

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner

v.

THE HOLDING COMPANY, LLC,
Patent Owner.

IPR2024-00398 (Patent 11,265,680)
IPR2024-00399 (Patent 11,350,246)

Record of Oral Hearing
Held: April 29, 2025

Before CHRISTOPHER M. KAISER, SHEILA F. McSHANE, and GARTH
D. BAER, *Administrative Patent Judges*.

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The above-entitled matter came on for hearing Tuesday, April 29, 2025, commencing at 11:00 a.m. MT, at the U.S. Patent and Trademark Office, 1961 Stout Street, 14th Floor, Denver, Colorado/via Video-conference.

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

10:59 a.m.

JUDGE KAISER: All right. Everybody can go ahead and have a seat. All right. Good morning. Welcome to those of you joining us here in Denver. We got quite a crowd today. This is a hearing in IPR-2024-398 and IPR 2024-399, challenging Patents 11,265,680, and 11,350,246, respectively.

I'm Judge Kaiser and Judges McShane and Baer are joining us remotely. Do we have Judge McShane?

(Whereupon, the above-entitled matter went off the record at 11:00 a.m. and resumed at 11:05 a.m.)

JUDGE KAISER: All right. So good morning, again. This is a hearing in IPR 2024-398 and 399. I'm Judge Kaiser and we now have both Judges McShane and Baer joining us remotely. Also here in the hearing room is Zachary Kachmer who's one of the Board's patent attorneys who's here to observe the hearing.

So I guess with that, why don't we start with the roll call of who's here today starting with anyone who's here on behalf of the Petitioner.

MS. RAW: Good morning. Lydia Raw from the law firm Erise IP. With me is my co-counsel, Jennifer Bailey, and also client representatives Tonya Manno and Dick Van Nort for the Petitioner, Apple Inc.

JUDGE KAISER: Thank you. And for the Patent Owner?

MR. LeROY: Good morning, Your Honor. My name is John LeRoy from the law firm Brooks Kushman on behalf of the Patent Owner THL Holdings. With me today is my colleague, Frank Angileri, also from the firm Brooks Kushman.

1 JUDGE KAISER: Okay. Great. Thank you. All right. So we've got
2 two hearings today that we're going to do back to back. The plan is to hold
3 the hearing in IPR 2024-398 first and followed by the hearing in 399.

4 In each of those two hearings, each side will have a total of 45
5 minutes to present its arguments. Petitioner has the burden of proof and will
6 go first. Petitioner may reserve some of its time for rebuttal in each case.
7 Patent Owner will present its arguments after Petitioner's initial presentation
8 in each of the two cases and may reserve some of its time for surrebuttal.

9 And I think with those preliminaries out of the way, we're ready to get
10 started with the hearing in 398. Petitioner, I guess, if you wouldn't mind
11 starting by letting me know how much time you'd like to reserve for
12 rebuttal, and then you can start whenever you're ready.

13 MS. RAW: May I reserve 15 minutes for rebuttal, please?

14 JUDGE KAISER: Sure.

15 MS. RAW: We would also request just a brief recess between the two
16 hearings; maybe ten minutes or so.

17 JUDGE KAISER: I think that's probably fine. Thank you.

18 MS. RAW: Thank you. May it please the Board. Again, I'm Lydia
19 Raw from Erise IP firm, and today I'm here to present on the 680 Patent
20 which as we presented in the Petition is invalid over the combination of
21 Kalliola and Vauclair.

22 So turning first to Slide DX-2. I'll begin with just a very brief
23 reminder of the procedural nature of this Petition. So originally, in the
24 Petition, Apple challenged Claims 1 through 12, and 15 through 20. The
25 Board preliminarily found that Claims 10 through 12 and 15 through 20

1 were likely unpatentable, and as a result, the Patent Owner disclaimed those
2 claims.

3 The Board also preliminarily found that it was not convinced that
4 Claim 1 was likely unpatentable on the basis of the Limitation I(d)(v) which
5 refers to a GUI-generating pairing signal.

6 Claim 1 is the only remaining independent claim. Claims 1 through 9
7 are the only claims remaining in this Petition.

8 Turning to Slide DX-3. As I previewed, there's only one limitation of
9 this patent that is discussed in the briefing. Patent Owner challenges only
10 whether the Kalliola Vauclair combination teaches a pairing signal generated
11 by the graphical user interface. As brief context here, of course, that's
12 Limitation I(d)(v) but it refers to some of the earlier limitations in the claim.

13 Just above at Limitation I(d)(iv), that same pairing signal was
14 generated in response to an indication from a user to pair the mobile
15 communication device. And just before that, both of these limitations fall
16 under I(d)(iii) which states wherein the processor operates in association
17 with the graphical user interface to perform these claim steps.

18 Turning to Slide DX-4. The base reference presented in this
19 combination is Kalliola. Kalliola teaches a wireless communication device,
20 which you can see on this slide at Figure 5, Kalliola's wireless
21 communication device may be a cellular phone or a hand-held wireless
22 device. Kalliola teaches that its wireless communication device is paired.
23 For example, you can see in the Figure that this particular device is paired
24 with keys and a wallet. The wireless communication device has a
25 touchscreen that's expressly taught by Kalliola, and that is the only -- one of

1 the embodiments relied on in the Petition. And the wireless communication
2 device of Kalliola already displays user selectable menu options on its GUI.

3 What Kalliola doesn't teach in detail is how the pairing between that
4 wireless communication device and what is being tracked is done including
5 the signals that are sent during that process.

6 To Kalliola, the Petition adds the reference Vauclair. So if you move
7 to DX-5. Vauclair's teachings are only relied upon for that signal's process
8 being sent to pair the wireless communication device, that mobile phone, to
9 whatever you're looking to track; keys, wallet, or things of that nature.

10 There are only two paragraphs of Vauclair that are at issue here. And
11 the question is just whether these two paragraphs and the disclosures therein,
12 when applied to Kalliola satisfy Limitation I(d)(v).

13 Here Kalliola teaches that -- sorry, excuse me. In Vauclair we have a
14 teaching that Vauclair has a display, and Vauclair's display has detailed
15 messages or menu options that it presents to the user. One of those menu
16 options is pairing menu option.

17 Vauclair teaches in Paragraph 30 that the device has user input 28
18 which may, for example, include a keypad and one or more scroll buttons
19 allowing the user to select from available menu options to send a signal to
20 the control circuitry. As that naturally reads, it's the selection of available
21 menu option which is what sends the signals. Those menu options are on the
22 display, which is the GUI in this case, of Vauclair.

23 If there is any doubt as to whether that selection is what causes those
24 signals to be sent, it is further clarified in Paragraph 36 of Vauclair which
25 explains that to initiate the process, that is the pairing process, the user may

1 select a pairing option from a menu using the user input 28. Again, pointing
2 to the selection of that pairing option, as what generates the signal.

3 Vauclair therefore teaches a user-selectable pairing menu option on
4 the display, on the GUI, and that selection of that pairing menu option on the
5 GUI through, in this case, user input 28, is what generates the pairing signal.

6 JUDGE McSHANE: Counsel, this is Judge McShane. Since this --
7 it's sort of, like, it's a little bit of a -- you're basically -- let me rephrase.
8 Here's the question. You're substituting the word "selection" for the word
9 "generation." So the Claim calls out that the pairing signal, and this is the
10 important part of the claim, I think, is "generated" by the graphical user
11 interface, okay? And looking at it, and you were kind of saying, well,
12 you're selecting and therefore you're generating. Is that what you're
13 saying?

14 MS. RAW: Yes. I would argue the natural reading here at that last
15 half of Paragraph 30. You're selecting. So it says to select the menu option
16 to generate. So the selection is what causes therefore the generation.

17 MS. McSHANE: Right. Here's the problem I'm having with that is
18 because the claim is very specific about what does the "generation," okay,
19 I'm using air quotes here. So that's, I think, that's the bugaboo. I think
20 that's what the issue here in this case is, is merely doing a selection where
21 actually the pairing signal may be electrically generated by software
22 somewhere else, does that suffice? So if you want to comment on that.

23 MS. RAW: Yes. So I would say two comments. So the first to your
24 last portion of that, looking at this claim in context, this limitation for
25 I(b)(iii) is performed by the processor operating in association with the
26 graphical user interface.

1 The graphical user interface you have your pairing menu options on
2 the display, and per these prior limitations, that graphical user interface is
3 already something that is displayed as a result of processor action. So these
4 are -- the GUI and the processor are already operating in conjunction in
5 order to meet the prior limitations of this claim as mapped. So it is that
6 selection at the graphical user interface, which is necessary for that signal to
7 be generated, and is what causes, for Vauclair's teaching at Paragraph 30,
8 that signal to be sent to the control circuitry, which then if you read later in
9 the claim, eventually additional signals go out to actually do the pairing with
10 your keys, or wallet, or whatever it may be.

11 So I think part of what your question may be getting at, was addressed
12 some in the briefing, and I want to turn to that. There was some distinction
13 made originally in the institution decision and also in Patent Owner's
14 response between, well is it the GUI that's generating the signal, or is it this
15 user input 28, which is in Vauclair keypad or a scroll button? Is that what's
16 generating the signal?

17 And what we tried to explain in our reply is that while Vauclair does
18 teach that it's the GUI that generates the signal because it's the selection of
19 the menu option that sends a signal, even if there's some distinction to be
20 made between is it the GUI generating the signal, is it this user input that's
21 generating the signal? That distinction completely disappears when this
22 teaching is applied in combination with the base reference, Kalliola.

23 So if you turn to Slide DX --

24 JUDGE McSHANE: Well, yes, before you get there.

25 MS. RAW: Yes.

1 JUDGE McSHANE: One thing, another point of distinction though, I
2 think, that was suggested in the institution decision at least, was that the
3 generation of the pairing signal is just not by the GUI and you may -- the
4 user may, you know, using the -- user button, the 28, to do a selection, but
5 nevertheless, the pairing signal is generated by something else, the control
6 circuitry, I think it's called in Vauclair. So do you have a comment on that?

7 MS. RAW: So in the institution decision, the suggestion was that it's
8 the user input 28 that would be generating the signal. And if the signal is
9 being sent to the control circuitry, per Paragraph 30, and because it's
10 something sent to the control circuitry, I don't believe that Vauclair teaches
11 the control circuitry would be what's generating the signal.

12 And this is with reference to DX-7 if you scroll, but the combination
13 of Kalliola and Vauclair's teachings, you still have Kalliola's wireless
14 communication device. It still has a touchscreen, it still has a GUI on the
15 touchscreen, it still has options that are being selected from that touchscreen.
16 It now has a pairing menu option as taught by Vauclair. When that pairing
17 menu option is selected on the touchscreen, that's what generates the pairing
18 signal in the combination, and that's what we mapped in the Petition.

19 So if you were going to distinguish a Vauclair, if you were going to
20 say, well was it the GUI generating the signal, was it the user input keypad
21 that's generating the signal? That distinction disappears in the combination
22 now that that GUI is on a touchscreen. And the selection is a user tapping
23 the touchscreen; directly tapping that GUI where that pairing menu option is.
24 And it's that tapping of that pairing menu option which is on the GUI which
25 is generating the pairing signal.

1 So there's no distinction to be made between are we saying the GUI
2 generates the signal. It's the user input that's generating the signal. In the
3 combination, it's the GUI on a touchscreen. That's what's generating the
4 signal.

5 I would also like to point out just in Vauclair as a whole. Vauclair's
6 user input 28, you've got a keypad, you've got scroll buttons, but those are
7 not dedicated buttons that have a certain use, for example, like a power
8 button, right? You hit a power button it turns it on or it turns it off. Without
9 that display also functioning in connection with my keypad and scroll
10 button, that user input is not on its own doing anything. That user input
11 requires that display. It requires the user to be able to select things from that
12 display, scroll, click this, select or, you know, keypad button as appropriate.

13 That combination that has to be used. So even if you're raising it as the
14 user input is what's generating a signal, that user input can never act alone in
15 Vauclair. It's acting with that display, that GUI, that pairing menu option.

16 So in combination you have a touchscreen, you have a selection of
17 pairing menu option on a touchscreen, that's what's generating our pairing
18 signal.

19 JUDGE KAISER: I guess I wonder what's the limiting principle
20 there? Like, if the user tapping on the display or on the touchscreen, on
21 some particular menu option, you know, instead of just kind of directly
22 going to some routine that generates a pairing signal or that creates a pairing
23 signal, let's say, and stay away from the word at issue here, if that user input
24 were to trigger some sort of electronic Rube Goldberg, you know, like, it
25 calls a module that calls a subroutine, that calls a function that, you know, on
26 and on and on before there's anything that we can say looks like a signal

1 that's sent from one device to the other to do the pairing. Where does the
2 generation take place? Is it every one of those steps? Is it somewhere along
3 the chain? Is it the first thing in the chain? And, you know, how long can
4 that chain get before that's no longer the case?

5 MS. RAW: Yes. And that's an interesting question. So two
6 thoughts. First is, in Vauclair, it teaches us in Paragraph 36 that the signal
7 we're talking about is what initiates the pairing process. We do have that
8 teaching.

9 The other thing I would look at is, what is the level of detail that the
10 680 Patent is providing about this pairing process? We cited some cases on
11 why this is appropriate to kind of look at that level of detail especially when
12 considering how a POSITA would have looked at these sorts of disclosures
13 in our reply on Pages 11 and 12.

14 If you look at Slide DX-8. This shows the only disclosures that are
15 discussing this pairing signal or related signals in the specification of the 680
16 Patent.

17 So there is a first embodiment. It has push buttons. And here, which
18 is at a Column 5, Lines 19 through 22, there's a disclosure that's the user
19 interface that wireless device generates. In this case it's a location request
20 signal. And it's generated by the user pushing one of the push buttons 10.
21 That's the extent of the detail given in that particular embodiment. It's the
22 push button is pushed, signal is generated which per, at least, *In re Epstein*,
23 which we cited; that's the Federal Circuit case at 32 F.3d 1559, that's a
24 suggestion that the same level of detail is appropriate in the references we're
25 citing because that's what a POSITA would have understood based on this

1 disclosure; if a POSITA would have understood what happens next and what
2 that level of signals is.

3 There's also an embodiment on the right side of this Slide. That's the
4 embodiment with a touchscreen. This is actually the only disclosure in the
5 entirety of the 680 Patent of generation of the pairing signal. Here the touch
6 interfaces 132 and 142, so those user interfaces are a touchscreen. And
7 those user interfaces generate a pairing signal in response to an indication
8 from a user to pair the devices. And there is no further detail provided in the
9 Patent.

10 JUDGE McSHANE: Counsel, on that, going to the right-hand side of
11 the Slide for me, that it's the user interface, and it specifically talks about the
12 user interface 132 or 142, which is to me as I read that, that's sort of a
13 physical -- or it is a physical device, right? According to this, it is actually,
14 and perhaps even the circuitry of that, is generating the pairing signal. And
15 that's in contrast to Vauclair or Kalliola, where there's intermediate
16 circuitry. So how do you address that issue? There you have a user
17 interface that's going to another processor, and then you get a pairing signal
18 going out.

19 MS. RAW: So I would say that to the extent that there is a distinction
20 or any sort of intermediate steps in Vauclair, that doesn't apply when you're
21 applying these teachings to a touchscreen that is displaying a GUI, which is
22 what Kalliola teaches, and that's consistent with the level of disclosure in the
23 680 Patent that a POSITA would have been familiar with how that would
24 work.

1 We also discussed that in the Petition of a POSITA's familiarity with,
2 you know, touching a button on a GUI and generating signals. That's not,
3 you know, the revolutionary part of this Patent to no one's surprise.

4 JUDGE McSHANE: Right. But it's the issue of the pairing signal.
5 I'm not going, you know, it's kind of not debatable that, you know, if you
6 have a touchscreen, you're going to, you touch it, you're going to generate
7 some signal. The question is, is it the pairing signal? That's the question.

8 MS. RAW: Yes. So I think there would be two questions. So is it the
9 pairing signal? And in this case, we're hitting a button to pair the devices,
10 it's a pairing-menu option that's expressly taught by Vauclair that's now on
11 the screen of Kalliola.

12 So after you hit that button, pairing is what happens. That's not
13 disputed that that's what selecting a pairing menu option would do. The
14 question that's being debated is, well is it the GUI that's generating the
15 signal? And based on how it's discussed in the 680 Patent disclosures where
16 your user interface is generated and the pairing signal response is the
17 indication from the user to pair. That's exactly the teachings that we have in
18 Vauclair when applied to a touchscreen like Kalliola's touchscreen.

19 At Slide DX-10, the primary error of Patent Owner's arguments and
20 their response and surreply is attacking the references individually.

21 So if you ask only, well does Vauclair teach generating a pairing
22 signal at the graphical user interface, we would say of course it does. That's
23 what Paragraph 30 is saying. But even that question is not the critical
24 question because it's those teachings applied to the touchscreen user
25 interface of Kalliola which is presented in the Petition, and this is
26 specifically one of the places where it is presented which is on Page 35

1 particularly pointing to the GUI exhibited on Kalliola's wireless
2 communication devices, touchscreen. That is what we map as would have
3 been generating the signals corresponding to the user's inputs, and it's in the
4 modified Kalliola wireless communication device that the signals generated
5 by the GUI from interaction at the touchscreen are then sent to the processor,
6 and the process continues and ultimately there.

7 DX-11, not to belabor this point, but that's -- I've again, pulled the
8 various Federal Circuits support for why you do have to consider the
9 combination and not whether one or the other reference individually teaches
10 your particular claim limitation.

11 Leading to DX-12, the other primary error that Patent Owner makes in
12 their briefing is they suggest, although not until the surreply, that if you were
13 to combine the teachings of Kalliola and Vauclair, what you would have is a
14 device where someone is using physical buttons in order to actually, you
15 know, do whatever it is that Vauclair's teaching and generate whatever
16 signals Vauclair's teaching, that's inconsistent with what the Petition maps.
17 The Petition only points to the touchscreen embodiments of Kalliola. And,
18 in particular, the Petition at Pages 20 and 21 explains why a POSITA would
19 have selected the touchscreen embodiment. We provided expert support at
20 Paragraph 154 of Exhibit 1003. By this time, more than half of the
21 smartphones in the world had touchscreens. This was not novel;
22 touchscreens is what was being demanded by consumers at the time, and we
23 also provided that support.

24 There was no contrary expert opinion suggesting that you wouldn't
25 use the touchscreen. This is simply something that was added in the

1 surreply in the suggestion that there's some sort of hindsight, why this is not
2 consistent with what the Petition actually teaches.

3 Are there any further questions from the Board?

4 JUDGE McSHANE: No questions from me. Thank you.

5 MS. RAW: Well then I will --

6 JUDGE BAER: One question, counsel -- can you hear me? This is
7 Judge Baer. Can you hear me?

8 MS. RAW: I am barely able to hear you.

9 JUDGE BAER: Is that better?

10 MS. RAW: Yes, much better. Thank you.

11 JUDGE BAER: Thanks. Can you give me an example of a GUI
12 that's generating a signal, where it wouldn't be the GUI generating the
13 signal, or something -- what would have to happen where you'd say, yes,
14 that now crosses the line where it's not a GUI generating a signal. Because
15 I'm trying to think of a --

16 MS. RAW: Yes.

17 JUDGE BAER: -- a GUI and how GUIs work, and GUIs do things,
18 and commonly a user interacts with it, and clearly there's software, there's
19 hardware, there are other signals, can you give me an example of a GUI
20 where a person interacts with a GUI, and that it doesn't generate a signal?

21 MS. RAW: So two thoughts, and the first may be slightly less
22 responsive, but that the first thing that came to mind was, you don't have to
23 have a GUI on the device. And, in fact, there are examples in the 680 Patent
24 of that. You could have just a button that says pair on it, right? So now I hit
25 the pair button, pairing happens, no GUI was involved. So that would be
26 one way that there wouldn't be a GUI generating a signal.

1 JUDGE BAER: Because there'd be no GUI?

2 MS. RAW: Because there's no GUI.

3 JUDGE BAER: But what I'm trying to get at is once you have a GUI,
4 doesn't that GUI generate signals? What kind of GUI doesn't generate
5 signals even though all GUIs use software, have drivers, have other things
6 going on. Does that make sense?

7 MS. RAW: That does make sense. And, you know, it's a question I'd
8 probably want to think about in additional detail, but I tend to think that, in
9 general, that is the function of the GUI; particularly a GUI on the
10 touchscreen. That signals are going to be generated from the user
11 interaction, and it's those signals that are going to allow the device to act on
12 the user's input provided at the GUI.

13 JUDGE BAER: Well let me try an example and tell me if you'd
14 agree. Perhaps if you had a GUI and the user did something but that wasn't
15 enough in the sense that the user had to do something else, some sort of
16 interaction with some other module that wasn't the GUI, that wouldn't be
17 the GUI generating the signal because, well there's something else that is
18 necessary that the user must do. Maybe that would be an example of the
19 GUI --

20 MS. RAW: Yes.

21 JUDGE BAER: -- not generating it because there's something else
22 necessary. So my question is would it be fair to say that it's your position
23 that if the user's interaction with the GUI is sufficient without additional
24 user action, that that is then the GUI generating the signal?

25 MS. RAW: I'm struggling a bit with the hypothetical only because
26 coming up with every implication is a little bit difficult. I do agree with you

1 though that, you know, if there was a scenario where I'm having to do
2 something at the GUI and perhaps that only unlocks the ability for, you
3 know, a pair button to now allow me to, you know, do the actual pairing
4 with my wallet, then, you know, perhaps that's a case where the signal that
5 we care about for this claim is not the signal that was generated by the GUI
6 in that hypothetical as far as a, you know, always ever, I tend to think live
7 that that sounds like it may be likely correct, but I would want to confirm.

8 JUDGE BAER: Thank you.

9 MS. RAW: Two maybe final points here. When it comes to this
10 combination of Vauclair's teachings applied to Kalliola's touchscreen and a
11 pairing menu option on Kalliola's touchscreen, whether that satisfies a claim
12 limitation is not directly discussed at any point by Patent Owner; they've
13 avoided that in every way that they can and not taken a position on whether
14 selecting a pairing menu option on a touchscreen can or would generate a
15 signal in this combination.

16 The other points that I'll make, just as a quick reminder. And this was
17 in the Petition at 6, the phrase a pairing signal, for the purposes of this
18 proceeding, we applied the definition that was proposed by Patent Owner in
19 the litigation. That definition is processor signal to initiate a wireless device
20 pairing sequence.

21 There's some acknowledgement there that GUIs do, you know,
22 operate through processors. That's expressly acknowledged in our earlier
23 limitations to the claim as well. But I did notice that certain slides, and the
24 slides about to be used by Patent Owner, do you refer to processor signals,
25 and do you kind of critique any reference to processor signals? I just want to

1 pre-emptively point out that processor signal is consistent with the definition
2 that they themselves proposed in litigation.

3 JUDGE McSHANE: Counsel, I'm going to apologize and I'm going
4 to push it back to your DX-7. Okay?

5 MS. RAW: All right.

6 JUDGE McSHANE: And this is the combination that you would just,
7 you know, you've been talking about here.

8 MS. RAW: Okay.

9 JUDGE McSHANE: And my question to you is, so here you're
10 saying, okay, so you have the Petition, it refers to Vauclair teaching a signal
11 generated by a graphical interface. You talk about that. You talked about
12 that earlier. But nevertheless, I just want to make sure about this. You're
13 relying on Kalliola's screen to the generation of the signal. Is that correct?

14 MS. RAW: Yes. It's Kalliola's device, Kalliola's touchscreen,
15 Kalliola's graphical user interface. It just has an additional pairing menu
16 option on it.

17 JUDGE McSHANE: Right. Okay. So then I look at your -- I think
18 it's your Petition 35.

19 MS. RAW: Okay.

20 JUDGE McSHANE: And this is I think your combination, okay? So
21 if you look in the middle of the page, you say a person of skill would have
22 found it obvious that in the modified Kalliola WCD, which is that wireless
23 communication device, the signal generated by the GUI, so that would be
24 the Kalliola GUI, from interaction at the touchscreen would be sent to the
25 WCD's processor. So the processor can interpret the user input and take the
26 appropriate action.

1 So my question on that is, again, you're relying on this processor and
2 here what it's receiving are user inputs, okay? So again, where I'm having
3 the trouble, is saying well these user inputs *per se*, is that a generation of a
4 pairing signal under the definition of what you're calling, you know, the
5 pairing signal that you just referred to?

6 MS. RAW: That user selection of that pairing option on the screen,
7 on the GUI, is the GUI generating the signal. That is the position. Just for
8 context for that passage you read, I do want to point out that it comes under
9 I(d)(iv), and I(d)(iv) requires the pairing signal to be generated in response
10 to a first indication from a user to pair, which is part of why that's being
11 discussed there. The indication from the user to pair is the user selecting
12 that pairing menu option, and as a result, those signals are then transmitted
13 to the processor, and then off the process goes to initiate the pairing process.

14 JUDGE McSHANE: Okay. All right. Thanks. I just wanted to make
15 sure of what your position was. Appreciate it.

16 MS. RAW: If there are no further questions, I'll reserve the rest of
17 my time to my rebuttal.

18 JUDGE KAISER: All right. So you've got, it looks like about 16
19 minutes left --

20 MS. RAW: Thank you.

21 JUDGE KAISER: -- for your rebuttal, and we'll hear from Patent
22 Owner. And if you wouldn't mind letting me know how much time you'd
23 like to reserve for rebuttal, and then you're free to start when you'd like.

24 MR. LeROY: Thank you, Your Honor. Yes, 10 minutes, please.

25 JUDGE KAISER: Okay.

1 MR. LeROY: May it please the Board. My name is John LeRoy with
2 the firm Brooks Kushman, on behalf of the Patent Owner, THL.

3 With respect to the graphical user interface limitation, I'd like to step
4 back a little bit because the analysis that we just heard from Apple's counsel
5 is really an analysis presented in the reply. And there's an issue which we
6 raised in the Patent Owner's response where we addressed specifically the
7 single error that Apple contends the Board made with respect to this
8 limitation.

9 On Slide 3, which is the first page of Apple's reply, Apple stated that
10 the Board erred by failing to consider the combination of Kalliola and
11 Vauclair. And that's incorrect because the Board, when it initially assessed
12 Independent Claim 9, considered exactly the combination of Kalliola and
13 Vauclair that Apple presented in the Petition.

14 And I would like to talk a little bit about what that interpretation of the
15 prior art was, and what specifically was presented to the Board as Apple's
16 Petition argument.

17 On Slide 5 we have Pages 33 and 34 of Apple's Petition. And
18 highlighted in red are its position on where exactly it contended the Board
19 could find a graphical user interface generating a pairing signal. There was
20 no confusion. Apple was consistent and clear that Vauclair discloses a
21 graphical user interface generating a pairing signal. That's all they said.

22 What is not in this analysis of this limitation is a statement that
23 Kalliola discloses a graphical user interface generating a pairing signal, and
24 Apple and its expert admit, in fact, Kalliola did not. Why? It analyzes
25 Vauclair.

1 Its Petition, if you look carefully on this chart, Chart 5, cites
2 Paragraph 168 and Paragraph 170 of Apple's expert declaration,
3 Dr. Buehrer's declaration, and I've recreated those two paragraphs here on
4 Slide 6, and they're unequivocal. Vauclair discloses a graphical user
5 interface generating a pairing signal.

6 Now in its institution decision, the Board said that was incorrect. The
7 Board was correct in saying that because it is now undisputed because
8 following the institution decision where the Board stated Vauclair does not
9 disclose a graphical user interface generating a pairing signal, Apple has
10 conceded.

11 Today, as shown on Slide 8 of Patent Owner's slides, Apple concedes
12 that the pairing signal in Vauclair is generated by a keypad. So they misread
13 Vauclair in the Petition, the Board plainly pointed that out, and Apple
14 conceded.

15 And this is a real problem for Apple because if Vauclair does not
16 disclose a graphical user interface for generating a pairing signal, and
17 Kalliola does not disclose a graphical user interface for generating a pairing
18 signal, we have no art, no prior art on this claim limitation.

19 Whether you take Vauclair by itself, Kalliola by itself, both of them
20 together, they will -- nowhere in that combination of references will
21 anybody be able to cite a passage that teaches a graphical user interface
22 generating a pairing signal because it just isn't there.

23 In its reply, Apple says, you know, it may not be there, but it's
24 nonetheless obvious. Well the problem they have is that's a reply argument;
25 it's not in the Petition, there is no assertion of obviousness in the Petition

1 based on this reading, which is Apple's concession of what Vauclair actually
2 teaches.

3 And Judge Baer you had asked, you know, what's an example of a
4 graphical user interface that does not -- that might not generate a pairing
5 signal? Well one very good example is Vauclair. And you don't have to
6 take my word for it; Apple's conceded it.

7 My laptop is another example. It has a graphical user interface, but if
8 I want to interact with my laptop I have to touch the buttons, I have to touch
9 my mousepad. But there are embodiments that have a graphical user
10 interface that does not generate the claimed pairing signal, and Vauclair's a
11 prime example.

12 JUDGE BAER: Counsel, is it your position that -- this is Judge Baer.
13 Is it your position that Vauclair is not a graphical user interface that
14 generates a pairing signal because it's not a graphical user interface, or for
15 some other reason?

16 MR. LeROY: That's correct. We'll just take a look at Patent
17 Owner's Slide 15. I've just captured the key --

18 JUDGE BAER: To be clear, when you said that's correct, you mean
19 it's not a graphical user interface? Is that correct?

20 MR. LeROY: That is correct, Your Honor.

21 MR. BAER: So my question was not can you give me an example of
22 something that is not a graphical user interface, but once you do have a
23 graphical user interface, can you give me a graphical user interface that
24 doesn't generate a signal?

25 That was more my question, not something that isn't a graphical user
26 interface, just to be clear. And if I could present that same question to you.

1 Could you give me something that is an example of something that is not a
2 graphical -- excuse me -- that is a graphical user interface, but is nonetheless
3 one that doesn't generate a signal?

4 MR. LeROY: Yes. And I apologize, I wasn't clear as well. So now I
5 understand your question. When I said Vauclair is not a graphical user
6 interface, I was referring to it's not a graphical user interface that generates a
7 pairing signal, so let me explain.

8 Vauclair does have a graphical user interface. It is Display 26. It is
9 graphical. And a user reads its output. But it is only output. It is not input.
10 We know in Vauclair, the input is the green box on the bottom which are
11 described as keypads. So Vauclair is an example of a device that has a
12 graphical user interface 26, but it does not generate the pairing signal.
13 Vauclair and Apple agree that's generated by user input 28. And that is
14 similar to my laptop in the sense that I have a display, which my display is
15 output only; it's not a touchscreen, and I have user input in the form of a
16 keypad. So that's an example of a graphical user interface that does not
17 generate the pairing signal.

18 And that's the rub. In Apple's Petition, it said again, on Slide 5, I
19 won't go back to it. Apple said repeatedly consistent with its expert that
20 Vauclair teaches a graphical user interface that generates a pairing signal,
21 and that's just simply incorrect. And the Board determined that's incorrect.

22 And when the Board denied Apple's IPR on THL's 381 Patent in its
23 entirety, the Board denied that Petition on that same basis. There is no prior
24 art in the record, in combination or otherwise, that discloses that claim
25 limitation.

1 Apple indicated in its reply and in its oral argument today, that
2 Dr. Buehrer's opinion of obviousness is un rebutted. That's not accurate for
3 two reasons. Number one is the reason we just covered, and I won't go over
4 that again. But number two, I've tried to capture on Patent Owner's Slide
5 14, our expert, Dr. Feuerstein's perspective of what the result would be if
6 Vauclair and Kalliola were combined. What Apple did indicate, and it's
7 true, both Kalliola and Vauclair disclose buttons.

8 And if you take a look at Apple's Slide 4, I show this. And just in
9 fairness, I added the green while I was sitting at my desk there. Green is not
10 in the original. I've added that just to -- for effect.

11 So this image, which I believe is Figure 5? Yes. Figure 5 of Kalliola
12 plainly shows navigational buttons just like Vauclair teaches. And our
13 expert testified that if a person were to actually combine Vauclair with
14 Kalliola to do the pairing, we would just use the keypad. There really is no
15 analysis in the record -- in the Petition specifically, Apple doesn't even
16 acknowledge that Kalliola has a keypad let alone explain why a POSITA
17 would not use the keypad but would use the touchscreen. That analysis is
18 one that just isn't present in the Petition. And our expert, when confronted
19 with this, testified that a POSITA combining the references would just use
20 the keypads as Vauclair teaches.

21 And I should also point out that in Apple's Petition at Page 36 it said,
22 quote there would be no change to the respective functions of either
23 Kalliola's WCD -- that's that device I showed -- or Vauclair's pairing menu.
24 In other words, in the Petition, Apple misreads Vauclair and combines it
25 with Kalliola and says we're not really going to change the references, we're
26 just going to combine them. That passage on Page 36 cites Apple's expert,

1 Dr. Buehrer, at Paragraph 175 where he says quote, where he refers to in the
2 combination quote Vauclair's pairing menu and processor signals close
3 quote.

4 And the point I'm trying to make here is that Apple's Petition assumes
5 Vauclair discloses a graphical user interface that generates a pairing signal,
6 they assume that incorrectly, and that is the basis for their combination.

7 And has the Board has already found, that was conclusory. The Board
8 found preliminarily that was conclusory, but Apple submits no supplemental
9 expert declaration, and its only evidentiary support for obviousness is the
10 same sentence the Board already found was conclusory of Dr. Buehrer,
11 because there is no record support for that claim limitation.

12 So does the Board have any questions it would like answered?

13 JUDGE KAISER: Not from me.

14 JUDGE McSHANE: No questions. Thank you.

15 MR. LeROY: Thank you.

16 JUDGE KAISER: So I think you have about 30, maybe 31 minutes
17 on surrebuttal. Okay. So rebuttal from Petitioner.

18 MS. RAW: Yes, Your Honors. Two points. First, as I already
19 discussed, if we're going to talk about the use of Kalliola's keypad, I do
20 want to specifically point out that Page 20 of the Petition quotes and says
21 that Kalliola has keypads, touchscreens, and a microphone, and then has a
22 paragraph of analysis on how a POSITA would consider this list of three
23 options. And to the extent it's a long list here is why we would have
24 selected the touchscreen, here's support from our expert, and so forth. That
25 was absolutely in our Petition despite the representations of Patent Owner.

1 And the second point I want to make goes to a question that Your
2 Honor Baer asked earlier which had to do with this idea of intermediate
3 steps after actually selecting the pairing menu option on the screen.

4 In this case, upon the selection of that pairing menu option on the
5 GUI, there is a signal that is generated that's ultimately resulting in the
6 pairing without further user interactions, without further intermediate steps,
7 such to the extent that is what's required that is what is taught by this
8 combination of references.

9 With that, if there are no further questions, I will yield.

10 JUDGE McSHANE: No questions, thank you.

11 MS. RAW: Thank you.

12 JUDGE KAISER: Thank you. All right. Patent Owner.

13 MR. LeROY: Very briefly, Your Honor. The discussion of
14 touchscreens in the Petition with respect to Kalliola was in the context of the
15 touchscreen limitation which is not a limitation we're disputing here today.

16 What was absent in Apple's Petition was an -- it's undisputed that
17 Vauclair discloses a keypad for generating the pairing signal. Apple now
18 concedes that.

19 When Apple combines Vauclair with Kalliola, Apple neither
20 recognizes the fact that Kalliola also teaches keypads and why would a
21 POSITA choose a touchscreen instead of the keypad that Vauclair uses and
22 that Kalliola clearly has. That analysis just isn't in the Petition. It could
23 have been, it just isn't there.

24 Thank you.

1 JUDGE KAISER: Thank you. Okay. Well thank you to both parties.
2 That argument, it was I think very helpful, and enlightening, and you've
3 served your clients quite well.

4 So I think the plan was to take a recess between the hearings if that's
5 still amenable, let's go ahead and do that. I'm not sure -- I haven't actually
6 done two back-to-back hearings with a recess between them here yet, so
7 hopefully we can figure out a way logistically to make this work, but let's --
8 given how short the argument was on that one, let's do 15 minutes, and we'll
9 plan to start at ten after the hour.

10 (Whereupon, the above-entitled matter went off the record at 11:55
11 a.m. and resumed at 12:12 p.m.)

12 JUDGE KAISER: Okay. It looks like, I think we've got everyone up
13 here on this side of the bench that we need. Do we have everyone back that
14 we need? Okay.

15 All right. So this is a hearing in IPR 2024-00399. Again, we'll hear
16 from Petitioner first, and you can reserve some of your time for rebuttal.
17 You'll have a total of 45 minutes. Patent Owner, you also have a total of 45
18 minutes and you can reserve some of your time for surrebuttal.

19 So with that I think, Petitioner, if you're ready just let me know how
20 much time you'd like to reserve and then start when you're ready.

21 MS. BAILEY: Thank you, Your Honor. I would like to reserve 15
22 minutes for rebuttal. My name is Jennifer Bailey. I'm from the law firm of
23 Erise IP. I have here with me my colleague, Lydia Raw, and in-house
24 counsel representatives from Apple, Tanya Manno and Diek Van Nort. May
25 it please the Board.

1 Thank you, Your Honors. Let's first turn to Petitioner's
2 demonstratives at DX-3. Claim 11 is the only remaining claim and dispute
3 in this IPR, and specifically limitations 11(d) and 11(e)(vii).

4 The focus of the dispute is on 11(e)(vii) so let's start there. 11(e)(vii)
5 recites a step of determining direction based on two requirements. The first
6 requirement is signal delay and the second requirement is rotation of the
7 mobile communication device as detected by an orientation sensor.

8 This claim language is broad. We're going to get into that. I first
9 want to note that the signal delay issue or recitation is not in dispute. The
10 only dispute is whether the Kalliola reference teaches determining a
11 direction based on rotation of the device.

12 There is no particular type of rotation claimed in 11(e)(vii) nor is there
13 any discussion of recitation of how the rotation of the device is used other
14 than determining direction.

15 I also want to note that Claim 11(e)(vii) does not recite determining a
16 particular orientation of the device. For example, pointing 15 degrees
17 southwest. And I want to stress that no particular orientation is claimed
18 because what THL's arguments in this IPR are attempting to do is replace
19 detecting rotation of the device, which is what is claimed, with determining
20 orientation of the device, which is not claimed. And as we all know, it is
21 important not to import limitations into what is otherwise broad claim
22 language.

23 Turning to DX-4. I'd like to quickly go over the Petition's mappings.
24 The Petition included two alternative mappings for Claims 11(d) and
25 11(e)(vii). The first rely -- and they both rely on the Kalliola reference.

1 The first is an embodiment from the Kalliola reference that is an
2 orientation sensor that is mapped to the claimed orientation sensor. And this
3 orientation sensor determines rotation of the housing sections.

4 The second Petition's mapping is Kalliola's teaching of a motion
5 sensor in the form of a gyroscope that detects rotational motion of the
6 mobile device.

7 I'm actually going to start today's discussion with the second mapping
8 relying on the gyroscope. It is a more streamlined argument. There is less
9 in dispute. Specifically, the first mapping relying on rotation of the housing
10 sections requires the Board to make a claim construction, whereas the
11 second mapping relying on Kalliola's gyroscope does not require claim
12 construction.

13 Let's turn to DX-7. So beginning with the second mapping relying on
14 Kalliola's gyroscope to detect rotation of the mobile device. Kalliola
15 teaches a motion sensor that is in the WCD with -- WCD standing for
16 wireless communication device. That motion sensor is in the form of a
17 semiconductor gyroscope chip.

18 Turning to DX-8. In the institution decision, the Board said that there
19 was no support for Dr. Buehrer's opinion that Kalliola's gyroscope that
20 detects motion is detecting rotational motion.

21 At Page 9, responsive to the Board's institution decision, Petitioner
22 provided arguments and evidence elaborating on Dr. Buehrer's opinions
23 from the Petition. Specifically, and what you're seeing on DX-9 is a
24 paragraph from Exhibit 1047, which is the supplemental declaration of Dr.
25 Buehrer.

1 Specifically, Dr. Buehrer opined that if a POSITA would understand
2 gyroscopes detect rotational motion, and he provided a factual basis relying
3 on background references to support that, that a fundamental principle
4 operation of a gyroscope is to detect rotation, to detect angular velocity.

5 Turning to DX-11, notably, in this IPR, THL does not rebut or dispute
6 that Kalliola's gyroscope detects rotational motion. THL concedes
7 gyroscopes detect rotational motion. What you see on DX-11 is an excerpt
8 from the Patent Owner's surreply, and it begins while a gyroscope can be
9 used to detect rotational motion.

10 So THL concedes gyroscopes detect rotational motion. What THL
11 instead complains about is that Kalliola's gyroscope is not detecting rotation
12 for the same purpose as claimed, and I'm emphasizing the purpose there.
13 And we're going to get to that. I'm going to discuss the purpose
14 requirement that THL is importing into the claim.

15 What we have here at DX-12 -- oh, and let me just quickly say why
16 THL is not rebutting; at least one reason, is at DX-12 we have THL's
17 infringement contentions from the parallel litigation. And in those
18 infringement contentions, you can see I put a red box down at the bottom,
19 where THL maps as the claimed orientation sensor, a gyroscope.

20 So if THL stood in front of this tribunal and said that gyroscopes
21 don't detect rotational motion, they would be making a consistent positions
22 and arguments with respect to what they're arguing in a different tribunal,
23 specifically, the district court.

24 So turning to DX-13. What we have here is substantial evidence that
25 supports gyroscopes detect rotational motion. I have cited a Google case.
26 This is also in our briefing. It's very similar facts to what we have here,

1 where the Board was reversed. The situation there was that the petitioner
2 argued that a reference taught a limitation, the patent owner did not dispute
3 that, the Board found otherwise, they were reversed by the Federal Circuit,
4 and the Federal Circuit said the substantial evidence was that the reference
5 taught the limitation because the Patent Owner did not dispute it.

6 Are there any issues or questions so far, Your Honors?

7 Let's talk about the second requirement of limitation 11(e)(vii). So
8 the first requirement is that the determination of direction is based -- let's
9 just say the first requirement is that there is rotation of the device is detected
10 by an orientation sensor.

11 The second requirement of 11(e)(vii) is that there is a determination of
12 direction based on the rotation of the device, and none of the sizing is based
13 on there.

14 So let's turn to DX-18 to talk about this. Kalliola's gyroscope
15 embodiment teaches that rotation of the device, as sensed by the gyroscope,
16 is used to pause or start direction estimation or to speed up or slow down
17 direction estimation.

18 So our Petition included lots of discussions of Kalliola. I only have
19 two excerpted here, but they're very focused and very express on how
20 Kalliola determines direction based on rotation. The first box I have in
21 Paragraph 84 on DX-18 is talking about how if the wireless device is
22 motionless, it's just sitting on a table somewhere, then direction estimation is
23 going to be paused because direction estimation is a power-hungry process.

24 But then, at the yellow highlighted section, when that motion resumes,
25 the DOA application control may resume the DOA estimation. And the
26 DOA—that is the direction of arrival—that we're talking about.

1 So Kalliola's expressly teaching that when motion resumes, and that
2 is motion that is rotational motion detected by the gyroscope, when that
3 motion resumes the DOA estimation resumes.

4 For the second mapping relying on the gyroscope embodiment, we
5 actually had what you would call two sub mappings because the other
6 embodiment from Kalliola is the second one I have on that slide. And this is
7 this -- you can call it the speed up slow down embodiment if you'd like,
8 where it says increased activity by the motion sensor. So again, the user is
9 now running instead of walking with their mobile device, may trigger a
10 configuration that increases the speed of DOA estimation.

11 So again, Kalliola's expressly telling us that it determines a direction
12 based on rotation of the device. Specifically, that determination of direction
13 is sped up based on the rotational motion detected by the gyroscope.

14 Let's turn back to DX-11. And recall I mentioned I was going to talk
15 about the purpose requirement that THL imports into the claims. THL
16 argues that Kalliola's use of detecting rotational motion is not for the same
17 purpose as claimed. And this is a running thing through their briefings. It's
18 at the Patent Owner response at Page 25, again at Page 26, and it said the
19 surreply at the sentence spanning Pages 11 through 12 and again at Pages 13
20 through 14. And every time I see this argument, I'm flummoxed by it
21 because there's no claimed purpose in 11(e)(vii) other than to determine
22 direction.

23 If rotation of the device is a trigger for direction determination, or
24 directly impacts the speed of direction determination, then the direction
25 determination is based on rotation of the device.

1 JUDGE KAISER: Is that necessarily true? I'd like to dig into that a
2 little bit more.

3 MS. BAILEY: Yes, Your Honor.

4 JUDGE KAISER: So I mean, I think, obviously, if you were
5 detecting some, or measuring some sort of variable that was used within the
6 direction-finding algorithm itself, I think everybody would agree that's
7 based on -- that's direction finding based on that variable. But at some point
8 you're sort of -- you get more and more removed from that, and as you do,
9 you move from -- at some point, I think, you'd probably move from "based
10 on" to "caused by," maybe, to eventually just "after," right? And where are
11 those lines drawn, I guess?

12 MS. BAILEY: The language of based on is broad. It does not
13 exclude the use of an intermediate or an additional step, or additional
14 functionality. Had Patent Owner wanted to use more narrowing language, it
15 certainly could have done so.

16 In our briefing we have cases cited including the Masimo case which
17 Patent Owner attempts to distinguish but the facts are very similar to what
18 we have here, where the Federal Circuit said based on is broad. As far as
19 where that line is that you get away, I don't think the Board actually needs to
20 answer that in this proceeding, it needs to simply determine is Kalliola's
21 gyroscope and what Kalliola teaches is that meaning the claim language.

22 Here, the one nice thing about determining unpatentability as opposed
23 to determining infringement, is we don't have to know the ultimate metes
24 and bounds of where that based on language is. We merely need to know
25 does Kalliola teach it.

1 JUDGE KAISER: Sure. I mean that's fair enough. But, I guess, I
2 mean, I could ask you the question, you know, which side of the line --
3 wherever the line is, which side of the line does Kalliola's teaching fall on,
4 but I think I know how you answer that. I guess the real question is why
5 does it fall on the side that you say it falls on and not the side that, thinks it
6 does not.

7 MS. BAILEY: So if we maybe just take a step back and kind of look
8 at the fair, plain reading of the claim, and then compare it to Kalliola.

9 In Kalliola we know that the direction to determination is directly
10 impacted by that rotational motion. I feel like that is a fair assumption but,
11 of course, feel free to correct me, Your Honor, if you believe differently.
12 But in Kalliola, we know that whether the device is moving or not is going
13 to directly impact rotation. I would actually argue that there is no
14 intermediate step in Kalliola, that it's very far on the line of being based on
15 as opposed to kind of what you're talking about about where is the line?
16 Because let's think of it from the opposite point of view. If the device is not
17 being rotated, in other words, not being moved, then no direction
18 determination is being performed. But as soon as you have rotational
19 motion, Kalliola tells us direction determination is performed. And similarly
20 for the speeding up, slowing down --

21 JUDGE KAISER: Okay.

22 MS. BAILEY: -- embodiment.

23 JUDGE KAISER: Okay. I think I understand.

24 JUDGE BAER: Ms. Bailey?

25 MS. BAILEY: Yes, Your Honor.

1 JUDGE BAER: This is Judge Baer. Isn't your argument there really
2 a sufficiency argument? In other words, I'm guessing you'd say -- can you
3 hear me well?

4 MS. BAILEY: Could you -- when you moved your microphone
5 down, I lost you just a little bit. Thank you.

6 JUDGE BAER: How about that?

7 MS. BAILEY: Yes, that's good. Thank you.

8 JUDGE BAER: So it sounds to me like your argument is a
9 sufficiency one that the rotation is sufficient for determining a direction,
10 whereas something like powering the device on is not.

11 So would you agree with me that powering the device on is not
12 determining -- the device does not determine a direction based on powering
13 a device on. While that is necessary, it's not sufficient. Would you agree
14 with that?

15 MS. BAILEY: I think that your question is getting close to what
16 Judge Kaiser was asking of where that line is. If we take the powering on
17 example, powering on does not cause the direction determination to be
18 performed. I think under your hypothesis, I'm assuming that your
19 hypothesis is that you power on and then something else would trigger our
20 hypothesis the direction determination to be performed. Is that a correct
21 understanding of your hypothesis?

22 JUDGE BAER: Right. Powering it on is necessary but not sufficient.

23 MS. BAILEY: Correct. In Kalliola, it is sufficient for the device
24 motion -- the rotational motion -- to be sped up or slowed down or started
25 and stopped, to then cause or result in the direction determination to be
26 performed.

1 So the rotational motion of the device serves as a trigger or a
2 condition precedent to use the language from the Masimo case for the
3 direction determination.

4 JUDGE BAER: So I guess I'm struggling with the line-drawing
5 problem. Would it be fair to say we can certainly draw a line that if
6 something is both necessary and sufficient, that that would be enough to be
7 based on, and that we would have that teaching in the prior art here?

8 MS. BAILEY: I apologize, Your Honor. Could you ask that question
9 one more time? I'm not sure --

10 JUDGE BAER: Sure. So if we have an act that is sufficient for
11 enabling determining direction, in other words, there's nothing else that the
12 user must do, that that would be enough such that the direction
13 determination would be based on that action?

14 MS. BAILEY: I would agree with that statement especially because
15 you could end the caveat that there's nothing further for the user to do,
16 which is exactly what we have in Kalliola. The direction determination
17 happens in response to the rotational motion.

18 JUDGE BAER: So here, it's enough to be -- if something is sufficient
19 to cause an outcome, that is enough to meet the based on language. Is that a
20 good line drawing -- is that a good line here? Not to say that nothing else
21 counts, but certainly if it's sufficient, that is good enough --

22 MS. BAILEY: I think --

23 JUDGE BAER: -- to be based on?

24 MS. BAILEY: I think that is fair. Again, I'm going to kind of push
25 back to where Kalliola and what Kalliola teaches as opposed to the broad

1 hypothetical. But, yes, I do agree that if an act causes and results in the
2 direction determination, then the direction determination is based on that act.

3 JUDGE BAER: That's helpful. Thank you.

4 MS. BAILEY: Okay.

5 JUDGE McSHANE: Counsel, on this one, just a quick one. You
6 know, on this line drawing, line drawing is becoming a theme here of this
7 hearing, but on the line drawing, why can't we look to the patent
8 specification to help inform us on that line drawing?

9 MS. BAILEY: That's a very good question, Your Honor. And the
10 problem with looking at the patent specification is that there is no
11 embodiment in the 246 Patent that matches the direction finding techniques
12 of Claim 11(e)(vii).

13 The Petitioner reply went systematically through every embodiment
14 that the Patent Owner identified. There's only two embodiments that
15 discuss rotation of the device whatsoever. And in both of those
16 embodiments, it actually requires a particular orientation, which is different
17 than rotation, to be fed back.

18 So there is no embodiment that matches the rotation and the direction
19 finding that is claimed. I'm happy to go through those embodiments in
20 detail if you would like, if that would be helpful for the Board?

21 JUDGE McSHANE: No, that's fine. Actually, is that in your papers?

22 MS. BAILEY: It is in our papers.

23 JUDGE McSHANE: It is. Okay. Okay. Appreciate that, that should
24 be sufficient. Thanks.

1 MS. BAILEY: If there aren't any more questions on the Kalliola
2 gyroscope embodiment, I'd like to move to the first mapping in the Petition
3 that relied on rotation of Kalliola's housing sections.

4 JUDGE KAISER: Okay.

5 MS. BAILEY: Let's turn to DX-23. So Kalliola teaches an
6 orientation sensor, it's actually called an orientation sensor, that is mapped
7 to the claimed orientation sensor in 11(e)(vii). And that orientation sensor is
8 built into the hinge of the Kalliola housing of the mobile device. And that
9 orientation sensor detects when the housing sections are rotated open.

10 Kalliola teaches, turning to DX-24, how the direction determination is
11 based on that rotation. And here, what I'd like to do is, first discuss how
12 Kalliola teaches determining direction based on rotation of the housing
13 sections and then come back to the claim construction issue which has taken
14 up a lot of the briefing in this IPR.

15 So in Kalliola, what happens is that when the rotation of the housing
16 sections is detected by the Kalliola orientation sensor, this configures the
17 appropriate antenna array for use in the direction of arrival estimation.

18 And I have the steps laid out here. What is actually interesting is
19 there's really no dispute between the parties on how Kalliola functions. We
20 seem to agree on how Kalliola functions. The dispute is simply whether that
21 meets the claim limitations.

22 But in Kalliola, when the housing is rotated to a particular orientation,
23 that configures an antenna array, and that antenna array, and then includes
24 how the measurements from the antenna will be used in order to determine
25 direction.

1 I also note that Kalliola Paragraph 86, kind of towards the bottom of
2 the column, discloses a mode where the current orientation of the mobile
3 device, if it's in a bad spot that's interfering with accurate direction
4 determination, it compensates by selecting a different antenna configuration.

5 So in Kalliola, the direction determination is based on rotation of the
6 device because rotation of the device configures the appropriate antenna
7 array for the direction estimation.

8 Let's then talk about the claim construction. Turning to DX-26, the
9 primary dispute on Kalliola's first embodiment is whether Kalliola's rotation
10 of the housing sections teaches rotation of the device as detected by an
11 orientation sensor.

12 In the institution decision, the Board said that rotation of the device
13 requires a rotation of the device as a whole. The Board used this
14 construction to then opine that Kalliola's housing sections are not rotated
15 because it's not rotation of the device as a whole.

16 At DX-27, THL expanded on this construction by importing a
17 negative limitation to exclude Kalliola's rotation of the housing sections.

18 And then at DX-28, Petitioner responded with the plain and ordinary
19 construction. In our plain and ordinary construction proposal, is that rotation
20 of the device as claimed means rotation of the device relative to any object
21 including itself.

22 This is not one of the special circumstances that the Federal Circuit
23 has identified for going outside of the plain and ordinary construction.
24 Patent Owner has not acted as their own lexicographer. The claim language
25 on its face is not ambiguous, and there is no prosecution history. And this
26 has not been argued otherwise.

1 So under the plain language of the claim, Kalliola teaches rotation
2 because Kalliola teaches rotation of the mobile communication device. And
3 I am emphasizing the antecedent be there because -- for two reasons. One,
4 that's what the claim recites, and two, Patent Owner emphasizes that -- in
5 their briefing, they never really explain what they mean by it, but they do
6 emphasize that antecedent bases these. So let's look at what the mobile
7 communication device is.

8 Claim 11 recites in its preamble a mobile communication device that
9 includes five electronic components: transceivers, memory, touchscreen,
10 orientation sensor, and processor. All of these electronic components are
11 mapped in the Petition as being in Kalliola's mobile device and there's no
12 dispute on that. So when Kalliola's housing sections are rotated, it is the
13 mobile device that is being rotated.

14 I want to emphasize on Claim 11 that there is no housing recited for
15 the mobile device. There is no form factor for a housing recited. For
16 example, a clam shell design, or a candy bar-style form factor. We need to
17 be cautious not to read into Claim 11 a housing room that has a particular
18 form factor, and a requirement that the entirety of that housing be rotated as
19 a single unit, which respectfully, Your Honors, is what the as a whole
20 limitation for construction is trying to do.

21 JUDGE KAISER: So I --

22 MS. BAILEY: Yes, Your Honor.

23 JUDGE KAISER: -- I wonder what's the limit there? I mean, at
24 some point you get to such a small or insignificant portion of the device, that
25 is the thing that's rotating with respect to the rest of the housing, rest of the

1 device, that it feels like it must, at some point, cease to be the device that's
2 rotating.

3 And I'm thinking, I don't know, like, it used to be that in mobile
4 phones you had, you know, like, sort of spinning offset weights that were
5 used for generating vibration, right? And if that's the thing that's rotating,
6 can you really say that the device is rotating?

7 MS. BAILEY: I appreciate the question. Remember we don't have to
8 decide the entire metes and bounds, and I actually don't think we need to
9 answer that particular question for this particular IPR to resolve the dispute
10 for a couple of reasons.

11 One, in Kalliola, it is the entirety of the housing and therefore the
12 entirety of the device that it's rotating; it's not just one part that is rotating.
13 And that's, again, not in dispute.

14 Second, I'm going to go back to what I just discussed of what is the
15 mobile device? We really have to be careful not to import kind of what we
16 would colloquially understand as a mobile device into the claim. The claims
17 tells you exactly what the mobile device comprises, and all of those
18 electronic components are in the Kalliola device that is being rotated.

19 So I would love to have an academic exercise to answer your
20 question, but I don't think we actually need to for this particular IPR.

21 I did just kind of mention, but I do want to emphasize, and let's turn
22 to DX-30 to discuss this, that even if we apply THL's construction, Kalliola
23 still teaches. So at DX-30 we have Dr. Feuerstein's opinion of what the
24 THL construction means. Dr. Feuerstein is THL's expert. And he said that
25 the plain meaning of an object rotating is the object rotating about its own

1 axis. But that is exactly what Kalliola's housing sections are doing. They're
2 rotating about an axis of the mobile device. And Dr. Buehrer opined to that.

3 Again, even if we talk about the entirety or the whole of the mobile
4 device, rotation of both of Kalliola's housing sections is rotation of the
5 entirety or the whole of the mobile device.

6 There was an earlier question about rotation relative to the 246 Patent.
7 And as I mentioned, our briefing has a long discussion about how the 246
8 Patent does not have any intrinsic support for THL's construction.

9 There's no embodiment that matches what is present in 11(e)(vii).
10 And I want to be clear here. We are not making a lack of written description
11 argument in front of the Board. I understand that is not the basis for
12 unpatentability. We're simply noting that there's no intrinsic support for
13 their construction. And I just note that because that's something that THL
14 has mentioned.

15 But the two examples discussing any rotation of the device -- I really
16 want to stress this -- are actually using the orientation of the device. The
17 orientation meaning pointing in a particular direction, like, 15 degrees
18 southwest. They're not simply relying on determining direction based on
19 signal delay and rotation of the device.

20 But even if every single embodiment matched exactly what THL's
21 proposing as their construction, Federal Circuit case law is clear, and it is
22 consistent that a claim term will not be construed to include a particular
23 limitation even if that particular limitation is described in every embodiment
24 that's claimed -- or excuse me, in a specification. And that Federal Circuit
25 case law is provided at the Petitioner's reply at Page 8.

1 So what THL is asking the Board to do here is inviting reversible
2 error and arguing for a claim construction that is not supported and has no
3 basis in the claim language of the claim.

4 And I seem to be right on time, so if there are no further questions, I
5 will save my remaining time for rebuttal.

6 JUDGE KAISER: I have nothing further.

7 MS. BAILEY: Thank you, Your Honors.

8 MR. LeROY: Well now, good afternoon, Your Honors. I would like
9 to also reserve 10 minutes for rebuttal, please. And just so we had a
10 complete transcript, may it please the Court, my name is John LeRoy from
11 the firm, Brooks Kushman, on behalf of the Patent Owner, THL.

12 I just want to step back a little bit and just start with the 246 Patent
13 and share with you the embodiment that explains the role and the
14 improvement caused by the implementation of an orientation sensor in the
15 context of direction finding, maybe just start there with some specs that's
16 captured in the claim. But I am sharing Patent Owner's demonstrative,
17 which was at 2004, Slide Number 4, and I'll try to make this as big as I can.

18 But basically, we have an excerpt. I've broken into two halves, but
19 it's an excerpt from Column 11 at the 246 Patent. And on the left is an
20 embodiment of the invention, in this case, not the claimed invention, trying
21 to locate something with a device based on signal strength alone, and the
22 null pattern without an orientation.

23 And in that embodiment, the specification explains the user has to sort
24 of meander and go wherever the indication says the signal is the strongest.
25 And that's okay. You can find your car keys that way. But this excerpt also
26 describes a better way which utilizes an orientation sensor. And I guess I

1 could have highlighted the whole paragraph because the second sentence on
2 the right-hand side of Slide 4 is just as important as the first half, but what it
3 does is it -- the orientation sensor allows the algorithm to know where in
4 space the hand-held device is pointing. And that's very helpful because
5 once the device captures the signal strength in the antenna's null pattern, it
6 can compare those two. And instead of having you kind of meandering
7 around your house aimlessly looking for the strongest signal, now, as
8 reflected in the very last line of the paragraph on the right, it could just point
9 to your car keys. And that's the improvement. And we could talk about
10 what a person skilled in the art would read from this, and glean from it, there
11 are other examples in the specification, but the Patent is very clear. Our
12 client was very clear when he built these things about the advantage of
13 actually having this orientation sensor in the device.

14 And I just want to start there because this is an improvement. It's not
15 the only improvement captured in the challenged claims, but it's definitely
16 one of them, and it's our focus today.

17 I'd like to talk about based on. And I'm going to start where Apple's
18 counsel started with the second embodiment and then come back with
19 Kalliola's first embodiment.

20 We know exactly what Kalliola's direction finding is based on
21 because Kalliola tells us. It's quite clear, and I have here on the screen, this
22 is Kalliola. It's Exhibit 1004, Paragraph 0060, and Kalliola explains that the
23 direction of arrival is resolved quote based on the phase and possibly
24 amplitude differences of signals received by the elements of an antenna
25 array. It's a Bartlett Beamformer. It's not magical. We know what it is,

1 and we know what it's not. What is not disclosed in this Paragraph is
2 utilization of any sense of rotation.

3 So Kalliola tells us what it bases its direction finding on. Kalliola also
4 tells us that it's not based on direction -- I'm sorry, not based on rotation.
5 Kalliola, Figure 12 -- and I'll just use -- Apple has a demonstrative. It has
6 Figure 12 at Slide, I think it's DX -- here it is, DX-17. This is Kalliola
7 Figure 12. And this figure tells us that rotation is not an input to the
8 direction traveler.

9 In this example -- and I'm not going to read all of the blocks, but I am
10 going to talk about the blocks that use the gyroscope output. The gyroscope
11 output as we know now, is part of this power save mode 1226. And when
12 you're in this power save mode, the gyroscope is looking to see if your
13 device has stopped moving. And if the device, which is this motion detected
14 -- well, it's box 1230 shown in blue with diamond -- if no motion is detected
15 by the gyroscope, the DOA algorithm is disabled. That's what it says at
16 1232. And by disabling the DOA estimation it therefore saves power.
17 That's what this embodiment's all about.

18 We know that the gyroscope is not an input to the direction
19 determination because the direction determination by the time you get to
20 power save mode, is already done. In the orange box, 1222, the direction of
21 arrival estimation is performed, and in box 1224, it's displayed to the unit.
22 And this makes sense.

23 Before you're going to enter a power save mode, because your device
24 stopped moving, of course you're first going to figure out where is the
25 remote device that I'm looking for. And that's exactly what Figure 12 says.
26 First, you do the estimation. Find out, based on the Bartlett Beamformer,

1 not based on rotation, where are your car keys, and then display that to you -
2 - to the user. And if and only if the user's activated the power save mode,
3 then we're going to see the device come to a rest, and if it comes to a rest,
4 we're just going to stop the direction of arrival calculation.

5 And that tells us, and if the only instance in this entire patent where
6 the gyroscope is used, and it's used after the direction of arrival is
7 determined. And one of the -- I tried to write down as many of the
8 variations in terms that I heard, variations of based on, we had caused by,
9 necessary, sufficient, and also active.

10 The reality is the gyroscope is used only after direction is already
11 determined.

12 JUDGE KAISER: What about Box 1234 on that diagram there on
13 Figure 12, which talks about when motion is detected? That's presumably
14 by the gyroscope. It displays the directional information and updates the
15 DOA estimation, right?

16 MR. LeROY: Yes.

17 JUDGE KAISER: So I mean, I take your point that, you know, on
18 this flowchart, the use of the gyroscope is after the box, it says begin DOA
19 estimation, but before the box it says update DOA estimation.

20 MR. LeROY: That's where you're right about that. But it's done. So
21 it's already displayed in Box 1224. It would be updated if you're in this
22 power save mode, you stop, and then you start again, motion. It would be
23 updated.

24 But what it's really telling us is not that the direction is determined
25 based on rotation, it's saying it's an on-off switch. The gyroscope is
26 effectively an on-off switch for the direction of arrival outward. And I

1 thought I heard the question asked and the answer presented, that an on-off
2 switch, no one would ever say direction is based on the switch being -- the
3 direction determination is made based on the power being on, okay?

4 A Geiger counter does not measure radiation based on someone
5 having just switched it on. And when I step on my scale in the morning, no
6 one would say it's measuring my weight based on me having to turn it on,
7 it's, of course, measuring my weight based on the force on the transducer.

8 Here Kalliola is very clear about how it determines direction and that
9 the role of the gyroscope is effectively an on-off switch after the initial
10 determination has already been made. And it's obviously THL's view that
11 that does not satisfy the claim language which express -- you know, the
12 claim doesn't only require a rotation detection, it requires a direction
13 determination based on the detected rotation. And that's getting back to the
14 embodiment where I started so that you can have an arrow and not have to
15 meander.

16 I'd like to turn now to the claim construction issue, which is a
17 precursor to the first Kalliola embodiment, if that's okay? But do Your
18 Honors have any questions before I do that?

19 JUDGE KAISER: No. Thank you.

20 MR. LeROY: The big rub on the competing claim constructions is
21 the source of the evidence, at least in my perspective. Here in Slide 6 I've
22 just done what Phillips tells us to do, we start with the claims and look at the
23 specs. The claims are very consistent, you know, a mobile communication
24 device is not recited just once, it's recited multiple times in Claim 11, and
25 you just can't -- Apple has not pointed to any language in Claim 11, and I
26 don't think there is any language, it's just that it's anything less than the

1 device as a whole, which I should note is the interpretation the Board had, at
2 least preliminarily, in its institution decision.

3 And then we go to the specification. And the specification has a
4 variety of examples of finding things, and, you know, having to determine
5 the orientation of the device, like the claim, there is no example of two
6 elements of the hand held -- the rotation of one element of the mobile
7 communication device being rotated with respect to another in the direction
8 finding context. It's just a unitary device, at least as described in the spec.

9 There is one example that Apple points to, and I've captured it here on
10 Slide 8. They correctly note that the Patent describes in an example of a
11 hand-held wireless device in netbook, and they say -- Apple says a netbook
12 has two halves, and it does. But nowhere does the patent say we're going to
13 monitor the relative rotation of the two halves of the netbook and somehow
14 provide that as an input to the direction finding outlook. So there just is no -
15 - the 246 Patent has no example of anything less than the device as a whole
16 being monitored for rotation which is then used.

17 So we believe based on the claims and the entrance of record our
18 proposed construction is sound. We turned -- you know, I looked at Apple's
19 brief and said, well what do you have? You know, what does Apple have to
20 support its claim construction which is this -- which -- I think Apple's
21 construction includes our construction. I think they would say the device, as
22 a whole, is a part of what the claim captures. But they also want this
23 limitation of that construction that says it can be at one component of a
24 device relative to another component. And the source of that is Apple's
25 expert, and it's just a conclusory statement; there's no intrinsic support for it.

1 So in the sort of balance of the intrinsic versus the extrinsic evidence,
2 we think we prevail on the claim. And that's important because if THL is
3 right that rotation of the device is the device as a whole, Kalliola's first
4 embodiment becomes largely irrelevant because I don't think there's any
5 dispute that the first embodiment detects rotation only at one component
6 relative to --

7 JUDGE KAISER: What about the argument that Petitioner makes
8 that when you've got something like a clam shell phone, or a netbook, or,
9 you know, something that where you got two substantial halves of the device
10 that sort of rotate relative to one another, that that is the entire device
11 rotating. It's not the entire device rotating in the same direction perhaps, but
12 it is, you know, half the device rotating and the other half.

13 MR. LeROY: And it is. It is. If two halves of a device are rotating, I
14 suppose the device could be rotating in the abstract, okay? But we're not in
15 the -- you know, with respect to Kalliola, it -- all it's trying to do is figure
16 out what am I going to be today? Am I going to be a device that's open?
17 Am I going to use the camera in a camera setting mode? Which antennas
18 am I going to use? And what calibration factors am I going to use? So I
19 don't think Kalliola ever discloses an embodiment that somehow looks at the
20 relative rotations and provides that as an input for the direction
21 determination.

22 Figure 9B in Kalliola is very similar to Figure 12 that we went over
23 before for the second embodiment. But the first embodiment, Figure 9B,
24 shows us that what Kalliola does determine when it's trying to identify itself,
25 is not an input to the DOA estimation, right? Kalliola has the DOA
26 estimation. It's in Box -- I believe that says 926. That's right. And we see

1 where the orientation information is determined and provided, and it's not
2 the DOA estimation, it's this identity box in terms of the antenna
3 calibrations, 934. And those, in turn, are provided with the DOA estimation.

4 So we sort of know -- we know how Kalliola's finding things, we
5 know where the gyroscope information is going and how it's not an input to
6 the estimation, and we know that these, you know, section rotation
7 determinations, we know where that's occurring, and that that also is not an
8 input for the Bartlett Beamformer, which doesn't use rotation determination.

9 JUDGE KAISER: What about on that figure there? You do have,
10 going into the DOA estimation box, antenna calibration vectors that are, I
11 think, it's reasonable to say they're based on whether the device is in its sort
12 of open mode or closed mode, one twist mode versus another twist mode,
13 whatever the sort of in sensors are thinking about. I mean, it does seem like
14 that's not a huge stretch to get to well now our DOA estimation is based on
15 whether the device is rotated open or rotated closed?

16 MR. LeROY: Well the first thing I'd say is, as a whole matters.
17 Because if we're right on as a whole, this embodiment doesn't reach the
18 claim. But even if it did, what I believe you're raising is this cascaded based
19 on.

20 And you could say by that logic, you could just keep going and going,
21 right? It's based on the power. It's based on the switch being on. You
22 know, where do you draw that line? Well for me, it doesn't have to be a
23 hypothetical. I can draw the line because Kalliola, it actually uses the term
24 based on. It says it determines direction based on phase angle and signal
25 strength.

1 Here the DOA estimation is based on an antenna calibration vector,
2 not based on direction. Now was the antenna -- I'm sorry -- not based on
3 detected rotation. Was the detected rotation determined based on -- I'm
4 sorry -- does, is the vector selected based on rotation? Yes. That's what it
5 says and I don't deny that. But that's not what our claim says. You know,
6 our claim doesn't say determining direction based on an antenna calibration
7 vector. If it did, Kalliola would disclose it.

8 So when you based on, based on, based on, we know that the actual
9 algorithm has not laxed the input from the orientation as claimed, because
10 our based on is direct. Like it's, we know where the null pattern is, you
11 know where the device is in space, you compare the two, we provide an
12 area.

13 Can I just have a moment here to see --

14 JUDGE KAISER: Sure.

15 MR. LeROY: Okay. I think that's it. I mean, ultimately, because
16 neither Kalliola's first embodiment nor its second embodiment teach
17 determining a direction based on the detected rotation of the mobile
18 communication device that was failed to establish the challenged claims that
19 led up to 19 on that. Thank you.

20 JUDGE KAISER: Thank you. I think you've got 24 minutes left on
21 surrebuttal.

22 MS. BAILEY: Thank you, Your Honors. Just a couple of small
23 points for the rebuttal. I'm just going to allow a discussion on the "based
24 on" language. I can feel the Board's struggle with trying to figure out the
25 metes and bounds of that are.

1 I don't think we actually truly need to determine how many
2 intervening steps would the language suffice for based on because in
3 Kalliola—the most we have is perhaps one intervening step perhaps going
4 from opening the housing sections to the antenna calibration vector to the
5 DOA estimation. That's one intervening step.

6 And so the broad language of based on, we covered that. This is not a
7 situation where there's ten different steps between a trigger and the direction
8 determination.

9 For the gyroscope embodiment it's even more direct. In the
10 gyroscope embodiment, the faster the device moves, and therefore based on
11 the rotational motion, the more the DOA estimation is going to speed up.
12 That is a direct cause and effect, Your Honors.

13 The sensing on the powering or I should say, the starting the direction
14 estimation and pausing it. So the pausing and the resuming is based directly
15 on the rotation of the device. So we don't even actually need to get to an
16 analysis of whether the based on language allows for multiple intervening
17 steps.

18 I'll also go back to the Federal Circuit case law that's cited in our
19 brief where the Federal Circuit says the based on claim language is broad.
20 And it does not exclude intervening steps.

21 Finally, I want to note Paragraph 80. And this is at DX-16 of our
22 slides. Paragraph 80 of Kalliola says that all of the modules in the DOA
23 estimation operate to work together to determine a relative direction.

24 And as the Your Honors correctly pointed out, in the flow chart of
25 Fig. 12, the DOA estimation is updated. We don't disagree that an initial
26 DOA estimation is performed in the gyroscope embodiment, but then

1 Kalliola Fig. 12, along with the other portions cited, Paragraphs 81 and 82,
2 expressly teach that that DOA estimation is then updated. So the direction
3 of determination is again performed based on the rotation.

4 Finally, I'm going to make a point to where Patent Owner's counsel
5 started at their discussion. And they pointed to the 246 Patent at Column 11,
6 Lines 21 through 52. And in this embodiment, I believe I heard Counsel
7 agree that this embodiment does not match what is recited in Claim
8 11(e)(vii), because then this embodiment, direction determination is based
9 on signal strength, not signal delay as claimed. This is also one of the
10 embodiments where there is a discussion of rotation of the mobile device.

11 If you'll recall, I mentioned earlier that we need to be very mindful
12 that Claim 11(e)(vii) does not recite determining direction based on a
13 particular orientation. And what is happening in that particular embodiment
14 at Column 11, is that the user has to hold the phone in their hand and rotate
15 an entire 360 degrees to find the null pattern in the antenna. And then the
16 system uses where that null was detected, the orientation for that null, to
17 feed it into the direction of determination.

18 So even the rotation doesn't directly influence the direction
19 determination. But regardless, it doesn't match the embodiment recited in
20 Claim 11(e)(vii). It requires a 360 degree rotation of the mobile device
21 which Dr. Feuerstein, THL's expert, says is not required by the claim. This
22 is also in our briefing, in the Petitioner reply. He says that the Claim is met
23 by as little as .5 degree of rotation.

24 So the end result is there's no embodiment that matches in this Claim,
25 and therefore no intrinsic support.

1 If there aren't any other questions? Thank you, Your Honors. I
2 appreciate the time.

3 JUDGE KAISER: Thank you very much.

4 MR. LeROY: Very briefly, Your Honor, if I may? I did not address
5 what Petitioner raised, again, which is the sort of the secondary Kalliola
6 second embodiment which is increasing or decreasing the frequency with
7 which the direction-finding algorithm is performed, and I would just like to
8 address that now.

9 From our perspective, that's just like disabling it—disabling the
10 direction finding algorithm when the device is at rest. It's an on-off switch.
11 It's determining when we're going to do direction finding, when we're not
12 going to do it, and how quickly we're going to do it.

13 But those embodiments can't change how the direction is actually
14 determined which Kalliola is express in Paragraph 60 -- it's actually 60
15 through 63 -- and specifically when it does the direction determination, what
16 it is based on, and that is not based on any detected rotation of the device.

17 There have been a variety of written description-type arguments that
18 have been made. I did not address them earlier. And all I'll say, you know,
19 what Petitioner has stated in the briefing and today is they don't find a
20 paragraph that tracks Claim 11, specifically. And that's, of course, whether
21 that's true or false is not specifically relevant to today and what this panel is
22 trying to determine which is validity, but I will say that as I tried to be
23 transparent with the Board, you can determine direction several different
24 ways. You can use signal strength, you can use signal delay, you can use
25 time of flight, you can use all three, and the Patent says that.

1 So the fact, when we tried this case to the extent the written
2 description becomes an issue, we are very comfortably going to demonstrate
3 that the inventor possessed the full scope of the Claim at that point to the
4 very aspects of this specification.

5 So I didn't want it to be viewed as a dispute. I mean, the passages say
6 what they say, but we're very confident that the invention is adequately
7 described.

8 Unless Your Honors have any questions, I will conclude the Patent
9 Owner's argument.

10 JUDGE KAISER: Thank you very much. Okay. So first of all, let
11 me say thank you to all of the advocates who have presented today and
12 everybody who came along with you.

13 This has been extremely helpful and it helps to crystallize the issues,
14 will help us, certainly, in deliberating and writing a decision on both of these
15 cases.

16 Before we adjourn, let me just ask the court reporter is there anything
17 that you need spellings on or clarification of?

18 COURT REPORTER: No.

19 JUDGE KAISER: No. Okay. All right. Well then, I think in that
20 case we can adjourn. Thank you very much.

21 (Whereupon, the above-entitled matter went off the record at 1:13
22 p.m.)

IPR2024-00398 (Patent 11,265,680)

IPR2024-00399 (Patent 11,350,246)

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