

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

INTELLECTUAL VENTURES II LLC,
Patent Owner.

Case IPR2025-00220
Patent 11,206,670 B2

Record of Oral Hearing
Held: April 22, 2026

Before KRISTEN L. DROESCH, FREDERICK C. LANEY, and
AARON W. MOORE, *Administrative Patent Judge*.

APPEARANCES:

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The above-entitled matter came on for hearing on Wednesday, April 23, 2026, commencing at 11:00 a.m. EDT, at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

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

11:01 a.m.

JUDGE DROESCH: Good morning, everyone. We're here for oral arguments for IPR2025-00220, where the issue at hand is patentability of Claims 1 through 18 of patent -- oh, I don't know if I have that down correctly. At any rate, I'm Judge Droesch. Joining me for the hearing in person is Judge Moore, and joining us remotely is Judge Laney.

We'll get started with appearances for both parties. And if anybody else is attending today -- it looks like no. But if you have anybody online that's attending, please identify them as well. Counsel for Petitioner, please begin with your appearances.

MR. JARRAT: Morning, Your Honor. I'm Scott Jarratt, lead counsel for Petitioner, Tesla. And with me today is Clint Wilkins, and he will be presenting today.

JUDGE DROESCH: Okay. Thank you. Counsel for Petitioner -- I mean, Patent Owner. Sorry.

MR. GOLUB: Good morning. I'm Dan Golub. I'm going to be presenting for Patent Owner today. And this is my colleague, Brandon Theiss.

JUDGE DROESCH: Good to see you again. All right. Following the hearing, just please remember to check in with the court reporter, make sure that they have all the spellings and information that they might need.

Per the order today for the oral hearing, Petitioner is allotted 60 minutes for their presentation, and Petitioner will go first. Petitioner may reserve some of its time for rebuttal, but that time cannot exceed 30 minutes.

1 Then following Petitioner's initial presentation, Patent Owner will go
2 and make their presentation. Patent Owner also has 60 minutes and may
3 reserve some of its time for rebuttal as well.

4 To aid in the preparation of the hearing transcript, please identify your
5 demonstrative slides by the slide numbers and any exhibits or papers by the
6 paper numbers and exhibit numbers. Your argument should be limited to
7 only those arguments previously presented in your briefs. Please make it
8 clear which challenges and claims you are addressing at all times.

9 If either party has any objections regarding anything opposing counsel
10 is arguing about, please wait until it's your time at the podium to make any
11 objections.

12 Counsel for Petitioner, would you like to reserve some of your time
13 for rebuttal?

14 MR. WILKINS: Yes, 15 minutes please, for rebuttal.

15 JUDGE DROESCH: All right. And counsel for Patent Owner, how
16 much would you like to reserve for rebuttal?

17 MR. GOLUB: I'll reserve ten minutes.

18 JUDGE DROESCH: Okay. All right. I'm going to keep this clock
19 running and the lights will hopefully indicate that you're getting close to
20 your time for your initial presentation. I think that's all I have to announce.
21 Counsel for Petitioner, whenever you are ready, please begin your
22 presentation.

23 MR. WILKINS: If you could give me just a moment to make sure
24 that I get the slides up on the screen before you start the clock.

25 JUDGE DROESCH: Yes.

26 MR. JARRAT: Your Honor, just one minor housekeeping matter.
27 Will Judge Laney be able to see our slides today or not?

1 JUDGE DROESCH: I'm not sure. Judge Laney, will you be able to
2 see the slides today, do you think?

3 JUDGE LANEY: Yes.

4 MR. JARRAT: Oh, great. Thank you.

5 MR. WILKINS: Perfect. All right. Your Honor, I'm ready whenever
6 you want to start.

7 JUDGE DROESCH: Okay. You may begin.

8 MR. WILKINS: Good morning. My name is Clint Wilkins on behalf
9 of Petitioner, Tesla. Can we go to Slide 2, please? In Slide 2, Figure 2 of
10 the '670 patent is shown. Figure 2 is described in column 8, lines 4 through
11 23 of the '670 patent. As shown in Figure 2, the '670 patent relates to two
12 types of mobile devices in wireless cellular networks. The device in the
13 upper left labeled 105A is an LTE device, and the device in the upper right
14 labeled 105B is an MTC device.

15 An LTE device refers to an existing device at the time of the '670
16 patent, and an example is a fourth generation cell phone. An MTC device,
17 or machine type communication device refers to a new device that had
18 reduced capability relative to an LTE device. The '670 patent is directed to
19 how to accommodate these new MTC devices in LTE networks. The '670
20 patent relates to transmissions of system information blocks, abbreviated
21 SIBs to the mobile devices. System information blocks are a big focus of
22 our discussion today.

23 Let's go to Slide 3, please. Slide 3 presents a textbook describing how
24 LTE works. The excerpt from this textbook describes system information
25 blocks, or SIBs. And if you can see along the left side, the SIBs are
26 enumerated from 1 to 13 in LTE networks. As the name implies, SIBs
27 provide information about the system to enable a device to connect to the

1 network. As reflected by this example from the textbook, the evidence
2 shows that these SIBs, as I mentioned, are enumerated. LTE networks
3 define types of SIBs referred to as SIB1, SIB2, SIB3, et cetera.

4 The main dispute in this case regards whether the first SIB, called
5 SIB1, is rendered obvious by Wallen's disclosure of transmitting SIBs to
6 MTC devices. And as the evidence shows, of course Wallen renders this
7 obvious, because SIB is the first system information block. To reiterate, the
8 acronym SIB stands for system information blocks, and the first system
9 information block is SIB1. As we'll discuss later, SIB1 is essential for all
10 devices to connect to a network.

11 Let's go to Slide 4, please. The bandwidths of the different devices in
12 the '670 patent are illustrated in Slide 4. The Figure 3 of the '670 patent is
13 shown here. Figure 3 depicts the bandwidth used by an LTE device and
14 MTC devices. LTE devices receive information over frequency band F1 on
15 the left, denoted in green, whereas MTC devices receive information over a
16 narrower bandwidth, frequency band F2, denoted in blue.

17 Also shown on Slide 4 is an excerpt from the '670 patent. This
18 excerpt refers to SIB1 as the first of the system information blocks. That is
19 because -- this is the only reference to SIB1 in the entire '670 patent, and the
20 reason is because POSITAs knew what an SIB1 is and POSITAs understood
21 that SIB1 is a term of art in LTE networks that refers to the first of the
22 system information blocks, and that receiving SIB1 is essential for a device
23 to connect to the network.

24 JUDGE LANEY: Can I ask you a quick question about the figure
25 you're showing?

26 MR. WILKINS: Yes.

1 JUDGE LANEY: Does that mean that MTC can't have SB1 block
2 since its frequency band is above where the SB1 block would be?

3 MR. WILKINS: So the question, I believe, is the MTC device can't
4 receive the standard, sort of, the LTE SIB1 because it's outside of frequency
5 band F2. Is that correct?

6 JUDGE LANEY: Correct.

7 MR. WILKINS: That is correct. That's the problem recognized in the
8 '670 patent, was that the way SIB1 was transmitted in legacy networks
9 would not work for MTC devices. So there's some adjustment that needs to
10 be made for MTC devices. Does that answer your question?

11 Okay. Let's go to Slide 5, please. So Slide 5 lays out the problem we
12 actually just discussed, and this is an excerpt from the '670 patent that
13 crystallizes the problem being addressed. The '670 patent notes that, and I'll
14 quote, a problem can therefore arise if essential control signaling from the
15 base station is transmitted outside of the frequency range, which can be
16 received by a low-capability device. So that's exactly what we just
17 discussed. An example -- and so that's an end quote from -- that's the first
18 highlighted portion of that excerpt.

19 And as we just discussed, an example of this essential control
20 signaling is SIB, and an example of the reference low-capability device is an
21 MTC device. And I'll continue. The '670 patent also notes that, and this is
22 the second part of that highlighted -- the second highlighted portion, and it
23 quotes, system information carried in system information blocks may be
24 transmitted at a frequency which cannot be received by the low-capability
25 device. This would cause problems, potentially preventing the low-
26 capability device from being able to camp on the network.

1 So again, the problem addressed is the inability of MTC devices to
2 receive the essential system information. Thus, the '670 patent recognized
3 that all devices need SIBs, but what was needed was a way to transmit the
4 SIBs over a smaller frequency band to MTC devices.

5 Let's go to Slide 6, please. So this is Claim 1 of the '670 patent, and
6 I've labeled the limitation that has our dispute as element 1.6, or limitation
7 1.6 at the bottom of claim one. And the other independent claims have an
8 identical limitation. So Claims 7 and 13 have the same limitation. And
9 there's no dispute that the prior art renders obvious the entirety of Claim 1 all
10 the way down to the number one at the end of system information block.
11 And so our dispute focuses on that portion of the claim.

12 So there's no dispute that Wallen discloses system information blocks,
13 but the dispute is over whether it was obvious that that would include SIB1.
14 And again --

15 JUDGE LANEY: Before you get there, and maybe you'll say you'll
16 cover it and say, hey, I'll get there, and that's fine, that's a fine answer. On
17 the MTC, how does an MTC, or I guess you're calling that a low-quality
18 product or whatever, how does it transmit the information that would be in
19 the SIB1 block, or the first system information block in an LTE device? Or
20 would an MTC not have that information? So in other words, the LTE
21 device has particular information that is essential for being able to connect to
22 the cell towers or communicate.

23 MR. WILKINS: Correct.

24 JUDGE LANEY: And is it only critical for an LTE device, or does an
25 MTC need similar type information so that it can connect? And if so, how
26 would an MTC know that if it can't use the SB1?

1 MR. WILKINS: So it is essential that the -- so there's a lot there. So
2 in the legacy network, yes, the LTE device, there's a way for the network to
3 transmit SIB1, which is essential. It's also essential for the MTC device, as
4 recognized in the patent, to receive the same information. But it couldn't.
5 And so now what the patent is trying to solve --

6 JUDGE LANEY: And what did it do if it couldn't? I mean,
7 obviously MTC devices were still connecting to the cell towers and things,
8 right?

9 MR. WILKINS: No, they weren't. So that's the whole problem, is
10 that the MTC device was a new concept. And so, as the name implies, it
11 was given the label machine-type device, and that was sort of to encompass
12 the possibility of these devices being attached to machines or something like
13 that that's going to connect smaller amounts of data to the network. But that
14 wasn't the only use case.

15 So those devices were new. That was a new concept. And so those
16 were being introduced into the network, or that was what was desired. But
17 there was no way for those to actually connect.

18 So just to kind of give you kind of a basic framework, imagine when
19 you power on a device, what it needs to start receiving just to connect.
20 There's some basic synchronization, and that's actually reflected in Claim 1
21 of those synchronization signals. Then it receives a master information
22 block, and then the very next block is literally the first system information
23 block. So that's sort of the sequence. And so that's how a device would then
24 have the information it needs to start connecting to the network. Does that
25 make sense?

1 JUDGE LANEY: It makes total sense. And you're saying MTC
2 devices at the time of the invention were not able to have that while blocking
3 the --

4 MR. WILKINS: Correct.

5 JUDGE LANEY: Okay.

6 MR. WILKINS: Correct. And that's exactly what's reflected in this
7 excerpt and other excerpts in the '670, the excerpt on Slide 5, for example.
8 So let's go to -- so again, Wallen renders obvious SIB1 because SIB1 is the
9 first system information block. And just as the '670 patent refers to SIB1
10 only once, Wallen likewise references SIB only one time for essentially the
11 same reasons.

12 Let's go to Slide 7. So there are two main issues in this case. First is
13 whether Wallen renders obvious SIB1, and the second issue is whether
14 Wallen is prior art. Those are the two disputes. The Patent Owner has
15 presented a claim construction that imports negative limitations to try to
16 show that Wallen does not render obvious SIB1. Patent Owner's
17 construction clearly contradicts the '670 patent. But even if Patent Owner's
18 construction was correct, Wallen still renders obvious SIB1.

19 Turning to Slide 8, Wallen, as shown in these excerpts, and I'll read
20 some from the excerpts, Wallen addresses the same problem in the same
21 way as the '670 patent. The problem addressed, as shown in the top, is
22 enabling an MTC device to connect to an LTE system. And Wallen presents
23 the same solution, which is to use the MIB, the master information block, to
24 convey control information for MTC devices to receive SIBs.

25 Let's go to Slide 10. So Slide 10 displays Wallen's paragraph 72. The
26 parties refer to Wallen's paragraph 72 as Example 5. Petitioner points to
27 Example 5 because it tracks the claim exactly. And Slide 10 illustrates the

1 core dispute, does Wallen's disclosure of SIBs render obvious SIB1? And
2 the simple answer is yes, Wallen's disclosure of SIBs does render obvious
3 SIB1. And there are at least two reasons that Wallen's disclosure of SIBs
4 renders obvious SIB1.

5 Again, SIB1 was known in the art as the first of the SIBs.
6 Furthermore, both experts agree that SIB1 carries essential system
7 information. Therefore, it would have at least been obvious that Wallen's
8 SIBs include SIB1. That's what the evidence shows. And now, let's step
9 through the details of what I just said. So let's go to slide --

10 JUDGE LANEY: Before you get there, can I ask one question on
11 that? So looking again at your figure showing MTC versus the LTE
12 frequency, you know, F.

13 MR. WILKINS: Yes.

14 JUDGE LANEY: Yeah, maybe I can --

15 MR. WILKINS: Let me go to that. Yes, there it is.

16 JUDGE LANEY: Okay. So would it be -- is it fair to say -- so I
17 guess I'm just trying to figure out, so you have F2, you have F1.

18 MR. WILKINS: Correct.

19 JUDGE LANEY: And 315 is referring to, that's a block, right?

20 MR. WILKINS: Yes, so the --

21 JUDGE LANEY: There could be several SIBs within 15, correct?
22 315.

23 MR. WILKINS: Right. Yes, so basically this figure is disclosing,
24 you know, how frequency and time can be partitioned. Does that make
25 sense?

26 JUDGE LANEY: I understand. Yes, but I'm just trying to use it kind
27 of as a -- because I can't point to things with you. I'm just trying to use it as

1 a frame of reference. And so starting at the bottom of it, you'd start stacking
2 up SIB blocks. Is that just a way to visualize it? You have SIB1 block, two,
3 three, four. How many blocks can there be?

4 MR. WILKINS: Well, frequency is along the Y-axis and time is
5 along the X-axis. So there would be, you know, a series of system
6 information blocks transmitted in time as time moves on. Does that make
7 sense?

8 JUDGE LANEY: Yes. And so, the block, I shouldn't be looking at it
9 from the frequency perspective. I should be looking at the time, so --

10 MR. WILKINS: Right. Time's marching forward and things are
11 being transmitted kind of at different frequencies or within different bands as
12 time moves on.

13 JUDGE LANEY: And there's roughly -- how many blocks can there
14 be? Because the reason I'm asking is because, you know, the statement you
15 point to that's at issue just says SIBs, right?

16 MR. WILKINS: Correct.

17 JUDGE LANEY: It doesn't say one, it doesn't say any. It just says
18 SIBs.

19 MR. WILKINS: Right.

20 JUDGE LANEY: Which is good evidence. But I guess I'm trying to
21 understand how many SIBs can there be? Can there be as many as a
22 designer wants to put in it or is there some constraints on, as far as set by
23 standards, that it can be limited to only 16 or 150 or whatever? You know,
24 I'm --

25 MR. WILKINS: Right. I see what you're saying. We haven't had to
26 basically enumerate anything beyond SIB1 because that's the only thing in
27 the claim, if that makes sense. But we know SIB1 is the first one and we

1 know that in order for an MTC device to receive it, it needs to be in the
2 narrower bandwidth, if that makes sense. The other standard -- go ahead.

3 JUDGE LANEY: I understood you to say that, but I'm trying to
4 understand what the world is of SIBs.

5 MR. WILKINS: Right.

6 JUDGE LANEY: How many SIBs can there be?

7 MR. WILKINS: The world of SIBs in LTE is what's in Slide 2. I'm
8 sorry, Slide 3. So there are 13 within the world of LTE as it existed, but this
9 claim and the entire case is about Claim 1 --

10 JUDGE LANEY: No, I understand. But while it is not limited to
11 LTE, yes, it gives us a frame of reference, it's an example. So this one has
12 13 but SIBs, if it's limited to 13, there could be other numbers.

13 MR. WILKINS: Basically, what I know is that, yes, SIB1 is the first
14 and there are 13 in LTE. So maybe there could be 13, but we haven't -- for
15 MTC devices, but we haven't really had to go down that path.

16 JUDGE LANEY: But I'm judging -- I understand that, but I'm
17 judging from Wallen, SIBs aren't limited to LTE, right? I mean, other
18 systems can have SIBs. And the reason I say that is because it says LTE is
19 an example. It doesn't say LTE is a limitation or only for LTEs. It's just --

20 MR. WILKINS: Wallen is -- let's go back to Wallen. It's essentially
21 trying to solve, yes, it does say such as but not limited in that first excerpt.
22 So now we're on Slide 8. Yes, such as but not limited to an LTE. But LTE
23 is the example driving Wallen, if that makes sense.

24 JUDGE LANEY: Well, I understand that. I'm just trying to
25 understand because of that statement and it says generically SIBs. I'm just
26 trying to understand the realm of what I'm dealing with. Okay. I don't want
27 to waste more time. You can --

1 MR. WILKINS: Yes. Let me go to Slide 11. I believe we were on
2 Slide 10, and I think Slide 11 will perhaps crystallize this a bit for you. So
3 Slide 11 displays paragraph 68 of Wallen, and this is a significant paragraph
4 because it confirms that it's important for an MTC device to receive SIB1.
5 And so I want to point to the first highlighted portion. It says, the first
6 system information block, SIB1. So the first highlighted portion confirms
7 the understanding that the first system information block is SIB1.

8 And I want to read you verbatim what the second highlighted portion
9 says. The first SIB, which is a legacy SIB, is allocated frequency resources
10 such that it can be read by an MTC device. So that's what Wallen is trying
11 to do. It's trying to solve -- as we just discussed, the problem it's trying to
12 solve is enable MTC devices to connect. And this recognizes what we've
13 discussed and what was understood as a term of art in LTE, the first system
14 information block is SIB1. And it calls it a legacy SIB, but it goes on to say
15 that it's allocated frequency resources such that it can be read by an MTC
16 device. So that's very important.

17 And this is significant because Patent Owner is alleging that an MTC
18 device cannot read a legacy SIB1, but that's not what Wallen says. Wallen is
19 talking about having an MTC device receive SIB1. Again, all devices need
20 to receive SIB1 because it's essential to connect to the network, and you can
21 see this -- let's turn to Slide 12. In Slide 12, both experts agree that receiving
22 SIB1 is essential for a device to connect to the network. Our expert said it
23 and their expert said it.

24 For example, during deposition in the second part of the slide, here's
25 the exchange we had with Patent Owner's expert, was SIB1 known to carry
26 information essential for a UE -- there's a typo there. It says UAE, but it's
27 UE or user equipment, to connect to the LTE network. And he said it is. It

1 is known to be essential, yes. So we have both experts agreeing that it
2 carries essential system information.

3 So let's go to Slide 13. Slide 13 displays a portion of the petition.
4 Now our position throughout the proceeding was that Wallen's Example 5 in
5 paragraph 72 at least renders obvious SIB1. The reason is that Wallen
6 confirms a POSITA's understanding that SIB1 is the first system information
7 block, and SIB1 was also known to be essential for connecting to the
8 network. So those two things together means that when Wallen discloses
9 SIBs to an MTC device, those at least include SIB1.

10 I want to go to Slide 14, please. So Slide 14 illustrates two portions of
11 the sur-reply. In the first one, the sur-reply is alleging that the petition
12 should have explained why a POSITA would have been motivated to replace
13 Example 1. And we're not replacing Example 1. Example 5 stands on its
14 own. So we're not bodily -- our position has not been, as I just showed in
15 the previous slide, has not been bodily incorporating Example 5 into
16 Example 1.

17 And another portion of their sur-reply refers to our theory as a new
18 theory that Petition cites Wallen's mention of SIB1 in the content of
19 Example 1 only as additional evidence. Well, as I just showed in the
20 previous slide, that's what we did. In the petition, it's additional evidence
21 that the first SIB is SIB1. Everybody recognized that, all POSITAs
22 recognize that.

23 JUDGE LANEY: Do you have -- can you understand why would
24 Wallen, given that it recognized what -- the importance of SIB1, why does it
25 rely on thinkers versus direct accessing SIB1, setting aside whether or not
26 the claim requires direct accessing anything? I'm just saying, why does it do
27 it the way it does versus directly accessing SIB1?

1 MR. WILKINS: I think it recognizes that there would be trade-offs to
2 each way of doing it.

3 JUDGE LANEY: Does it describe trade-offs?

4 MR. WILKINS: No, it doesn't describe trade-offs, but I would -- but
5 Example 5, again stands on its own. The other thing I would point out is
6 that Example 5 actually tracks the way legacy LTE works. So Dr. Long,
7 their expert in paragraphs 34 through 38 of Exhibit 2010, describes legacy
8 LTE networks. Our expert describes legacy LTE networks. And legacy
9 LTE networks actually use a two-step process.

10 First, there's the MIB that points to a PDCCH, and then the PDCCH
11 points to SIB1. So there's -- one way to frame it in your mind is it, Example
12 5 is basically tracking LTE except it calls the PDCCH an MPDCCH. The
13 reason is the frequencies are being adjusted. That control channel -- and
14 sorry, I know this is an alphabet soup, but that stands for a control channel.
15 It's a physical downlink control channel. That control channel is being
16 transmitted such that an MTC device can read it.

17 Then coming after that control channel are SIBs, if that makes sense.
18 And for our expert, if you're interested in his discussion, it's Exhibit 1037,
19 paragraphs 16 and 17. And their expert has a discussion in Exhibit 2010,
20 paragraphs 34 through 38, for the record. That's discussion of legacy LTE.

21 JUDGE LANEY: Thank you.

22 MR. WILKINS: Let's go to Slide 15. So this Slide 15 has each side's
23 proposed construction. Petitioner has maintained that no construction is
24 necessary because SIB1 is a term of art that doesn't need a construction. The
25 Patent Owner's proposed construction is that SIB1 is an ordinary legacy SIB
26 and is not intended for an MTC device. And their proposed construction is

1 wrong for at least three reasons as we're going to discuss in the following
2 slides.

3 The first reason why their construction is wrong is that their own
4 expert contradicts the construction. It says in paragraph 48 of Exhibit 2010,
5 SIB1, that is legacy SIB1, which they refer to legacy SIB1, MTC-like
6 communication devices can read SIB1. So their expert is contradicting their
7 construction. The second reason --

8 JUDGE LANEY: How is that a contradiction?

9 MR. WILKINS: Because they're saying it's not intended for an MTC
10 device. So they're trying to read MTC devices out of this claim, out of the
11 claim term.

12 JUDGE LANEY: I don't know that I understand their construction
13 that way. I guess what I understand their construction to be is what we --
14 going back to what we said before and to the things that you pointed out in
15 Wallen, just that the SIB1 has to be -- if anything, I guess they're trying to
16 pin SIB1 to the LTE SIB1.

17 MR. WILKINS: Yes. But they're saying that -- it's a little
18 complicated what they're doing -- what they're saying. But yes, the MTC
19 device is receiving what Wallen recognizes as SIB1, but it's adjusted, that
20 bandwidth is adjusted relative to the legacy network. So it's the same
21 information, just different bandwidth.

22 JUDGE LANEY: Well, I know you want to smooth it out, and I
23 understand that, but I guess that -- but I understand their -- the question we
24 have to answer is, and you supported it in the earlier one. A skilled artisan
25 knew what SIB1 is. SIB1 is that first one in the LTE. And what you're
26 trying to say is, no, SIB1 is broader than that. It's information akin to what

1 would be in the LTE SIB1. And it seems to be. That's the issue we have to
2 resolve.

3 I don't see that necessarily being an inconsistency, and I don't even
4 know if I think that's a negative limitation. And I just wanted you to
5 understand kind of where I'm struggling with that so maybe you can
6 understand where to go in the presentation. Because that is a claim
7 construction.

8 MR. WILKINS: Our position is that the SIB1 that the MTC device
9 would receive is the same information but different bandwidth, if that makes
10 sense.

11 JUDGE LANEY: Right. So in other words, you're not -- I guess a
12 question, but it seems as though earlier you were saying a skilled artisan at
13 the time of the invention knew exactly what SIB1 is. It's a specific thing
14 baked into the transmission, not just broadly speaking information about
15 setup. Yes, that is information that could be in SIB1, but you're trying to --
16 what it sounds like the Petitioner's position is is that we want to construe
17 SIB1 not to be the thing it is, but to be the thing that it's comprised of.

18 MR. WILKINS: If it would simplify things, we agree that SIB1 is a
19 legacy SIB1 in the sense of the type of information. And we have, as we'll
20 get to in our slides, SIB1 refers to a type of information and not the intended
21 receiver.

22 JUDGE LANEY: Okay. So you're saying -- so what's the limitation
23 on the type of information? What's the scope of that? I mean, is that the
24 only information that can go in SIB1? Are you telling me that somehow
25 SIB1 is -- I understand how it's being used, but it seems as though SIB1
26 could be used for other things and not as limited to what specific information
27 it happened to be used with.

1 MR. WILKINS: SIB1 carries a certain meaning as the first system
2 information block that has certain information in it that was essential. That's
3 basically, I think, all that's needed.

4 JUDGE LANEY: Okay.

5 MR. WILKINS: Their expert -- so continuing on the proposed
6 construction that we see what they're trying to do is exclude MTC devices.
7 And he says the central problem addressed in the '670 patent is how to
8 accommodate MTC-like terminals in legacy LTE networks.

9 The third reason why their construction is wrong is that SIB1 refers to
10 a type of information and not the intended receiver. So as our expert
11 explains, referring to textbook information, the different SIBs are
12 characterized by the type of information that's included. And so their expert,
13 in their sur-reply, says, Wallen is explicit that SIB1 is a legacy SIB. And we
14 agree that Wallen says it's a legacy SIB, meaning that it's for use by a
15 standard compliant or legacy device. But that's not what Wallen says when
16 it discusses the first SIB.

17 Again, it says it's a legacy SIB, but it's allocated frequency resources.
18 Such that it can be read by an MTC device. And that last part is crucial. It's
19 saying an MTC device should receive SIB1. In the time I have left, let's --
20 are there any further questions about Wallen? I can move on and discuss the
21 next --

22 JUDGE LANEY: So just to be absolutely clear with Wallen, Wallen
23 does not actually receive SIB1. It receives a version of the information that
24 SIB1 contains. Is that a fair characterization?

25 MR. WILKINS: That's a fair characterization. It's in a narrower
26 bandwidth.

27 JUDGE LANEY: Okay.

1 MR. WILKINS: Yes.

2 JUDGE LANEY: Thank you.

3 MR. WILKINS: Let's go to Slide 23. So now we're moving on to the
4 next major issue, which is, that's in dispute, is whether Wallen's prior art.
5 And this slide illustrates a timeline of the relevant dates for the Wallen
6 reference and the '670 patent. And as you can see from the timeline, the
7 Wallen non-provisional application falls between the '670 non-provisional
8 application and the '670 foreign priority application. And then the Wallen
9 provisional is earlier in time than the foreign priority application.

10 This is important, Your Honors. So there are two different ways for
11 Petitioner to prevail on this issue. And so Petitioner can prevail in either one
12 of two ways. Wallen's prior art is of its non-provisional filing date, so you
13 need not even reach whether Wallen is prior art in the provisional filing date.
14 However, we've also shown and provided extensive evidence that Wallen is
15 prior art as of its provisional filing date.

16 So let's cover the non-provisional -- the law related to the non-
17 provisional filing date first. There's no presumption that the '670 patent is
18 entitled to the filing date of its foreign priority application. No one, not the
19 examiner during prosecution, not the Patent Owner in this proceeding, has
20 examined whether the '670 patent is entitled to its foreign priority
21 application. And this is contrary to the case law, because the case law in
22 Dynamic Drinkware, the Federal Circuit case, the Board has no basis to
23 presume that a reference patent is necessarily entitled to the filing date of its
24 provisional application.

25 And then the second part of this case law, which is interpreting
26 Dynamic Drinkware, the same thing applies to a foreign priority application.

1 So there's no basis to presume that it's entitled to its -- that the '670 patent is
2 entitled to its foreign priority application.

3 This is the excerpt from the original petition that says, Wallen is prior
4 art of its non-provisional filing date. This is what we asserted. And we said
5 the '670 patent is not entitled to claim the benefit of its foreign priority date
6 due to its lack of written description support for the challenged claims. This
7 shifted the burden to the Patent Owner. You can see this -- you can see why
8 on slide 27. So again, this Marvell Semiconductor, it's a PTAB case, but it's
9 interpreting Dynamic Drinkware and In re Gosteli, another two Federal
10 Circuit cases. And I'll read you the top portion of the highlighting.

11 If Patent Owner wished to challenge the prior art status of a reference
12 after Petitioner satisfied its initial burden of production by saying the
13 reference is prior art, Patent Owner would then have to demonstrate in this
14 proceeding that the challenge claims indeed do satisfy the requirements of
15 35 U.S.C. 119 with respect to the foreign application, the priority of which it
16 claims.

17 And that cites the footnote 5, which says, the foreign priority
18 application must -- which is the second highlighted portion in Slide 27. The
19 foreign priority application must be examined to ascertain if it supports
20 within the meaning of section 112, paragraph 1, so written description, what
21 is claimed in the United States application.

22 And the Patent Owner has simply not met its burden. They have not
23 shown that all the challenged claims are entitled to the foreign priority
24 application. They addressed one limitation of Claim 1, and even that, if you
25 look in Slide 28, even that showing was deficient. And it did not show the
26 entirety of even the limitation they were trying to address. They just say, the
27 foreign priority application discloses the system information block. So the

1 Patent Owner has not met its burden, and Wallen -- and so the '670 patent is
2 not entitled to the foreign priority date. So Wallen is prior art, at least as of
3 its non-provisional filing date.

4 Now let's go to the second part of this inquiry. And then by the way,
5 the inquiry on whether Wallen is prior art can end there, because it's prior art
6 if it's non-provisional. But for completeness, we're going to cover also the
7 provisional application and the disputed portions. And there are two
8 disputed portions of the non-provisional application and whether it has
9 written description support.

10 The first disputed portion is Figure 13 of the Wallen reference. And
11 what we've used from -- what we used from Figure 13 is highlighted in
12 color. So the three, and it's basic hardware to implement the method. And
13 this is how it's being used. In Claim 1, there's a transceiver and a processor,
14 and those are operatively configured to implement the method steps.

15 And in Figure 13, what we pointed to was the radio circuitry is a
16 transceiver, and the processor is a processor. Claim 13 is in the top portion
17 of the slide, and that's a computer-readable medium claim, so you need a
18 memory with instructions. And so what we pointed to was the memory of
19 Figure 13. That's all we used of Figure 13.

20 We compared Figure 13, so what the case law requires is showing that
21 the specific portions that you relied upon from the non-provisional are
22 supported in the provisional. That's what we did, and this color coding is
23 actually from our expert declaration where he compares the specific
24 disclosures of Figure 13 we relied upon. And he also color codes where the
25 transceiver, the processor, and the memory are in the Wallen provisional
26 Figure 6.

1 The only argument that the Patent Owner made about Figure 6 in its
2 response was that Figure 6 of the -- I'll go back here. I'm going to read what
3 they said. Rather than depicting an example of an MTC device, figures 5
4 and 6 of Wallen provisional only depicted UEs in the form of cellular
5 telephones. So they're saying that Figure 6 of Wallen is the more complex
6 cellular telephone. This has no merit. This argument has no merit. What
7 the Wallen provisional is all about MTC devices. From the title of the paper
8 down through the basic concept and then the problem solved and the
9 solutions, they're about MTC devices.

10 And so what we relied on is, it says, as shown in Figure 6, some or all
11 of the functionality described above is implemented in that figure. And the
12 functionality described above is all the proposed solutions in the Wallen
13 provisional. I know I'm eating into my rebuttal time and I'm okay with that
14 for just a small amount of time. So that argument has no merit.

15 The second disputed disclosure is Wallen provisional -- is the
16 disclosure in Wallen in paragraph 72 that we've pointed to several times in
17 the presentation. And what I've done is I've highlighted in green verbatim
18 where they're the same, and in blue, the words that are extra in Wallen in 72.
19 And we had our expert look at this, and the expert, it says in the Wallen
20 provisional, pointing to the SIBs after it says including the MTC-specific
21 SIBs or downlink assignments pointing to the SIBs.

22 The SIBs is referring to the MTC SIBs or the SIBs for MTC devices.
23 In their response, they admit that the disputed passages mean the same thing,
24 and I've color-coded the same words here. It's clear from the text -- here's
25 what their response is. It's clear from the text that both the SIBs that are
26 intended for this MTC device, as in paragraph 72 of Wallen and the SIBs as

1 in page 9 of Wallen provisional, refer to the MTC-specific SIBs referred to
2 in the first part of these sentences. So again --

3 JUDGE LANEY: Can I ask you a quick question? Is SIB1 -- I guess
4 we would have to understand that to be, or a skilled artisan would
5 understand that not to be MTC-specific SIB. Assuming that's the case
6 because you're saying the LTE is designed and not intended for MTC
7 devices.

8 MR. WILKINS: And that's their argument. That where Wallen 72
9 says SIBs for MTC devices, that SIB1 would not be in there. But SIB1, as
10 we showed, as understood in Wallen, was the first SIB. It was important.
11 And Wallen discloses an MTC. It discloses it being sent in the narrower
12 bandwidth, which is the necessary thing to do with an MTC device.

13 JUDGE LANEY: But if you have an MTC-specific communication
14 within the MTC-specific bandwidth, wouldn't you still have an SIB1 for that
15 bandwidth? And that would make it an MTC-specific SIB.

16 MR. WILKINS: Correct, yes. There's no distinction in that example
17 between MTC-specific and SIB1. When you format it for the bandwidth, it
18 is specific for the MTC device.

19 JUDGE LANEY: Well, that would depend on claim construction,
20 right? Presuming you're correct on claim construction, if Patent Owner's
21 correct on claim construction, then there would be a distinctive difference.
22 Because if, as I understand it, if Patent Owner is correct, then SIB1 is the
23 SIB1 for the LTE-type network. That's different than an MTC-specific
24 SIB1, which would be an SIB1 that would be in the block within that
25 specific frequency for the MTC device.

26 MR. WILKINS: That's where their construction doesn't make any
27 sense, because the legacy SIB1 is in the broader bandwidth. So that's the

1 whole problem, is that MTC devices can't get that. So their construction
2 would contradict the '670 patent. The problem is --

3 JUDGE LANEY: Explain that -- break that down a little bit more,
4 because I need to understand what you just said a little bit more.

5 MR. WILKINS: Yes. Let me go back to Slide --

6 JUDGE LANEY: Well, just go back first to what you just said so I
7 can make sure I understand what you just said. You said that -- you just
8 talked about how it's the entire frequency, so it doesn't make any sense. It's
9 kind of important to me. It was a lot. I just want to make sure I fully digest
10 and understand the point you just made.

11 MR. WILKINS: Yes. The so-called legacy SIB, if you full stop
12 there, meaning the SIB, the way it's transmitted in a legacy LTE network,
13 SIB1 in the legacy network, an MTC device could not receive that.

14 JUDGE LANEY: Okay.

15 MR. WILKINS: And that's the problem. Their construction would be
16 -- anyway, that's the problem that the '670 patent was trying to solve, is it
17 recognized this control, what it called essential control signaling, was
18 outside of the bandwidth for MTC devices.

19 JUDGE LANEY: Okay.

20 MR. WILKINS: And that leaves me ten minutes for rebuttal, so I'll
21 reserve that ten minutes. Thank you.

22 MR. GOLUB: May it please the Board. I'm Dan Golub, and I'm
23 going to make the presentation on behalf of the Patent Owner. And I'd like
24 to begin with a system information block 1. I'm on Slide 6 of the Petitioner's
25 demonstratives. And you can see the claim language. It's odd language. A
26 system block 1. And it's odd language because it comes right out of the

1 standard. The standard refers to SIB1, where the SIB stands for SIB, and the
2 1 is the 1 at the end.

3 All of the evidence in this case points to a system information block 1
4 being the legacy SIB1. The legacy device is used to access the network.
5 Patent Owner is not saying that an MTC device can't also read it in some
6 embodiments, but it's not intended for MTC devices.

7 I want to walk through each piece of evidence because it's important.
8 So starting with '670 patent. This is Exhibit 1001, column 7, lines 58 to 62.
9 The patent makes clear that the disclosure is in the context of 3GPP LTE
10 standard. And then next column, I'm at line 36. The patent defines the first
11 class of device that is compliant with particular standards. Those are the
12 LTE devices, the legacy devices, and the second class of devices that are
13 compliant with modified versions of the standard. And then a few lines
14 later, the patent, again, refers to the first class of devices as legacy devices.

15 Now going to paragraph -- I'm sorry, column 17, lines 22 to 31 of the
16 patent, this is the place where SIB1 is recited in the specification. It's the
17 only place. And as it's clear, the patent makes clear that this is what's used
18 by legacy LTE devices to access the network.

19 Now I'm going to switch to Petitioner's Demonstrative Exhibit 3,
20 which is also Exhibit 1038, which my friend relied on for this discussion of
21 SIB1. Right above SIB1, the textbook says, LTE defines the number of
22 SIBs. And SIB1 is one of those SIBs. It's defined by the standard.

23 Finally, let's look at Wallen. And I'm at paragraph 68 of Wallen. Let
24 me see if I can make this a little bigger. Here, Wallen also refers to SIB1
25 that is transmitted in a standardized location in an LTE system, and then
26 refers to it as a legacy SIB. All of the evidence in these proceedings points

1 to a system information block 1 being the SIB1 defined in the standard that
2 can be used by legacy devices to access the network.

3 My friend wants to rewrite the claim language here. He wants to
4 change it from a system information block 1, which is a defined term of art
5 from the standard, to a first system information block. The first system
6 information block. That's not what the claim language says. And, you
7 know, it can't be reconciled with the prosecution history.

8 Remember, this limitation comes in at the end of the prosecution. It's
9 added by examiner's amendment. It's handcrafted by the examiner. These
10 were words chosen by him, not by the applicant. He knew what the standard
11 said, and he picked standard lingo, a system information block 1. If he had
12 meant a first system information block, he would have said that.

13 JUDGE LANEY: But I guess one of the issues we need to struggle
14 with is your claim isn't limited to an LTE network.

15 MR. GOLUB: Well, it does require access to a system information
16 block 1, which is a creature of the standard.

17 JUDGE LANEY: I understand that. But how do we resolve that, the
18 tension? I mean, in other words, is a system information block, going back
19 to what you pointed, referring to Petitioner's exhibit where it defines --
20 where it says LTE defines a number of different SIBs, but then it says SIB
21 includes information mainly related to whether a terminal has allowed the
22 camp on the cell. This includes information about -- I won't read the whole
23 thing, but my point is, do we construe it as being the information that
24 comprises it, or is SIB1 the first block in an LTE-specific network?

25 MR. GOLUB: It's the latter. If the intent was to claim the
26 information included in a system information block 1, the claim would have
27 said that. It doesn't say that. There's also no evidence that Wallen's MSIBs,

1 or MTC-specific SIBs, include the same content and the same information as
2 a SIB1.

3 JUDGE LANEY: Well, then could you resolve how would the MTC
4 acquire the system information block from an LTE network when that would
5 be outside of its frequency band?

6 MR. GOLUB: Well, let me start with Figure 8 of the '370 patent.

7 JUDGE LANEY: Of the '670?

8 MR. GOLUB: '670. Thank you, Judge. So in Figure 8 of the '670
9 patent, item 840, I believe corresponds to the first system information block,
10 SIB1. And at column 17, lines 12 to 17, and describing Figure 8, the
11 specification says that 840 can be located in other places, including in the
12 center band, 820. And that is what is being claimed here. It's a relocation or
13 a location of SIB1 in a band in which the MTC device can't read.

14 JUDGE MOORE: Counsel?

15 MR. GOLUB: Yes, sir.

16 JUDGE MOORE: I'm curious. Does Claim 1 -- Claim 1 is directed
17 to a UE. So does that cover an LTE UE, an MTC UE, or both?

18 MR. GOLUB: So I haven't thought about that question. My
19 understanding was in Claim 1 that the first bandwidth is less than the entire
20 bandwidth. I haven't --

21 JUDGE MOORE: But it only says a first portion, right? Which could
22 be the entire portion?

23 MR. GOLUB: Yes. I guess I haven't thought about it, Judge Moore,
24 only because it hasn't been an issue in the case, but we will think about it
25 while my friend is talking.

26 So I'd like to transition to our point on the merits, which is that the
27 Petitioner hasn't demonstrated that Wallen discloses or renders obvious

1 elements 1.4 and 1.6, and I'm going to begin with a short discussion of
2 Wallen's disclosures of MTC devices and legacy devices. I'm going to talk
3 about examples 1 and 5 of Wallen, then I'm going to get into the petition's
4 mappings of elements 1.4 and 1.6 and why the petition hasn't met its burden
5 of proof.

6 So now I'm on Slide 3 of the Patent Owner's slides. Wallen, I think
7 we've really established this, discloses two types of terminals. A legacy
8 terminal, which Wallen itself refers to as a standard compatible UE, and it
9 uses the full bandwidth, and it also refers to it as a first type of
10 communication device.

11 And then Wallen talks about an MTC device, calls that a second kind
12 of type of communication device with a smaller second bandwidth. And I
13 just put the quotes from Wallen below. In paragraph 11 of Wallen, you can
14 see he talks about a terminal UE designed in accordance with earlier
15 versions of LTE as a legacy terminal. In paragraph 47, he refers to that same
16 legacy terminal as a standard --

17 JUDGE LANEY: Counsel?

18 MR. GOLUB: Yes, sir.

19 JUDGE LANEY: Can a legacy device just accept a portion of the cell
20 frequency bandwidth?

21 MR. GOLUB: I don't know in Wallen. I believe that Wallen says at
22 some point that it receives the full bandwidth.

23 JUDGE LANEY: Well, I'm just curious if you knew whether an LTE
24 legacy cell phone or user equipment could even accept a portion of it, or
25 does it have to take the whole thing and then use the different portions that it
26 wants?

1 MR. GOLUB: I believe legacy UE, as it's described in these
2 references, receives the full bandwidth. That's the way it's set up. And then,
3 in paragraph 42, I'm on the same slide, you can see that Wallen discloses
4 that its MTC device receives a signal no larger than the second bandwidth,
5 which is smaller than the first.

6 So after Wallen talks about these two sets of entities, Wallen goes on
7 to disclose new entities for its MTC devices, such as physical channels and
8 system information. And he denotes these new entities in the specification
9 by adding the prefix M- in front of them. So an M-SIB would be a SIB
10 intended for an MTC device. And I just have the paragraphs 8 and 20 on
11 this slide demonstrating that this is how Wallen refers to these things.
12 Wallen's sole reference to SIB1 is to a legacy SIB. This is paragraph 68 of
13 Wallen.

14 Now I'd like to turn to the two examples, examples 1 and 5 of Wallen.
15 Example 1, which I'll call direct access, has the master information block
16 point directly to the legacy SIB. And this example uses a legacy SIB or
17 SIB1. However, it is the Petitioner's position that Claim 1 requires an
18 indirect pathway to get from the master information block to the SIB1. And
19 we can see that -- I'm looking at the petition page 49 and note 4.

20 According to Patent Owner's apparent understanding of limitation 1.4,
21 the MID points directly to system information. However, that is not the
22 construction that the Petitioner adopted or that the petition sought to map to
23 the claim language. Instead, the petition relied on Exhibit 5 of Wallen. I'm
24 now on Slide 7, where there's an indirect way to get --

25 JUDGE LANEY: Did you mean to say Exhibit 5 or Figure 5?

26 MR. GOLUB: I meant to say Example 5.

27 JUDGE LANEY: Okay.

1 MR. GOLUB: I apologize. So I'm on Slide 7, which has a picture of
2 Example 5 of Wallen. Here, the access to the SIB, in this case an MTC
3 specific SIB, is indirect. The process starts when the MTC device accesses
4 the MID on the left. The MID points the MTC device to a control channel,
5 M-PDCCH. The M-, of course, means that it was a new entity created for
6 MTC devices. And then, the M-PDCCH channel, information on there, is
7 what points to the MTC specific SIB.

8 So I'm moving to Slide 8. In Example 1, the MID directly informs the
9 MTC device of a location of a legacy SIB1, but the Petitioner doesn't believe
10 that meets the claim language. By contrast, Example 5, makes no mention
11 of the system information block 1. Example 5 involves a multi-step
12 approach, where the MID first accesses an MTC specific control channel,
13 which in turn points to MTC-specific SIBs.

14 What the Petitioner does is they cherry-pick from examples 1 and 5 in
15 their mappings to try and meet the limitations of elements 1.4 and 1.6. They
16 use Example 5 for the portions highlighted in yellow, but when it comes to a
17 system information block 1, they turn to Example 1. This is what the
18 petition said in order to try and bridge the gap between examples 1 and 5.
19 They're talking, I believe, in the context of Example 5. They say SIB1 is the
20 only specific LTE SIB disclosed in Wallen. Moreover, it would have been
21 obvious that one of Wallen SIBs that are received includes the disclosed
22 system information block 1.

23 And then, a few lines later, they just say the indication of SIB1
24 represents simply specifying an information detail. This doesn't say
25 anything about basically SIB1 being used as an MTC-specific SIB, but the
26 way that this is phrased, the Petitioner bore the burden of demonstrating that
27 it would have been obvious to implement Example 5 of Wallen such that the

1 control information on the M-MD control channel, the one designed for
2 MTC devices, pointed to an MSIB that included SIB1. And they didn't meet
3 that burden.

4 Petitioner says that it would have been essential for Wallen's MTC
5 devices to access a legacy SIB to access the network, but there's no evidence
6 of that. While there may be evidence that it was essential for legacy devices
7 to access the legacy SIB1, there's no evidence that it would have been
8 necessary for Wallen's MTC devices to access SIB1. On the contrary, the
9 fact that Wallen disclosed and defined new entities like the MSIBs
10 demonstrates that an MTC using one of Wallen's, in the context of Wallen,
11 would have used an MSIB as opposed to a legacy SIB.

12 JUDGE MOORE: Counsel?

13 MR. GOLUB: Yes, Your Honor.

14 JUDGE MOORE: Is there any information in the record about
15 signaling protocols for MTCs in general?

16 MR. GOLUB: I don't believe there is beyond what's in Example 5.

17 JUDGE MOORE: All right.

18 MR. GOLUB: The argument that the Petitioner --

19 JUDGE LANEY: How would you define the SIB1 in the affirmative
20 without putting in the not this or not that? What would you say in the
21 affirmative SIB1 should be defined as?

22 MR. GOLUB: The entity labeled as SIB1 in the 3GPP standard.

23 JUDGE LANEY: Okay.

24 MR. GOLUB: The argument that the Petitioner hasn't combined
25 examples 1 and 5 is simply not consistent with the record.

26 So now I'm on slide 13. And on the bottom left is a quote from the
27 petition's analysis of element 1.6, and you can see it's quoting paragraph 68

1 of Wallen, which is Example 1, and it's quoting Wallen's reference of SIB1,
2 which only happens in Example 1, and on the right is Example 1, so you can
3 see the corresponding language. It's hard to square the idea that the
4 Petitioner didn't rely on Example 1 with the record.

5 In the reply, the Petitioner basically made an argument that I hadn't
6 seen before, which is that the petition cites Wallen's mention of SIB1 in the
7 content of Example 1 only as evidence that SIBs include SIB1. However,
8 Example 5 doesn't refer to SIBs in general. It's expressly limited to only
9 MSIBs, SIBs that are specific to an MTC device. The Petitioner doesn't
10 provide any evidence that MTC-specific SIBs or SIBs that are intended for
11 this MTC device include the legacy SIB that Wallen refers to as SIB1.

12 If there's no questions about that, I'm going to turn to the Petitioner's
13 failure to demonstrate that the aspects of Wallen relied only on 1 are prior
14 art. Actually -- I'm sorry, I forgot something. The combination of teachings
15 from examples 1 and 5 that are glued together in the petition aren't supported
16 by a rational motivation why someone, why a POSITA, would have
17 basically used the legacy SIB1 in the context of Example 5.

18 So Wallen already disclosed in Example 1 a direct way for an MTC
19 device to get to the legacy SIB1. Why would a POSITA replace that direct
20 route with a route that required first going on to Wallen's specially designed
21 control channel for MTC devices only to point back to the legacy SIB1?
22 The petition doesn't provide any explanation for this and they certainly don't
23 point to a problem, for example, that there was an issue with Example 1 or
24 Example 5 that would have been solved by making the modification that
25 they are proposing.

26 Now I'm going to turn back to the prior art issue and whether Wallen
27 is prior art. With respect to this issue, on Slide 17 is exactly what the

1 petition said. First, at the top they said Wallen is prior art under pre-AIA as
2 of the filing date of Wallen prov. And they also said that the '670 patent is
3 not entitled to claim the benefit of GB1201000, its foreign priority
4 document, because a specific limitation, the last limitation, the one we've
5 been talking about, wasn't supported in the provisional. The Petitioner
6 understood from the get-go that both of these were going to be live issues in
7 this petition.

8 And with respect to the last issue, whether or not the '670 patent was
9 entitled to priority data of its provisional, the petition itself on page 11
10 acknowledges that during the prosecution history, the Patent Owner took the
11 position that the '670 claims were supported by the provisional. And
12 knowing all this, the Petitioner set out its case on both issues.

13 With respect to Wallen being prior art, they did a claim chart which
14 mapped Claim 1 of Wallen to its provisional. And with respect to the '670
15 patent, they pointed to the limitation that they could identify, that in their
16 view didn't satisfy the claim, that it wasn't supported by the provisional. The
17 petition was deficient. It failed to do what was required under Riggs, which
18 is to establish that the aspects of Wallen relied on in the petition have written
19 description support.

20 And written description is an exacting standard. As the Federal
21 Circuit said in Purdue Pharma and Ariadne Pharma, a POSITA must be able
22 to immediately discern the material at issue, and material that merely renders
23 the invention obvious doesn't satisfy the written description of Wallen.

24 JUDGE DROESCH: Counsel, I have a question for you. Would you
25 say that it's accurate to say that Petitioner did not have a burden to show that
26 they were entitled to the filing date of the provisional application? Or that
27 they were entitled to rely on the filing date of the provisional application for

1 Wallen? They didn't have to show or produce anything at that point until
2 after the '670 patent was - there was some evidence produced to show that
3 the '670 patent was entitled to its earlier foreign filing date.

4 MR. GOLUB: For their own strategic reasons, they chose to lay out
5 their position in the petition. That was their burden of production. They
6 basically produced evidence tending to show that one limitation of the '670
7 claims wasn't met by the provisional application.

8 JUDGE DROESCH: Okay. And --

9 JUDGE LANEY: And could you answer Judge Droesch's question
10 though? She was asking you, what did they have to do? You're telling us
11 what they did. I'd like to hear your answer to her question though.

12 MR. GOLUB: What they had to do? I guess I want to back up a little
13 bit. They don't have to do anything. They could have done nothing, and in
14 which case the Patent Owner perhaps might have laid out its case for support
15 in the Patent Owner Response. But this case is a very different posture
16 because they went first. And Dynamic Drinkware talks about shifting
17 burdens of production.

18 They set up this construct in the petition by laying out their view of
19 what was missing from the provisional application. We came back in a
20 Patent Owner Response and said, no, it's not missing. Now the burden
21 shifted back to them. In their reply brief, they could have, if they had been
22 able to --

23 JUDGE LANEY: But you're saying -- it sounds like you're saying the
24 burden is dictated by what a party does. I mean, the burden is what the law
25 says the burden is. And it seems like the law says the Petitioner always has
26 the burden of persuasion. They have the initial burden of production. They

1 satisfied that because they pointed out what your filing date is on the patent,
2 and they showed that Wallen's filing date is sooner.

3 Sure, they gave some additional information in anticipating
4 something, but that doesn't shift the burden or change the burden, does it? I
5 mean, it just means they provided in some anticipatory information. You
6 had the burden as the Patent Owner to come forward and establish that
7 you're entitled to your earlier prior date. And that may shift the burden then
8 back to the Petitioner. I mean, isn't that correct? Isn't that what the law is?

9 MR. GOLUB: I think in a normal case, had the Petitioner done
10 nothing in the petition, perhaps the way that you're describing it is the way
11 that the burdens would play out. But this was different. Here they laid out
12 their reason why it wasn't supported, and that was what they produced. And
13 we met it. It seems to me that it's a different construct.

14 JUDGE LANEY: It would be -- it sounds like what you're saying is
15 by doing what they did, they implicitly conceived everything else as
16 satisfying --

17 MR. GOLUB: No.

18 JUDGE LANEY: -- so you didn't have to do anything.

19 MR. GOLUB: I respectfully disagree.

20 JUDGE LANEY: Okay.

21 MR. GOLUB: Because in their reply brief, they had an opportunity to
22 come back with any other aspect of Claim 1 that they thought was not
23 supported by the provisional application.

24 JUDGE LANEY: But that's not their burden, right? I mean, the
25 burden was for you to establish it is supported. I mean, that being your
26 burden, in their reply, why would we expect them to do that when that's not
27 their burden? Why would they highlight for you something you didn't do

1 that -- I'm not saying it as hypothetically, was fatal to your case. I mean,
2 why would they -- I guess from a strategic, let's talk strategically, they may
3 not want to do that. They don't want to call your attention to it. And it's our
4 responsibility to follow the law about who has the burden and make
5 decisions based off of who had the burden.

6 MR. GOLUB: I think my response, Your Honor, is it's different
7 because they went first.

8 JUDGE LANEY: Okay.

9 MR. GOLUB: Okay. Had they not done that, I think things would
10 have been differently. But our burden of production was to meet their
11 burden of production.

12 JUDGE DROESCH: But Counsel, in your response in sur-reply, are
13 you saying that Patent Owner has met their burden of production to show
14 that they put forward enough evidence to show that the Patent Owner is
15 entitled to the earlier foreign filing date of this Great Britain patent or
16 application?

17 MR. GOLUB: Yes. So first of all, the ultimate burden of persuasion
18 here isn't on the Patent Owner.

19 JUDGE DROESCH: Right. But you have a burden of production.

20 MR. GOLUB: I have a burden of production. And this slide shows
21 basically the puts and takes here. The Petitioner laid out --

22 JUDGE DROESCH: Which slide are you on?

23 MR. GOLUB: I'm sorry. I'm on Slide 37.

24 JUDGE DROESCH: Okay.

25 MR. GOLUB: They said that the last claim element relating to a
26 system information block wasn't supported. We came back, showed that it
27 was, and then they didn't challenge any other claim limitations.

1 JUDGE DROESCH: Okay. So because you addressed that one
2 limitation that Petitioner had mentioned, is it your position that Patent
3 Owner has met its burden of production?

4 MR. GOLUB: Yes.

5 JUDGE DROESCH: Okay.

6 MR. GOLUB: I'd also like to talk about why the aspects of Wallen
7 relied on in the petition are not supported by the Wallen provisional. And
8 I'm on Slide 34, which has some quotes from paragraph -- from pages 50
9 and 51 of the petition, where the petition maps element 1.6, which includes
10 the phrase, for use by the UE. And the petition maps this claim limitation to
11 some language in paragraph 72 of Wallen. And the language that's bolded in
12 the parenthetical was bolded in the petition.

13 And you can see that what they bolded was the reference to downlink
14 assignments pointing to the SIBs that are intended for the MTC device.
15 They say that not once, but twice in connection with element 1.6 in the body
16 of their analysis on the left and in their summary on the right.

17 Now this slide shows a comparison of the relevant language between
18 Wallen and the Wallen provisional. And you can see that the language that
19 are intended for this MTC device, the very language that they bolded and
20 relied on, isn't in the provisional.

21 They came back and they said, I'm now on Slide 36, that basically the
22 language in yellow is redundant of the language in blue. That basically
23 because there's a phrase where an MTC device can receive and detect
24 control information, basically that's synonymous with it being intended for
25 this MTC device. One doesn't follow from the other. The fact that a device
26 can read something doesn't mean it was intended for it.

1 I want to talk about the Marvell case for a second that the Petitioner
2 relied on for its burden of production argument. So the Marvell case was a
3 routine case by the Board from 2019. And in that case, the patent being
4 challenged had no ancestral foreign patent application identified on the face
5 of the patent. I'm going to the next page, and we can see what happened.
6 During the prosecution, the Patent Owner asserted that a foreign priority
7 claim was made and that the examiner erroneously rejected it.

8 And the Patent Owner asserted during the IPR that priority should be
9 accorded and the Board said, no way. This is not the place for reviewing the
10 examiner's decision rejecting the foreign priority claim. And then in some
11 dicta, which comes later, and you can see it's dicta because it starts out even
12 assuming that the Patent Owner successfully shows that the examiner errors.
13 It's the language that the Petitioner relies on from Dynamic Drinkware -- I'm
14 sorry, from Marvell.

15 And Marvell itself indicates that the proposition is not directly
16 supported by Dynamic Drinkware. It's actually a CF site to it because that's
17 not what Dynamic Drinkware says, at least not explicitly. And so I think
18 that this is pretty weak support for the proposition that the Petitioner is
19 urging and it's the best that they could find.

20 The last case that they relied on, the G&H case, is also an opposite.
21 This case stands for the general observation that the burden of production
22 may shift, but it doesn't hold that a petitioner can basically create some -- lay
23 out their case in a footnote and then basically have the Patent Owner have to
24 affirmatively lay out everything else in the next filing. It wouldn't make a
25 whole lot of sense as a matter of trial structure.

26 In other words, the Petitioner affirmatively sought to an institution to
27 advance a theory that Wallen was prior art, and they framed it around the

1 Wallen provisional and this limitation being missing. If there are no further
2 questions, I'd like to reserve the balance of my time.

3 JUDGE DROESCH: I don't think there's any questions. Thank you.

4 MR. GOLUB: Thank you.

5 MR. WILKINS: Your Honor, just a moment to -- all right. I'm ready
6 to go back on the clock.

7 JUDGE DROESCH: Okay.

8 MR. WILKINS: So I want to take us back to Slide 3 of Petitioner's
9 demonstratives. And I want to read from the middle of the page there. It
10 says, and this again is an LTE textbook, and our expert relies on it and
11 discussed it. It says, and I quote, LTE defines a number of different SIBs
12 characterized by the type of information that's included within them. So
13 SIBs are defined by the type of information, not by a bandwidth.

14 So there is a full bandwidth SIB1, and there's a smaller bandwidth
15 SIB1 in the context of this patent, and both are legacy SIB1 because SIB1 is
16 defined by the type of information. I want to go to the Slide --

17 JUDGE LANEY: Does that mean the numbers are irrelevant?

18 MR. WILKINS: Well, the number 1 connotes a certain group of
19 information, so SIB1. And as you can see there in the slide, it includes
20 information mainly related to whether a terminal is allowed to camp on a
21 cell, which is the problem the '670 patent points out, that Wallen points out.
22 If you can't receive SIB1, then you can't connect to the network.

23 So let's go to Slide 11. And I just want to remind you what paragraph
24 68 of Wallen says. The first SIB, in other words, SIB1, is a legacy SIB, but
25 it's allocated frequency resources such that it can be read by an MTC device.
26 So this is talking about receiving a legacy SIB1, and that's what Wallen
27 discloses.

1 Let's go to Slide 6 please, and that is Claim 1. And Judge Moore, you
2 asked if the term UE encompasses MTC devices. And I want to just point
3 out, there are several places in the '670 patent that supports the idea that UE
4 is an umbrella term that encompasses MTC devices. And one of those is
5 column 18, lines 34 through 36 of the patent, which says the term MTC
6 terminal as used herein can be replaced with user equipment, UE. So here,
7 I'll just go to -- there it is. That's one instance, but there are other instances
8 as well that make it very clear. Let me go back to my demonstratives.

9 So the point is, Claim 1 is certainly encompassing MTC devices. And
10 I want to point out, if SIB1 in the claim refers to a full bandwidth SIB1, then
11 an MTC device, again, cannot receive it. So this claim cannot be about the
12 full bandwidth SIB1, because that would be claiming the very problem
13 identified in the background. And it would be an SIB1 that an MTC device
14 could not receive.

15 So the Patent Owner has pointed to no intrinsic evidence for its
16 construction, and there's no basis for the Board to agree with it. I also want
17 to point out their expert support for what we're saying about the bandwidths.
18 And this is paragraph 35 of his declaration, where he's talking about --

19 JUDGE LANEY: Before you go back to that, isn't the difference
20 between Petitioner -- Patent Owner, that Patent Owner is saying that the
21 SIB1 is being moved to a frequency range that the MTC can utilize?
22 Whereas that's different than what their argument is there, I mean the Patent
23 Owner. The difference between what Wallen discloses and that is that
24 Wallen never actually takes the SIB1 and moves it to the MTC frequency. It
25 just simply has a pointer and derives information from it that the MTC can
26 use. Is that right, or am I missing something?

1 MR. WILKINS: Let me go to paragraph 72 and exactly what it says.
2 So the MIB points to this controls channel MPECCH, and that provides
3 downlink assignments pointing to the SIBs. And the downlink assignments
4 means the frequency and time where those SIBs would be located. And so --

5 JUDGE LANEY: And this is referring to Figure 5, right? Is this in
6 the context of Figure 5 or Figure 1?

7 MR. WILKINS: It's in the -- so this is referring to MIB. I believe the
8 numbering is 901 is from figure, it's Figure 9.

9 JUDGE LANEY: Figure 9. So it's not --

10 MR. WILKINS: 901.

11 JUDGE LANEY: So this isn't addressing either one of the -- that you
12 relied on in the petition?

13 MR. WILKINS: No, Figure 9 is explicitly annotated in the petition
14 and in the expert declaration, and explains --

15 JUDGE LANEY: Okay.

16 MR. WILKINS: Yes, Figure 9 is well explained.

17 JUDGE LANEY: Is it different -- okay. But is Figure 9 a different
18 embodiment than figure -- what's shown in Figure 5, which is a different
19 embodiment that's shown in Figure 1.

20 MR. WILKINS: Than Figure 5 of --

21 JUDGE LANEY: Wallen.

22 MR. WILKINS: You may be confused. There's no Figure 9 --

23 JUDGE LANEY: That's why I'm asking. Well --

24 MR. WILKINS: Figure 9 is --

25 JUDGE LANEY: Well, you said -- yeah, I haven't been focusing on
26 Figure 9. I just understand that Patent Owner's -- the embodiment shown in
27 Figure 1 is different than the embodiment shown in Figure 5, right?

1 MR. WILKINS: Oh, they're called examples. They're just different
2 examples. They're all shown in Figure 9. It's Example 1 --

3 JUDGE LANEY: Okay.

4 MR. WILKINS: I don't want to use up all my rebuttal time on that
5 point, but when you have the number 1, 2, 3, 4, 5, they're all different
6 examples shown in Figure 9.

7 JUDGE LANEY: Okay. Thank you.

8 MR. WILKINS: So what I want to do really quickly is go to their
9 expert and, again, reinforce this point that. He's talking. Here he says a UE,
10 in paragraph 35, must receive at least two SIBs, SIB1 and SIB2, before
11 being able to communicate with the base station. And then he talks about,
12 later in that paragraph, terminals in the prior art had bandwidths up to 20
13 MHz and were capable of receiving the SIBs.

14 At the same time, the '670 patent recognized that then-novel MTC
15 devices had narrower bandwidths and could not receive the SIBs aimed at
16 the wideband mobile terminals. And this is his interpretation of what the
17 problem is in the patent. And so, again there's a full bandwidth SIB1 and
18 there's a smaller bandwidth SIB1. And both are legacy SIB1, but the MTC
19 devices could not receive the SIB1 as it was transmitted in the existing
20 system.

21 The last point I want to make. So Wallen's Example 5, again, says
22 MTC devices receive SIBs and the first SIB is SIB1. The MTC device has
23 to receive it to connect to the network. The last --

24 JUDGE LANEY: Does it have to receive SIB1 or does it need to
25 receive information that's contained within SIB1?

26 MR. WILKINS: Well, they're one and the same because it's defined
27 by the type of information in SIB1. So it's a free -- you know, that

1 information is transmitted in a certain frequency and block of frequency that
2 needs --

3 JUDGE LANEY: That's where I get confused because it seems like a
4 block is something specific. And it seems like you're saying the block is not
5 something specific. It's not really the first block. It's information that's in
6 the block, wherever that information is.

7 MR. WILKINS: It's the legacy SIB1 information.

8 JUDGE LANEY: I understand what the information is. I'm just
9 getting confused by the fact that it seems like SIB1 is a specific thing. It is
10 the first block within the LTE network. There's no question, as I understand,
11 or note from Petitioner, that the MTC device in Wallen does not acquire that
12 specific block.

13 What I understand Petitioner's position is, what Wallen discloses is
14 that you get information that would be contained within that block, but it
15 does not receive that block. And what I understand Patent Owner to be
16 saying is the claim specifically said, acquire the SIB1. Acquire the first
17 block. Wallen doesn't do that. The way the patent does it is it takes that
18 block and makes it in such a way that that block can be reallocated to the
19 MTC device within its bandwidth.

20 MR. WILKINS: That's exactly what Wallen paragraph 68 is
21 describing. It's the legacy SIB1 that's now allocated the bandwidth for an
22 MTC device. And so the MTC device in paragraph 72, when it says SIBs,
23 it's the same information, SIB1.

24 JUDGE LANEY: Well, it says SIBs. It doesn't say SIB1.

25 MR. WILKINS: Correct. But as our evidence shows extensively, it
26 would have at least been obvious that those SIBs include SIB1, the legacy
27 SIB1. The last point I want to make is regarding Wallen's prior art. No

1 one's ever examined the foreign priority application to see if it provides
2 written description support for the challenge claims. Dynamic Drinkware is
3 clear that you cannot just blindly assume the claims have written description
4 support. Are there any further questions?

5 JUDGE DROESCH: I don't believe so. Thank you.

6 MR. WILKINS: All right. Thank you.

7 MR. GOLUB: Patent Owner has nothing further.

8 JUDGE DROESCH: You're resting on your briefs?

9 MR. GOLUB: Yes.

10 JUDGE DROESCH: Okay. Thank you. Thank you, counsel, for
11 your presentations today. We are adjourned and we'll go off the record.

12 (Whereupon, the above-entitled matter went off the record at 12:52
13 p.m.)

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