

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MASIMO CORPORATION
Petitioner

v.

APPLE, INC.,
Patent Owner.

IPR2023-00634 (Patent 10,627,783 B2)
IPR2023-00734 (Patent 10,942,491 B2)

Record of Oral Hearing
Held: July 9, 2024

Before KEN BARRETT, JOSIAH C. COCKS, and ROBERT L. KINDER,
Administrative Patent Judges.

IPR2023-00634 (Patent 10,627,783 B2)

IPR2023-00734 (Patent 10,942,491 B2)

APPEARANCES:

ON BEHALF OF THE PETITIONER:

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PHILIP NELSON, ESQUIRE
IRFAN LATEEF, ESQUIRE
RHETT RAMSEY, ESQUIRE
Knobbe Martens

ON BEHALF OF THE PATENT OWNER:

KARL RENNER, ESQUIRE
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Fish & Richardson

The above-entitled matter came on for hearing on Tuesday,
July 9, 2024, commencing at 9:00 a.m., at the U.S. Patent and Trademark
Office, 600 Dulany Street, Alexandria, Virginia.

P R O C E E D I N G S

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JUDGE BARRETT: Good morning, everyone. This is IPR2023-00634 and IPR2023-00734. Masimo Corporation versus Apple Inc. This hearing today is being conducted by video conferencing. I am Judge Barrett and with me today are Judges Cocks and Kinder. And let's get the party's appearances. Who do we have for Petitioner today?

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MR. CANNON: Good morning, Your Honors. I'm Ted Cannon of Knobbe Martens. I'll be presenting for Petitioner Masimo today. With me in the room, our lead counsel, Philip Nelson. Also, backup counsel, Irfan Lateef and Rhett Ramsey. And I believe on the public line is another associate, Paul Spiel and Masimo's expert, James Duckworth.

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JUDGE BARRETT: Good morning. And for Patent Owner?

MR. RENNER: Good morning, Your Honor. This is Carl Renner and I'm joined in the room by Andrew Patrick and Karan Jhurani. Thank you.

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JUDGE BARRETT: Good morning to you, too. As you know, we set forth the procedure in our oral argument order. But to remind everybody what we proposed was Petitioner of course, will go first, have 75 minutes total for presentation of arguments in both cases. Patent Owner also will have 75 minutes for both cases. Petitioner goes first, may reserve time for rebuttal. It's expected that Petitioner will address both cases during that initial period. Patent Owner then will have the opportunity to a response and may reserve time for a brief sur rebuttal. Similarly, the expectation is Patent Owner would address both cases in that initial period. And then we'll just go

1 back and forth until we're all done. Is that, is that proposal acceptable to the
2 parties? Petitioner?

3 MR. CANNON: Yes, Your Honor.

4 JUDGE BARRETT: Patent Owner?

5 MR. RENNER: Yes, Your Honor. Thank you.

6 JUDGE BARRETT: All right, I will be keeping track of the time
7 today. I suggest you have someone on your team also keep time and give
8 you any time warnings that you desire. Otherwise, I will just give you
9 warnings as we're approaching the end. There's a lot of issues that apply to
10 both cases today. If any arguments are specific to one case or the other,
11 please identify that case. Although I think your demonstrative exhibits laid
12 out pretty well what cases you're talking about. And speaking of
13 demonstratives, we do have those pulled up on our computers. It is helpful
14 to us and to the record if you state which slide you are referring to, or if
15 you're going to refer to something in the record, give us an exhibit number,
16 page, column, line number, something like that, so it's really clear what
17 you're talking about, and it gives us a heads up so we can get there.

18 These hearings are open to the public today. There is an open line;
19 they can both hear and view us. I don't expect any confidential information
20 to come out today. But if you foresee that, just pause, let me know and we'll
21 deal with it at that time. And for your information, our court reporter has not
22 shown up yet. So, our outstanding hearings team is working that and trying
23 to get a court reporter. They may show up midway through the hearing, but
24 have no fear, the IT people, our excellent IT team will have a recording.
25 And if nothing else, we will submit that recording to the hearing the court
26 reporting company and they will transcribe it. So, we will have a transcript

1 for the record regardless. Any questions or concerns? Petitioner, Mr.
2 Cannon?

3 MR. CANNON: Would you like us to share our slides as we present
4 them on the screen? Or would you prefer to just have us indicate by number
5 and have you follow on your own copies?

6 JUDGE BARRETT: It is up to you. Either way works fine with us.
7 You present however you feel is comfortable. Both ways work.

8 MR. CANNON: Okay.

9 JUDGE BARRETT: Patent Owner, any questions, concerns?

10 MR. RENNER: No, thank you, Your Honor.

11 JUDGE BARRETT: All right. With that, I think we are ready to
12 begin. Petitioner, we will hear from you first, and if you could tell me how
13 much time you would like to reserve.

14 MR. CANNON: I plan to reserve 15 minutes for rebuttal.

15 JUDGE BARRETT: All right, thank you.

16 MR. CANNON: I'm going to share my screen here. Good morning,
17 Your Honors. I'll be presenting for Petitioner Masimo. Let's go to slide two.
18 Slide two shows the topics in the order that I intend to present. I'm not sure
19 that I'll get through all of these, but I'll go in the order as far as we can go.
20 Let's go to slide three. I'm going to focus on the claims that were actually
21 argued in Apple's POR, and of course, that we replied to in our reply. Let's
22 move to slide four. The first topic that I will be addressing is obviousness to
23 combine optical sensors and wireless charging coil under a single cover that
24 addresses claims in both patents. But we'll be focusing on the 491, claim
25 seven, which is a representative claim. Let's move to slide five. It's
26 undisputed that Kotanagi teaches almost all the limitations of the '783 and

1 ‘491 patents. Those patents claim basic features of a biological sensing
2 watch, such as a housing, a cover, a band on slide five. On slide six, you can
3 see some of those same elements, and also the biosensors, such as a
4 photodetector and an LED.

5 Let's move to slide seven. The first ground we'll be discussing is ‘491
6 ground one. It does apply to some of the other claims, as I mentioned. Let's
7 go to slide eight. Here's claim seven of the ‘491 patent that is representative
8 of the optical sensor and wireless charger coil combination claims. The
9 highlighted portions of this slide show what Apple alleges is innovative,
10 namely, a wearable electronic device that passes optical signals and wireless
11 power through the same cover. Now, these limitations of the claim do not
12 recite coil dimensions, charging speed, or charging efficiency. So, any
13 wearable electronic device that passes optical signals and wireless power
14 through the same cover meets these limitations. Before proceeding further, I
15 want to emphasize some important legal principles. First, motivation to
16 combine and reasonable expectation of success focus on the claimed
17 invention. A POSITA must have a motivation to combine accompanied by a
18 reasonable expectation of achieving what is claimed. That means we don't
19 need to show that a POSITA would have been motivated to implement
20 beneficial but unclaimed features of a reference, and that's supported by In
21 re Urbansky, 809 F. third, 1237, 1243 through 1244, Federal Circuit 2016
22 and Janssen Pharmaceuticals versus Teva Pharmaceuticals, 97 F. fourth,
23 915, 925, Federal Circuit 2024.

24 Also, we don't need to show that a POSITA would reasonably expect
25 the prior art references to operate as those references intended once
26 combined, and that's supported by intelligent Biosystems versus Illumina,

1 821 F. third, 1359, 1367 Federal Circuit 2016. So, importantly, the
2 emphasis is on the claimed invention. We have to show motivation to
3 combine and reasonable expectation of success that once combined, the
4 references would have a cover that both passes optical signals and wireless
5 power, but it does not. We do not need to show reasonable expectation of
6 success of any particular degree of efficiency or speed or particular
7 dimensions for the coil. Another principle is that reasonable expectation of
8 success does not require the petition to describe every particular
9 modification that might be contemplated by a skilled artisan in combining
10 the prior art, and that's supported by Google versus Knowbots, IPR2022-
11 00940 paper 38, at 24 through 26, PTAB November 29th, 2023. And in that
12 case, the Board explained that obviousness does not require a showing how
13 the prior art would have been bodily incorporated into each other. And the
14 Board cited some Federal Circuit cases. But there are several Federal
15 Circuit cases that support that notion and indicate that bodily incorporation
16 or physical combinability are not required for a showing of obviousness.

17 So, with that, let's move to the next slide, slide nine, which shows our
18 combination for these claims. Kotanagi and Honda. Let's move to slide ten.
19 Kotanagi teaches contactless charging. As you can see on the screen,
20 Kotanagi specifically discloses a transformer that can recharge a battery in a
21 contactless state. Moving to slide eleven. What is meant by a contactless
22 state? Dr. Duckworth explained that a POSITA would have known that such
23 contactless charging involves a wireless charging receive coil. So even with
24 Kotanagi, we have at least a suggestion of wireless charging in the watch.
25 Let's move to slide twelve. We also rely on Honda for additional details of
26 wireless charging. Honda has a wireless charging station where the device

1 can be placed for wireless charging. Let's move to slide 13. Honda also
2 discloses specific location of the coil. You can see in orange on slide 13, the
3 coil, and in red on slide 13, the cover over the coil. Let's move to slide 14.

4 The combination that is set forth in the petition, in both petitions is to
5 modify Kotanagi to accommodate Honda's coils. On the screen on slide 14
6 is from the '491 petition and specifically discussing claim seven. And that
7 explains that we're starting with Kotanagi, but we're modifying it to
8 accommodate Honda's coils. It mentions two possible ways to modify it,
9 and the second one is to enlarge Kotanagi's opening and cover glass to make
10 room for a coil behind the cover glass, surrounding the LED and PD. Slide
11 15 is a figure that immediately follows that preceding paragraph, and it
12 points to available space that would encourage a person of ordinary skill in
13 the art to understand that it wouldn't be a significant modification to put a
14 coil such as Honda's into Kotanagi. That doesn't suggest or indicate that we
15 are limited to the exact space available. And it's an unreasonable
16 interpretation of the petition to believe that there is such a restriction.

17 Because again, this figure immediately follows the paragraph shown on slide
18 14 that explicitly talks about enlarging Kotanagi's opening and cover glass to
19 make room for a coil behind the cover glass. Let's move to slide 16. This is
20 the '783 petition, and it's discussing claim nine with respect to this claim. It
21 also mentions the combination of modifying Kotanagi to accommodate
22 Honda's coils. It speaks in general terms, and it says that we modify
23 Kotanagi's device based on Honda's teachings to align a charging receive
24 coil behind the cover glass in a similar position and with a similar size to
25 that taught in Honda, and that Honda's teaching of how to do so would aid a
26 person of ordinary skill in the art to make that modification.

1 Now, it's important to note here that we're starting with Kotanagi, but
2 we're not limiting ourselves to the structure of Kotanagi. In fact, we're
3 saying expressly we're going to modify Kotanagi and we're going to be
4 driven by Honda's teachings and particularly the positioning and the size of
5 the coil taught by Honda to determine where that coil is going to be
6 positioned in Kotanagi. And if there's any modifications needed to do that,
7 that would be well within the realm and skill set of a person of ordinary skill
8 in the art. And so, that is completely contemplated by the petition. For all
9 of the claims. Let's move to Slide 17. Slide 17 is the '783 petition
10 discussing claim eleven, and that one has, in addition to the general
11 description of the combination, the specific ways that that could be
12 implemented, including enlarging Kotanagi's opening and cover glass, let's
13 move to slide 18. This is also the '783 petition discussing claim 15 that has
14 the general description of the combination of modifying the device based on
15 Honda's teachings in a similar position and with a similar size to that taught
16 in Honda. And it also mentions adjusting for any scale differences. Let's
17 move to Slide 19. Slide 19 shows an illustration of how an enlarged covered
18 glass may work. That's only one illustration. There could be other ways that
19 an enlarged covered glass could look. This is an illustration in pictures of
20 what was already present in the petition. Let's move to Slide 20, which is a
21 further illustration in pictures of what was already shown in the petition,
22 which is the positioning of the coil around the optical elements and with the
23 coil positioned at the perimeter of the protruding part of Kotanagi, which
24 would extend the size of the coil with the cover glass expanded. Let's move
25 to slide 21.

1 The motivation to combine and expectation of success are fairly
2 straightforward here, and several of them. The petition lists multiple reasons
3 to combine, and many of them are undisputed. The first listed is Kotanagi
4 suggests contactless charging, and Honda teaches wireless charging for
5 biosensing watches, so they both mutually support a combination, motivate a
6 combination of the two together to have both the wireless charging and the
7 biosensing aspects in a single device. Both references have glass covered
8 rear openings, and Honda positions a wireless receive coil behind its glass to
9 improve wireless power transmission. And then on the next slide 22,
10 Kotanagi's watch profile fits intimately into Honda's charging station profile.
11 Now, we're not indicating that the devices are exactly the same size or that
12 they don't require any physical modifications at all. But we're suggesting
13 that a person of ordinary skill in the art would know that the devices are
14 roughly the same size and would have motivation to make the minor
15 modifications that would be needed to put the two concepts of the invention
16 together in a single watch. Let's move to slide 23. This begins to address
17 Apple's arguments against motivation to combine and reasonable
18 expectation of success. The first argument they make is that Kotanagi limits
19 the size of its coil to a maximum diameter of 10 millimeters. We disagree
20 with that, but we'll explain later that even if that is correct, it doesn't negate
21 reasonable expectation of success.

22 The reason we disagree with the limitation here, or the restriction, is
23 that Apple is relying on figure eight, which shows a 20 millimeter circular
24 protruding part. Apple is then attempting to apply that limitation to figure
25 five, which, as you see, has a rectangular cover on a protruding part. Apple
26 is estimating the size of that cover at about half of the diameter of the

1 protruding part, is imposing that limitation of 20 millimeters, saying that
2 about half of that is a ten millimeter diameter. The problem with Apple's
3 assumptions is, first, that figure eight is a different embodiment. But
4 second, that even if we were limited to the protruding part size, with the
5 expansion of the cover glass to the full extent of the protruding part, we
6 would be able to fit a coil of at least 20 millimeter under there, which is
7 twice the diameter and significantly more of the surface area of a coil that
8 Apple may assume for all of its arguments in this case. Let's move to slide
9 24. We don't believe we're limited to the ten millimeter restriction that apple
10 tries to impose. But even if we were, Apple's own evidence shows that even
11 a smaller coil, 6.5 millimeters or 9.5 millimeters, would provide a good
12 power level for wireless charging. To the left, we have a figure from a
13 reference that Apple put into the record called the Mohamad reference, and
14 it shows that even smaller coils would produce certain wattages. And to the
15 right, we have Dr. Anthony's testimony. That's Apple's expert, who
16 admitted that these wattages are a good power level for wireless charging.
17 So even if we were limited to 10 millimeters, which we're not, it would
18 provide a good power level for wireless charging. Let's move to slide 25.

19 Apple argues two things about Mohamad. First, they argue that
20 Mohamad is not prior art. But Masimo is not relying on Mohamad for prior
21 art. By way of background, Apple put Mohamad into the record, and they
22 rely on Mohamad to support assumptions about what type of conditions or
23 factors that a coil of various sizes would result in. And they relied on it sort
24 of as showing inherent characteristics of coils that Dr. Anthony relied on to
25 support assumptions about how coils of different sizes would work. We're
26 relying on for much the same purpose, and we're just showing inherent

1 characteristics of coils. And for that purpose, it does not need to be prior art.
2 Apple also argues that Mohamad did his experiments in a vacuum and not in
3 the context of the patent. But that's not correct as shown to the right of this
4 slide. That's the conclusion paragraph of Mohamad that shows that the
5 developed wireless power transfer is suitable to charge wearable and
6 medical devices. And so, those wearable and medical devices are exactly
7 the type of context we're talking about. And these experiments were not
8 done in a vacuum, but were done in the exact context of these patents. And
9 again, just to reemphasize, we're relying on Mohamad to show inherent
10 characteristic of coils. And for that purpose, it need not be prior art. Let's
11 move to slide 26.

12 Apple also argues that the combination would somehow undermine
13 the Honda's goal of quick and efficient charging. Now, before we get to the
14 points on this slide, that's an example of where Apple is trying to make us
15 prove something that we don't have to prove. And that is that a person of
16 ordinary skill in the art would have been motivated to achieve the goals of
17 the prior art or to have reasonable expectation of success of the goals of the
18 prior art when the appropriate inquiry is with respect to the claim limitations
19 instead. Now getting into the specific points that Apple made. First of all,
20 Apple relies for its argument on the ten millimeter restriction for Kotanagi
21 that we've shown is not applicable. Second, Honda specifies no minimum
22 acceptable speed or efficiency, so it's put forth some generalized goals, but it
23 really doesn't provide any metric for determining what is quick and efficient
24 charging. Also, the patent claims don't require a particular speed or
25 efficiency. Again, all we have to show is reasonable expectation of success
26 of wireless power passing through a cover without regard to any particular

1 speed or efficiency. Fourth, Honda is relevant for all it contains, even if it
2 has some ideal goals in mind. A person of ordinary skill in the art would
3 understand that it also discloses devices that perhaps stop short of the ideal,
4 but would still be beneficial. And a person of ordinary skill in the art would
5 take into account those teachings as well. Finally, Apple's expert admitted
6 that even trickle charge is beneficial for wireless charging. Let's move to
7 slide 27.

8 Apple also argued, based on an assumption that optical elements have
9 a two millimeter thickness, that the coil separation between the device and
10 the dock would be too far apart for effective charging. There's two problems
11 with that. First, Apple's assumptions, if you applied the scaling to the entire
12 figure, would result in a watch that is greater than 4 centimeters in thickness,
13 which is, of course, an unreasonable thickness for a watch, and shows that
14 Apple's assumptions are unreasonable. Second, Apple's argument ignores
15 the combination where the opening is enlarged so that the coil can go around
16 the optical elements and be up against the cover glass. Let's move to slide
17 28. Apple also puts forward this general principle, that as distance decreases
18 between the coils, the transmission efficiency increases. And that's a well
19 known principle of physics. It's not really a dispute here, but it doesn't prove
20 anything relevant to the case because this is from Honda itself. Honda
21 teaches this concept. Person of ordinary skill in the art would have been
22 aware of it, and in fact would have taken it into account in implementing the
23 combination and would have chosen a point on the curve that would have
24 balanced distance and efficiency for the purposes of the particular design.
25 And Apple's expert admitted that such tradeoffs are a standard part of
26 engineering. We'll now move to slide 29. This shows a case we cited,

1 Medichem. Simultaneous advantages and disadvantages do not necessarily
2 obviate motivation to combine, so this expresses just the general idea of
3 tradeoffs. A person of ordinary skill in the art might choose a larger watch if
4 their main emphasis was making sure that the charging efficiency was
5 maximized. If they were willing to have slightly less charging efficiency,
6 but wanted to emphasize the comfort level of the watch, they might choose a
7 smaller watch. They might even take into account aesthetic concerns and
8 other things. But a person of ordinary skill in the art is not going to be
9 discouraged simply by knowing that there are inherent tradeoffs in any of
10 the choices that the person makes. Let's move to slide 30. This is one of
11 those inherent tradeoffs.

12 Apple relies on Honda to suggest that Honda needs an air core. In
13 other words, a core that doesn't have anything in the middle in order to have
14 effective charging. But that's simply not what Honda teaches. At most,
15 Honda is talking about a classic tradeoff where it says, if you have these
16 three concerns, limiting the magnetization of a watch mechanism, avoiding
17 an increase in the weight of the watch, and preventing the exposure of
18 magnetic metal. If you have those three concerns, then you may want to use
19 an air core to avoid that increase in weight or the magnetization of a watch
20 mechanism or exposure of a magnetic metal. But the very next sentence
21 says that if those concerns are not important and that should be interpreted as
22 important to the designer for the particular purpose. If they're not important,
23 if you emphasize instead the desire to have wireless charging and to also
24 have biosensing components, then you can use a core that's not an air core.
25 And Honda simply is talking about that. Trade off. The other thing to note
26 about the three issues of limiting magnetization, weight and exposure of

1 magnetic metal is that all of those are talking about, we don't want to expose
2 the metal to magnetism rather than talking about messing up the wireless
3 transmission or wireless power transmission. Those concerns are related to
4 different things, not to the wireless power efficiency. Let's move to slide 31.
5 Apple tries to rely on Fraser to rebut expectation of success and motivation
6 to combine. Now, before we go into detail in Fraser, it's important to know
7 how Fraser plays into this case and to realize that in many ways, Fraser is an
8 irrelevant distraction from the true issue. In this case, the real issue is
9 whether Masimo's combination would pass wireless power through a cover
10 along with the optical signals.

11 Apple doesn't use Fraser to say that the combination wouldn't do that.
12 What it does is say that Fraser, an alternative combination involving Fraser,
13 would perform better and would not pass power through the cover. Now, it
14 doesn't really matter whether you agree if it would perform better. We don't
15 agree necessarily. And it doesn't matter whether it would pass power
16 through the cover, which we definitely disagree with, because that is a
17 separate issue from what we need to prove, which is that our combination
18 would pass wireless power through the cover. So now, with that caveat, let's
19 look at what Fraser actually shows. And if you look at what Fraser shows, it
20 actually supports the combination. And what it shows is that there are light
21 emitters in the center. In other words, it's a non-air core. There are light
22 emitters in the center, 120, 322, 324, and. And that there's a coil 310 that
23 surrounds the emitters. And so, that shows that wireless power can work
24 with a coil surrounding a non-air core with light emitters in the center. Now,
25 Apple argues that this doesn't apply to the combination because Fraser's coil
26 is bigger. The problem with that is that Fraser doesn't support that

1 argument. Fraser doesn't provide any dimensions for its coil, and there's no
2 basis for arguing that it's a larger coil based on Fraser. As we know, patent
3 drawings are not assumed to be to scale. And it's certainly even a more
4 attenuated assumption when you're comparing one patent drawing to one in
5 a completely different publication, both of which are not to scale and
6 certainly are not to the same scale between themselves. So, Apple can't rely
7 on Fraser to make that allegation. Let's move to slide 32.

8 The other issue which I partly alluded to with Fraser, which is, again
9 irrelevant to the ultimate decision in the case, is whether Fraser, the Fraser
10 combination that Apple puts forward, would pass wireless power through the
11 cover. There's a disagreement between the experts as to whether that would
12 occur. It's not completely necessary for you to resolve that disagreement
13 between the experts, because, again, this relates to whether Fraser would
14 pass wireless power through the cover and not the relevant point about
15 whether the combination would pass wireless power through the cover.
16 Nevertheless, we're going to get into this dispute to show how our expert,
17 Dr. Duckworth, has the better side of this argument. The issue is whether
18 when the claims talk about wireless power passing through the cover it's
19 referring to the magnetic flux passing through the cover or whether there's
20 some other physical thing that needs to be passing through the cover to meet
21 that claim limitation. As Dr. Duckworth explains, really, magnetic flux is
22 the only physical thing that passes through anything that transmits through
23 the air at all or through space. And so, it's the only physical thing that one
24 can look at to determine if there's anything passing through the cover. And
25 that's supported by two references that Apple put into the record. The
26 Mohamad reference that we talked about before and exhibits 2023, which

1 both show magnetic flux going through the center of the transmitter and
2 receive coils.

3 The way that this works is that on the transmitter side, current goes
4 through the transmitter coil, creating a magnetic flux that goes through the
5 center of both coils. On the receiver side, that magnetic flux induces a
6 current which creates power on the other side. So that's the principle of
7 operation of power transmission, wireless power transmission. And the only
8 physical thing that is transmitted through space is magnetic flux. Dr.

9 Anthony agreed up to a point in the sense that he agreed that the field lines
10 are concentrated, or appear to be concentrated in the center of the coils. But
11 he disagreed with magnetic flux being the thing that passes between the
12 coils. Let's move to slide 33. Honda corroborates the notion that magnetic
13 flux is highest in the center of the paired coils. Figure ten shows the
14 magnetic flux in the portion we've highlighted in yellow, and you can see
15 that the peak magnetic flux is right in the middle between the two in the
16 center of the coils. Let's move to slide 34. Here's Apple's hypothetical
17 Fraser combination. And they've placed the coils relatively far apart and put
18 a cover in the middle. And they allege that wireless power transmits in the
19 blue arrows to the left and right of the coils. You'll note that they've omitted
20 a magnetic flux from their diagram. Slide 35. If you put magnetic flux in,
21 and based on Dr. Anthony's admission that magnetic flux would encircle or
22 that the field lines would encircle the coils, you can see that the magnetic
23 flux passes through the cover even in Apple's hypothetical Fraser
24 combination. But again, coming back to a point that I said before on slide.
25 Well, we'll get to that.

1 Apple denies that magnetic flux shows power transfer through the
2 cover. That's just a point that the experts disagree on. We believe that we
3 have the better of that argument, because, again, magnetic flux is the only
4 physical thing that transfers anywhere during wireless power transmission.
5 This is on slide 36. Now let's move to slide 37. Now we're getting back to
6 the main point and the point that really is the relevant issue here without
7 regard to whether you agree with Dr. Anthony or Dr. Duckworth about
8 whether Fraser transfers power through the cover, Kotanagi and Honda do.
9 And this figure here on 37 shows that it's well established in the record, and
10 it's really not been subject to significant dispute on this issue. Let's move to
11 slide 38. So that's the -- now, Apple relies on modeling. And let me just
12 explain a little bit about what their modeling is attempting to convey. What
13 Apple's trying to show is that if you mockup the combination that Masimo
14 proposes, using some assumptions that Apple made, then you compare it to a
15 model of the Fraser combination, again, using Apple's assumptions, they
16 claim that Fraser would perform better than the Honda-Kotanagi
17 combination. There's many problems with Apple's modeling, even if they
18 relied on correct software and put inputs in there and the calculations were
19 performed correctly. As we all know, modeling requires accurate
20 assumptions. And if you put bad assumptions into the model, you're going
21 to get bad results. Apple didn't have accurate assumptions, and they couldn't
22 have had accurate assumptions because first, Fraser provides no coil
23 dimensions.

24 And so, Apple made an assumption about what those coil dimensions
25 would be. They also made improper assumptions on the other side with
26 Kotanagi, and particularly relied on the ten millimeter restriction, which,

1 again, is not a real restriction. Even if we were limited to the 20 millimeter
2 protruding part, we could expand the coil to at least 20. So all of Apple's
3 assumptions that rely on 10 millimeters are simply not relevant to this case,
4 and it's improper modeling. In addition, the modeling doesn't show any
5 absolute numbers. It's really just a relativistic comparison that, according to
6 them, based on their assumptions, shows that Fraser would perform better
7 than Kotanagi and Honda. What they cannot tell you is any absolute metric
8 of how well Honda and Kotanagi would perform. So, they cannot show that
9 there's a lack of expectation of success or that power would not transmit
10 through the cover the Kotanagi and Honda combination. Let's move to slide
11 38, 39. In addition, Apple's modeling proves nothing legally relevant. At
12 most, if you assume that the model is, even if you assume it's a perfect
13 model, which it is not, at most it shows that increasing coil number and
14 diameter and reducing separation distance results in faster charging. But of
15 course, that's just standard physics that would have been well known, would
16 have been something that a person of ordinary skill in the art would have
17 taken into account in designing the combination. And in addition, the claims
18 don't require a specific charging speed. Again, all we need to show for
19 expectation of success is that the claim that we would have met the claims
20 that Honda and Kotanagi would have passed wireless power through the
21 cover which we have shown. Let's move to slide 40.

22 And we're moving on to the next topic. The next topic is obviousness
23 to measure ECG using electrodes. And the claim we'll focus on is '491,
24 claim one. Moving to slide 42. Kotanagi definitely has two rear electrodes.
25 There's no dispute about that. The dispute sends on the whether those two
26 electrodes could be configured to measure ECG. Let's move to slide 43.

1 The claims require the two electrodes to measure ECG. Now, it doesn't
2 require any particular two electrodes. It just says first and second in patent
3 language to mean two electrodes. It could be any two electrodes to meet the
4 claim limitation. There's two obvious options to meet this limitation. One,
5 you could configure Kotanagi's electrodes to obtain an ECG. Or two, you
6 could add additional electrodes to Kotanagi and use both the new and the old
7 electrodes to obtain an ECG. Let's move to slide 44. ECG measurements
8 can be made using only rear electrodes, and we showed that in the petition
9 with two references one is Choi. Choi has sensors that could be used for
10 ECG on both the front and the back of the device, and it gives an and or that
11 you can use those to do ECG by the sensors on the front and or the sensors
12 on the back. So, a person of ordinary skill in the art would understand that
13 to disclose three possibilities, measuring ECG with the sensors on the front,
14 measuring ECG with the sensors on the back, or measuring ECG with the
15 sensors on both the front and the back.

16 Schmid in 1983 discloses having two electrodes disposed in close
17 proximity and using those to detect ECG. And so, we've shown that even
18 with just two rear electrodes, you can do ECG measurements. Let's move to
19 slide 45. Apple attempts to discount Schmid by arguing that Schmid
20 offloads ECG processing, so it does not teach measuring ECG on the watch.
21 But we didn't rely on Schmid for the processing of the signals on the watch.
22 What we relied on it for is its teaching that two electrodes on the same
23 surface can measure ECG. And we relied on Choi, which in 2013 taught on
24 device ECG processing using the growing computer power of the mobile
25 device. So, in other words, computing power caught up by 2013 such that
26 you could process the ECG signals on the watch itself. And the '491 patent

1 also relies on generic processors. Let's move to slide 46. The motivation to
2 combine for these claims and the expectation of success are also relatively
3 simple. First, no significant structural changes to the rear electrodes is
4 necessary to be able to measure ECG with them. Second, by using both
5 ECG and PPG in the same device, that would improve the heart function
6 sensing above PPG alone, ECG would provide an additional measurement
7 beyond simply pulse rate. Let's move to slide 47. We showed in the petition
8 that the electrode structure of Schmid and Kotanagi is quite similar, and the
9 purpose of that is to show that it's not really the electrode structure that
10 determines the electrode function, it's really the inputs to the electrode and
11 then the processing of with additional circuitry that determines the electrode
12 function.

13 To the left, we have Schmid's structure that shows figure one of
14 Schmid. And what you see is electrodes that have a surface portion, a flat
15 surface portion, that's metal that touches the user's skin, and then a thin
16 connector that takes the signals into the interior of the device. And as you
17 can see to the right, Kotanagi's electrodes have a very similar structure with
18 a flat metal portion that contacts the skin and a thin connector that takes the
19 signal into the interior of the device. Let's move to slide 48. Apple argues
20 that using Kotanagi's electrodes for ECG would frustrate their skin contact
21 purpose. And that's simply incorrect because the electrodes can detect skin
22 contact and then ECG serially, so they don't have to be operating at the same
23 time, and there's no need to disable the skin contact detection function to
24 then separately do an ECG measurement. Lee discloses that ECG and or
25 PPG sensors can be used to detect removal of the device from the wrist,
26 which is consistent with Kotanagi's serial approach of using electrodes for

1 contact detection prior to pulse measurement. And it's also consistent with
2 Choi's serial approach of using electrodes for authentication and then
3 detecting detachment. Let's move to slide 49 now, this is in response to
4 Apple's argument in their Patent Owner response, where they argued that
5 we, they argued that our combination would frustrate the purpose of
6 Kotanagi's electrodes. Of course, that's an argument that Apple brought up
7 in the POR. It's not one we were required to anticipate in the petition. We
8 put forth our prima facie case in the petition, and then they put forth there
9 what they consider to be a rebuttal. But we were entitled to reply to that in
10 our reply. And in doing so, we put in three references to show that
11 electrodes can actually have a dual purpose and that doing ECG
12 measurement with them does not frustrate the purpose of another purpose,
13 such as skin contact detection.

14 One of the references is shown in slide 49 is the Autosense Paper, and
15 it shows that. It shows electrodes that where the same electrodes measure
16 both ECG and galvanic skin response. Galvanic skin response is a
17 measurement involving skin contact that measures, that involves potential
18 difference across the skin. It is not exactly the same as Kotanagi's skin
19 contact, but it is a similar type of measurement that shows dual purpose
20 electrodes and that shows that you can use electrodes for multiple purposes
21 without frustrating either one of those purposes. Moving to slide 50 Lee is a
22 reference that says roughly the same thing. Moving to slide 51, Lapetina is
23 also a reference that shows roughly the same thing. Let's move to slide 52.
24 Apple argues that the types of signals that are being measured by the
25 different types of, by the different electrodes set up in different ways are not
26 analogous. The problem with Apple's argument is that all of the different

1 measurements that are applicable to Ohm's law or the variables that come
2 out of Ohm's law, such as impedance, Z, potential V, or current, I. Any one
3 of those could be isolated such that you can arrange electrodes to measure
4 any one of those things. And a person or a skill in the art would understand
5 the relationship of those different things through Ohm's law and would
6 understand that you can arrange the inputs to electrodes and the circuitry in
7 the back of the electrodes to be able to measure any one of those variables.
8 Let's move to slide 53.

9 Apple argues incorrectly that Choi does not use both ECG and
10 impedance. In fact, Choi teaches a second bio-signal that can be an ECG
11 signal and or an impedance signal, and it also teaches using that detected
12 second signal for authentication of the user. Let's move to slide 54. This is
13 a portion of an office action that rejected some different Apple claims after
14 the petition was filed. And this shows that the examiner found that ECG
15 collection may be implemented via electrode 7A and 7B of Kotanagi. Now,
16 Apple makes some irrelevant responses and says that the examiner was
17 applying additional secondary references and in addition, that these claims
18 are not identical to the claims we're talking about today. The problem with
19 those arguments is that they don't squarely address the examiner's finding
20 that ECG collection may be implemented via electrode 7A and 7B of
21 Kotanagi. Of course, that finding is applicable to these claims, even though
22 they might not have exactly the same limitations and even though there are
23 different secondary references. In this case, let's move to slide 55. This is
24 moving to the second possible combination where we take some additional
25 electrodes and existing electrodes to obtain an ECG. Let's move to slide 56.
26 Apple argues that moving Kotanagi's rear electrodes to a different surface

1 would frustrate Kotanagi's purpose of detecting skin contact. But Apple has
2 misrepresented Masimo's combination. Masimo proposes adding more
3 electrodes, not moving existing electrodes, and the additional electrodes
4 would be for ECG, not for the skin contact purpose.

5 So, we're not proposing any modification that would interfere with the
6 existing electrodes being used for skin contact detection. Let's move to slide
7 57. Now, the petition includes the possibility of obtaining an ECG by using
8 Kotanagi's existing electrodes to trigger an ECG measurement and
9 additional electrodes, as taught by Choi, to perform the ECG measurement
10 of claim one. And that's in the language shown at the top of the box. On
11 that slide that says use both the new and the existing electrodes to obtain an
12 ECG. Now, Apple reads the words obtain an ECG improperly, narrowly, to
13 restrict it to every one of those electrodes needs to be directly involved in the
14 ECG measurement. But the petition belies that interpretation because it has
15 in it notions of indirect use of electrodes to trigger a measurement and then
16 using something else to actually do the measurement. An example is the
17 portion in the middle that says Kotanagi's rear electrodes interact with the
18 optical sensor to achieve pulse measurement. Obviously, that isn't meant to
19 claim that the rear electrodes are directly doing the pulse measurement.
20 Obviously, they're not optical signals, and so they're not doing the pulse
21 measurement itself. But they are part of the process, and they trigger the
22 process to allow that pulse measurement to occur. Similarly, the petition
23 says, Kotanagi teaches a PPG comprising two contact detection means,
24 which are the electrodes for performing a PPG measurement. As Kotanagi
25 teaches, optical measurement occurs upon contact detection. So, the notion
26 of using electrodes to trigger a measurement, to trigger the start of a

1 measurement, and then using something else, including the other electrodes
2 provided by Choi for the actual ECG measurement, is well within the scope
3 of the petition and is not a new theory. Let's move to slide 58.

4 JUDGE BARRETT: Mr. Cannon?

5 MR. CANNON: Yes?

6 JUDGE BARRETT: You have about 16 minutes remaining.

7 MR. CANNON: Thank you. Let's move to slide 58. We're now on
8 the third topic, which is obviousness to make the cover disc shaped. And
9 that's 783 claim six. Slide 60 shows a part of claim six, the limitations
10 requiring the ceramic cover to be a disc and having a disc diameter greater
11 than an opening diameter of the second opening. And Kotanagi and Honda
12 show those limitations. Slide 61 shows an additional water tightness
13 limitation that has not been significantly disputed. So let's move to slide 62.
14 Here's our combination for claim six. It's Kotanagi with Honda. Kotanagi
15 figure eight teaches a disc shaped protruding part covering the opening. And
16 Honda suggests the disc can be a glass cover with the claimed diameter and
17 seal. Let's move to slide 63. Apple argues that we have improperly mixed
18 and matched embodiments from Kotanagi, namely figure five and figure
19 eight. The problem with Apple's argument is that they've misinterpreted
20 how Kotanagi describes the different embodiments and the interrelationship
21 between the embodiments. Figure eight doesn't describe the internal
22 components of the device. Figure five and some related figures does
23 describe those internal components. And figure eight doesn't provide an
24 additional explanation of those internal components. All that figure eight
25 does is it shows different external components from figure five. So, a person
26 of ordinary skill in the art would understand that there's still optical elements

1 and there's still the other components that are the internal portion of the
2 device. But that figure eight shows different structures on the outside of the
3 device. Specifically, figure eight has a different shaped protruding part over
4 the opening, which is of course, circular, which is the relevant shape for
5 these claims. It does not show a rectangular cover, and thus a person skilled
6 in the art would understand a rectangular cover is not required for figure
7 eight. It also does not show electrodes on a circular protruding part. And a
8 person skilled in the art would understand that the electrodes are not
9 required on the circular protruding part. Let's move to slide 64.

10 The protruding part of Kotanagi's figure eight is over the opening.
11 Now, you don't have to decide that figure eight itself is a cover because
12 there's Honda as well. Now, Apple argues in its Patent Owner response that
13 because figure eight labels the disc a protruding part four, it cannot also be a
14 glass cover. But of course a glass cover could be protruding and could be
15 both a protruding part and a cover. Apple's argument, sorry. Apple's
16 argument also requires Apple to modify figure eight based on passages
17 referring to figures one through seven, where they've imputed or taken from
18 figure five the rectangular cover and superimposed it on figure eight, which
19 does not show a rectangular inset on the circular portion. Let's move to slide

20 --

21 JUDGE BARRETT: Mr. Cannon, before you move on, this is Judge
22 Barrett, sort of a fundamental issue for me, and I think this may be Patent
23 Owner's argument, is for the base combination. I understand Petitioner
24 relied on the figure five embodiment, which, correct me if I'm wrong, is a
25 rectangular cover, glass, whatever it may be. But then when we get to the
26 claim that calls for it being a disc, Petitioner just pointed to figure eight and

1 said, see, there's a circle, and only turned to Honda for, let me see, for the
2 watertight connection, ceramic cover, things like that, but never proposed
3 modifying the rectangular cover of figure five. So am I misunderstanding
4 the Petitioners' position?

5 MR. CANNON: Our combination is to take the circular shape from
6 figure eight and then use Honda to make that circular shape a glass cover.
7 And so, there's no intermediate step of removing any rectangular cover.
8 We're starting with figure eight's circular shape and then using Honda to
9 make that circular shape a glass cover, which is well supported by Honda.
10 And I'll get to whether it's supported by the petition, which it is. So let's go
11 to slide -- actually, let me skip ahead to get to that issue right now. Slide 66.
12 And Apple's trying to argue that using Honda for the cover limitation is new.
13 And that's simply incorrect and it misreads the petition. As you can see, the
14 petition to the left in green, we've highlighted this combination. Kotanagi
15 does not specifically state that this disc is a ceramic cover forming a
16 watertight seal. And then we rely on Honda to teach a cover with a
17 diameter. And we also rely on it for the water tightness, but importantly, the
18 green language, the highlighted green language. We're also relying on it for
19 a cover, and it's directly in the petition and is not a new argument. Apple's
20 trying to read that out of the petition to try to make it into a new argument
21 because they don't have a response to the notion that, in fact, it would have
22 been obvious to take a circular portion and then use Honda's teaching of a
23 glass cover to make that circular portion a glass cover. To the right, we have
24 the sur-reply where Apple's trying to argue it's a new argument. But you'll
25 note the bold highlight is Apple's highlight, and it emphasizes forming a
26 watertight seal. The red highlight is our highlight, which shows that Apple

1 ignored and did not highlight the ceramic cover portion, which shows that
2 we are relying on Honda for the cover also. Just wanted to point out there's
3 a typo in this slide and the petitions. The page of the petition we're citing for
4 this is 78 of the '783 petition. Does that answer your question on that issue?

5 JUDGE BARRETT: It addresses it. I don't know that it answers it
6 because it seems to me. Again, my understanding is the base combination
7 relied on the rectangular glass. The embodiment having a rectangular cover,
8 and, pointing to another embodiment, which I think you said earlier today is
9 a separate embodiment having this circular protrusion, and referring to that
10 as the cover. Even relying on Honda for a waterproof cover, a ceramic
11 cover, I don't see where Petitioner argued modify the shape in the
12 embodiment relied on to become circular.

13 MR. CANNON: To be clear, the figure, the claim six petition never
14 relies on the rectangular cover for the cover in claim one talks about the
15 rectangular cover. The petition in claim six never relies on the rectangular
16 cover for the petition. So we're not taking the rectangular cover and
17 changing its shape. We're taking the circular portion of Honda's, of
18 Kotanagi's figure eight embodiment, which shows the circular portion. And
19 then, as the petition expressly says on Slide 66, we're acknowledging that
20 this disc is not a ceramic cover forming a watertight seal. But then we say,
21 Honda teaches a cover with a diameter and with the watertight seal. And so,
22 we're saying, here's the disc, here's the circular portion here. Here's the
23 circular portion. But Honda teaches the cover aspect. So, we're taking that
24 disc and we're making that disc a cover over the entire protruding part with
25 the optical elements underneath.

1 Now, again, figure eight doesn't redescribe the optical elements, and
2 that's not the purpose of it. The purpose of it is to show that the protruding
3 part can be a different shape, and that's the shape we're relying on, which, in
4 combination with Honda, makes a disc shaped cover. Let's move to Slide
5 65. Another argument is with respect to the positioning of the electrodes.
6 Now, neither claim six nor Kotanagi's figures eight through ten require
7 electrodes on the circular protruding part, so we don't have to show
8 electrodes at all for claim six. Apple argues in its POR that if the cover is
9 the entire protruding part four, it would have no room for electrodes. But
10 Kotanagi's figures eleven through 13 address that issue, because figures
11 eleven through 13 provide ample room for electrodes on the ridges that are
12 located to the left and right of the circular part and come into contact with
13 the living body before the protruding part four. Let's move to slide 67,
14 which is topic number four, which is making the disc shaped cover convex
15 to align with a concave dock. We're going to go to the conclusion slide for
16 this section because Apple basically repeats its arguments for claim six.
17 Apple repeats --

18 JUDGE BARRETT: Mr. Cannon?

19 MR. CANNON: Yes.

20 JUDGE BARRETT: You have about five minutes left, so --

21 MR. CANNON: Thank you.

22 JUDGE BARRETT: -- use those as you will.

23 MR. CANNON: Yes. Apple repeats its claim six arguments that the
24 combination lacks a disc shaped cover. Apple relies on the alleged lack of a
25 disc shaped cover to argue that the combination lacks a disc shaped convex
26 cover, and they don't separately argue convexity. So, Apple's claim twelve

1 arguments fail for the same reasons as claim six. Let's move to slide 73,
2 which is the magnetically couple watch with a charging dock. Claim 16 of
3 the '783 patent. Honda teaches the wireless charging dock. 76. Honda
4 teaches coils magnetically coupled for inductive charging, which is in our
5 briefs. In addition, Park discloses permanent magnets in the watch and the
6 dock for more precise alignment and securement. 77. Honda modifies the
7 size of one of the coils to reduce negative effects of misalignment. So
8 Honda acknowledges that there's misalignment of the coils, but it tries to
9 mitigate the negative effects rather than solve the underlying problem. A
10 POSITA would have understood Park as teaching a solution to the
11 underlying problem, namely using magnets to pull the mag, the coils
12 together so that there's not as much misalignment. Slide 78. Apple attempts
13 to argue that our background section is a new argument. In fact, we cited to
14 the background section in the petition column 1, 48 through 58. Slide 78.
15 That's that portion we show. And it shows that Honda is saying that simply
16 seating a device into a station still results in a modest degree of
17 displacement. We know that that applies to Honda also because we
18 mentioned Honda tries to mitigate that misalignment. Let's move to slide
19 80.

20 Apple argues that we've exaggerated the wiggle room in this slide. If
21 you push the device down into the dock, you will see that there's still, you
22 can see that there would still be yellow to the left and the right, so there
23 would be lateral displacement. Let's move to slide 81. Honda acknowledges
24 that there's lateral displacement because it tries to mitigate the negative
25 effects through the larger coil. A person of ordinary skill in the art would
26 have understood it to be even better to fix the problem or at least reduce the

1 problem by bringing the coils closer together or closer alignment rather than
2 simply trying to mitigate the negative effects. Moving to slide 82, Apple
3 raises some arguments that are well within the person of skill in the art as to
4 positioning the magnets and shielding to address interference. Again, we
5 don't have to put forth in the petition every possible modification that a
6 person skilled in the art would have contemplated to support reasonable
7 expectation of success. A POSITA would have known how to position the
8 magnets or include shielding to address interference. And Park itself
9 discloses magnets that do not interfere with wireless charging. And a
10 POSITA would have known how to balance the trade offs. Let's move to
11 slide 83 and we're going to very briefly discuss the coil diameter issue with
12 respect to the biosensor module for '783. Claim eleven, slide 85 requires the
13 coil to have a diameter less than the biosensor module and for power to pass
14 through the biosensor module. Slide 86 this is a claim construction issue,
15 and the question is, can the biosensor module include a cover? Masimo's
16 position is that, yes, it can include a cover. Apple's position is that claim
17 eleven must be interpreted to exclude a cover from the biosensor module.

18 The specification is the primary source for claim construction, and it
19 answers the question. It says in some embodiments, the biosensor module
20 includes the rear cover. Apple has not adequately explained why claim
21 eleven should be interpreted to exclude those embodiments. Slide 87 shows
22 the disc shape of both the rear cover and the biosensor module, strongly
23 suggesting that the biosensor module can include the cover. Slide 88,
24 Apple's only argument is that the biosensor module is introduced in a
25 different limitation than the one that says cover disposed over the biosensor
26 module. They rely on Becton Dickinson and Engel to argue that because

1 they're separately listed, they can't be one and the same. 89. Masimo didn't
2 argue that they're one in the same. In fact, we acknowledge that they're not
3 one and the same. The biosensor module is a larger piece and the cover is
4 only part of it. They are certainly not coextensive or the same thing.
5 Further, legally, Becton Dickinson and Engel do not create a per se rule that
6 separately listed claim elements are distinct components regardless of the
7 intrinsic record. In fact, you always need to turn to their intrinsic record to
8 see whether it makes sense as a matter of logic and in view of the intrinsic
9 evidence, whether two limitations that are separately listed have to be
10 completely physical components.

11 As we've shown, the intrinsic record here supports that the cover can
12 be part of the biosensor module, and logic. The claim language itself does
13 not dictate otherwise. We showed an example of a lid over a container.
14 Everyone understands that a lid is part of a container, but it is also over a
15 container, which is exactly consistent with our interpretation that the cover
16 can be disposed over the biosensor module and still be part of the biosensor
17 module, and that the claim construction issue addresses this particular
18 dispute. And so, with that, unless there are further questions, I'll reserve the
19 balance of my time.

20 JUDGE BARRETT: I don't believe we have any questions for you, so
21 you have 15 minutes remaining.

22 JUDGE COCKS: Judge Barrett?

23 JUDGE BARRETT: Oh, okay, I'm sorry.

24 JUDGE COCKS: I do have one question and it should be brief. Mr.
25 Cannon, can you scroll back to your slide 63?

26 MR. CANNON: Yes.

1 JUDGE COCKS: And at the top left says that Kotanagi's figure eight
2 embodiment has the same internal components, that is optical sensors, as
3 figure five, do you have a citation supporting that statement?

4 MR. CANNON: That would simply be just reading the entirety of
5 Kotanagi in context. Figure eight doesn't have any additional description of
6 the internal components, but is just a continuation of the description where
7 previously, in addressing figures one through seven, it talks about the
8 internal components. And then figure eight just provides description of the
9 external components which can be different, such as the circular portion of
10 the cover or, sorry, of the protruding part.

11 JUDGE COCKS: All right, thank you.

12 JUDGE BARRETT: All right, thank you, Mr. Cannon. We will now
13 hear from Patent Owner.

14 MR. JHURANI: Good morning, Your Honors. Is my sound coming
15 through okay?

16 JUDGE BARRETT: Yes, it is. How much time would you like to
17 reserve?

18 MR. JHURANI: Let's go with 20 minutes.

19 JUDGE BARRETT: All right, thank you.

20 MR. JHURANI: All right. Good morning, Your Honors. My name
21 is Karan Jhurani and I'm here, and I represent Patent Owner, Apple
22 Incorporated. Let's please turn to slide two of our presentation. Here we
23 have a listing of six issues or topics. The first issue is directed to the
24 combination of Kotanagi and Honda as it relates to the independent claims
25 of both the '783 and '491 patents. And the remaining issues, two to six,
26 largely focus on various dependent claims of these patents. Our plan today

1 is to start with the dependent claims first, which present more compact and
2 focused issues than the issues at play for the independent claims. And of
3 course, there are issues on which -- these are the issues on which Masimo
4 just finished presentation. So, there's the added benefit of these issues being
5 fresher in our minds. As such, I'll plan to speak on issues two to four. Mr.
6 Renner will then speak on issues five and six, and Mr. Patrick will round out
7 the discussion with issue one. With that, Your Honors, unless you have
8 thoughts about this proposed plan, I'll ask that we turn to slide 24 of our
9 presentation, which begins our treatment of issue two, which relates to claim
10 six of the '783 patent.

11 On slide 24, we've got the claim language for claim six and its two
12 limitations that are recited here. Our focus will be on the first limitation, and
13 in particular, the ceramic cover is a disc feature which is highlighted. And
14 because this will come up later in my presentation, I also want to flag that
15 the second limitation recites that the ceramic cover forms a watertight seal.
16 So let's turn to slide 25, please. This slide includes excerpts from the
17 petition that confirm Masimo's mapping, which they didn't dispute today, of
18 the cover is a disc limitation to the protruding part four of Kotanagi's device.
19 And as I'll plan to talk today, there are going to be -- there are four flaws
20 with these theories. First, Masimo inconsistently maps the ceramic cover
21 limitation to Kotanagi's rectangular cover glass, and then to its protruding
22 part second. And notwithstanding these inconsistencies, neither Kotanagi's
23 cover glass nor its protruding part is a ceramic cover that is a disc. Third, a
24 cover would not be formed over the entire protruding part as Masimo argues,
25 especially when considering that Kotanagi counsels against that. And last,
26 Honda also does not teach that its cover is a disc.

1 Let's first turn to slide 26 and let's begin with the issue of the
2 inconsistent mappings for the ceramic cover claim feature. I didn't hear
3 until you started asking questions, Your Honors, any reference to claim one
4 from Masimo as it related to this claim six analysis. And yet that is front
5 and center here. Given that claim six recites the ceramic cover which
6 antecedently references a ceramic cover of claim one. And so, let's look at
7 what claims one and six said in the petition. As shown at the top for claim
8 one, Masimo unequivocally mapped Kotanagi's rectangular cover glass,
9 shown in the figure in red, to the claim ceramic cover with respect to figures
10 five and seven. Then for claim six which recites that the ceramic cover of
11 claim one must be a disc having a disc diameter. Masimo does not even
12 point to Kotanagi's rectangular cover glass. Instead, the petition pointed to
13 another component of Kotanagi, the protruding part four in figure eight as
14 the protruding disc. What's more, you heard them say today that figure eight
15 is different from figure five as Your Honors picked up. And then they told
16 you that no modification is made to the rectangular cover. They're instead
17 starting with a circular shape and made it a cover. There's no obviousness
18 argument in the petition to that effect. Nothing in the petition says take the
19 circular protruding part into a cover when you have begun. Initially in their
20 mapping with the rectangular cover, they make no attempt to reconcile these
21 varying mappings.

22 Certainly they don't explain how or why the rectangular cover would
23 be modified to be the disc. And certainly, as counsel told you, it wasn't even
24 starting with that as a baseline, even though that was the mapping for the
25 independent claim. Regardless if we work through the different mappings
26 that Masimo offers, they still do not teach this claim feature. Let's go to

1 slide 28. First, let's begin with the actual mapping of the cover which was to
2 the rectangular cover. Excuse me, and that is certainly not a disc and no
3 one's disputing that. Let's go to slide 29 and talk about the protruding part,
4 which is also not a cover or a disc. And that's because the protruding part is
5 part of Kotanagi's device housing. Kotanagi tells us, in the excerpt at the
6 top, a protruding part which protrudes from the lower surface is formed on
7 the lower surface 2a of the housing. And unsurprisingly, even Masimo's
8 expert confirmed that during deposition, as shown on right, that the
9 protruding part is part of the housing. Masimo also asserted that protruding
10 part is a cover because it covers the opening. There are two issues with that.
11 Again, protruding part is not a cover, it is part of the housing and it's not
12 covering any opening. Paragraph 55, which cited here as a second excerpt
13 on the slide, says so. It tells us that the through hole or opening, as Masimo
14 calls it, is formed in this protruding part, and it is the cover that covers or
15 blocks that opening. And you can visualize this using Masimo's own
16 demonstrative slide 112, where they show the red cover covering the purple
17 opening formed in the protruding part. Let's go to slide 31.

18 Next, Masimo tells us that a cover can form over the entire protruding
19 part four in figure eight. But even that's wrong. There's no suggestion in
20 Kotanagi to that effect. And the top excerpt here from Kotanagi tells us that
21 electrodes have tips that protrude lower than the lower surface 4a of the
22 protruding part, and that's done in Kotanagi to ensure proper contact is
23 established with the skin before contact detection is performed, before
24 optical measurements are performed. So, if you cover that entire surface of
25 protruding part four in figure eight, you could not have electrodes disposed
26 on the protruding part surface and certainly could not have electrodes that

1 extend lower with tips lower than the protruding part's lower surface. As
2 such, covering the entire protruding part of the glass cover would frustrate
3 Kotanagi's skin contact detection function, which is performed using those
4 electrodes. Let's go to slide 32. What does Masimo do when it's confronted
5 with this problem? It says two things, and you heard them today as well.
6 The electrodes are not required in figure eight, they say. And they also say
7 electrodes could be relocated to the ridges in what they have annotated here
8 as electrode ready ridges. Nowhere, nowhere are these assertions advanced
9 in the petition.

10 But even if we consider these new and untimely theories, they have
11 two problems. Kotanagi never says ridges are where electrodes could or
12 would be positioned. And in fact, Kotanagi and Masimo's own expert
13 confirm that the electrodes would be on the protruding part of the figure
14 eight embodiment, as we will see on the next slide, slide 33 at the top. Let's
15 look at Kotanagi's excerpt that confirms the presence of biological sensor
16 part eight in figure eight. Specifically, this paragraph talks about improving
17 adherence of the biological sensor part eight in the context of figure eight by
18 providing a certain distance between the lower surfaces of the protruding
19 part and the housing. Again, all of this is in the context of figure eight. And
20 when we asked about this disclosure during deposition, Masimo's expert
21 confirmed, as shown on the left, that the biological sensor part eight is
22 disposed on the lower surface of the protruding part four. Again, in the
23 context of figure eight, and in the testimony continuing on the right, the
24 expert further confirmed that Kotanagi teaches that the biological sensor part
25 includes electrodes. So the record is clear. Even in figure eight's
26 embodiments, electrodes and the biological sensor part eight would still be

1 provided on the lower surface of the protruding part four, even though these
2 components are not depicted or labeled in figure eight.

3 Let's turn back for a brief moment to slide 30. I also heard in today's
4 presentation, and I believe Your Honors did as well for the first time, that
5 there's a delineation that Masimo proposed between figure eight and figure
6 five's different embodiments. As they said, they said figures eight and figure
7 five provide the same internal components, but different external
8 components, such that the rectangular cover and electrodes are not required.
9 Nowhere is this in the petition. It's not even in the Petitioner reply, quite
10 frankly, but let's consider it. This narrative is refuted by what we just talked
11 about in the context of electrodes, which would in fact be provided on the
12 protruding part surface. And in fact, excerpts from Kotanagi shown on this
13 slide expressly refute that assertion. In these paragraphs, Kotanagi
14 contemplates, and I won't read it in the interest of time, but it contemplates
15 modifications to its disclosure, and it tells us one example modification is to
16 the shape of the protruding part from the keyhole like shape in figure five,
17 which is shown at the bottom left, to a circular shape, which is shown in
18 figures eight to ten on the bottom right. So, at best, this description of figure
19 eight is contemplating modifying the shape of the protruding part. It is not
20 talking about relocating, modifying, or getting rid of any external or internal
21 components provided on or disposed within the protruding part. So, there's
22 no reason or basis to remove or modify external components such as the
23 rectangular cover or the electrodes from the surface of the protruding part
24 four. Let's turn to slide 36.

25 And now let's address Masimo's reliance, and in fact, the newfound
26 reliance on Honda for the ceramic cover is a disc limitation, as Your Honors

1 properly noted. Sure there may have been references to Honda for the
2 ceramic cover, but not for the disc limitation that was squarely targeted in
3 the context of Kotanagi. But regardless, let's take a look at what they said
4 about Honda and the citations from Honda that they provided. And those
5 are shown at the bottom of this slide, none of which teach that Honda's cover
6 is circular or a disc. Let's look through each of these disclosures first. The
7 first excerpt on the left does not talk about a glass or cover. It instead
8 references waterproofness. The next excerpt references a high rigidity glass.
9 But neither this excerpt nor the red annotated cover shown in the figure at
10 the bottom of the slide shows a circular or a disc shaped cover glass. The
11 last excerpt then talks about a device with a waterproof structure that
12 withstands a water pressure of five atmospheres. But again, it says nothing
13 about the glass cover, much less that set cover would be a disc. All these
14 excerpts really are just talking about waterproofing, which makes sense
15 given that the petition relied on Honda for claim six's watertight seal
16 limitation. But none of these disclosures, or any other disclosure in Honda
17 substantiate the notion that Honda discloses a ceramic cover that is a disc.

18 So where does that leave us? It leaves us with a few things.
19 Kotanagi's protruding part is part of the housing. It is not a cover or a disc.
20 Kotanagi's rectangular cover is not a disc. Honda does not teach a cover that
21 is a disc. So even if you consider the teachings of both references, there's no
22 basis to conclude that the combination's allegedly ceramic cover would be a
23 disc. Nor is there a reasoned basis to provide a cover that covers the entire
24 protruding part surface, particularly when doing so would frustrate
25 Kotanagi's contact detection function. On this record, Masimo has simply
26 failed to demonstrate Kotanagi and Honda render obvious claim six. Let's

1 turn next to claim twelve, and in that regard, let's go to slide 39, please.
2 Claim twelve has a similar cover as a disc limitation. And unsurprisingly,
3 we see the same issues that we also observed just now for claim six. Against
4 the backdrop of these issues, Masimo again, just like it did with Honda for
5 claim six, it turns to secondary references to gap fill, a deficient theories for
6 claim twelve. But that newfound reliance on secondary references fails.
7 Let's discuss that briefly in the context of slide 44.

8 Here we have excerpts from the petition, and these excerpts tell us
9 that the reliance on the secondary reference was with respect to the second
10 limitation of claim twelve, which recites that the convex shape is configured
11 to facilitate alignment with the concave surface of the dock. In particular,
12 these excerpts are talking about accommodating convex protruding cover of
13 convex intruding part, excuse me, of Kotanagi in a complementarily shaped
14 dock. This is done without any contention or evidence substantiating
15 modification of the rectangular covered glass, which is the only plausible
16 mapping for the cover limitation to a disc. At best, these references speak to
17 convexity, and presumably they could suggest that the cover is convex.
18 Maybe. But even if we go and take that leap with Masimo, that still does not
19 speak to the shape of the outer perimeter of the cover which remains
20 rectangular. And Masimo, for its part, and as you heard them today, does
21 not address or explain why the rectangular cover would be modified to be a
22 cover that is a disc. They don't even begin with that cover. They begin with
23 a cover that does not exist. Let's turn to slide 47, which begins our
24 presentation of claim eleven issues.

25 Our focus for claim eleven will be on the limitation highlighted here
26 in yellow, which recites, the wireless charging receive coil has a diameter

1 that is less than a diameter of the biosensor module. Let's turn to slide 48 to
2 see Masimo's treatment of this claim in its petition. As we see on slide 48,
3 Masimo argues that biosensor module has a diameter larger than that of the
4 coil as required by the claim. Because Kotanagi's cover's diameter is larger
5 than that of the coil provided in the combination. Or Honda's cover for that
6 matter, is larger than that of the coil in the combination. For starters, the
7 cover is not circular and has not been shown to be circular, as we just
8 discussed with reference to claim six and twelve. Therefore, by extension,
9 the cover would not have a diameter. And as such, even if the cover could
10 be part of the biosensor module, it does not have the claim diameter, much
11 less the diameter that is greater than that of the coil. Masimo's analysis
12 would fail for that reason alone. But let's go one step further. Masimo's
13 analysis for claim eleven requires interpreting biosensor module as
14 necessarily including the cover. But in doing so, Masimo unjustifiably
15 collapses two separate and distinctly recited claim elements. Let's discuss
16 that further on slide 49.

17 Here we have claims nine and claim eleven right next to each other.
18 Claim nine is the independent claim from which claim eleven depends.
19 As we see in claim nine, the biosensor module and cover are recited as
20 separate components. But the claim doesn't stop there. The claim tells us
21 that the cover is disposed over the biosensor module and passes optical
22 signals to and from the biosensor module. A cover cannot be disposed over
23 the biosensor module if the cover is part of the biosensor module. In that
24 regard, this case is actually squarely aligned with the Becton Dickinson case
25 cited in the POR. In that case, the claim separately recited components like
26 hinged arm and spring means, and further recited the interrelationship of

1 these two components by reciting that one component is connected to the
2 other, which is very much like the present claims, where the biosensor
3 module and cover are separately resided and the biosensor module, excuse
4 me, the cover is disposed over the biosensor module. Let's go to slide 50.

5 Masimo's only justification, as you heard of the cover being part of
6 the biosensor module rests on portions of the specification which only talk
7 about example embodiments where the biosensor module may include the
8 cover. But we know from established Federal Circuit law that to depart
9 from the plain meaning requires disclaimer, disavowal, lexicography. None
10 of these non-limiting statements of example embodiments in the
11 specification justify that. They don't justify importing limitations from the
12 specification, particularly example embodiments, into the claim. Let's go to
13 slide 52, and finally, Masimo, in its last ditch attempt, points to Federal
14 Circuits Google v. EcoFactor case but Google again is readily
15 distinguishable from the present case. The five different inputs that were at
16 issue in the Google case, which are shown at the top right, were separately
17 recited, and the dispute turned on whether those inputs are distinct. Notably,
18 the claims at issue did not describe any interrelationship, interconnection of
19 the separately recited inputs to each other. In contrast, the claims here not
20 only recite separate and distinct components, they actually expressly recite
21 the relationship and interconnection of one to the other. That is, the cover is
22 disposed over the biosensor module and is configured to pass optical signals
23 to the biosensor module. So the cover in the context of claims nine and
24 eleven, cannot be part of the biosensor module. And Masimo, for its part,
25 has not identified any other component or components of the alleged
26 biosensor module that have the claim diameter that is larger than that of the

1 wireless charging receive coil. Thus, here too, Masimo has failed to
2 demonstrate that claim eleven would be obvious over Kotanagi and Honda.

3 With that, Your Honors, unless there are questions, I'll turn it over to
4 Mr. Renner to speak to issues five and six from our agenda. And as he
5 comes up, I'll ask that you please turn to slide 70.

6 MR. RENNER: Thank you, Your Honors. Thanks, Karan. Good
7 morning. I'm Carl Renner for Patent Owner, and I'll begin by discussing
8 issue six, dealing with claims that we identify as the electrode claims. Slide
9 69, please. We're there. We can see the claims at issue, claims 1, 13, and 17
10 of the '491 which require a watch configured to measure ECG using first
11 and second electrodes on the rear face of the watch. At slide 70, we can see
12 that to address these electrode features, the petition proposes to integrate
13 Choi with Kotanagi or Honda, and as demonstrated by the excerpt on pages
14 51 to 52 of the petition, which is shown here at the bottom of slide 70
15 because Kotanagi has sensors on its rear face, the petition proposes
16 repositioning, repurposing the Kotanagi sensors consistent with the claims to
17 also detect ECG. Slide 71, please. In getting to its proposed combination,
18 the petition, it acknowledges two things that are important as to Kotanagi,
19 that the electrodes are devoted to detecting skin contact, and nothing is said
20 in Kotanagi about ECG measurements.

21 In Choi, by contrast, it recognizes sensors used for ECG detectors.
22 Now, in Choi, in figure three, which is at the center of slide 71, here we see
23 that a wearing detection sensor is identified. It's colored in orange or peach,
24 and that's devoted to detecting contact with skin similar to Kotanagi's
25 electrodes. The aspect of Choi, this particular aspect of Choi, it wasn't
26 mentioned in the petition, but as you can see, Choi offers a combination of

1 sensors, one for ECG, as mentioned by the petition, and one that is devoted
2 to skin contact detection, which is not mentioned by the petition. This is
3 where it gets interesting, because it leaves us with each of Kotanagi and
4 Choi offering the same thing, a sensor that is configured to detect ECG but
5 instead does not configure to detect ECG, but is instead devoted to sensing
6 contact with the skin. The petition proposes to advance a specific
7 integration of Choi with Kotanagi, and that's a seemingly disregard and
8 seeming disregard for the commonality between these two teachings. In
9 particular, the petition suggests that a combination of Choi with Kotanagi
10 would motivate the POSITA to configure all of the electrodes for ECG
11 detection, leaving none devoted toward detecting contact with skin, which is
12 something that was, of course, in each of Kotanagi and Choi.

13 And this was a key part of the combination promoted by the petition,
14 and you can see it highlighted in the excerpt again, that was at the bottom of
15 slide 70. Recall the petition there, it told us that two configurations were
16 present. The first one that uses signals from Kotanagi's existing electrodes
17 to obtain an ECG. Second one that detects ECG using signals from added
18 Choi sensors and existing Kotanagi electrodes. In each, the sensors that had
19 been devoted by Kotanagi to detecting the skin contact are now repurposed
20 into dual sensor functions that detect ECG. And despite neither of Kotanagi
21 nor Choi proposing the same, also without skin detector. Slide 73, please.
22 The petition simply proclaims this configuration without offering any
23 justification for its departure from both Kotanagi and Choi, the two
24 references being combined and consequently, as formulated, the petition
25 ground is simply not justified. After all, when we think about it, Choi is, it
26 does not teach transitioning from a skin contact detecting electrode into a

1 dual purpose electrode designed for ECG or skin contact. On the contrary,
2 we saw in Choi, you saw in the figure, that it has consistently leveraged two
3 kinds of distinct sensors, and one of those distinct sensors is a skin contact
4 sensor of the type in Kotanagi. And importantly, no motivation was offered
5 in the petition or otherwise, for that matter, to justify departure from Choi
6 when integrating its teachings into Kotanagi, which is the combination
7 before us. Nor departing from Choi make any sense under the circumstances
8 when you consider that the presence already exists in Kotanagi, the subject
9 reference of a skin contact sensing device.

10 The point being, and I hate to be painfully clear about it, but just to
11 make sure we're all there, that the proposed modification to Kotanagi does
12 not flow from Choi more, the petition offers nothing to explain divergence
13 from Choi. And for these reasons, we're left to conclude that the integration
14 of the particular position, and that is proposed by the by the petition is the
15 product of impermissible hindsight. Now, when we brought this to the
16 attention of the Petitioner, we thought the response was telling. If you look
17 at me at slide 74, you can see here, we show that when the Petitioner was
18 presented this, they didn't turn back into Kotanagi or Choi to explain
19 themselves. They offer four new references, and in addition to being
20 impermissibly late and offering those references, which we'll address in a
21 moment, the timing, that is, the evidence, failed to address the problem that
22 we were noting. Why? Because even if you credit these references as
23 establishing what POSITA says they establish, that is, the knowledge of a
24 dual purpose electrode, skin detection or otherwise, plus ECG. The problem
25 remains a POSITA, whether familiar with that dual purpose kind of
26 electrode or not, would not be led by integration of Choi, which is the

1 proposal to change Kotanagi in a manner that departs from both Choi and
2 Kotanagi. They would instead follow Kotanagi and Choi, for that matter,
3 absent advice and evidence suggesting otherwise, at least as the areas of
4 harmony among their disclosures. And here no evidence has been offered
5 again to substantiate departure from them.

6 For these reasons, the new evidence, we believe, is actually moot.
7 These references also lack relevance for other reasons. Again, recall that we
8 began with Kotanagi, which has electrodes that detect skin contact based on
9 potential differences. It's kind of a binary decision. It's either there it's not,
10 contact is made or it's not. By contrast, the new references bear on GSR,
11 galvanic skin response, which does not leverage potential differences, but
12 instead leverages impedance. This is often more detailed. It supports
13 detection through GSR of things like, I don't know, conditions of the skin to
14 enable lie detectors and the like. This would seem to be more complex.
15 And importantly, the record's devoid of any evidence establishing that a
16 POSITA would have applied the teachings relating to GSR to an electrode
17 that is designed as Kotanagi's to detect potential differences in deposition.
18 Dr. Anthony confirms that this difference is not trivial. Slide 79 is an
19 excerpt from that deposition. Now, slide 75, please.

20 Here we'll address the newness issue. The first point regarding these
21 references, that they're clearly and impermissibly late. The response, after
22 all, they respond, after all to allegations that the petition had failed to
23 substantiate its contentions of obviousness. That is a failure of proof. And
24 the Google Nobots case, which has been referenced a couple times today,
25 tells us it's not appropriate to address an evidentiary gap that's identified with
26 new evidence. As done here. Here the Petitioner offered no justification for

1 the late submission and nothing to demonstrate that the references couldn't
2 have been brought earlier. The newness of the issue, and this is something I
3 want to return to because it was discussed a little bit before you. And with
4 regard to slides 56 and 57 of Petitioner's slides this morning, there at
5 Petitioners, slide 56, I think I heard my colleague correctly when he said, I
6 think he said at least, and I'll have him perhaps correct. But he said, Masimo
7 proposes adding more electrodes and using those electrodes, not Kotanagi's,
8 to measure ECG. Then, with respect to the Petitioner slide 57, it was said
9 that the petition includes the possibility of obtaining an electrode using,
10 using Kotanagi's existing electrodes to trigger the ECG measurement, using
11 the Choi like electrode. So in other words, just triggering would be done by
12 Kotanagi's in this formulation that's being described.

13 But this isn't consistent with the petitions mapping. At page 50 of the
14 petition, you can see mapped pretty clearly that Kotanagi's electrodes are the
15 only thing used and applied to the first and the second electrodes of the
16 claim. There's no mention of Choi anywhere as it relates to those two
17 electrodes. And at page 51 and 52, it goes on to explain now with respect to
18 the function performed by those, it says that it recognizes an element, one
19 which requires the electronic watch is configured to measure. So, the watch
20 is configured to measure ECG using the first electrode and the second
21 electrode. Not to trigger a measurement of ECG using the first electrode and
22 second electrode, but to use it. This isn't a requirement for enabling
23 measurement of ECG using first and second. In pages 51 and 52 of that
24 petition, it wasn't ambiguous in calling for measurement by Kotanagi's
25 electrodes. The only electrodes map to the first and second electrodes.
26 Despite suggestions today to the contrary, and even the ending of that

1 section, it says to add additional electrodes to Kotanagi as taught by Choi,
2 and use both it and the existing electrodes to obtain ECG. Use both it and
3 the existing electrodes to obtain ECG. Right. In context, there's no way you
4 can see this as anything other than a command for using the first and second
5 electrodes. Those were only Kotanagi's for ECG.

6 The result, prejudice, we think, has been sought. And mind you, the
7 Patent Owner's reply remained on the schedule. It left only the Patent
8 Owner a sur-reply. And so the Patent Owner was left without an
9 opportunity to introduce evidence or explore fully what it means that the
10 GSR sensor in the relationship would have to a sensor like the voltage based
11 sensor of Kotanagi, which is a much simpler sensor, and whether that would
12 inform the obviousness or the lack of obviousness of transition that they're
13 talking about, which is to take Kotanagi's voltage based sensor and make it
14 into a dual purpose sensor. Now, of course we continue to maintain, and the
15 whole point of today's presentation is to reinforce the idea that the proper
16 inquiry here focuses on the references that were selected by the Petitioner
17 for their combination. How did they promote and what did they contend
18 was the combination in the petition that was being examined throughout the
19 proceeding? And therefore, it would be obvious to do this Kotanagi based
20 on Choi to integrate what is actually in Choi, which is a separate detector for
21 skin.

22 Your Honors, if you don't have any further questions on this, I'd go to
23 slide 53 to talk about the other of the two issues, issue six or five, rather. All
24 right, heading here with this, we transition to issue five. And this implicates
25 proposed integration of magnets from Park to address claims calling for two
26 instances of magnetic coupling. Let's go ahead and slide 55, please.

1 JUDGE BARRETT: Mr. Renner, you have about 23 minutes left.

2 MR. RENNER: Excellent. Thank you for that. Let's go instead then
3 to slide 56, please. Slide 56. Slide 57, then 57. Slide 57. The petition
4 proposes to optionally add park to Kotanagi and Honda in order to meet this
5 limitation. Now, as to the Kotanagi, Honda, Park combination, the petition
6 does two things. First, the petition observes that Park describes using
7 magnets to align coils in devices that are otherwise not aligned. And you
8 can see that with respect to its figure 14, which we show up here. The figure
9 14 shows us that device 20 is simply sitting on top of a charging device ten,
10 with no alignment mechanism other than Park's magnets. Second, the
11 petition contends that a POSITA would have found it obvious to integrate
12 Park's magnets into Kotanagi-Honda with a reasonable expectation of
13 success. And this lies at the heart of the dispute. In the clip at the bottom of
14 the slide, we reproduce the treatment given to this issue. Within the petition,
15 just four sentences are offered to prove that motivation exists and reasonable
16 expectation supports it. But these sentences don't do this. They don't do
17 either thing. And we're going to look at each one of them for just a few
18 moments.

19 The first sentence, a POSITA, would have been motivated to combine
20 these based at least on Honda's description of a socket where the watch body
21 is seated in alignment in Honda's station. That's the first sentence. So, does
22 that give us motivation? Well, here, best we can tell, the position is looking
23 at what Honda achieved. It's saying, hey, since Honda achieved alignment, I
24 guess that means we are motivated to use Park. That's a very strange
25 analysis. If anything, the fact that Honda's focusing on a problem or solving
26 it would allow you to think about maybe a substitution for Honda. But here,

1 mind you, the combination is to integrate Park, integrate its magnets into
2 Honda, and into Honda's configuration for alignment. Nothing about
3 Honda's success or even attempt to address what it's addressing there would
4 inform motivation for that. The second sentence doesn't even go to
5 motivation. It's really reasonable expectation of success. It reads
6 understanding the value and feasibility of alignment from both Honda and
7 Park, POSITA would have experienced success in modifying Honda to
8 include Park's permanent magnets. Here, the petition's crediting Honda and
9 Park for establishing this value and feasibility of alignment. But again, what
10 we're looking for right now is an indication of motivation and reasonable
11 expectation of success in improving or changing the Honda configuration
12 based on Park. That's what's in front of us. And the idea that there's
13 feasibility or value in alignment itself doesn't inform that inquiry as it relates
14 to reasonable expectation for success or motivation for that matter.

15 The third and the fourth issues, both are related, deferred sentences.
16 They say motivation also stems from Park, which teaches disadvantages in
17 existing wireless charging schemes. And the fourth, a POSITA, would have
18 used Park's solution: permanent magnets to reduce distance and thereby
19 improve wireless power transfer efficiency. Well, reading these, the petition
20 seems to allege that the integration of its magnets from Park would fix
21 existing or known problems and result in reduced distance to improve power
22 transfer. Perhaps not a crazy assumption, but we're not talking about just the
23 use of Park. We're talking about integration of Park into Honda. Again, and
24 there's no evidence offered to substantiate that Honda's scheme suffers from
25 disadvantages that are discussed at that time of existing wireless charging
26 schemes contemplated by Park. That is, at the time Honda wrote what it

1 wrote. Nor that the alignment achieved through Kotanagi-Honda leaves any
2 correctable displacement between its transmit and receive coils, or that the
3 integration of Park's magnet would actually address whatever correctable
4 displacement there might be. And from this it becomes clear that the
5 petition fails to sufficiently justify the specific combination that was
6 proposed by the petition, that is the integration of Park and its magnets into
7 the base of Honda, and to go with alignment that way.

8 Slide 58. The absence of evidence becomes even more apparent when
9 considering that Park is focused on magnets for aligning devices that
10 otherwise lack an alignment mechanism. Again, figure 14 demonstrates this,
11 and with Park's focus on improving devices that lack alignment mechanisms.
12 In order to justify obviousness, the petition would have needed to establish
13 that a POSITA would have applied Park in a mechanism that already has an
14 alignment mechanism like Honda, and on this petition offers nothing. There
15 is no remark, no explanation, and no evidence. There's not even an
16 acknowledgement of Honda's alignment mechanism when it's talking about
17 the integration of Park. Certainly, no indication of how Park's magnets
18 would integrate with Honda's alignment mechanism, or how Park's magnets
19 would integrate without triggering concerns that are openly expressed by
20 Honda about integration of magnets. And finally, no evidence is mentioned
21 a moment ago that Park would actually improve whatever, if any,
22 displacement might have been left by a Kotanagi-Honda combination.

23 So what did the petition actually offer? Well, in addressing claim 16,
24 it cited to paragraph 204 of Park. Paragraph 204 of Park talks about figure
25 16, and all it does is talk about two magnets that have a force between them
26 and that would converge. Now, if there's coils around them, it'll converge

1 those as well. But it's not talking about the integration of Park anywhere.
2 The same is true of other portions of Park that were cited for this
3 proposition. After that fourth sentence that we reviewed on the petition's
4 page 56, which we talked about a few moments ago. There it cited
5 paragraphs 192 of Park and paragraph 32 of the provisional application upon
6 which Park claims priority. Neither one of which says anything more. It
7 just says it about figure six, figure 14, rather than figure 16, the same as
8 paragraph 204 did. The expert declaration is similarly unavailing. It just
9 repeats the argument, doesn't offer anything new to substantiate it. So, in
10 stepping back at core the petition, it demonstrates only that the magnets in
11 Park attract, and generally they can be used to align coils if those coils
12 happen to be in the vicinity. But there's no acknowledgement of Honda's
13 alignment mechanism, no acknowledgement of how Park's magnets would
14 integrate with that alignment mechanism, or how they'd address the concerns
15 openly expressed by Honda over magnets, or how they'd improve if there
16 were any displacements. None of this is in the record or in the petition at
17 least.

18 Slide 60 gets even worse when you look at the petition nowhere
19 explaining how it proposes to integrate Park's magnets into the resource
20 constrained, the size constrained device structure of the watch, and whether
21 or why a POSITA would find it obvious to include coils to pack those into
22 the Kotanagi device structure. Slide 61. Confronted with all these issues,
23 Petitioner pivots with the new arguments and theories again. And for this
24 one, for instance, it looks at the highlighted sentence in the upper text box.
25 You can see at the top of this slide the Petitioner, its reply, contends that
26 Honda's background at 152 to 53, that it establishes motivation for its

1 integration at Park. Now, I mentioned a few moments ago that this section,
2 it was among the part of the section that was referenced on that page 56 in
3 the background section there of Honda, it was referenced in order to support
4 reasonable expectation of success. The sentence that this was cited to in the
5 petition did have nothing to do with motivation, but instead reasonable
6 expectation of success. But now it's said to motivate the combination, and
7 this is the first time that this has been added, and it was unjustly late. A look
8 at this shows us that Honda reveals that a POSITA would see this as a
9 description of what Honda improves, of course, but not a characteristic of
10 what Honda provides.

11 So if we look at slide 64, we can see that that background is
12 reproduced on this slide if you want to take a look at it. And here you do see
13 Honda. It indeed acknowledges that a maximum displacement exists.
14 Talked about in its background, though. And it's noted in our sur-reply that
15 this was not an endorsement by Honda of displacement in its own device, or
16 in the Kotanagi-Honda combination for that matter. It's instead saying
17 exactly the opposite. The background. Honda is explaining that an aspect of
18 the prior art is the existence of this displacement, and it wants to treat that.
19 Honda is indicating that it is eliminated or addressed this through its
20 solution. And you can see that when you look at its summary, this point's
21 not going to be lost on a POSITA anyway. Backgrounds are regularly used
22 to summarize problems with prior art that are addressed by Patent Owner.
23 And if I look at that summary, by the way, you can look columns two and
24 four. Column two, line 55, 56, column 421 to 29. You can see there it's
25 telling us that it's addressing those problems, which is not surprising.

1 Now we look at slide 62 again. If we back up just a couple slides at
2 62, you'll see that there's an extension to this argument that exists, and again,
3 further new. But Petitioner is now contending that wiggle room exists in the
4 Honda final product. You can show that. You can see that in the
5 annotations that were added to figure two that are here on this slide.

6 Petitioner highlights space that exists in the figure between the watch and
7 the dock on that figure to show that there's some sort of wiggle room there.
8 But this is new, and wiggle room in Honda is the first time it's alleged is
9 here in the reply, nowhere in the petition. But even looking past the timing,
10 the Petitioner's position is exposed on several levels. First, figure two. It
11 depicts a watch that is unseated, and it's not even a scale in this sense.
12 Figure two doesn't indicate the existence of wiggle room in the device as
13 seated. That is Honda's device, not Kotanagi-Honda. And this is noted
14 earlier by Petitioner themselves when promoting the combination of Honda
15 and Kotanagi. And even today you can see slide 22 that was covered in the
16 comments with respect to it, it's undisputed, it said, it's undisputed that
17 Kotanagi's watch profile fits intimately into Honda's charging profile.
18 There's no indication of wiggle room, or at least not any kind of
19 impermissible wiggle room.

20 Slide 65. Even Dr. Duckworth confirms that as their expert the
21 absence of wiggle room or addressable displacement in Kotanagi and
22 Honda, and this is shown in his expert deposition testimony, it's upper left,
23 but more it's incredible that only now, when facing challenges over
24 sufficiency of its evidence and motivation to intend to integrate Park's
25 magnets into Kotanagi or Honda, that we find Petitioner criticizing the
26 displacement of what earlier praised as fitting intimately. Ultimately, we're

1 left without a record from the Petitioner or the Petitioner that substantiates
2 its late argument that a POSITA would somehow find addressable
3 displacement in that Kotanagi-Honda system, and that they would then be
4 motivated to integrate Honda and Park to address the same. And because of
5 this and the open discouragement of Honda of integration of magnets, we
6 think a combination is unjustified. One last thing, Honda's expressed
7 concerns over integrating magnets and magnetic materials. The Petitioner
8 responds to this, attempting to suggest that Honda is wrong in doing so. The
9 Petitioner directs attention to a reference made by Park to Schieling, and the
10 Petitioner contends that POSITA would have known how to address
11 concerns of the type Park offers.

12 This argument's got several problems. First and foremost, it's been
13 impermissibly late. It's their burden to have demonstrated that the
14 combination worked, and the criticism was right there in the middle of the
15 reference of being combined. We think they should have explained
16 themselves in order to prove that there was motivation to combine or
17 reasonable expectation of success exists. And yet, with this we see the
18 entirely new theory of obviousness that shields would be used. But there's
19 no reason for delay here, and it's prejudicial. We need time, and we would
20 deserve process to investigate whether shields would actually work in
21 Kotanagi's system, and properly. Beyond that, Park's disclosure isn't even
22 sufficient. If you look at it, it cites to a shield between 12 and 14. If we
23 look at the next slide, slide 67, you can see depicted there, the configuration
24 and the shield is said to be between 12 and 14. The slighted two portion that
25 they include is above this. Between 12 and 14 is on the base, not on the
26 watch. Notorious absence is any mention by Park for shielding in the space

1 constrain a watch in the section that was cited. And speaking of space
2 constraints, there's yet again a disregard for what had been informed by
3 Kotanagi, which are real constraints over space.

4 Now, if there aren't any questions, I will actually ask my colleague,
5 Mr. Patrick, to come up and talk about the combination in general.

6 JUDGE BARRETT: Mr. Renner, I do have one question. You had
7 said that the figure two that we were discussing showed the watch
8 configuration in an unseated configuration. How do we know that?

9 MR. RENNER: Oh, thank you, Your Honor. It just shows it, actually
10 without seating. We know that because it is what it is. You can look at the
11 figure and there's no indication of seating there. There's no indication that
12 it's being applied to a configuration where seating exists, or there's some
13 other form of alignment that's already there. And Your Honor, I'll just to
14 make sure we're speaking the same language. While we believe that true,
15 and we believe that's what you're seeing in the reference, we think even if it
16 had shown you some sort of a seating, it's not what's being shown by Honda.
17 And the combination here, of course, is a combination with Park integrated
18 into Honda. And the contentions we have is that the proofs have been put to
19 you, and the arguments, they just didn't account for what Honda's alignment
20 was. They didn't explain with evidence that it would be an improvement to
21 what Honda has already achieved. But I hope I answered your question.
22 Did you? Any other questions before I ask Mr. Patrick to present?

23 JUDGE BARRETT: I don't believe so. You have about nine minutes
24 remaining.

25 MR. RENNER: Thank you, Your Honor.

1 MR. PATRICK: Thank you, Your Honors. Turning back to slide
2 four, I'd like to briefly address Petitioner's failure to demonstrate
3 obviousness of the wireless charging features recited by independent claims
4 of both the '491 and '783 patents. For example, as shown at left of slide
5 four, in the '783 patents, independent claim nine, and at right, in the 491
6 patents, independent claim seven. More specifically, Petitioners failed to
7 demonstrate both that a person of skill would have been motivated to
8 combine the Kotanagi and Honda references in the specific ways that
9 Petitioner advances in its attempt to reach these claims, and that they would
10 have reasonably expected success in doing so. In that regard, Petitioner's
11 advanced combination strikingly disregards the teachings of the constituent
12 Kotanagi and Honda references themselves, which actually would have
13 discouraged the person of skill from attempting Petitioner's combination in
14 both of its alternatives. Turning to slide five, we see at top left Petitioner's
15 assertion from the '783 petition that a person of skill would have noticed
16 available space near Kotanagi's opening and been motivated to use that
17 space for a wireless receive coil. The '783 petition additionally asserts, with
18 respect to a dependent claim that a quote POSITA would have used Honda's
19 teachings to either one modify Kotanagi to position a wireless charging coil
20 behind Kotanagi's cover glass, LED and PD or two enlarge Kotanagi's
21 opening and cover glass to make room for a coil behind the COVER glass
22 surrounding the LED and PD.

23 Skipping to slide seven. I'd like to start exploring the various ways in
24 which Petitioners propose modifications defy disclosures of the references
25 that Petitioner relies upon. First and foremost, Honda teaches neither of the
26 coil placements required by Petitioner's primary or alternative modifications,

1 and instead, as shown at bottom left, specifically discourages coil
2 placements that would yield detrimental noise and interference resulting
3 from metallic elements located either between transmitting and receiving
4 coils or within a coil core. Further, as shown at upper left, Honda
5 additionally discourages as detrimental to transmission efficiency separation
6 between coils as, for example, introduced in at least Petitioner's primary
7 proposed modification. In that upper left clip from Honda, for instance, we
8 see Honda's express teaching at column 13, lines 14 to 16, that as the
9 distance between coils decreases, transmission efficiency increases in
10 accordance with a quadratic curve. From that a POSITA would, of course,
11 also have logically understood that as the distance between coils increases,
12 transmission efficiency decreases in accordance with a quadratic curve.
13 Despite both that and Honda's actual placement of a wireless receive coil
14 within an opening directly adjacent to the Honda electronic watch's outer
15 surface that is, as close to the transmitting coil and Honda's charging station
16 as possible. Petitioner's primary proposed modification nevertheless calls
17 for a wireless receive coil to be positioned spaced away from Kotanagi's
18 cover glass 23 with metallic optical elements and a metallic flexible board
19 24 present there between. In other words, Petitioner's primary proposed
20 modification relies on an assertion that a POSITA would have been
21 motivated by Honda to place a wireless receive coil in Kotanagi at a position
22 that Honda not only fails to suggest, but instead actually discourages by its
23 teachings on the detrimental effects both of increased space in between coils
24 and of intervening metallic elements.

25 The notion that a person at skill would have been motivated by Honda
26 to pursue that placement of a receive coil in Kotanagi is not facially credible,

1 and it's certainly not sufficiently supported on this record. Turning to slide
2 eight, we see at upper right an illustration from our patent owner response of
3 Petitioner's alternative proposed modification to Kotanagi, which supposedly
4 would have been inspired by Honda, again, despite Honda's actual teachings.
5 Recall that Petitioner argued in the alternative that the receive coil could also
6 be positioned, quote, behind the cover glass surrounding the LED and PD.
7 Yet that too would, as Honda warns, result in signal degradation stemming
8 from the presence of Kotanagi's metallic LED and PD and metallic flexible
9 board 24 and that instance within the receive coils four. At Honda's column
10 six lines 41 through 49, which are reproduced, for instance, on Petitioner's
11 slide 30. Honda explains that the station side coil 110 and the watch side
12 coil 210 of the electronic watch that Honda generally describes. For
13 example, in connection with Honda's figure two are of an air core type
14 without any core, to limit the magnetization of a watch mechanism, to avoid
15 an increase in the weight of the watch, and to prevent the exposure of a
16 magnetic metal. Petitioner suggests that a person of skill would disregard
17 these specific teachings of Honda with respect to the receive coil of Honda's
18 electronic watch when implementing a receive coil in Kotanagi's electronic
19 watch. Because Honda teaches use of non-air cores, they're presumably
20 referring to Honda's column six lines 46 to 49. But rather than supporting
21 Petitioner's position, those lines further discourage the person to skill from
22 implementing a receive coil with a metal core in an electronic watch. Again,
23 bearing in mind that the immediately prior lines describe watch side coil 210
24 of Honda's electronic watch and list reasons for avoiding a core that are
25 watch specific, it's striking that Honda then effectively goes on to juxtapose
26 electronic watches with other types of electronic devices by its next

1 statement, when the present invention is applied to an electronic apparatus in
2 which these concerns are not important, a coil having a core can be used.

3 Notably, Honda later describes in detail an example of one such non-
4 watch electronic apparatus, an electronic toothbrush. Respectfully, given
5 both the plain language and that context, Petitioner's assertion that these
6 lines would lead a person of skill to disregard Honda's teaching that a watch
7 side coil should feature an air core is not credible. And that being the case,
8 we are again faced with an instance in which Petitioner relies upon the
9 notion that Honda would somehow motivate a person to skill to modify
10 Kotanagi in a manner that Honda actually discourages. In that regard, I'd
11 like to ask Your Honors to turn to slide nine, which shows at right an
12 annotated image from Fraser, a non-combination reference that the '491
13 petition and only the '491 petition asserted quote provides evidence that it
14 would have been feasible to make the second modification option discussed
15 above to enlarge Kotanagi's opening and cover glass to make room for a coil
16 behind the cover glass surrounding the LED and PD. Also at page 29, that
17 '491 petition further asserts that Fraser provides motivation for this
18 approach, for example, to reduce apparatus thickness. Contrary to those
19 assertions, Fraser neither supports its feasible Petitioner's allegedly Honda
20 inspired alternative modification of Kotanagi nor motivates it to understand
21 why. It's first important to recognize that, contrary to both combination
22 references, Fraser's received coil is illustrated as extending over the entire
23 inner surface of the back of Fraser's watch, and that both that
24 implementation of a coil and the thickness reducing motivation offered by
25 Fraser for it run counter to express teachings from both Kotanagi and Honda.

1 Turning to slide ten, we see at bottom left an annotated figure from
2 Kotanagi. The combination reference that Petitioner proposes would have
3 been modified even if one were to set aside that Fraser is not a combination
4 reference and that its implementation of a large coil covering the entire inner
5 surface of the back of its watch runs directly counter to the combination.
6 Honda references teachings on avoiding metallic elements between coils and
7 within coil cores. Petitioner faces a further issue. Kotanagi repeatedly
8 emphasizes the advantages both of the protruding structure within which
9 Kotanagi locates its LED in PD and a sandwiching those elements between
10 electrodes to allow for high precision detection of contact of the LED and
11 PD with the body surface. For example, Kotanagi explains in paragraph 28
12 that its protrusion can be reliably brought into contact with the surface of the
13 living body and the adhesion of the living body sensor can be ensured.
14 Kotanagi further explains that this enhances sensor accuracy because
15 external light is less likely to enter through a gap, and further explains
16 paragraph 29 that the protrusion enhances user comfort by making it
17 possible to prevent a feeling of oppression.

18 Kotanagi further explains a paragraph 35, for example, that in its
19 invention the diameter of the protruding part is set to not greater than 20
20 millimeters, further limiting the space available for a coil. Again, recall that
21 the '491 petition relies on Fraser for the limited proposition that it allegedly
22 evidences feasibility of enlarging Kotanagi's opening and cover glass to
23 make room for a coil behind the cover glass surrounding the LED and PD.
24 It does no such thing. Fraser, far from disclosing an LED and PD positioned
25 within a protrusion from the main sensor body, actually discloses in
26 paragraph 26 an opposite approach in which Fraser's emitter and detector

1 elements are positioned in the middle of the charging coil to reduce the
2 thickness of the apparatus.

3 JUDGE BARRETT: Your initial time is up. You are now cutting
4 into your 20 minutes rebuttal. You're free to do so.

5 MR. PATRICK: Thank Your Honor, I appreciate that. We'll wrap it
6 up shortly. So even if one were to go further than the '491 petition and
7 allow for consideration modification of Kotanagi based on Fraser in addition
8 to Honda, what quickly becomes apparent is that Petitioner proposes a
9 modification to Kotanagi that is directly contrary to the teachings of
10 Kotanagi itself. More why would a person of skill modify Kotanagi in a
11 way that both Kotanagi and Honda discourage? The Petitioner has not, on
12 this record, satisfactorily answered that question. What is instead apparent is
13 that contrary to the prohibitions against impermissible hindsight and against
14 picking and choosing, Petitioner proposes a Kotanagi-Honda combination
15 that disregards the teachings of those constituent references in an attempt to
16 reach specific features of the challenge claims that are neither taught nor
17 suggested by the references singly or combined. Accordingly, Patent Owner
18 respectfully submits the Petitioner has failed to demonstrate both motivation
19 and reasonable expectation of success for the combination on which it lies,
20 and has further failed to demonstrate obviousness of the challenge claims.
21 With that, and unless there are further questions, we would like to reserve
22 the remainder of our time for rebuttal.

23 JUDGE BARRETT: Okay, I don't see any further questions. I have
24 you down for about 17 minutes remaining.

25 MR. PATRICK: Thank you, Your Honor.

1 JUDGE BARRETT: Patent Owner, you may begin whenever you're
2 ready. You have 15 minutes. I'm sorry, I meant Petitioner. My apologies,
3 Mr. Cannon.

4 MR. CANNON: Are there slides being shared right now? Seeming
5 to have trouble having those shared.

6 JUDGE BARRETT: I am not seeing those, but again, we do have
7 them and can pull them up. However you want to handle it. Oh, it's starting
8 to. There they are. We can see them now.

9 MR. CANNON: Great. All right, I'd like to start on slide 66 of
10 Petitioner's deck. And so, the first issue that, one of the issues that was
11 brought up was this notion that we did not mention the cover from Honda as
12 part of the combination. Again, slide 66 shows that the petition expressly
13 says that Honda teaches a cover, and we are clearly relying on Honda's cover
14 for the cover aspect of the claim and not just for the waterproofness and
15 water tightness. Apple also argued that, again, the issue of mixing and
16 matching embodiments. Figure five and figure eight. I'd like to provide a
17 more detailed citation of where the petition, or, sorry, Kotanagi explains
18 what figure eight is. And if I could have that shown here. Figure the portion
19 of Kotanagi on page eight that describes what figure eight is, says figure
20 eight is a drawing illustrating the shape of another protruding part than that
21 of the biological information measuring device illustrated in figure one, and
22 is a drawing of a case in which the outer periphery of the protruding part is
23 circular. So that provides a more specific citation for the argument we made
24 about figure eight, just showing a different shape of the protruding part and
25 the external components and not negating anything about the internal pieces.
26 They argued that we somehow have to rely on the same rectangular cover

1 for claim one as for claim six, simply because we relied on the rectangular
2 cover for claim one. But that misrepresents how claims are analyzed.
3 Separate claims are analyzed separately. We are not required to rely on the
4 same cover for claim one as for claim six. And the petition very clearly uses
5 the circular protruding part as the disc portion of the cover for claim six, and
6 uses Honda for making that disc shape into a cover.

7 For the motivation to combine the petition sets forth a motivation to
8 combine for that. Claim six is in ground three, which incorporates
9 motivations from ground one, including claim eleven. That's at petition 68
10 incorporated ground one. Motivations include using a glass cover to
11 improve wireless charging. That's petition at 32, making the opening and
12 cover as large as possible to avoid unwanted shielding. That's petition at 41.
13 In addition, the discussion of claim six specifically indicates that Honda
14 discloses that a glass cover over the entire coil would improve
15 waterproofness. That's petition at 79. So, the motivation aspect also
16 supports the notion that using the glass cover over the entire protruding part
17 would be beneficial and a person of ordinary skill in the art would be
18 motivated to do so. Council for Apple admitted that Masimo does not begin
19 with the rectangular cover for claim six, and it's totally acceptable for us to
20 not begin with the rectangular cover because we do not need to use the same
21 cover for claim six as we used for claim as for claim one. Let's move to
22 slide 28. Not that.

23 Okay. They also argued that there's no suggestion in Kotanagi of the
24 disc being a cover. They argued that Honda does not say that its cover is a
25 disc. They seem to be misunderstanding obviousness law and trying to
26 make this into an anticipation case. We don't have to have a single reference

1 that says, here's a cover, that is a disc. We're taking the disc shape from
2 Kotanagi, which is expressly put forth in the petition. We're taking the idea
3 of it being a cover from Honda. We are not required to show a single
4 reference that has both aspects of that limitation. Now let's move on to the
5 electrode issue or the positioning of the electrode issue. They argue that the
6 electrodes need to contact the skin, and it would frustrate the purpose if
7 those electrodes could not be on the cover portion. On the protruding part.
8 Again, there's no need for the electrodes to be on the protruding part in
9 figure eight. Figure eight shows that. Let's go to slide 62. Let's go to slide
10 65. Again, there's no need for electrodes to be on the protruding part. A
11 person, ordinary skill in the art would look at figures eight through ten and
12 see that there's no electrodes there. And that would be a suggestion to a
13 person of ordinary skill in the art that there don't need to be electrodes on
14 that portion. In addition, they argue that it would frustrate the purpose to not
15 have the electrodes on that protruding part. Well, that's simply not the case
16 because the electrodes can be on figures 11 through 13 on the ridges. So
17 there's no frustration of purpose. We're simply not proposing a combination
18 that would completely remove electrodes. If someone wanted electrodes,
19 they could put them on those ridges, and a person of ordinary skill in the art
20 would be well aware of that possibility and would be well aware of the
21 ability to do that in order to have the electrodes and in addition, have a disc
22 shaped cover.

23 Let's move on to the argument that Honda is not a circular disc.
24 Again, Honda's not providing the disc portion. Honda's providing the cover
25 portion, and that's perfectly acceptable in an obviousness analysis. Let's
26 move to the ECG electrode issue. They argued that Choi has separate skin

1 contact detection from ECG. That doesn't negate our combination because
2 we've showed the alternative basis for using the ECG from Kotanagi for, or,
3 sorry, the electrodes from Kotanagi for skin contact detection and then
4 triggering the other electrodes to do the ECG measurement. It's not correct
5 that the petition is using all electrodes for ECG detection. Counsel for
6 Apple continues to use the word ECG detection. And what we actually said
7 in the petition in slide 57 is that we would use both the new and existing
8 electrodes to obtain an ECG. Counsel for Apple continued to replace the
9 word obtain with detect and imply that there needs to be a direct detection of
10 ECG using all of the electrodes. In fact, the petition has the possibility of
11 using an indirect system where Kotanagi's rear electrodes are used as a
12 triggering mechanism, and then additional measurements are taken using
13 other electrodes. And that's completely consistent with the petition and not a
14 new argument.

15 Apple argued that Choi and in addition, Apple's argument is a bodily
16 incorporation argument. They say the issue is not whether Choi has the
17 possibility of ECG, it's that you have to incorporate Choi's teachings entirely
18 into Kotanagi. And that's not true. That's a bodily incorporation argument,
19 and it's incorrect as a matter of law. A person of ordinary skill in the art
20 does not need to bodily incorporate the entire design of Choi into Kotanagi.
21 Kotanagi teaches ECG, or sorry, electrodes for skin contact detection. Choi
22 teaches electrodes for ECG, and it is perfectly permissible to take those
23 electrodes from Choi for ECG and put them into Kotanagi without also
24 taking Choi's separate skin contact electrodes. In addition, Choi does have
25 an embodiment where the sensor can do both ECG and skin contact
26 detection. As for the newness of the argument, the petition made a prima

1 facie case that using the electrodes for ECG would have been obvious. We
2 pointed to Kotanagi's electrode 7A and B at petition 50 through 53. The
3 petition also asserts that in view of Kotanagi and Choi, a POSITA would
4 have considered alternative electrode arrangements for ECG. That's petition
5 at 51 through 52. The petition pointed to Schmid to show the feasibility of
6 using two rear electrodes for ECG. That's petition at 52. The petition
7 showed the structural similarity of those electrodes. Petition at 50 and 52.
8 And that all adds up to a prima facie case of obviousness to adapt Kotanagi
9 to measure ACG with at least two of its electrodes, or perhaps with two
10 electrodes and additional ones added by Choi.

11 The reply is a proper response to Apple's frustration of purpose
12 argument. The frustration of purpose never came up until Apple's Patent
13 Owner response. They attempt to rebut motivation to combine by arguing
14 that using Kotanagi for ECG would frustrate its skin contact detection
15 purpose, and we were not required to anticipate that argument and pre-rebut
16 it during in the, in the petition itself, Sanofi Aventis versus Milan 66 F 4
17 1373, 1379 Federal Circuit 2023. Google versus Valtrex, IPR2022-01197
18 paper twelve at five, PTAB March 29th, 2023. Samsung versus Affinity,
19 IPR2014-01181, Paper 36 at 63, PTAB January 26th, 2016 show that we do
20 not have to anticipate arguments in the petition that Apple raises to try to
21 show this frustration of purpose. Masimo's evidence is a legitimate reply to
22 Apple's frustration of purpose evidence and documents the knowledge that
23 skilled artisans would bring to bear in reading the prior art identified as
24 producing obviousness, which is permissible under Anacor Pharmaceuticals
25 versus Iancu, 889 F third 1372, 1380 through 81, Federal Circuit, 2018. And
26 so that's not a new argument. It's a proper response to Apple's argument.

1 The first and second electrode issue. Apple argues that we relied on
2 Kotanagi as the first and second electrodes. Obviously, it's kind of arbitrary
3 claim language says first and second electrodes. All it really is saying is you
4 need two electrodes that do ECG. It's arbitrary whether it's the Kotanagi
5 ones or the Choi added ones, and it's not. And we can rely on Choi's added
6 arguments as the first and second electrodes. Let's talk about the magnet
7 issue. Slide 77. Everyone knows there's displacement in Honda. It's
8 remarkable that they deny that there's displacement. Honda tries to mitigate
9 the effects of the displacement by having a larger coil. So clearly there's
10 displacement. It's better to fix the displacement and reduce it than simply try
11 to mitigate the effects. So, there's clearly a motivation to combine, and the
12 idea that there's no displacement has absolutely no support in the record.
13 Apple argues.

14 Let's go to the separation distance argument. Apple argues that the
15 primary combination, the primary way to combine, would have separation
16 distance, but they ignored the secondary way to combine where the coil
17 would -- where the expanded cover, where the coil would be around the
18 optical elements, and therefore right up against the cover glass. They argue
19 about LED's and PD's being metallic and creating a lot of interference.
20 There's really no support in the record for that. They make the allegation,
21 and they say that these are big old chunks of metal. There's no support for
22 that. In fact, LED's and PD's have some metal, but not the type of metal that
23 is an entire core that would cause a problem. Going to the air core issue.

24 JUDGE BARRETT: Counselor, your time is wrapping up. I'll give
25 you a minute or two, if you just want to wrap up your argument.

1 MR. CANNON: Okay, I just wanted to mention that the air core
2 issue, that the teaching in Honda is a classic trade off situation. It's not
3 teaching away by any means, it's simply a tradeoff situation where it says,
4 here's three potential issues that might go towards the air core situation, but
5 if you're not concerned with those issues, then you would be able to use a
6 non-air core. It's not a watch non-watch distinction. It's a distinction
7 between whether you are concerned with those types of issues or whether
8 you are not concerned with these types of issues. In our combination, where
9 the predominant issue is to have both optical components and wireless
10 charging, then those issues would not predominate, and a person skilled in
11 the art would be willing to accept those tradeoffs. And with that, I thank you
12 for your time. And if there are no further questions, then I will. Then that
13 will be it.

14 JUDGE BARRETT: Looks like no questions. Thank you for your
15 presentation. Patent Owner, whenever you are ready.

16 MR. JHURANI: Thank you, Your Honor. Just a few points from me,
17 and then I'll invite the others on my team to come up for their respective
18 issues on which they presented. I'll start with the issue of the '783 patent,
19 claim six. I heard counsel say they're not relying on the same cover, they
20 just don't have to. But they're not addressing separate claims. They're
21 addressing claims that are directly related. One is an independent claim that
22 recites a ceramic cover. The other is a dependent claim that's further
23 modifying that ceramic cover. So, the jettison and earlier mapping does not
24 make sense and is not reconciling the very problems that we're talking about
25 today. And to the extent they are relying on a completely different mapping.
26 Now, for the ceramic cover, it was incumbent on the patent Petitioner to

1 explain why that type of mapping would work in the context of claim six,
2 but then to also explain why that would work in the context of claim one.
3 Because, again, these are not independent claims. These are directly related
4 and dependent claims. I heard counsel criticize our reliance on the teachings
5 of Kotanagi and Honda, but that is fundamental part of an obviousness
6 analysis. You follow the teachings of the references, and it's telling that I
7 didn't hear any dispute about that neither reference teaches a cover that is a
8 disc. And what I did hear, though, was they don't have to. The references
9 don't even have to teach that because obviousness law does not require it.
10 But obvious law does require a reasoned basis to make a combination to
11 present that combination, explain why POSITA would have done something
12 a certain way, how they would have done that thing a certain way.

13 And when you begin with a rectangular cover, glass, which was what
14 the mapping was for a ceramic cover, you need to be able to explain why
15 and how that would be modified for purposes of a dependent claim to a disc.
16 Tellingly, they didn't do that. The petition wholly omitted that type of
17 analysis. There is no obviousness analysis providing that type of analysis in
18 the petition. Instead, what I did hear counsel do in his presentation right
19 now is talk about a dependent claim 11 cited with respect to a dependent
20 claim 11, and pointing out that that somehow supports the theory of claim
21 six, which is a completely different dependent claim there. The dependents
22 are actually two different claims.

23 And then one last thing on the electrode issue, the counsel pointed to
24 their slide 65. Petitioner slide 65. And they said, well, we're not trying to
25 frustrate the purpose of Kotanagi and its electrodes because you could move
26 the electrodes to the ridges that they show on that slide. And the question,

1 though, there are two problems. First of all, this is not in the petition. I
2 heard counsel say this was their obviousness theory. Then where was it in
3 the petition? Not there. But the other point of problem and contention is
4 obviousness law is not a question of what could be done, it is a question of
5 what would be done. And here Petitioner failed to explain what would be
6 done with those electrodes until we identified an evidentiary gap and
7 deficiency in their record and then they pivoted to what could be done. That
8 is simply not obviousness law. With that, I'll turn it over to my colleague.

9 MR. RENNER: Your Honor, want to make sure that we're respectful
10 of time. How much time do you have for us at this point?

11 JUDGE BARRETT: I am showing about 13 minutes.

12 MR. RENNER: I don't expect we'll need all of that. Thank you. Just
13 a few points to follow up. As to the electrodes issue, Petitioner indicates
14 that it is not correct that all electrodes are used for ECG detection. This is
15 not our point. To be clear, our position is that at least one of the electrodes
16 identified in the petition as a first or second electrode must measure ECG.
17 It's not sufficient to trigger and only trigger with an electrode. That's, well,
18 to use one of those electrodes to trigger and then to perform the ECG
19 measurement with an electrode that is other than the first or second
20 electrodes, if you want to meet the claim. And this isn't an argument over
21 frustration of purpose, it's a contention of lacking motivation for the
22 combination that was advanced by the Petitioner in the petition. As to the
23 first and second electrode, it's the contention of Petitioner in the petition that
24 it's the Kotanagi electrodes that were identified specifically in the petition on
25 the pages that addressed first and second electrodes. So in a PTAB
26 proceeding as this, the proceeding is all about whether or not the contention

1 is advanced by the Petitioner at the outset, are themselves legitimate and is
2 sufficient. And in this case, it'd be about whether or not those first two
3 electrodes, the first and second electrodes, that is, the ones that were only
4 mapped to Kotanagi, do the job that is necessary in the claim of them, and
5 adding electrodes that are Choi's, and having Choi's electrodes perform
6 ECG's, while that's possible to be done, perhaps, or it might be something
7 gets done that's not sufficient to meet the claim.

8 The claim requires that the first and second electrodes, the ones
9 identified in the petition, the ones mapped in the actual contended proposed
10 combination, that those electrodes which have other elements and
11 requirements on them, like, for instance, the positioning that those electrodes
12 perform ECG. And we know that those electrodes, the Kotanagi electrodes,
13 they had a specific purpose. Kotanagi was clear on that, Choi had similar
14 electrodes and maintained those electrodes despite the existence of ECG
15 detecting electrodes. And so, bringing Choi into Kotanagi would leave you
16 with nothing other than leaving alone what the Kotanagi electrodes do and
17 where they are. And as they are the ones that are mapped, those electrodes
18 perform skin detection, not ECG. So, all of that was to say, we were testing
19 the contentions made by Petitioner, the actual proposed combination that
20 were advanced by Petitioner, as outlined quite clearly in the petition not
21 advancing new positions ourselves.

22 One last thing I wanted to address, and Judge Cocks, I want to return
23 to the question that you asked me during my opening presentation, because I
24 frankly, in real time, misunderstood it. You asked about figure two of
25 Kotanagi, and I think we were talking about slide. See if I can get me to
26 slide. Well, it's the slide which shows the configuration where the watch is

1 sitting. Where it's sitting on the base, Honda basically is before actual
2 docking, if you will. It shows the watch sitting above the dock or the base.
3 And you asked, how do we know that? I believe the question was, how do
4 we know that there's actual contact made or what the displacement looks like
5 as between those two items? Well, in real time. I thought you were asking
6 about figure 14 of Park. So I'm going to go ahead and try to answer your
7 question, hopefully do a better job at this time. Two points that I think
8 maybe, or maybe three points I want to make. First, Honda is clear that its
9 figure two is undocked. That is a description that is, I don't think, disputed
10 on the record. We know that the gap that's shown in that figure, the one
11 that's pointed to as reflecting wiggle room, that that is an undocked situation
12 that's not relevant to what happens when you actually dock the watch.
13 Secondly, Honda tells us, and this is, you can look at various places in it, but
14 column 16, lines one to 16, is an example that it achieves with its
15 mechanism, that's its alignment mechanism, accuracy, that allows it reliable
16 performance. That's what it's all after. You know, it's talking about portions
17 of the background that we discussed earlier. It's improving upon those, it's
18 getting to reliable performance, and it does not call for improvement of the
19 same, nor does it record evidence, establish that Park would address
20 whatever, if any, displacement exists in a Honda implementation, such as
21 Petitioner's proposed combination of it to Kotanagi.

22 The third final, and I think maybe even the most important point as it
23 relates to this, is that the review of Honda is helpful under the circumstances,
24 for sure. But the real and critical inquiry actually implicates the combination
25 of Kotanagi and Honda that has been proposed and whether displacement
26 exists between the watch and the dock in the combination that was proposed.

1 Because after all, what's before us is a combination that changes that
2 formulation and whether or not that's obvious. And to this point, as noted
3 earlier in the earlier presentation, Petitioner, in its petition, it proposes a
4 configuration in which those components are intimately fit together,
5 engaged. And you saw that even today in the demonstratives they had
6 demonstrate. Slide 23, for instance, 22 and 23 tells us it's undisputed, and
7 it's not at issue that there's an intimate fit between them, because that's, after
8 all, what they were trying to establish in the base combination of Kotanagi-
9 Honda that's being changed by the integration now of a further reference.

10 So, we know that it's not a problematic gap or displacement, even if
11 there is any displacement. We know that Honda tells us it teaches that it's
12 sufficient in the way that it works. In that sense, there's no need. Therefore,
13 there's no motivation to pull in an additional configuration or technology to
14 try to further align. And as I talked about in our opening presentation,
15 there's no record evidence that even if you saw it as something that needs to
16 be improved, that you would know that Park is sufficient to actually improve
17 whatever gap there would be, nor that Park would come together with that
18 configuration of Honda in an obvious manner. So I'll further address that
19 question. Did I this time, maybe get the question a little better? Or did you
20 have something further on your mind. Judge Cocks?

21 JUDGE COCKS: I understand your answer and thank you for
22 clarifying.

23 MR. RENNER: Well, with that, I think I'm finished. Let me check
24 with my colleagues for one moment to see if we wanted to comment further.
25 Okay. I think we're going to rest on the argument at this point unless there
26 are any further questions from you.

1 JUDGE BARRETT: Looks like no further questions. So, thank you
2 for your presentation. If I'm not mistaken, that is the end of the argument,
3 and the cases are now submitted. Thank you for your time. Let me ask, do
4 we have a court reporter on the line right now?

5 COURT REPORTER: Yes, we do.

6 JUDGE BARRETT: Okay.

7 COURT REPORTER: Yes.

8 JUDGE BARRETT: Good. Good morning. Do you have any need
9 for spellings or terminology or anything like that before we let counsel
10 leave?

11 COURT REPORTER: Yes, I do. Is it Mr. Jhurani?

12 JUDGE BARRETT: Jhurani, correct.

13 COURT REPORTER: Can he spell his name for me, please?

14 MR. JHURANI: It's J-H-U-R-A-N-I.

15 COURT REPORTER: All right. And Mr. Renner, is it R-E-N-N-E-
16 R?

17 MR. RENNER: That is correct, sir.

18 COURT REPORTER: And Mr. Duckworth, y'all had mentioned that.
19 Is it D-U-C-K-W-O-R-T-H?

20 MR. CANNON: Yes, that's correct.

21 COURT REPORTER: Okay. And Mr. Patrick, what is your first
22 name?

23 MR. PATRICK: Andrew.

24 COURT REPORTER: Great. Let's see. I believe that's all I have.

25 JUDGE BARRETT: Thank you. Thank you, everyone. Have a great
26 day. Thank you all.

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1 (Whereupon, the proceedings at 10:38 a.m. were concluded.)

IPR2023-00634 (Patent 10,627,783 B2)

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