which I think informs these
11 claim constructions. Then I'd like to address some specific claim
12 constructions, and then I'd like to address the actual combinations of the art
13 here.

14 So to start with, turning to Slide 4, what we're talking about here is
15 the '223 patent and importantly here, we have a priority date. A priority date
16 of March 1, 2005. And what's going on at that priority date is Masimo, who
17 all the inventors of the '223 patent worked at, had just come out with
18 something called the rainbow® technology or rainbow® parameters, where
19 previously, Masimo was able to non-invasively measure blood oxygen and
20 heart rate, now they can non-invasively measure a whole number of new
21 parameters, such as carbon monoxide, methemoglobin, or total hemoglobin.

22 And so what the inventors were doing is they were trying to figure
23 out how to display these new parameters on small handheld devices. In fact,
24 Figure 2 here, we can see a small handheld device from the patent with a
25 seven-segment display on the top and bottom. So what the examiner -- or
26 excuse, the inventors decided was, what do we need to do to display the new

1 parameters on our small devices. And they came up with a solution and they
2 said, well, what we can do is -- because we only have a limited display, we
3 can only display one at a time -- if something important happens in the other
4 parameters -- if there's a worsening state of a patient, alarms, above or below
5 a designated range, then we can switch. And we can see that here on Slide
6 5.

7 So what does that mean in practice? And I think there's -- these
8 are some actual Masimo monitors. I think this provides a pretty good
9 example. So on the left here in red -- this is on Slide 6 -- in red, we have a
10 seven-segment display. This matches the figures of the '223 patent. And on
11 the right here, we have a Masimo Root monitor. This is much, much later in
12 time, and what the inventors were trying to do was to display the parameters
13 that this Masimo Root has, which is, as you see, is an enormous screen,
14 touchscreen, and trying to figure out how to do that with a small
15 seven-segment display on the monitor over here on the left. And I think that
16 sort of sets the stage for how a POSITA would understand these claims and
17 understand how a person -- or how the claims apply to the prior art. And I
18 think what's particular here is that all of the prior art at issue aren't small
19 displays. They're large displays that can display all of the monitored
20 parameters at the same time. And in fact, they teach that they should
21 prioritize displaying all of the currently monitored parameters so that the
22 caregiver can see the entire state of the patient. And that's not the problem
23 that Masimo is trying to solve, because Masimo didn't have that kind of
24 display real estate.

25 JUDGE MARSCHALL: Can you respond to the -- Petitioner's
26 argument that the "common display area" language helps their case because

1 it's identifying a subset of the display and the replacement occurs in that
2 subset of the display, so what's wrong with having the rest of the display
3 display that parameter after it's been replaced in the "common display area"?

4 MR. HUGHES: Right. So I think what's helpful here, and I'll skip
5 on to one of the figures at issue, but I think there's a couple points here on
6 "common display area." So in the patent, the only part of the patent that's
7 described as a common area or a common display is this 206. And in 206,
8 we can see that you're fully removing from the area, right? We've got a 98
9 on the left for the blood oxygen, and removing it to HbCO. And so I think
10 there's -- in terms of the claim construction, we've got a couple of things
11 going on here.

12 First, we think "replaced" - because of the plain and ordinary
13 meaning in the specification and the *ex parte* re-exam -- or excuse me, the
14 re-examination -- all stands on its own and we can interpret the term
15 "replaced" properly. Then "common display area" affects where that
16 replacement occurs, but it doesn't change the plain meaning or plain and
17 ordinary meaning and what we expect in a POSA's knowledge of what
18 "replace" means.

19 Second, we can see that because this is the part of the spec that's
20 described as a "common display area," we actually are removing it
21 completely. And the first --

22 JUDGE MARSCHALL: I don't think there's any dispute that
23 you're doing a replacement in that common display area, and "replace" on its
24 own does suggest removing one and putting in a new one, so there's -- I don't
25 see a real dispute there. The problem is, as I see it for claim 1 at least, that
26 you can do a complete replacement in the "common display area" and yet,

1 the claim says nothing about what happens on other areas of the display.

2 Just going by the claim language, without getting into the figures dispute.

3 MR. HUGHES: Right. So I -- did I interrupt you? I'm sorry.

4 JUDGE MARSCHALL: No, no.

5 MR. HUGHES: Okay.

6 JUDGE MARSCHALL: I'm not sure. That might be a rhetorical
7 question.

8 MR. HUGHES: Well, I --

9 JUDGE MARSCHALL: I don't want to eat up all your time with
10 that. If you want to address that question, that's fine, or else -- also I'd like
11 you to address the use of Figures 11B and 11C where it appears that there is
12 a replacement done in a common display area, but not -- it does not involve
13 removing the parameter entirely from the display.

14 MR. HUGHES: So I do have an answer to your question and I
15 will take it on, if you'll permit. So I think what's very helpful here is the re-
16 examination picture. Oops, let me just switch back to it. Right. So in the
17 re-examination, the examiner was considering all the claims. Those that
18 recite "common display area" and those that do not and said what we have
19 here from the left to the right, which essentially is just reorganizing it and
20 adding parameters, was a switching and not a replacement.

21 And so the examiner said that all of the claims, common display
22 area or not, overcome this art. And I think that makes sense in the context
23 because what Al-Ali was teaching -- oh, and excuse me, this is Slide number
24 22. What Al-Ali was teaching is that it's preferable to display everything
25 that the caregiver might need. And so, if you're merely reorganizing things,
26 that's not "replacing" because that's what the examiner said. It's contrary to

1 the teaching of Al-Ali.

2 And I think, again, Your Honor mentioned the specification in
3 Figures 11. So turning to my Slide 20, so I think what's important here is if
4 you read Figures 11 and -- I thought it was odd because it appears that
5 Petitioner and us want to point out the same part of the spec here, but I think
6 it really supports us. So in the specification, monitor 1000, which is the
7 monitor that appears in Figures 11B and 11C, what's happening here is
8 described not as “replacing,” but as reorganization.

9 And so I think that a reorganization is not what we're talking about
10 here. In fact, this is an unclaimed embodiment. When we're talking about
11 “replacing,” we should use the plain and ordinary meaning, and it means
12 removing it entirely. And then I think to your final point, Your Honor, I
13 think it's exactly right that even if you disagree with me on the “common
14 display area,” claims 27, 28, and 33, and all of their dependents, don't have
15 the “common display area” language. And so at least for those claims, we
16 should prevail regardless of the “common display area” issue. Did that
17 answer Your Honor's question?

18 JUDGE MARSCHALL: Did you say claim 33 at the end there?

19 MR. HUGHES: I believe that's right.

20 JUDGE MARSCHALL: Okay. Is that a challenged claim? I'm
21 trying to find that in the list. I don't see it, but we can look that up.

22 MR. HUGHES: It's not challenged. My apologies --

23 JUDGE MARSCHALL: Okay.

24 MR. HUGHES: -- Your Honor. It's not challenged.

25 JUDGE MARSCHALL: Yeah. Don't make our job any harder
26 than it already is.

1 MR. HUGHES: I won't, Your Honors.

2 JUDGE MARSCHALL: That's all right. Okay. I'll let you --
3 yeah, you can proceed to whatever is next on your agenda.

4 MR. HUGHES: Thank you. So I'll turn back to our claim
5 construction. And so I'm on Slide 12 now and we have four claim
6 constructions at issue here. "Measured value," "changes," the "replacing"
7 limitations, and "first" and "second". And "first" and "second" is
8 undisputed, so I won't spend very much time on that, but there are four at
9 issue.

10 And I'd like to start with "measured value." And I think
11 "measured value" is important because as I already indicated, I think if we
12 win on "measured value," we win regardless of the interpretation of
13 "replace" because Hochstedler, the one reference that Petitioner relies on to
14 establish this limitation, doesn't have two measured values and we'll discuss
15 that when we get down to the art. It's only if you allow them to now import
16 Naghavi in with a new theory that we should even get to the issue of
17 "replace."

18 So in terms of "measured value" -- and I'm on Slide 13 -- the
19 proper construction of "measured value" is a value or parameter currently
20 detected and determined by the monitor, and we know that for a couple of
21 reasons. So turning to Slide 14, we can start with the claim language. And
22 so the claims describe that the "measured values . . . are determined using an
23 output signal of a light sensitive detector," and so we're talking about a
24 sensor that's on the skin that's detecting light, that's measuring a value. And
25 so a POSITA would understand that, would understand that this is talking
26 about something that's measured with a sensor going on, and the other

1 claims are consistent with that. You've got an invasively measured value, a
2 non-invasively measured value, glucose, all of these are actual values that
3 get measured in the hospital.

4 JUDGE MARSCHALL: But that's in claim 19. That language
5 doesn't appear throughout the other claims, correct?

6 MR. HUGHES: That's correct. It's only in claim 19, but I think
7 that a POSITA reading the term in the context of the entire specification and
8 claims, this helps to inform them. And I think the other key point here is --
9 turning to my Slide 50 -- is that all the claims have this language, which is
10 that the "measured value" is based on an event or an occurrence.

11 And that occurrence could be, for example, the measured value
12 crossing a threshold or it's alarming, or it's evaluating which one is more
13 critical, or otherwise indicating a worsening state of a patient, but it can only
14 make that determination if it's actively measuring a value. And so a
15 POSITA reading this would understand that the claims must be requiring the
16 actual measurements to be occurring because that's how it would know when
17 to alarm or not.

18 And then finally, this specification is very consistent with this. So
19 this specification talks throughout about measuring the values on the
20 monitor, it measures the HbCO, HbMet, Hbt, SpO2. All of these things are
21 parameters that are capable of being measured by the monitor and are being
22 measured by the monitor.

23 Now, Petitioner has two arguments against this construction. So
24 the first argument is that the construction is somehow ambiguous because
25 it's not clear exactly how often it must be measuring or currently detecting,
26 and I don't think that's a correct argument. So first of all, we know that and

1 we cite this in our brief, *Nautilus*, that absolute precision is not required
2 here. We don't need to be so precise that we have every possible edge case
3 examined by these claim constructions.

4 And second, I think a POSITA reading the spec would understand
5 how often you need to be measuring these things, which is as often as you
6 need to in order to allow these alarms or thresholds to be evaluated for
7 individual parameters. So a POSITA reading the spec wouldn't find this
8 ambiguous. And second of all, they have an argument about, well, it might
9 only be one parameter that needs to be measured and not the other, and I
10 don't think that's correct.

11 I think that the claim -- so for example, claim 1, and I'll return to
12 the claim -- so claim 1, which I'm on Slide 8, says "the measured value of
13 one of the first or second physiological parameters approaching one or more
14 threshold values indicative of a worsening state of a patient." So the event --
15 the occurrence of the event -- is being applied -- evaluated by both
16 parameters. And second of all, even if it was true that it only required one,
17 Hochstedler doesn't even have that, and so that actually ends up irrelevant to
18 the art.

19 JUDGE MARSCHALL: Aren't you reading the proposed
20 combination a little narrowly by saying they only rely on Hochstedler for
21 "measured values"? I understand that early in claim 1, it's talking about a
22 display that's merely capable of displaying a measured value, which I think
23 in the Decision on Institution we found persuasive. But later in the claim,
24 they clearly bring in Naghavi and Burnes, especially when it talks about
25 "based on the occurrence of an event." So in that sense as I read it, the
26 proposed combination does rely on the treatment of those "measured values"

1 in Naghavi and Burnes, at least to some extent in the overall combination.

2 What is your response to that argument?

3 MR. HUGHES: Right. So I think there's a distinction here
4 between the “measured values” and how they're moving on the screen and
5 what's causing that movement. And I'm not, you know, I'm not putting my
6 own words out here. What Petitioner says, and this is in their Reply brief, is
7 that it relies on Hochstedler for the specific GUI changes that show
8 replacement of one measured value of a parameter for another, not Naghavi
9 or Burnes. And so that's Petitioner's own words.

10 And again, I think just to fully explore this idea, I think there's a
11 distinction between the display changes and the measured values on the
12 display and what's causing that display change. And Petitioner did rely on
13 Naghavi and Burnes for what's causing the display change, but they relied
14 only on Hochstedler for the specifics of one measured value moving or
15 reorganizing, or whatever they want to say it is, from one place to another.

16 And Hochstedler doesn't have that, because as we'll talk about,
17 while they may have modified Hochstedler's figures -- and it doesn't actually
18 teach values where they say there should be values. And so only if we now
19 allow them to say, well, Naghavi has this reorganization theory, which was
20 not at issue in the Petition, was never proposed before their Reply, would we
21 ever even get to this issue of “replacing” or Naghavi at all.

22 JUDGE MARSCHALL: I guess there's two ways to read that
23 statement in the Reply that you just quoted. One is that they're just
24 emphasizing that they rely on Hochstedler for the “replacing” aspect with
25 the “measured values,” but not necessarily stating that they don't rely on the
26 “measured values” at all and the monitoring of those in Burnes and Naghavi,

1 so I guess that's open to dispute there. But I understand your position on
2 that.

3 I guess -- I know you have limited time, but I just want to make
4 sure, at some point, we get to the new arguments that they made relying on
5 Naghavi. They're new, not necessarily improper, because they're responding
6 to your new claim construction, so I just want to hear from you on that, just
7 before you get through that issue.

8 MR. HUGHES: Right. Okay. Well, why don't I move on to the
9 "replaced" limitation because I do think the claim construction of "replaced"
10 is really one of the important issues under the new Naghavi reorganization
11 argument, but before, I think Your Honor asked for some authority on
12 whether they're allowed, permitted to provide these new things that are not
13 in the Petition.

14 I think under 37 CFR § 42.23(b), they're not. And then similar,
15 there's some Federal Circuit cases on the issue. *Yita*, 69 F.4th 1356, and
16 *Intelligent Bio-Systems*, 821 F.3d 1359.

17 JUDGE MARSCHALL: Thank you for that. But I will ask, do
18 those cases deal with this precise issue where Petitioner is allowed to
19 respond to a new claim construction, and in doing so, they use a reference
20 that was in the Petition and the same cited portions of that reference, but
21 they do so in a new way with a new obviousness thrust?

22 MR. HUGHES: I think what those cases and the CFR emphasize
23 is that whatever the Petitioner needs to rely on should be in the Petition, and
24 changing at such late stage in the game is really prejudicial to us as Patent
25 Owner, and I think Your Honor already acknowledged that with the idea
26 that, well, we didn't have a chance to rebut some of these new theories on

1 Naghavi. And so to the extent that you're going to allow this new argument,
2 we would ask for a chance to provide some briefing and potentially a
3 declaration to rebut on that issue.

4 JUDGE MARSCHALL: Okay, thank you.

5 MR. HUGHES: So I'd like to turn to my claims -- my Slide 17
6 now, which is "replaced." And so "replaced" -- the proper construction of
7 "replaced" in the context of the entire claim, and the limitation surrounding
8 it, is that the measured value of the first parameter is removed from a
9 display, and the measured value of a second parameter is displayed in its
10 place.

11 So I think what we should start with, which is what you should
12 always start with in claim construction, is the plain and ordinary meaning.
13 And so we cite a number of dictionaries for this in our briefing, but the plain
14 and ordinary meaning of "replaced" is "take the place of." And in fact, that's
15 how the spec uses it. It explains that a caregiver should replace the batteries,
16 and we know when we replace batteries, we take the two batteries out and
17 put new batteries in their place. We don't take the two batteries and swap
18 them. So this new reorganization theory, that's contrary to the plain and
19 ordinary meaning of "replace."

20 It's also -- we looked at this figure already -- it's also contrary to
21 the spec, which has the actual elimination going on, and their embodiment --
22 excuse me, I'm now on Slide 20 -- is not described as replacing. It's
23 described as reorganization, and that's what we're distinguishing here,
24 replacement and reorganization. And we know from Slide 21 that this -- the
25 re-examination really provides a lot of points here because it -- what it
26 explains is that the examiner distinguished "replacing" from switching or

1 reorganization, and issued all of our claims over the art, despite that.

2 And Slide 22, we already went through this figure, so I won't
3 belabor it, but we think this supports the proper construction of “replace.”
4 And then I'd like just to highlight, again -- I'm on Slide 23 now -- that it's the
5 examiner, I think Petitioner said that we, Patent Owner, used the word
6 “switched.” No, it was the examiner that used the word “switched,” and it
7 was the examiner explained that switching is not replacing, and particularly
8 in light of the direct teaching of displaying all of the parameters. And again
9 and again, we see in Apple's art, Naghavi included, it teaches displaying all
10 measured parameters. It does not teach replacing one parameter for another.

11 And so to respond to your specific question about Naghavi and the
12 new reorganization theory, we think that's prohibited from the proper
13 construction of “replace,” and also, I think the examiner's reasoning still
14 holds. Naghavi teaches, and this isn't disputed, displaying all the parameters
15 it's measuring. The examiner said that that sort of teaching is what shows
16 that Al-Ali does not disclose [unintelligible].

17 Turning to my Slide 24, I'd like to spend a few minutes on
18 “changes” because I think this has been unaddressed by Apple. So we
19 believe that “changes” should take the same interpretation or construction as
20 “replace,” but we rely on separate evidence. In fact, we rely on different
21 parts of the claims, and we rely on parts of the plain and ordinary meaning
22 of “changes,” and Apple does not address any of this in the briefing and they
23 should not be allowed to now. And so our construction of “changes” should
24 hold throughout, and under the proper construction of the “changes,” none of
25 the art discloses this.

26 So I'll start with the plain and ordinary meaning, turning to my

1 Slide 25. "Change" is replace one with another, and that should be
2 consistent with our normal usage of the term. When we change a tire, we
3 remove the tire and put another in its place. When we change a lightbulb,
4 we unscrew the lightbulb and put a new one in. It's a full replacement. It's
5 not a reorganization. And the claim language supports this.

6 Turning to my Slide 26. A common display area changes from
7 displaying one of the measured values of the first or second physiological
8 parameter to displaying the other. It has to change from one to the other,
9 showing it as a replacement.

10 Turning to my Slide 27, claim 28 has the same sort of language.
11 It's a change from displaying one to displaying another. Again, this shows
12 that it's a complete removal, and so we think because the claim construction
13 of "changes" and the evidence we relied on is unrebutted, this should carry
14 the day here.

15 And the final point on claim construction -- and this is undisputed
16 on my -- now I'm on Slide 28 -- there's a first and second parameter and
17 those have to be different parameters and that's been undisputed by Apple.
18 So taking all of these claim constructions together, we see that the proper
19 understanding of the claims is that you first -- you have a displaying the
20 measured value of the first parameter and then replacing the value with a
21 second measured value of a second parameter the device is currently
22 monitoring, but not displaying. And so that's when you combine all of our
23 constructions -- the "measured value," "replacing," the "changes" -- and
24 "first" and "second," this is what your POSITA would understand these
25 claims to mean.

26 So Apple already covered some of the details of the various

1 references, so I won't provide much background there, but I'd like to turn to
2 my Slide 34, which again, I think it makes an important point. Because
3 what's going on in the art, and really the key distinction here, is that
4 Hochstedler, Naghavi and Burnes are all disclosing large CRT or other big
5 monitors that can display all measured parameters. While what's going on in
6 the patent is we have a small handheld monitor and it doesn't have that
7 capability, so we had to come up with an invention where we replace one
8 parameter with another, based on what's going on in the background. And
9 so this art just doesn't line up with what was actually going on.

10 So to go through Hochstedler -- and now I'm on Slide 37, what's
11 going on in Hochstedler is it has this -- what they call a best fit algorithm,
12 that's trying to pick which layout it's going to assign based on what sensors
13 are currently plugged into the monitor, and it's going to try to display every
14 single parameter that is currently plugged into the monitor and it's going to
15 change its display when new parameters or new capabilities are added.

16 And in fact, it's going to describe that as that it will change its
17 layout even if, to display all the parameters, it has to display some boxes that
18 are not currently being measured. And so that's why we think, under the
19 proper construction of "measured value," we don't have that here, because
20 Hochstedler is always displaying everything and there's no pointing to any
21 teaching by Apple of any sort of switching or reorganization or what have
22 you in Hochstedler that's actually measured values.

23 And I'd like to turn to Apple's Slide 12, which I think really
24 illustrates this, and that's because as they acknowledged in their presentation,
25 they added the #### sign. And in the actual figures -- turning to our Slide
26 40 -- that #### sign is not there, because there isn't a measured value there,

1 because Hochstedler explains that it can have these boxes for unmeasured
2 parameters. And so anything they've -- in all of their identifications of a
3 supposed replacement, Hochstedler isn't replacing one measured value for
4 another based on the proper construction of “measured value.”

5 So rather than confront the issues with Hochstedler, and I'm now
6 on my Slide 44, they try to go to this combination theory. And again, this is
7 new in the Reply, and we went over this, so I won't belabor the point, but
8 Hochstedler was what they relied on for the “replacement,” not these other
9 references. But these other references don't have the replacement either,
10 so -- and because the other references don't have a replacement -- and I'm
11 now on my Slide 45 -- the combination can't disclose this limitation, and we
12 cite a good case on this in our briefing. And it says if none of the references
13 have the key limitation, then no possible combination could ever combine
14 that way.

15 So under the proper constructions of “measured value” and
16 “replacing,” where you must have an un-displayed measured value, none of
17 the references have that. In fact, all of the references teach that you must
18 have all currently-monitored parameters displayed on the screen at once.

19 So for example, turning to my Slide 47, Burnes. Burnes teaches
20 this enormous summary table that displays all the measured parameters for
21 all of the different patients, and in fact, if something is not being measured,
22 it still displays that. It says “NA” or “no data.” And per Slide 48 -- turning
23 to Slide number 48, Naghavi. Naghavi has a user-friendly GUI with a single
24 visual display of displaying items comprising menus, health objects, icons,
25 and options. And importantly, Apple never argues that there's some un-
26 displayed measured parameter in Naghavi. Instead, they go to the

1 reorganization theory.

2 So turning to my Slide 50, as Your Honor noted, the reorganization
3 theory is not in the Petition. They only relied on Hochstedler in their
4 Petition. And the reorganization theory, it fails under the proper claim
5 construction of “replaced.” And so next, I would like to address the
6 motivations to combine and I'm on my Slide 53. So all of Apple's
7 motivations to combine fail here, as well, for basically one simple reason,
8 which is that all of the motivations to combine assume that there is some un-
9 displayed, unmeasured parameter that a POSITA would be motivated to
10 display. But because that disclosure isn't in any of the references, none of
11 the motivations will actually follow under the evidence.

12 And finally, Apple, again has a new theory in Reply on Malmberg
13 and this wasn't addressed, so I'll touch on it only briefly. But they try to add
14 this new gistobviousness argument that “replacing” is obvious in light of
15 none of the references at all and point to Malmberg, which is another
16 reference that's not even in their IPR combinations, and I'm on Slide 54 here.
17 And then turning to Slide 55, Malmberg, if you look at it, is just another
18 reorganization reference, where what's highlighted in red and green are
19 being reorganized around the screen and also displayed in boxes 56, 58, and
20 60.

21 And then finally, I'd like to address two claims in particular. So
22 Your Honors already raised claim 18 and I heard from Apple's response that
23 claim 18 fails because of their other reasons for their other claims, but as you
24 noted in our briefing on page 61, we provided a separate unrebutted reason,
25 despite their arguments in the other claims, that claim 18 is not motivated by
26 the art -- not disclosed by the art -- and I think that should still stand.

1 And then finally, turning to claim 4 on my Slide 57, we also don't
2 think the art discloses claim 4. So claim 4 has a “common display area . . .
3 configured to default to displaying one of the measured values of the first or
4 second physiological parameters,” and they point to this as some sort of
5 default layout Hochstedler discloses. But again, that's not what Hochstedler
6 discloses. Hochstedler doesn't have default layouts. It's got default settings
7 and weightings to determine which of the many layouts would be the best fit
8 for the currently plugged-in parameters. It's not saying when you have two
9 parameters, default to displaying this one or this one.

10 So in summation, I think under the proper construction of
11 “measured values,” their original Petition combination fails. Under the
12 proper construction of “measured values” and “replaced,” all of their new
13 arguments also fail, and that's because of the key distinction, which is that
14 the claims are talking about having an un-displayed measured value that's in
15 the background and replacing it, the currently displayed measured value,
16 with that previously un-displayed measured value. And all of the art is
17 about displaying all the measured values at the same time, and displaying all
18 the measured values at the same time is exactly why the examiner said in re-
19 examination that Al-Ali did not disclose these claims. So unless Your
20 Honors have any questions, I'd like to reserve the rest of my time.

21 JUDGE MARSCHALL: Okay, thank you very much. We'll add
22 two minutes onto your time. You reserved 10 minutes, so you'll have 12.

23 MR. HUGHES: Thank you.

24 JUDGE MARSCHALL: Petitioner, you reserved 15 --

25 MR. RENNER: Yes.

26 JUDGE MARSCHALL: -- minutes. Petitioner, whenever you're

1 ready, you can start. I'll give you some time. You'll have to switch out the
2 display, obviously.

3 DR. DEVRIES: All right. I think we are all set here. Well, thanks
4 very much, Your Honors. I'd like to respond to a few points that Patent
5 Owner raised and then my colleague, Grace Kim, will come up and do the
6 same.

7 JUDGE MARSCHALL: I believe --

8 DR. DEVRIES: First, I'd like to --

9 JUDGE MARSCHALL: -- your -- excuse me.

10 DR. DEVRIES: Yes.

11 JUDGE MARSCHALL: I believe your camera is off.

12 DR. DEVRIES: Uh oh. Okay. Sorry about that. Is that better?

13 JUDGE MARSCHALL: Yeah.

14 DR. DEVRIES: Yeah, thank you.

15 JUDGE MARSCHALL: Better. Thank you.

16 DR. DEVRIES: All right. All right. So first I would just like to
17 clarify, again, our primary reference is Naghavi. Naghavi discloses a
18 display that changes. We've put up several aspects of Naghavi that
19 demonstrate and that describe the icons and health objects on a display are
20 changed based on a patient's condition.

21 So Naghavi clearly tells us that we are starting with a display that
22 changes. The implementation of what exactly that display and its change
23 would look like is provided by Hochstedler, but we aren't solely relying on
24 Hochstedler for the idea of a changing display. And to be clear, this is not a
25 new argument. If you look, for instance, in the Petition, we discuss the way
26 that our references come together, the way that the -- that Dr. Cockburn

1 determined the references come together on pages 10 through 12 of the
2 Petition.

3 And citing to Naghavi, the Petition states, for instance, on page 10,
4 that changes are made automatically to the display, responsive to changes in
5 patient health status. And similarly, on page 12 of the Petition, it states that
6 it would've been obvious to replace displayed GUI icons/health objects
7 based on changes and health status, based on, for instance, Naghavi and
8 Burnes.

9 So while we certainly reply -- rely on Hochstedler as an example
10 of how a replacement might be implemented in the context of a multi-
11 parameter display, Naghavi, the primary reference, provides the fundamental
12 teaching that display of icons and health objects can change responsive to
13 changes in patient health condition.

14 JUDGE MARSCHALL: And I take it you're also relying on
15 Naghavi and possibly Burnes, in part, for the “measured value” aspect of the
16 claims after the combination is made; is that accurate?

17 DR. DEVRIES: That's correct, and as my colleague, Ms. Kim,
18 discussed, and I believe she'll discuss further in a few minutes, we are
19 relying on Naghavi and Burnes to contribute to the disclosure of “measured
20 value.”

21 I'd also like to discuss a little bit more regarding claims 27 and 28,
22 which Your Honors have noted do not specifically recite the “common
23 display area,” and Patent Owner has also focused on that. The language of
24 claims 27 and 28 is on Petitioner's demonstratives on Slide 61, if you'd like
25 to take a look. Now, these claims do not specifically recite the “common
26 display area.” That's true. But they also do not recite any language that

1 modifies the term “display” in any way that implies that replacing the
2 display of one measured value with another needs to be narrowly interpreted
3 to require removal entirely of the replaced value from the display.

4 For instance, let's look at claim 27. Claim 27 recites that activation
5 of a user input button replaces the display of one value with another. So that
6 is activation of the button causes the second value to be displayed in the
7 place that was previously occupied by the first value. Just like the other
8 claims, it doesn't say anything about where the replaced value goes. The
9 claim is solely focused on the area where the first value is displayed, and
10 that display of the first value is replaced by display of the second value. So
11 the claim is simply open-ended. It doesn't say where that replaced value
12 goes. It doesn't say where the replacement value comes from, prior to the
13 replacement.

14 Claim 28 presents a similar issue, but I'd like to look a little bit
15 more closely at claim 28. Claim 28 recites activation of a button causes the
16 display to change from displaying one value to displaying another. So first
17 of all, as an initial matter, this also doesn't say what is going on in regions of
18 the display that are not impacted by this change, or solely focused on the
19 idea of changing from displaying one value to another. But in more detail, if
20 we take “change” to mean the same thing as “replace,” as Patent Owner has
21 argued, how would we read this claim? So just simply substituting “replace”
22 for “change,” would give a claim that says activation of a button causes the
23 display to replace from displaying one parameter to another, which doesn't
24 quite read right. It's not grammatical.

25 So to understand this claim, we need to make this usage of
26 “replace” work here. And the best way to do this is to have the claim read

1 something like activation of a button causes the display to replace one
2 parameter with another, which is consistent with what we've already
3 discussed for the other claims. It's consistent with the scope of the '223
4 patent disclosure. There's no requirement imposed on what goes on
5 anywhere on the display, except where the replacement is occurring.

6 So in that regard, I'd like to point you also to our Petitioner's Reply
7 at page 14, where we specifically argue that no requirement for where the
8 first value goes after the replacement is imposed by the claims. So just to
9 briefly summarize, the -- our interpretation of claims 27 and 28 is consistent
10 with the breadth of the examples offered within the '223 patent specification.
11 Claims 27 and 28 are both silent on the question of where replaced
12 parameters go or where replacement parameters come from, and this then
13 provides an interpretation of the term "replaced" that would be consistent
14 with the canon of claim construction, that a claim term should be interpreted
15 consistently across all claims of a claim set.

16 Finally, I'd like to touch on one last issue very quickly and that is
17 the Patent Owner's concern regarding our purported reliance on a new
18 reference, Malmberg, in our Petitioner's Reply. I'd just like to be clear. Our
19 expert, Dr. Cockburn, discussed Malmberg simply to demonstrate that
20 replacement of parameters on a display is well known. Malmberg is not part
21 of our grounds. It's simply a demonstration that what Patent Owner is
22 attempting to describe here and claim here is not new. So unless Your
23 Honors have further questions for me, I'd like to turn it over to Grace Kim to
24 answer a few additional issues. Thank you very much, Your Honors.

25 JUDGE MARSCHALL: Thank you.

26 MS. KIM: Hello, Your Honors. As Dr. DeVries mentioned, I

1 wanted to just address a few more issues. You had mentioned and
2 questioned earlier allegations that we left Patent Owner's arguments
3 un rebutted, arguments that were submitted in pages 61 through 62 of the
4 POR. Apple's position is that it's untrue that the Patent Owner's arguments
5 do stand un rebutted because our position with respect to those arguments
6 were provided in the Petition -- the original Petition -- and that continues to
7 stand.

8 So claim 18 should not prevail for the reasons that we articulated
9 in our Petition. For example, on page 39, addressing element 18B, we stated
10 that a parameter, a second parameter, becoming near or out of range
11 indicates that the second parameter is the more critical one of the
12 parameters, as compared to a parameter that has not changed. Furthermore,
13 we did submit evidence that --

14 JUDGE MARSCHALL: Excuse me. If I could step in. You said,
15 as compared to a parameter that has not changed, but there's no, as I read it,
16 comparison of the displayed parameter, the first parameter, with the
17 parameter that's almost out of range and kind of weighing which one is more
18 critical between those two; is that accurate?

19 MS. KIM: The Petition is specific to a parameter that has not
20 changed towards being out of range, that would be correct. But however,
21 the second parameter becoming near out of range would similarly be
22 interpreted and applicable to a parameter that would be less critical, even
23 though the articulations of the Petition, it may be that it states that the
24 parameter has not changed towards being out of range.

25 JUDGE MARSCHALL: Okay. I think I understand your position
26 as I read the Petition. I just wanted to make sure I wasn't missing something

1 either in the Reply or in your arguments today, but I understand your
2 position now. Thank you.

3 MS. KIM: I also wanted to address the “measured value”
4 construction and wanted to revisit that. The “measured value” claim
5 construction that's been asserted by Patent Owner is improper. Again, when
6 you look at the plain language of the term “measured value” as applied, for
7 example, in claim 1, there is no explicit language supporting this
8 construction. We -- there is no temporal language in the claim. There is no
9 language dictating whether the determination must happen, and when you
10 look at the construction that's been applied, it's simply unclear due to the
11 ambiguity associated with what is currently detected and determined.

12 Furthermore, the last clause in independent claim 1 that is specific
13 to the one or more threshold value would indicate whether or not a value
14 needs to be currently detected and determined. The phrase “measured
15 value” by itself should not be the reason for interpreting a claim term as
16 being currently detected and determined. There would be redundancy in the
17 claim, for instance, for claim 1, if “measured value” were to have the
18 meaning of currently detected and determined, considering that the last
19 phrase of the claim requires a threshold value to be considered.

20 Next, addressing the arguments relating to the evolution of the
21 record at hand, Your Honors asked whether or not there were any other
22 cases beyond *Axonics* that would support our position. We believe that there
23 are situations where new arguments are permissible, and this is one of those
24 situations.

25 A new claim construction was introduced in the Patent Owner
26 Response. Patent Owner did have proper due process here because they

1 were entitled to prepare a Response and submit one in their Sur-reply. The
2 additional case law that would support our position, to answer your question
3 from earlier, is *ParkerVision v. Vidal*, 88 F.4th 968, cited at pages 979 to
4 980, Federal Circuit 2023. In this case, the Federal Circuit endorsed
5 petitioner indicating that the claim, if construed as proposed by the patent
6 owner, would be rendered obvious by applying it differently, the already-
7 -applied prior art. So the fact pattern is actually very similar to those of this
8 proceeding, and we offer this case as further support for why the Federal
9 Circuit would endorse our position here, as well.

10 Lastly, I wanted to touch upon the question of whether Apple
11 would accept reasonable accommodations if believed by the Board to serve
12 purposes of fairness, and we submit that we would find -- if the Board finds
13 it appropriate to afford Patent Owner an opportunity to furnish an additional
14 declaration, we would simply ask for the opportunity to confirm the
15 reliability of the positions advanced through deposition with the hopes of
16 maintaining a compact record. We simply ask for the opportunity and offer
17 observations. And --

18 JUDGE MARSCHALL: Okay. I had a question on motivation to
19 combine, and maybe you're going to get to that, but Patent Owner
20 characterizes your arguments as kind of hinging on their construction in a
21 way, where they say that as part of your motivation arguments, for every one
22 of them, you rely on some un-displayed parameters that are then introduced
23 to the display. What is your response to that argument?

24 MS. KIM: I would say that it is incorrect. I'd like to touch upon
25 Slide 49 in our demonstratives, and state that while Patent Owner advances
26 theories on why it believes Petitioner's motivation fails, these theories are

1 not credible. The Petition provided multiple reasons, not just one, for why a
2 POSITA would've been motivated to combine the ground references, as
3 presented in the Petition. And those motivations are still relevant, even if
4 Patent Owner's narrow claim constructions were applicable in this
5 proceeding.

6 Like if you jump to Slide 52, for example, Patent Owner argued in
7 its POR that the removal of some icons or health objects on a display
8 prevents Petitioner being able to rely on these motivations, but that's not the
9 case. The mere removal of some of the icons and health objects does not
10 mean that one has lost the ability to, as we put forth in the Petition, provide a
11 display that best suits the condition of the patient. Or also, displaying
12 certain parameters only when necessary. These motivations still apply, even
13 with the improper narrow claim construction.

14 JUDGE MARSCHALL: Okay, thank you.

15 MS. KIM: Thank you, Your Honors.

16 JUDGE MARSCHALL: Anything else from the other panel
17 members? No? Okay, thank you. You can start whenever you're ready,
18 Counsel for Patent Owner.

19 MR. HUGHES: Thank you, Your Honor. So I'd like to try to
20 address a few brief points. So -- and I'll try to take them in the order that the
21 Petitioner just did them. So starting with claims 27 and 28, I think the
22 issue -- there was some argument that somehow it was ambiguous on where
23 the replacement was occurring in these claims. No, it's not ambiguous. It
24 says replacement occurs in the display, which I think Your Honor already
25 recognized and pointed to, so I won't belabor the point, but that's why these
26 claims show that it has to be taken out of the entire display because they

1 refer to the display in their entirety.

2 So second of all, I'd like to address this new Naghavi argument and
3 the new rearrangement theory. And so Your Honor asked some questions
4 about the case law and are they allowed to present sort of new theories in
5 response to a claim construction. And in the break I had, I got a minute to
6 sort of dig in on the case law a little bit, and I think the *Axonics* case, which
7 is what Petitioner is relying on, actually supports us on this point because in
8 *Axonics*, what the Federal Circuit said is that they're allowed to propose a
9 new theory that meets the limitations under Patent Owner's construction.
10 And in fact, that's what Counsel for Petitioner just said in their presentation,
11 that they're allowed to propose new theories in response to our construction,
12 to meet our construction. But that's not what's happening here.

13 Instead, they're disputing our construction, which does not allow
14 for a rearrangement theory, and still arguing that this rearrangement theory
15 applies. So I think *Axonics*, in fact, is exactly on point and that it supports
16 us. They're not allowed to propose a new argument. Sorry?

17 JUDGE MARSCHALL: Yeah. I don't think that's what they're
18 trying to do. I don't think they're just taking it and rearranging on the same
19 screen. I think they're saying under paragraph 59 of Naghavi that that
20 contemplates removing icons -- replacing and removing health icons from
21 the screen, and therefore, would meet your narrow replacing construction.
22 So I think --

23 MR. HUGHES: So --

24 JUDGE MARSCHALL: -- the question -- I think they're at least
25 consistent with that case, in the sense that they are addressing your
26 construction and trying to show that under your construction, the

1 combination still meets the limitation.

2 MR. HUGHES: Respectfully, Your Honor, I don't think that's
3 correct. I think that what they're pointing to -- and Naghavi does not teach
4 some un-displayed parameter in any way. There hasn't been an argument
5 from Petitioner that there is an un-displayed parameter. Instead what they
6 argued was that Naghavi teaches that the different parameters that are
7 already on the screen could be reorganized so that one would be more
8 prominent than another, and there's no teaching of a second in the
9 background un-displayed parameter. And I think that's consistent with the
10 record, and that's our point, which is our construction prohibits that. The
11 reorganization theory, that isn't allowed under our construction and they're
12 not allowed to advance it now.

13 So in terms of claim 18, I think, again, Your Honor, this is exactly
14 on it, which is that we disputed this idea that this somehow coming in and
15 out of bounds is a critical -- shows a critical parameter, which parameter is
16 more critical. We made an argument on it against what they had in the
17 Petition, and they never rebutted it, and I think that should make sense that a
18 parameter coming in and out of bounds may not necessarily be a critical
19 parameter, because that's, you know -- I mean, I've been to the doctor a few
20 times. Sometimes, my parameters are out of bounds, but they're not
21 necessarily critical. I'm not rushing to the hospital.

22 So I think that should jive with our common understanding, and
23 that's exactly the argument we made in the Petition here -- or excuse me, in
24 our Response to the Petition. So I think our arguments on claim 18 are
25 un rebutted and that we should prevail on claim 18.

26 JUDGE MARSCHALL: And then if I could ask you what your

1 position would be if we don't adopt your construction for the "replacement"
2 limitation or the material -- or "measured value," I should say -- for let's say
3 claim 1, what arguments do you have left, if any, in support of your
4 arguments, whether it's motivation to combine or lack of disclosure of a
5 limitation or anything else?

6 MR. HUGHES: Yeah. So I think there's a few arguments. So
7 there's claim 18, which is separate and apart from all of that. There's claim
8 4, which is also separate and apart from all that. There's a measured -- or
9 excuse me -- the motivations, which also is provided there, and I think all of
10 those arguments show that the claims are patentable, regardless of the
11 constructions.

12 JUDGE MARSCHALL: Well, I think a lot of your motivation
13 arguments seem to assume that we would adopt your constructions, as I read
14 them, because they talk about un-displayed parameters and then removing
15 parameters. So it's hard for me to draw the line between -- that's why I'm
16 asking the question because it seems like everything rises or falls with us
17 adopting at least one of those constructions, if not both for some arguments,
18 and I'm trying to figure out what's left of your motivation arguments if we
19 don't adopt either construction.

20 MR. HUGHES: Well --

21 JUDGE MARSCHALL: Is there any you can name here today? I
22 know I'm putting you on the spot, but --

23 MR. HUGHES: Right.

24 JUDGE MARSCHALL: -- that's what I'm trying to figure out.

25 MR. HUGHES: Well, I admit it. My job is a lot easier if you
26 adopt our construction, so I think you've successfully identified that. In

1 terms of what's left, right, I think the issue on the motivations is actually
2 separate from the constructions because what's happening in the motivations
3 is they have all these motivations describing you would want to combine all
4 of these references to essentially prioritize some sort of information to the
5 caregiver.

6 In fact, one of the motivations specifically is prioritizing display of
7 important info. It's also to provide a display that best suits the condition of
8 the patient, relieve the data analysis burden on clinicians so they don't have
9 to pick which ones are important, and that it allows the GUI to change with
10 the needs of the user and the stage of medical treatment, and display, to
11 display clinically relevant information.

12 So all of those motivations assume that there must be some sort of
13 picking and choosing between the various parameters displayed on the
14 screen, but that's not true in the references. Because I think what's
15 undisputed is that all the references teach displaying all the parameters,
16 regardless of what you have. Now, they may teach moving them around on
17 the screen, but they always are teaching displaying everything, and if all the
18 references teach displaying everything, regardless of our claim construction,
19 none of these motivations make sense because the easy answer is exactly
20 what the examiner said -- Al-Ali teaches -- which is that these references
21 say, show the clinician everything. You don't need to sort of pick and
22 choose and figure out what might be more important and what might not be
23 because all you have to do is display everything. And so regardless --

24 JUDGE MARSCHALL: Don't --

25 MR. HUGHES: -- of the claim construction -- oh, sorry, Your
26 Honor.

1 JUDGE MARSCHALL: But as I said -- but don't Naghavi and
2 Burnes both highlight different parameters based on whether they're out of
3 range or whether they're alarming? They might color them red, there might
4 be an audio alarm, they might move them on the screen according to
5 Naghavi. Wouldn't those visual changes and movement of icons be enough
6 to -- when you move the icons, at least, and replace one with another in one
7 area of the screen -- wouldn't that be enough of a motivation in the absence
8 of adopting your constructions?

9 MR. HUGHES: Well, I don't think that explains why you would
10 want to combine with Hochstedler, which I think is sort of our point. If
11 Naghavi has it all and rearranging is enough and it can highlight, why is
12 Hochstedler even an issue? And it's because Naghavi doesn't have all the
13 limitations in the claim, and you need to combine them with Burnes and
14 with Hochstedler. And when you drill down on that actual combination,
15 their arguments don't make sense.

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

18 MR. HUGHES: All right. I think with that, Your Honor, we'll end
19 here. I appreciate the time and thank you so much for the attention to this.

20 JUDGE MARSCHALL: Okay, thank you very much. This was
21 very helpful. Oh, I'm sorry. Do we have a question? I just heard a stray
22 voice. Sorry about that. That wraps up this session of today's arguments.
23 We're going to close this argument and adjourn for about 10 minutes and
24 then start a new proceeding -- a new transcript -- for the next case, but this
25 case is adjourned. Thank you very much.

26 MR. RENNER: Thank you, Your Honor.

1 MR. HUGHES: Thank you very much.
2 (Whereupon the above-entitled matter went off the record at 2:54
3 p.m.)

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