

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROCHIP TECHNOLOGY INC.,

Petitioner,

v.

APTIV TECHNOLOGIES AG AND APTIV TECHNOLOGIES LIMITED,

Patent Owner.

PGR2024-00011
Patent 11,681,643 B2

Record of Oral Hearing
Held: April 17, 2025

Before JEAN R. HOMERE, TERRENCE W. McMILLIN, and
JOHN D. HAMANN, *Administrative Patent Judges*.

APPEARANCES:

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The above-entitled matter came on for hearing on Thursday, April 17, 2025, commencing at 1:00 p.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P R O C E E D I N G S

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USHER: All rise.

JUDGE HOMERE: You may sit. Good afternoon. We are convened for all arguments in PGR2024-00011, challenging Claims 1 through 15 of US Patent Number 11,681,643 B2. Petitioner is Microchip Technology, Inc. Patent Owner is Aptiv Technologies AG. I am Judge Homere. Also appearing are Judge McMillin and Judge Hamann. Let us get started with appearances of the representatives who will be arguing today for both parties. If anyone else is attending with you remotely today but will not be speaking, please identify them as well. For example, please state if your client is attending. We'll start with appearances for Petitioner. Thank you.

MR. JENSEN: Thank you, Your Honor, this is Travis Jensen, lead counsel for Petitioner Microchip from the law firm Orrick, Herrington and Sutcliffe. And I have with me today Jared Crop, who is a Microchip client representative.

JUDGE HOMERE: Now Patent Owner.

MR. BRAUSA: Good afternoon, Your Honors. Adam Brausa from the Morrison Foerster Firm, lead counsel for Patent Owner Aptiv Technologies. I'm joined by my colleagues Andrew Jones and Eric Weiner in person and remotely joining us is Brian Blumenkopf, also from the Morrison Foerster firm. Our client representative who was here yesterday, Paul Margolis, extends his regrets. He unfortunately had to fly home yesterday for a family funeral.

JUDGE HOMERE: Before we begin to remind the parties that guidance for this hearing was provided in our oral hearings order of March

1 18th, 2025. As we inform the parties in the order of March 18th, each side is
2 given up to 30 minutes total time for all argument. Petitioner will proceed
3 first to present its case as to the challenged claims of the challenged patent.
4 Petitioner may reserve time for rebuttal.

5 Thereafter, Patent Owner will argue in opposition to Petitioner's case.
6 Patent Owner may also reserve time for sur rebuttal. Absent special
7 circumstances, Petitioner may reserve no more than half of its time for
8 rebuttal and Patent Owner may reserve no more than half of its time for sur
9 rebuttal. Remind the parties that Petitioner has the ultimate burden of
10 establishing patentability by preponderance of the evidence.

11 Additionally, we provide the following reminders. First, recordings of
12 any kind during PTAB hearings are strictly prohibited. The court reporter
13 will provide, in due course, a full transcript of the hearing that will become
14 part of the record in the proceeding. To ensure that the transcript of this
15 hearing is clear, we ask you to identify yourselves before speaking, to speak
16 directly into the microphone, and to identify specific slide numbers,
17 numbering in figures, and any other pertinent information when referring to
18 demonstratives. Please pause a few seconds after identifying it to provide us
19 time to find it. Please mute yourself when not speaking. If at any time
20 during the proceeding you encounter any technical difficulties you feel
21 fundamentally undermined your ability to adequately represent your client,
22 please let us know immediately.

23 Second, we have reviewed the entire record, including demonstratives
24 and we are prepared today with questions. These questions and answers will
25 help us to decide each the issues in the case. In the interest of fairness and
26 due process, we must limit our consideration to the arguments and evidence

1 already presented in the record. Please know that we are paying close
2 attention to your arguments and carefully considering the case. And if we
3 interrupt you, I apologize in advance, but we do so to be able to ask you
4 questions that may be essential to our resolution of the issues or to keep the
5 case on track with time.

6 Third, please make it clear which challenges and claims you are
7 addressing at all times. We ask that the parties hold any objection regarding
8 a party's arguments until it is their time to speak. I will maintain a clock and
9 endeavor to give each party time warnings as you get near the end of your
10 allotted or pending argument and at the end of any reserved rebuttal time, it
11 would be helpful for the parties to also track their time.

12 Finally, please be aware that members of the public may be listening
13 to this oral hearing. Following their hearing, please confer with the court
14 reporter to ensure that no question regarding spelling of names or terms are
15 required. Are there any questions? Okay. Petitioner.

16 MR. JENSEN: May it please the Board. Travis Jensen for Petitioner.
17 I'd like to reserve 10 minutes for rebuttal, and I may eat into that a little bit
18 depending on how the argument proceeds. At a high level, there are, say,
19 two categories of topics I'd like to --

20 JUDGE HOMERE: Okay, so rebuttal 10 minutes.

21 MR. JENSEN: I'll wait for you to set the clock.

22 JUDGE HOMERE: Okay. You have 20 minutes.

23 MR. JENSEN: Thank you. So there are, at a high level, there's two
24 categories of topics I'd like to address today. Given that this is a PGR
25 proceeding, there's a number of 112 issues. And then there are also a couple
26 of obviousness issues that arise in the context of the 643 Patent as well, time

1 permitting. I'd like to get to those as well. Before I jump to those, there is
2 one case that I'd like to call to the Board's attention, and that case is Sage
3 products v. Stewart. That is Federal Circuit case number 2023-1603. And
4 this is a case that just issued in the last day or two. And we had discussed
5 yesterday the various POSITA issues and whether it would be appropriate
6 attribute to a POSITA, you know, knowledge of certain USB standards.
7 And to the extent there was any question about the propriety of such an
8 approach, I believe the Federal Circuit has definitively answered that now, in
9 the Sage Products case.

10 And I'll cite the Board to just one passage in this case, it's footnote
11 five, but this provides a good summary of a much larger discussion on I
12 would submit this exact issue. And here the Federal Circuit said, contrary to
13 the Patent Owner's suggestion, the Board's reference to a particular industry
14 standard is not improper in the context of analyzing whether the prior art
15 reference anticipates the claims. And the same would hold true for
16 obviousness, of course, as well. The Court goes on to explain that invalidity
17 analysis is undertaken from the perspective of a POSITA and therefore must
18 take account of the knowledge of a POSITA. As we have already held, the
19 Board had substantial evidence for its finding that a skilled artisan would
20 have known of UK regulatory standards and would have carried that
21 knowledge with her when examining each of the challenged claims. And I
22 would submit that the same is true here in the context of the USB standards.

23 I don't want to belabor that point and I want to turn to the 112 issues
24 at this point, since the Board, I think, had indicated an interest yesterday in a
25 number of the 112 topics. So, if we turn to slide number 258, we provide a
26 summary of the various 112 grounds. So, there's five grounds, 112 grounds.

1 Four of them relate to indefiniteness. Those are grounds three through six,
2 and ground seven is a written description challenge. And given where we
3 left off at the end of the hearing yesterday with I believe it was Judge
4 Homere asking about the signal detection circuit and asking opposing
5 counsel, you know, where is that discussed or described in the Patent? I'd
6 like to start with the various signal detection circuit terms. They're subject
7 to the 112 arguments, and then sort of work from there. And to do that, I'd
8 like to start with actually the ground number seven, which is the written
9 description ground, because that goes, I think, hand in hand with the Board's
10 question about, you know, what's in the specification on this.

11 So, if we turn to slide 290, let's turn to slide 291. The claim element
12 that's at issue here recites the USB routing switch includes the signal
13 detection circuit. And of course, the test for written description. Right on
14 slide 292 is -- or the Ariad case says that the hallmark of written description
15 is disclosure. The test requires an objective inquiry into the four corners of
16 the specification. The only passage that my esteemed colleague on the other
17 side could identify in the challenged patents that had anything to do with,
18 you know, signal detection or signal detection circuit was a passage in
19 column six, I believe it was lines 19 through 52. I have on slide 293 the first
20 part of that passage and the rest of the paragraph goes on. I don't think it
21 adds anything, but you can see here that this passage is talking about the
22 head unit. They abbreviate that HU.

23 So, it says the head unit software application may choose to enable,
24 for example, a phone on any one of the consumer USB ports by requesting,
25 commanding, or otherwise knowing the phone is required to be in the USB
26 host mode. So, there's nothing in this passage, number one, about a signal

1 detection circuit. At most there's some disclosure about a head unit software
2 application. And in terms of the written description, a circuit, if it connotes
3 anything, we'll talk about that later. Connotes hardware, not software.
4 Moreover, this passage doesn't talk about signal detection at all, right? It
5 says that the head unit can simply otherwise know what mode the
6 downstream product is in.

7 JUDGE HOMERE: The case you just referenced earlier, the Sage
8 fellow case just referenced one of the passage that I think that you alluded to
9 discusses what women are supposed to know, right? So, in other words, if
10 something is within the scale of the POSITA, there is no need. There's an
11 assumption that the POSITA is armed with that knowledge. So, I remember
12 as part of the discussion that we had yesterday, there was an argument
13 regarding if something is within this, you know, the prior art one of skill in
14 the art knows that, then that information, that knowledge is imputed to the
15 ordinary skilled artisan. So, my question for you here is that the hub in
16 question, is it capable of performing some set of detection, although, albeit
17 not disclosed, but is that inherent as part of the functioning of a hub?

18 MR. JENSEN: I would submit, Your Honor, that given that the
19 specification discloses some other technique that involves this head unit
20 software, that it's not necessarily inherent that you have a signal detection
21 circuit because they disclose some alternative way.

22 JUDGE HOMERE: If there's some kind of detection being done by
23 the hub, type of hub that we're talking about here?

24 MR. JENSEN: I don't think I would call it a detection. I think what
25 they describe here is it's really an inquiry the head unit can ask the
26 downstream device, what are you? Are you a host? Are you a hub? I don't

1 think a person of ordinary skill in the art would necessarily consider that as
2 performing a signal detection. That's really a different technique that they
3 have disclosed here. But let me answer your question. More fundamentally,
4 if the board concludes that the knowledge of a person of ordinary skill in the
5 art necessarily includes knowledge of a signal detection circuit. Right. And
6 I don't think that's in the patent here. And the hallmark, again, of written
7 description is looking at the document itself. But if the Board does conclude
8 that an ordinarily skilled artisan would absolutely know this, no doubt about
9 it 100 percent, then we lose on written description and we win on
10 obviousness. We win on obviousness, I think, either way, and I'll talk about
11 that. But certainly, the written description analysis does not ignore the
12 knowledge of an ordinary skilled artisan.

13 I think your question also kind of dovetails with ground number six,
14 which deals with the identical claim language, but it's an indefiniteness
15 challenge as opposed to a written description challenge. So, let's jump there
16 next. And this is at slide, starting at slide 283. And I think that the passage
17 that we read in column six is problematic for the Patent Owner here as well
18 on indefiniteness. And we just talked about how it may be the case that a
19 person of ordinary skill in the art would know about signal detection circuits,
20 how they operate, what they do, they're easy to implement, et cetera. I don't
21 think that's really what's at dispute here on this indefiniteness challenge.
22 And Mr. Welch, the Petitioner's expert, talks about voltage dividers and
23 various other circuits that were known. There's no dispute about that.

24 The indefiniteness issue here for ground six is okay. Beyond those
25 things that are recognized by a person of ordinary skill in the art as signal
26 detection circuits, what are the outer bounds of signal detection circuit? In

1 particular, when you look at the passage at column six that talks about some
2 software, head end software that all of a sudden, if you've expanded the term
3 circuit, which typically connotes some type of hardware to include software,
4 well, where does the line stop? What else is included? It becomes
5 practically meaningless at that point. And that's our indefiniteness challenge
6 when it comes to this signal detection circuit. And how does that. Not just
7 the signal detection circuit, but the claim language here is a routing switch
8 that includes the signal detection circuit.

9 At most the column six passes, says the head unit software, which is
10 outside of the hub and certainly outside of the routing switch is what they
11 point to as a signal detection circuit. Okay, where's that? How could that
12 possibly be a routing switch that includes the signal detection circuit?
13 Where's the written description support for that? Right. There's a real
14 indefiniteness issue here and lack of disclosure around that point. But
15 there's no dispute, I don't think, and there's certainly no tension with
16 Petitioners position that, hey, look, signal detection circuits and how they
17 operate are known to POSITAs with this idea that, okay, what are the outer
18 bounds and does that extend all the way beyond traditional multiplexers and
19 crossbars to include things like software that's not even in the hub itself.
20 That's somewhere out in the ether in the head end. That's where you run
21 into, you know, muddy waters. And there's some ambiguity and lack of
22 clarity around what the signal detection circuit would be in this power.

23 JUDGE HOMERE: To be clear, your position is not that there's no
24 detection being done, it's with the term circuit. Is that correct?

25 MR. JENSEN: I think that's fair to say it's with the term. It's not just
26 with the term circuit. That's part one. Part two is the claim element says the

1 USB routing switch has to include the signal detection circuit and there's
2 absolutely no disclosure whatsoever of in the patent.

3 JUDGE HAMANN: Counsel? This is Judge Hamann. I'm just trying
4 to understand. So is it Petitioner's position that a routing switch, for
5 example, would not include any software? It's purely hardware driven?

6 MR. JENSEN: It certainly could be a multiplexer doesn't need to
7 have any software on it. So that multiplexer is a quintessential example of a
8 routing switch. And you know, if there's any software at all in that, it would
9 be -- I think, of course you could have routing switches, a crossbar could
10 have some software associated with that, but a pure software solution which
11 is apparently what the challenge patents describe, I don't think it's fair to say
12 that that somehow encompasses, you know, a circuit of any type or sort.

13 JUDGE HAMANN: Well, obviously software is in its purest form
14 just sort of instructions that is data itself. That's got to be executed on
15 something to be effective. It's some type of hardware, doesn't it?

16 MR. JENSEN: It needs to be run on a general purpose processor, for
17 example. But I don't think any person, ordinary skill in the art would look at
18 a general purpose processor and say, hey, I recognize that as a signal
19 detection circuit.

20 JUDGE HAMANN: Thank you.

21 JUDGE HOMERE: But what if it's capable of performing the signal?

22 MR. JENSEN: Well, that's a perfect segue into ground number four,
23 which is the means plus function issue. So, let's turn to that ground right
24 now, if we could, and let's go to slide number 264 for that. I'm sorry, let's go
25 to slide. That's ground number five. Slide 271. So this is a slightly
26 different indefiniteness challenge. It's a means plus function challenge. And

1 there's two steps to that analysis. One is the claim term, and we're talking
2 about right signal detection circuits still. Is the claim term means plus
3 function, number one. Number two, if it is, is there supporting structure
4 disclosed in the specification? I think we've talked about the second part of
5 that already. You know, what the specification discloses, or in this case
6 doesn't really disclose, there's no structure there. And with respect to the
7 first inquiry is it means plus function term. Right. I would refer the board to
8 the Federal Circuit's en banc Williamson decision, where the court said, you
9 know, we overrule the strict requirement of a showing that the limitation is
10 essentially devoid of anything that can be construed as structure.

11 And if you look at that passage in column six, which is what our
12 opposing counsel yesterday identified as the signal detection circuit, which
13 is nothing more than some head end software or firmware. If the term
14 circuit is somehow expanded to include, you know, software, I think at that
15 point it has essentially become a nonce term, you know, devoid of any real
16 meaning. And at that point, since there's no associated structure or, you
17 know, algorithm, right. If they wanted to point to some software that runs
18 on a general purpose computer, the case law is clear at that point you have to
19 disclose an algorithm. They have any even tried to do that. It's just not in
20 their papers anywhere.

21 So I think there is an issue here with this term being a means plus
22 function term. And if the Board concludes that it is, I think it follows right
23 afterward that it's also indefinite for lack of supporting structure. And I want
24 to address. Before we go off the signal detection term, I did want to address
25 how does that play into our obviousness analysis? And to do that, let me.
26 Let's just look at an example here.

1 JUDGE HOMERE: Counsel, you have five minutes.

2 MR. JENSEN: Yeah, five. I'm going to exceed that, I can tell you
3 right now. But I appreciate the heads up. Let's look at. Yeah, so here we
4 go. This is in the petition here. And when we're talking about the detection
5 unit, right. We cite to the detection unit from Chang II. Right. That's where
6 that comes from. And we talk about, you know, where that can be placed in
7 a number of different locations. And I actually just noticed that looks like
8 this one is talking about a crossbar. So let me see what claim this is. Oh,
9 you know, this is.

10 JUDGE HAMANN: What slide are we on? Counsel this is Judge
11 Hamann. Your slides are not being displayed, which I assume you knew.

12 MR. JENSEN: Oh, I did not know that. Well, that makes it more
13 difficult. But let me continue in the interest of time.

14 JUDGE HAMANN: You're doing very well referencing the slide
15 number.

16 MR. JENSEN: The slide number. Okay. Yeah. This is looking at
17 the petition and I think I had this opened yesterday, Judge McMillin, in
18 response to one of your questions about claim three of the 420 Patent and
19 was there a signal detection circuit disclosed for the crossbar
20 implementations? And the answer to that, since I've got it open right here, is
21 absolutely yes. We site Chang II, we describe where that detection unit can
22 be located. And it's all the same location that Mr. Welch talked about in his
23 declaration. That's identical in all of the proceedings. Right. Inside the
24 mux. Outside the mux, you know, in the bridge. Outside the bridge. So let
25 me switch over. I meant to click on the 643 petition. So, this is if Judge

1 McMillin you're interested. I was looking at pages 68 and 69 of the 420
2 petition that I just mentioned.

3 JUDGE HOMERE: Just to be clear that we're not discussing any of
4 the other --

5 MR. JENSEN: Yeah, yeah.

6 JUDGE HOMERE: -- cases here today.

7 MR. JENSEN: The 643 petition.

8 JUDGE HOMERE: Okay, so okay.

9 MR. JENSEN: I got. That's right when I saw the crossbar, I realized
10 because the 643 is a mux. So, this one here we have claim for where in the
11 USB.

12 JUDGE HOMERE: For the record --

13 MR. JENSEN: Okay, that's fine. That's. I apologize. I meant to flip
14 to the 643 petition here where we have claim four wherein the USB routing
15 switch includes the signal detection circuit circuit. And we talk about how
16 Chang and Chang II both disclose integration and putting everything on one
17 chip or combining two functions onto one component. And I think, you
18 know, the short of this here is, you know, there's really no intention with,
19 you know, what is the knowledge of a POSITA, all of that, that doesn't
20 really matter because Chang II expressly discloses a signal detection circuit.
21 We don't need any knowledge of a POSITA. Even if a POSITA would have
22 it, we think they probably would. It doesn't matter because it's writing
23 Chang II expressly.

24 The other thing I'd like to address with respect to the signal detection
25 circuit is, you know, if we talk about the secondary considerations and
26 nexus, I think there was a suggestion that, hey look, there's no dispute that

1 the claims or that the Aptiv product, you know, practices any of the claims.
2 So, if we look at this 643 as an example and we go to Petitioner's reply brief
3 where we address the nexus issue, even though this wasn't in their Patent
4 Owner response was only in their declaration, we did try to touch on it. We
5 do contest that their product practices the claims. The claims require a
6 signal detection circuit, and their product doesn't have one. It has some head
7 end software. So right there you don't need to go any further to conclude
8 that there's no nexus. They don't even practice the claims. You don't even
9 have to reach the nexus question. But we went on and this is on page 25 of
10 our reply.

11 JUDGE HOMERE: Counsel, what is your suggestion regarding how
12 the signal detection circuits would be treated? In light of the argument that
13 it's not supported in the spec and yet it's cited in the claim.

14 MR. JENSEN: I think it's fair to say that there isn't really any dispute,
15 I don't think, that both a multiplexer and a crossbar are signal detection
16 circuits. And because that's what we rely on in the prior art for obviousness
17 purposes, you know, the specification, I think at one point with I forget it
18 mentions a -- I think I might be mixing up with the routing logic circuit, the
19 multiplexer. But I think there's no dispute that the signal detection circuit,
20 because it's expressly disclosed in Chang II, whatever the outer bounds of
21 the signal detection circuit term are in the claim. Right? That's a question of
22 indefiniteness. The Board can find that indefinite. But under the Intel case,
23 the Board can still find the claims obvious over the prior art. Because while
24 the outer bounds of the claims are loosey goosey here, there's no dispute that
25 a multiplexer and a crossbar are signal detection circuits. And the prior art
26 expressly discloses a a signal detection unit.

1 JUDGE HOMERE: In this case –

2 MR. JENSEN: I'm sorry, I said the multiplexer and the crossbar,
3 those are routing logic circuits. The signal detection circuit comes directly
4 from Chang II.

5 JUDGE HOMERE: Okay, so if we're taking the case, the claims at
6 face value cites that the signal detection circuit is part of the routing logic.
7 But in this configuration, the signal detection circuit would be outside of the
8 bridge. When you look at the invention itself, the bridge is separate from the
9 switch where the routing logic circuit is. So, if Chang II teaches that you
10 have a bridge and then the detection circuit is inside the bridge, how would
11 you meet that limitation where the claim itself requires that you have the
12 detection circuit being outside the bridge and being part of the routing logic
13 circuit?

14 MR. JENSEN: So for the dependent claims, there's no claim that
15 recites that the signal detection circuit has to be in the bridge. There are two
16 dependent claims or three that say that the signal –

17 JUDGE HOMERE: No, no. I said that the claim requires that the
18 signal detection circuit is outside of the bridge.

19 MR. JENSEN: Outside of the bridge. Outside of the bridge.

20 JUDGE HOMERE: Yes, but whereas Chang II teaches that the signal
21 detection circuit is inside the bridge.

22 MR. JENSEN: So let me answer that question this way. The claims
23 that I think you're referring to are the dependent claims in the 643.

24 JUDGE HOMERE: No, I'm talking about the independent claim of
25 the 643.

1 MR. JENSEN: The independent claim in the 643 places no restriction
2 on the location of the signal detection circuit.

3 JUDGE HOMERE: Oh yes it does.

4 MR. JENSEN: What limitation are you referring to?

5 JUDGE HOMERE: Give me a second here. The last limitation E
6 says routing USB. The signal detection circuit is operating in a device, but
7 it's discussing the circuit and then says that by determination of the signal
8 circuit that the consumer device is operating in the USB device mode.

9 MR. JENSEN: Let me look at Your Honor's question this way. Let's
10 assume that's the case because there's at least some claims where that is the
11 case that the signal detection circuit has to be outside of the bridge. And
12 more than that, it's even more specific. Certain claims say the signal
13 detection circuit has to be inside of the routing switch. And I think that the
14 answer to that is very easy and it's provided. This is on slide 287 by Patent
15 Owner's own expert that says it would be natural to implement a routing
16 switch that includes the signal detection circuit. There's no dispute that that
17 would be a natural and I would submit an obvious location to place the
18 signal detection circuit. And Mr. Welch talks about about why that would
19 be and why a procedure would want to put that there, but it's an undisputed
20 point.

21 So I think that is an easy answer. But in this particular limitation, I
22 would agree with you, Your Honor, that if you had the signal detection
23 circuit in the bridge, that particular embodiment would not read on the
24 claims that require the routing, the signal detection circuit to be located in
25 the routing switch. But it's undisputed that that's a natural, easy and obvious
26 location to place it. And you can look at Dr. Houh's testimony. He testifies

1 to this multiple times, repeatedly over and over paragraphs. I think it's 116,
2 120 and 121 of his POPR declaration. I mean, he beats it like a dead horse.

3 I know I'm eating into my rebuttal time, but I'd like to continue maybe
4 to just round out a couple of points here. One is let's jump next to the
5 ground, so we're off the signal detection circuit now. Let's jump to ground
6 three, and that's at slide 259. This is an indefiniteness challenge concerning
7 the language the USB hub and USB bridge have different components and
8 functionality. And the dispute here is not whether a bridge and a USB
9 bridge and a USB hub are different things, or they perform different
10 functions. A bridge creates a host to host connection, right? A hub does
11 what a hub does. That's not really in dispute. The question that we have
12 here is this particular limitation was added to obtain allowance of the claims.
13 That's on slide 261. So, the claims already recited to USB bridge in a USB
14 hub, which a person of ordinary skill in the art would understand are
15 different things and they do different things.

16 So, to get the claims allowed, they had to add some additional
17 language that said that these two components are yet somehow further
18 different. And that's what's ambiguous. What additional differences beyond
19 already being a hub and a bridge is the claim attempting to require? So
20 that's the, I'd say the gist of the 112 argument for ground three. Briefly, on
21 ground four, this is the routing logic circuit term. And the indefinite issue
22 here is somewhat similar to ground three, right? Ground three said, well,
23 how are the hub and bridge, you know, more different than they already
24 were? The issue here is we have routing logic circuit and then a number of
25 other claims and other patents. But even in the 643 Patent itself, Dependent
26 Claim 3, for example, refer to a USB routing switch. So they're using these

1 two different terms which normally connote two different meetings. What's
2 the difference between a USB routing switch and a routing logic circuit.
3 They both include a multiplex and a crossbar. I don't think that's in dispute.
4 Right, but what else would somehow qualify as a routing logic circuit but
5 not a USB routing switch? That's the indefiniteness issue that we flagged on
6 for ground number four.

7 So let me just hit maybe for one or two minutes these obviousness
8 points that I wanted to touch on. So let's go to slide 243 and this is Aptiv's
9 isochronous argument and this concern. This is slide 244. The claim
10 language at issue is the USB host is embedded in an infotainment system
11 and Aptiv's essentially doing a backdoor claim construction here. They don't
12 call it claim construction, but they're reading into this term infotainment
13 system a whole slew of different requirements. They're importing
14 limitations from all over the specification including real time data transfer,
15 streaming services, screen mirroring, functionality, mapping video, and an
16 isochronous data transfer connection.

17 The word isochronous doesn't even show up anywhere in the patent.
18 Right. And the other language, the only passage they cite from the spec on
19 this is one that uses permissive language. This is on slide 245. It says such
20 as or it may provide it. And if you look at their slide 246 this is Figure 7
21 from the patent that shows the Patent Owners or the challenge patents
22 bridge. It refers to bulk in and bulk out connection points. Those are
23 standard USB data. Those are not isochronous data transfers. Bulk is the
24 generic general data transfer mechanism. So their own bridge doesn't have
25 this capability in the patent that they're trying to read in.

1 The last issue I would like to touch on is Aptiv's argument and this is
2 at slide 228, that the claims require that the data connection, the host device
3 data connection, bypass the USB bridge. And in some ways, this is sort of a
4 recycled version of their dead end argument. But if you, if we look at this is
5 slide 234, this is an extract from the PGR petition page 68 where we have
6 the proposed combination and the purple arrow is the host to device data
7 path. You can plainly see that it bypasses the bridge and their argument is
8 oh no, somehow the detection unit has to be in the bridge and therefore the
9 routing has to go to the bridge. So, you can perform host device detection.
10 But in the combination that we rely on, it's right here directly from the
11 petition the detection unit is illustrated outside of the bridge. I mean, the
12 argument just falls apart and it doesn't even get across the start line. I
13 submit. And with that, I'll reserve what minute and a half I have left for
14 rebuttal. Thank you.

15 MR. BRAUSA: It's all right. I'll go ahead and reserve. I think I can
16 just reserve five minutes for rebuttal, if any. I may eat into it, but I think I
17 should be brief. Famous last words.

18 MR. JENSEN: I said the same thing.

19 JUDGE HAMANN: Counsel, this is Judge Hamann. I don't see any
20 slides. You may be presenting just by referencing the slide number. But
21 just to give you that heads up, since it wasn't clear before.

22 MR. BRAUSA: Okay. Before we get going any -- we're seeing them
23 in the room. Do you know why they're not projecting?

24 JUDGE HOMERE: I know we had some technical problem earlier
25 today.

1 MR. BRAUSA: So I think I can make it easy. I'm actually going to
2 be using Petitioner's demonstratives. And so, with Your Honors comments
3 from yesterday in mind, I'll call out the slide number, but it will be a PDX
4 number. So, I'm currently on PDX258.

5 JUDGE HAMANN: Many parties argue without displaying the
6 slides, just by referencing the slide numbers. And certainly we have a lot of
7 experience following.

8 MR. BRAUSA: Well, I'll do my best not to make you work.

9 JUDGE HAMANN: No, no problem. So, I guess my point is, this
10 should absolutely be fine. Thank you very much.

11 MR. BRAUSA: Great. So, we're on PDX258, which is really just the
12 summary of the different grounds.

13 JUDGE HOMERE: Okay.

14 MR. BRAUSA: And I'm ready to proceed with that.

15 JUDGE HOMERE: You have 25 minutes.

16 MR. BRAUSA: Great. Good afternoon again, Your Honors, may it
17 please the Board. I want to spend the bulk of my time responding to the 112
18 arguments that were made. And we heard about various legal standards.
19 We saw various cases in some of the slides, and I think there was a little
20 muddling of the different grounds. The written description phrase is not the
21 written description of signal detection circuit in isolation, it's the larger
22 phrase. And as I understood it, the bulk of the written description challenge
23 in the petition was based on whether there's support for this routing switch
24 that includes the signal detection circuit.

25 But before we get there, I want to flag that one case you didn't hear
26 about that I think is frankly dispositive of grounds 3, 4 and 5 is the claim

1 construction order Exhibit 20, or, I'm sorry, Exhibit 1080 from the parallel
2 district court proceeding, which issued, I think, just a few days prior to Your
3 Honor's institution decision in this case. And it was submitted by Petitioner
4 at the time. But I think given the timing of submission, it was not before,
5 Your Honors, during the institution decision.

6 In that case, the same arguments you heard in the papers and today for
7 grounds three, four and five were squarely rejected by Judge Wilson out of
8 the District of Delaware. And he went through the same arguments, the
9 same evidence that Your Honors had before you at institution, the same
10 evidence that you heard about today. And he determined that the phrase in
11 ground two or ground three is not indefinite. That was added by an
12 examiner's amendment. And a person of skill in the art would know that any
13 difference between a hub and bridge would satisfy that claim limitation. So,
14 I think that's dispositive on that issue for routing logic circuit.

15 JUDGE HOMERE: Counselor, do you know that this is not binding
16 upon us?

17 MR. BRAUSA: I certainly know it's not binding. I would submit it's
18 highly persuasive, given that it's the same evidence. The rationale for the
19 court's decision is set forth in Exhibit 1080, and so fully understand it's not
20 binding, but it's an unusual circumstance where you have a
21 contemporaneous decision maker considering the same evidence.
22 Obviously, Judge Wilson has considerable expertise in claim construction
23 matters and rendered an opinion in this case.

24 JUDGE HOMERE: So, let's take the opportunity then to turn to the
25 patent, the 643 Patent.

26 MR. BRAUSA: Yes.

1 JUDGE HOMERE: And to point, because I think we had the
2 preliminary discussion about that yesterday, and I'd like to take the
3 opportunity today to look at the patent together with you, so you can show
4 me where in the patent a detection circuit, a single detection circuit, is
5 disclosed or suggested.

6 MR. BRAUSA: Sure. And I direct Your Honor to the same section
7 of the specification at column 6, lines 23. And then it goes on through that
8 process where it talks about the head end controlling the switching unit and
9 then specifically the hub portion that my friend on the other side highlighted,
10 talking about commanding the routing of the specific USB port, and then
11 also inquiring to see if the phone, the downstream device, is in a host mode.
12 Your Honor is exactly right. To be clear, we're not saying that the word
13 signal detection circuit appear in the specification. They don't. They're in
14 the claims. And so, I understand the issue Your Honor is grappling with was
15 with what do I do here? It says it in the claims, obviously, and it's not.
16 Those words aren't used.

17 JUDGE HOMERE: What is a circuit, Counsel?

18 MR. BRAUSA: Well, I think a circuit has known structure. If you
19 look at the record and what Mr. Welch's testimony was throughout this
20 proceeding, POSITAs have knowledge of what integrated circuits are. You
21 don't need to say here are the building blocks for a circuit and the cases that
22 we've cited on the indefiniteness issue, the MIT vs. Abacus case out of The
23 Federal Circuit really talks about the fact that when you're adding additional
24 functional language specifying what a circuit is, that helps even further. The
25 other case is Linear Tech that we cited, and I'm quoting. When the structure
26 connoting term circuit is coupled with the description of the circuit's

1 operation, sufficient structural meaning generally will be conveyed to
2 persons of ordinary skill in the art.

3 Now, again, that's really getting at the question of whether there's a
4 means plus function treatment. It doesn't squarely address, I will
5 acknowledge, Your Honor's question of where does it say what the circuit is
6 in the patent. And that is an area where yesterday, frankly, we heard all
7 about how it doesn't need to say it. A POSA would know. And Mr. Welch,
8 I think.

9 JUDGE HOMERE: No, no. I think if anything established is that the
10 signal detection itself is being performed. Now, what's performing it, we
11 don't know. I think that's where the issue lies. So really, let me ask you, is it
12 circuit software, for instance? Would the software qualify the circuit?

13 MR. BRAUSA: No, we would not. Certainly. I think Judge
14 Hamann's question and explanation is software in the abstract would not be a
15 circuit. In our view, at least in this context. A circuit typically will have
16 some associated software. But as the cases we've cited indicate, circuit is a
17 known hardware. It has known components. And Mr. Welch testified to
18 that at his deposition, that you have resistors, you have known parts of an
19 integrated circuit. And so, again, a POSA would know. And I think this
20 highlights what, in our view is --

21 JUDGE HOMERE: When you say a POSA would know, it's not
22 something in the abstract. I mean, it's concrete knowledge. You have to be
23 able to back that up with evidence and everything. And I'm looking at the
24 record here, and I'm trying to figure out exactly where is the circuit itself.
25 We end up, you know, routing. For a moment, I think I read somewhere that
26 the detection circuit was in the routing logic. You know, routing logic,

1 recitation in the claim. But when I look at claim one, I was like, oh, maybe I
2 saw it in a different claim. But where is that exactly?

3 MR. BRAUSA: So I think it's important to make sure we're talking
4 about a distinction between where it is and the claims and where it is in their
5 combinations. Because we're having this hybrid discussion.

6 JUDGE HOMERE: Right now, we're focusing on the claim. So in
7 the plan, in the invention.

8 MR. BRAUSA: I think we're in agreement that in claim one, it does
9 not place a restriction on the location of the signal detection circuit. What I
10 think Your Honor is referring to is claim four, and that's where the language
11 that we see on the bottom in ground seven comes from. That of course
12 narrows the independent claim and says in this implementation, in the
13 dependent claims you see specified, it's actually 4, 9. And then it was put
14 forth in our papers. Claim 15 doesn't include that language. Our view is
15 they're just trying to read that language in. But at least in 409, there's
16 express language limiting the location of the signal detection circuit in those
17 claims to the USB routing switch.

18 JUDGE HOMERE: Great. Okay, so let's focus on claim four then.

19 MR. BRAUSA: Okay.

20 JUDGE HOMERE: Because I know I read it somewhere and when I
21 went out of there, I didn't see. Exactly. Yeah. So, focusing on claim four, it
22 says the USB routing switch includes the signal detection circuit. Is there
23 illustration for that? Because when I look at the figures that depicts the
24 routing logic switch, for instance, figure four, I think we're referring to this
25 USB routing multiplexing switch. Right. So, detection circuit is inside
26 there?

1 MR. BRAUSA: Yes. It can be part of it. That's correct. It can either
2 be, as we saw in the diagrams that they've relied on one possible location is
3 it's associated with that. It could be on the same integrated circuit, or it
4 could be utilizing some of the same components.

5 JUDGE HOMERE: Okay, and then we're saying that the support for
6 that is in column six, the whole column?

7 MR. BRAUSA: I think column six is showing that detection occurs
8 and it's explaining that process, which I don't think is in dispute. As we
9 discussed yesterday, even the claims in other patents, and I don't want to get
10 into that, but that don't require a signal detection circuit explicitly. I think in
11 response to Judge McMillin's questions, he brought up the fact that it still
12 has to be a routing switch configured to do certain things, and it requires
13 knowledge and detection of the downstream port to do that. To be clear,
14 column six doesn't place any limitation on the location of the signal
15 detection circuit. I do think it's --

16 JUDGE HOMERE: Where are you getting that? Where are you
17 getting that support for claim 4 where it says that, you know, the detection
18 circuit itself is in the routing switch?

19 MR. BRAUSA: The support is directly from the POSA's knowledge.
20 It follows the Boston Scientific Decision of you don't need to describe what
21 is well known and the location of these as the slides that we saw from
22 Counsel refer to.

23 JUDGE HOMERE: I think I understand. So, you're saying that
24 because the switch is capable of detecting, of differentiating between a host
25 and a consumer device, a host and a device, therefore it has -- it's capable of
26 performing some kind of detection. I think we saw an agreement with that.

1 MR. BRAUSA: I think that's right. At least with respect to that
2 claim. And this is where I think, even though our position has been
3 criticized for being a double standard, and yesterday there was reference to
4 there being a nuance in Petitioners arguments on obviousness on the one
5 hand and on definiteness on the other, I don't think there is. There's no
6 nuance there. Those positions are inconsistent. Whereas in contrast, Patent
7 Owner's position acknowledges that the different approach to indefiniteness
8 and obviousness turns on the question being asked. For indefiniteness, the
9 question we're here today talking about is if you told a POSA or a POSITA,
10 here's the solution, do you know what a signal detection circuit is? Do you
11 know where to put it? They would say yes, that's why there's not a
12 definiteness problem. However, the obviousness input is different. It's not
13 do you know what one is? Do you know where you might put it? It's
14 whether you put it in the claim combination, whether you'd arrive at the
15 claim combination.

16 JUDGE HOMERE: But I think the problem with that claim is that if
17 the claim decided the switch itself is performing the detection, well, clearly
18 the switch is a circuit, it's performing the detection. I think that that
19 probably would be okay. But it's the recitation that, you know, as part of the
20 switch, you have a separate circuit in there that does that. So really, I think
21 that's probably, you know what's a bit confusing in claim 4. Because when
22 you say that, well, the switch, that routing switch includes that detection
23 circuit, of course it has that mechanism. I guess you could rationalize that.
24 Well, hey, because it's capable of performing detection, you have a circuit.
25 Is that where this is coming from?

1 MR. BRAUSA: I think you're correct that the signal detection circuit
2 is of course a discrete circuit. It is a thing, a structure. But you could put
3 that in the routing switch. Once you know that you want to do it, as the
4 Patent explains why you'd want to do it, and so it doesn't pull any limitation
5 on there. You don't have to put it there. Unless we're talking about claim 4
6 and potential infringement, then of course you need to have a routing switch
7 in the signal detection circuit.

8 But the slides that we've seen conflate this indefiniteness and
9 obviousness inquiry. Because in one, there's just a problem. You don't have
10 the benefit of the solution. If you're a POSITA for obviousness, you have
11 the benefit of the solution for considering 112 issues, the question on
12 indefiniteness is what does it mean? Do you know what it means? And
13 again, on signal detection circuit, Judge Wilson, and I don't want to belabor
14 it because you're right, it's not binding authority, but the evidence is exactly
15 the same. And I think it's telling that in 29 minutes that decision wasn't
16 referenced once.

17 Another decision that was –

18 JUDGE HAMANN: Counsel, this is Judge Hamann, and I'm not
19 certain we talked a lot about this aspect of it, is the written description
20 arguments from Petitioner.

21 MR. BRAUSA: Yes.

22 JUDGE HAMANN: And obviously for that we've got to be careful
23 we don't conflate things. And my understanding is with written description,
24 we're really looking whether the inventor had possession, and we have to
25 look in the four corners of the specification. And so, I'm trying to
26 understand exactly, you know, obviously Petitioner pointed to a portion of

1 column six, and I'm not certain exactly what otherwise knowing it means.
2 But for example, where is sort of the evidence of that knowledge? We can't
3 rely on obviousness for description analysis. Where is Patent Owner saying,
4 is the detection circuit the possession that's disclosed in the spec?

5 MR. BRAUSA: Yeah, and I think Your Honor is exactly right. And
6 to be clear, as I said at the outset, ground five was squarely before the court.
7 The court did not, of course, consider written description as part of its
8 Markman analysis. But again, the claim limitation here and the written
9 description challenge is not to the phrase signal detection circuit. It's saying
10 there's not sufficient written description of this clause wherein the USB
11 routing switch includes the signal detection circuit.

12 And I think the silence on that subject is what actually renders the
13 POSITA knowledge relevant here because it doesn't place a limitation on it.
14 There doesn't seem to be any debate that a POSITA would know. Of course,
15 I'm going to have to do detection. I could do it with a circuit. And the only
16 question is, were the inventors in possession of a specific location for claims
17 4 and 9? And we would submit that because a POSA would recognize that
18 that is one potential location, they didn't need to describe it in express
19 verbiage. And that's under applying the Boston Scientific Decision and its
20 progeny, saying you don't need to describe what is well known. We're not
21 disagreeing that if you're told, hey, implement a signal detection circuit, that
22 a POSITA would recognize one potential place to put that is the routing
23 switch, you don't need to tell them that once they have the solution of the
24 patent in front of them.

25 So again, Your Honors are correct that there's not a specific
26 instruction in the patent that's outside of the claims that says put the signal

1 detection circuit in the routing switch or as part of the routing switch. But as
2 we heard about at great length yesterday, the Petitioner's position is not only
3 does there not need to be, they think POSITA would come up with it even
4 without the patent. Now, we have a fundamental disagreement about that
5 point, but I think that hopefully addresses Your Honor's question.

6 JUDGE HAMANN: Let me just one follow up question. It seems
7 obvious the location of the detection circuit is in a broader phrase and I
8 recognize there's some part you spoke to, but it seems to me it also begs
9 where the detection circuit itself is shown to be in possession in the
10 specification. And that part. Yeah, I know, I look at column six, I'm just
11 trying to understand, you know, what Patent Owner is suggesting is
12 sufficient to meet that requirement?

13 MR. BRAUSA: So again, if the question is specifically about what
14 specification disclosure specifically points to where you have to locate or
15 where you should locate the detection, the signal detection circuit, column 6
16 does not require a specific location. A POSITA reading the specification,
17 however, would recognize that there are multiple locations that would be
18 apparent and well known that you could implement this in. And that is what
19 we would consider an appropriate implementation detail. Because again,
20 you're approaching the question knowing what you're supposed to do. The
21 solution's been identified, and the question is, did they exclude this? Did
22 they say, oh, we didn't really think about putting it here. And our position is
23 that a POSITA would just know that.

24 JUDGE HAMANN: Well, I'm more focused on the detention circuit
25 itself. I recognize that's within a broader basic location to talk about the
26 location of something. I think you also have to know what that something

1 is. And so, I'm trying to get an understanding of, you know, where does the
2 term the possession of -- you need to have possession of the detection circuit
3 itself.

4 MR. BRAUSA: Sure, I think that is, I think that was apparent
5 yesterday. Again, it's the POSITA knowledge. And if you look at Mr.
6 Welch's declaration, exhibit 1013 at 74, he goes on at length about detection
7 circuitry being known. A POSITA knowing that there were different forms.
8 And so again I would point back to Boston Scientific. There isn't an explicit
9 description, there isn't an explicit statement. Rather there is a description of
10 detection, but the words signal detection circuit aren't expressly found in the
11 specification because a POSITA reading the specification would understand
12 them as they are.

13 JUDGE HAMANN: Yeah, I'm not concerned about the particular
14 verbiage. I'm concerned about whether there's a disclosure that a POSITA
15 would understand that they better have possession. And I understand you
16 rely on the Boston's Scientific case as well as what you've previously talked
17 about.

18 MR. BRAUSA: That's correct. As well as the declaration of Mr.
19 Welch, exhibit 1013, paragraph 74.

20 JUDGE HAMANN: Thank you.

21 MR. BRAUSA: Just briefly, with my time remaining, I want to touch
22 on. I hadn't seen the slide on Sage products that was shown at the outset on
23 the POSITA. I want to belabor the point. I will note that it's the standard
24 was about whether the board had substantial evidence. As Judge McMillin
25 alluded to yesterday. Our position is they don't have substantial evidence for
26 their POSITA. Obviously the case was also, as we saw in the context of UK

1 regulatory standards for sterility, which I don't think definitively answers
2 any question about the POSITA in a case that implicates USB.

3 And the final point I wanted to make on that, just reading the footnote
4 that was displayed is it just talked about familiarity with it. It didn't require
5 specific knowledge of specific documents and designing. I don't know what
6 the technology was there, but sterility treatments or anything like that with
7 this heightened level of skill that's been proposed by Petitioners. So far from
8 being dispositive, I don't think it actually is relevant to the question at all. If
9 Your Honors are curious about it, we're happy to submit supplemental
10 briefing on it once we've had a chance to consider the decision.

11 I want to close really with the questions of, I think my colleague did,
12 on grounds of three and this notion that there's some built in redundancy
13 with the word different. Again, Judge Wilson considered the exact
14 arguments. But I think it's important to recognize that this surplusage
15 argument is really just a guide that's not a hard and fast rule. And here this
16 was brought in by an examiner's amendment and the examiner referred to
17 the reasons of allowance. Rather referred to it being brought in over a --
18 actually, let me back up. I got garbled there. The examiner's reasons of
19 allowance don't place any emphasis on this language at all. Instead, they're
20 talking about the routing logic circuit language. It refers to a limitation that
21 was added and the examiner reading that portion of the allowance from
22 exhibit. Let me give you the cite from Exhibit 1012 at 202 to 203 doesn't
23 call this out at all. And as we cited in our case, the Federal Circuit and the
24 Tennis decision that is 733F, appendix 1011 at page 1020 states the
25 proposition that it would be unfair to infer that an examiner, in putting the

1 application in better condition for allowance, introduced an indefiniteness
2 issue.

3 And so, we don't think there's really any basis for challenging that or
4 disturbing Judge Wilson's decision on that point. The portion of claims, or,
5 I'm sorry, ground six and seven that were discussed, again, we see here,
6 claims four, nine, and 15 are challenged as we put in our briefing. And as I
7 want to make clear, claim 15 doesn't have the language that you see quoted
8 here. They're reading that in through an expert, if you look, I think, Your
9 Honor, Judge Homere has the claims of the 643 in front of him. That doesn't
10 actually refer to a signal detection circuit at all. And so, I would submit that
11 for both of these, the challenge is really for claims 4 and 9 and doesn't have
12 anything to do with claim 15.

13 Just in closing, and I'll reserve a little time ground 4, the routing logic
14 circuit, just to touch on that briefly. Again, that was construed by Judge
15 Wilson recognized that circuit that does routing, that's a routing logic circuit.
16 And the reason I mention that is because there's a difference in their
17 approach to routing logic circuit and signal detection circuit in this
18 proceeding that I don't think makes a lot of sense. Which is the primary
19 argument with respect to signal detection circuit and its alleged
20 indefiniteness is that it's a means plus function term. And once you construe
21 it as a means plus function term, then there's not sufficient disclosure in the
22 specification. And to their credit, they're right that we're not pointing to any
23 specific structure corresponding to the means plus function term, because it's
24 not a means plus function term. That's what Judge Wilson concluded.

25 But if signal detection circuit were even plausibly a means plus
26 function term, then you would have thought that you would have seen an

1 argument that routing logic circuit is a means plus function term because
2 routing logic modifies circuit, signal detection modifies circuit in the same
3 way; it's adding further functionality to the structure of the circuit. But they
4 didn't do that. And so, I think that inconsistent consistency between the
5 arguments not only highlights that the construction is not correct, but that
6 once again, we see this inconsistency in argument that doesn't really cash
7 out. And so, with that, unless Your Honors have further questions, I'm
8 happy to reserve the rest of my time for sur rebuttal.

9 JUDGE HOMERE: Counsel, I guess I have a residual question. I
10 think there was an argument regarding using routing logic circuit
11 interchangeably with routing logic switch, something like that. Something
12 along I think that's what the confusion was.

13 MR. BRAUSA: So I think they're referring to claim 3 is maybe what
14 Your Honor is referring to, where they say it's confusing. Because it says
15 that the bridge or the bypassing the US bridge is performed by a USB
16 routing switch. And I don't think there's actually any confusion there. The
17 claim gives a specific meaning to that. If there's a more specific argument to
18 that, I'm happy to let Counsel introduce it and respond to it on sur rebuttal.

19 JUDGE HOMERE: Two minutes remaining.

20 MR. JENSEN: Thank you, Your Honors. I know time is short, so I
21 will be brief on this. Let me just hit a few points first on the larger issue of
22 the district court's decision. As the Board noted. Number one, that's not
23 binding on the Board. Number two, that was decided under a different
24 standard, a clear and convincing evidence standard. There's a lower
25 standard for a Petitioner to prevail here. That's another reason why it's not
26 binding. There was a different evidentiary record before the District Court.

1 There was no Mr. Welch declaration, no Welch testimony, none of that
2 deposition testimony. So, the Board certainly has the discretion and the
3 ability to find for Petitioner on these 112 claims for all those reasons. And
4 with respect to written description, that was never even addressed by the
5 District Court ever at all.

6 So, I think there's three or four reasons right off the bat why that's not
7 an issue or an impediment for the Board to find for Petitioner in this
8 proceeding. Number two, with respect to the signal detection circuit, I
9 would direct the board's attention to slide 38. And this is figure 5 from the
10 Chang II reference. I think in some respect the discussion of the signal
11 detection circuit is really, I'd say much ado about nothing because Chang II
12 expressly discloses a detection unit, whatever else that may mean, if it
13 includes head end software, that makes zero difference whatsoever to
14 Petitioners obviousness arguments. There can be no legitimate dispute that
15 the prior art and the combination discloses a signal detection unit.

16 Not only that, we just heard from Patent Owner's counsel. I think a
17 significant concession their expert has made it as well that a person of
18 ordinary skill in the art would absolutely know to locate the signal detection
19 unit inside a routing switch, inside a mux, inside a USB switch. And they do
20 that to try and preserve some of the 112 issues. But that completely
21 undermines their obviousness case that somehow Petitioner limited itself to
22 only putting the signal detection circuit necessarily and only inside the
23 bridge and necessarily and only inside the Bridge in a way that it could not
24 perform its intended function. Right. So I think that disposes of a lot of the
25 arguments and issues in the case right there.

1 The last point I'd like to make and direct the court's attention to slide
2 146. That is not the right 146. Let me try it again. Oh, there we go. Slide
3 146. And this raises the double standard issue here. Right. This is a Federal
4 Circuit case. The Board's observation that appellant did not provide the type
5 of detail in his specification that they now argue is necessary for the prior art
6 supports the board's finding that a POSITA would have known these things,
7 whether that's a mux or a crossbar or a signal detection circuit. Petitioner
8 went above and beyond the disclosure in the patent and it creates a complete
9 double standard as the Federal Circuit has repeatedly recognized. Thank
10 you.

11 JUDGE HOMERE: What slide number is that?

12 MR. JENSEN: That is slide 146. Unless there are any further
13 questions, I'm done.

14 JUDGE HOMERE: Thank you. You have seven minutes.

15 MR. BRAUSA: Thank you, Your Honor. I'll try not to use all seven.
16 I want to focus, Your Honors on the Chang II slide that you just saw. And
17 yesterday we heard a lot about how a POSA would know that you should
18 move around that detection unit. In the slide we just saw Chang II,
19 undisputably, the detection unit is in the bridge. And the grounds for various
20 of the patents that we considered, and I don't want to get into those. That's
21 what they said in their petition. That's where it was. That creates the dead-
22 end problem. Whether now in hindsight, yet again, they wish that their
23 petition had identified other potential locations and argued that it would have
24 been obvious to move it around. That's not in the petition. And so that's the
25 problem. Not that in theory, it's possible to move it around once you know

1 how to make the combination, once you've been given the why to make the
2 proposed combination, that's reflected in the claims.

3 You might say, well, I could also put the signal detection circuit
4 somewhere else. But I would agree with counsel that the discussion today
5 on 112 issues is really much ado about nothing. Because as we just heard,
6 there's not actually any concern with the structure. They know what the
7 structure is. We agree that Chang II includes a detection unit. It's just doing
8 things that are not related to the problem being solved. It's limited. It's
9 about data transfer for the reasons we just discussed. And so –

10 JUDGE HOMERE: Turn to page 48 of the petition.

11 MR. BRAUSA: And this is in the 643 proceedings, Your Honor?

12 JUDGE HOMERE: Yes, yes.

13 MR. BRAUSA: 46, you said?

14 JUDGE HOMERE: 48.

15 MR. BRAUSA: 48. Thank you, Your Honor.

16 JUDGE HOMERE: Okay, so from what I'm seeing here, there's a
17 depiction of what the combination is supposed to be now showing a
18 detection unit being outside of the bridge.

19 MR. BRAUSA: That is exactly correct for this petition. And that was
20 my point. If it wasn't clear, that is not a global selection. In this petition,
21 they placed the detection unit somewhere outside the board, outside of the
22 bridge. And that creates other issues in this petition, which I'll talk to in just
23 a moment. But it doesn't change the fact that in the other proceedings, in the
24 other petitions we talked about yesterday, they've limited to the bridge,
25 which is the very disclosure in Chang.

1 So, in this petition, what's interesting is they've said, okay, you'd look
2 at Chang, and notwithstanding, for obviousness purposes, notwithstanding
3 the fact that Chang doesn't say, move the detection unit, move it outside the
4 bridge. Chang, in their view, discloses a mux. Right. Yesterday Your
5 Honor was asking, why didn't you stop there? And so why didn't they stop
6 there, here? Well, because if they just followed Chang, that detection unit
7 would be in the bridge. But what's interesting is in this proceeding. Excuse
8 me. In this proceeding, they've looked at Chang for observation purposes,
9 and they've said, okay, let's put it outside the mux. Let's associate it with the
10 mux instead of what Chang actually teaches. The reasons for doing that are
11 vague. How the detection unit is.

12 JUDGE HOMERE: Actually, I thought they are relying on Chang II
13 for that detection unit.

14 MR. BRAUSA: Because they are. If I said Chang II, I messed up.
15 Chang II is where the detection unit comes from. And in their combination,
16 they're saying, let's apply that teaching. Remember, talk about the Chang II
17 teachings. But they don't actually apply the Chang II teachings because
18 Chang II teaches put it in the bridge. So, they say, well, a POSITA would
19 know. Let's move it outside for this proceeding only. In other proceedings,
20 they didn't do that. But in the 643 context, let's move it outside and
21 associate it with the mux in some form.

22 JUDGE HAMANN: Counsel?

23 MR. BRAUSA: Yes.

24 JUDGE HAMANN: This is Judge Hamann. Focusing on Chang II's
25 bridge is the term they use, which I think has the detection unit. What is the

1 switching circuit? I thought that was sort of within what Chang II identifies
2 as the bridge.

3 MR. BRAUSA: That's exactly right. And that's one of the problems
4 with the proposed combination, which is multiple elements are getting
5 moved around that are not taught by Chang. And what's more is there's a
6 selective movement. It's not just moving the detection unit outside the
7 bridge. Because when we get to page 64 to 66 of the petition in the 643
8 proceedings, we see claim language requiring the bridge to have a bridge
9 controller and buffers. And for that they also rely on Chang II and they
10 point to the CPU and the buffer unit from the same figure 5 from Chang II
11 that we saw.

12 But for this limitation they say, oh no, you just leave them in the
13 bridge in our combination. So what we have is a proposed obviousness
14 combination for these claims where for some reason the POSITA would
15 look at Chang II and say, you know what, I'm going to move the detection
16 unit. I'm going to move that --

17 JUDGE HOMERE: I guess the question is, would it be within the
18 scale of the POSITA to say that, well, hey, you know, we have a routing
19 logic circuit as you have in the invention, and there's a detection that's being
20 done here and we're going to need, you know, the detection there at, you
21 know, at that side of the bridge.

22 MR. BRAUSA: So I would suggest that it's not a question for
23 obviousness or dispute about the question of obviousness is not whether it's
24 in a skill of the person of ordinary skill to do it, it's whether they'd have a
25 reason to do it. And that's the problem once you have the solution --

1 JUDGE HOMERE: I did not have a reason because first thing, when
2 you have this consumer device, you have to determine what it is, whether it's
3 operating as a host or as a device. So you got to have a detection. That's the
4 first step, right?

5 MR. BRAUSA: Certainly there's if you're having a host in a device,
6 you'd need detection. The question though is not do I know that? It's why
7 would I do these various changes that are being proposed? Why would I
8 move the detection? Chang II as you ought to recognize yesterday, it detects
9 whether something attached is a host or a device. We see in Figure 5 the
10 detection unit is in the bridge. Why move that but leave certain components
11 in another place? The reason, as we saw, is in the claims and that's the
12 problem not only in the 643 proceeding, but across all five of these
13 proceedings.

14 The hindsight we talked about yesterday plagues this petition too, and
15 it's particularly true with the picking and choosing about what to move in
16 Chang, what to leave in place and the total absence of a rationale not for if
17 you could do it, but why you would do it. Thank you.

18 JUDGE HOMERE: Thank you. Any further questions from the
19 Panel? Reporter, do you have any questions for the attorney, for the parties?

20 REPORTER: If I could do that after.

21 JUDGE HOMERE: Yes. What is it?

22 REPORTER: Off the record.

23 JUDGE HOMERE: Oh, off the record. Okay. All right. Well, thank
24 you for appearing today and answering your questions. The hearing
25 regarding PGR at 2024-00011 is concluded. We are adjourned.

26 MR. BRAUSA: Thank you.

- 1 MR. JENSEN: Thank you, Your Honor.
- 2 (Whereupon, the proceedings at 2:13 p.m. were concluded.)

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Patent 11,681,643 B2

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