

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AT&T MOBILITY LLC, AT&T SERVICES INC.,
ERICSSON INC., NOKIA OF AMERICA CORPORATION, and T-
MOBILE USA, INC.,
Petitioner,

v.

DAINGEAN TECHNOLOGIES LTD.,
Patent Owner

IPR2024-00402
Patent 10,841,958 B2

Record of Oral Hearing
Held: May 19, 2025

Before CHRISTOPHER L. OGDEN, RUSSELL E. CASS, and
MARY C. HOFFMAN, *Administrative Patent Judges*.

IPR2024-00402
Patent 10,841,958 B2

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The above-entitled matter came on for hearing on May 19, 2025,
commencing at 1:00 p.m., via video teleconference.

P R O C E E D I N G S

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JUDGE HOFFMAN: Good afternoon, everyone. This is the hearing in IPR2024-00402 involving U.S. Patent Number 10,841,958. Patent Owner has filed a revised non-contingent motion to amend in this case, asking the Board to decide the patentability of proposed substitute claims. I am Judge Hoffman. Also appearing with me today is Judge Ogden and Judge Cass. I'd like to welcome both the Petitioner and the Patent Owner today. Was Mr. Hejny able to connect?

MR. HEJNY: Yes, Your Honor. I was.

JUDGE HOFFMAN: Great. Well, let's get started. Who do we have on the line for Petitioner?

MR. TOROSSIAN: Counsel, you're on mute. Would you please unmute your mic? Thank you.

MR. HANSEN: Sorry. So for Petitioner, you have Eric Hansen and Scott Hejny, both from McKool Smith.

JUDGE HOFFMAN: Okay. Will one of you be providing all of the arguments today on behalf of the Petitioner or are you sharing your time?

MR. HANSEN: I plan to provide all the argument. Eric Hansen.

JUDGE HOFFMAN: Thank you, Mr. Hansen. Is there anyone else on the line for Petitioner?

MR. HANSEN: No.

JUDGE HOFFMAN: Okay, thank you. And who do we have on the line for Patent Owner?

MR. TOROSSIAN: Counsel, you're on mute. Would you please

1 unmute your mic? Thank you.

2 MR. WYDE: All right. I am Joshua Wyde for Patent Owner
3 Daingean.

4 JUDGE HOFFMAN: Thank you, Mr. Wyde. Is there anyone else
5 on the line for Patent Owner today?

6 MR. WYDE: Not that I know of.

7 JUDGE HOFFMAN: Okay, thank you. Again, welcome. A few
8 preliminary matters. To ensure that the transcript of the hearing is clear, we
9 ask you to identify yourselves before speaking, to speak directly into the
10 microphone, remembering to unmute yourself first, to identify any specific
11 slide numbers and any other pertinent information when referring to
12 demonstratives. Please mute yourself when you're not speaking. If you
13 encounter any technical difficulties, please let us know immediately. I'll
14 remind everyone today that we do have a public line, so please don't disclose
15 anything that's confidential.

16 We have allotted 60 minutes per side, pursuant to our hearing
17 order. Petitioner, you will open the argument and you may reserve rebuttal
18 time up to 30 minutes. Patent Owner, you will then respond to Petitioner's
19 arguments and may reserve surrebuttal time, also up to 30 minutes. When
20 you're arguing, please speak slowly, and if you hear another voice, such as
21 one of us Judges, either here or remotely -- well, we're all remote -- please
22 stop and do not talk over each other.

23 If either party believes that the other party is presenting an
24 improper argument, such as a new argument and substance not made in the
25 party's briefs, please raise that issue during your presentation. Do not object
26 at the time and interrupting the other party's presentation. I will be keeping

1 track of the time, but it would be helpful if you also keep track of your own
2 time. With that, I will ask Counsel for Petitioner and Patent Owner whether
3 there are any other preliminary matters you'd like to discuss before we go
4 into arguments. Mr. Hansen? Mr. --

5 MR. HANSEN: Nothing for Petitioner.

6 JUDGE HOFFMAN: Okay. Mr. Wyde?

7 MR. WYDE: No. Nothing for Patent Owner, Your Honor.

8 JUDGE HOFFMAN: Okay, very well. Mr. Hansen, do you wish
9 to reserve any rebuttal time?

10 MR. HANSEN: Let's plan on reserving 20 minutes.

11 JUDGE HOFFMAN: Twenty minutes. Okay, so you'll have 40
12 minutes. Very good. You may begin when ready.

13 MR. HANSEN: Okay. May it please the Court. Eric Hansen for
14 Petitioners. We're here today to discuss the revised substitute claims from
15 Patent Owner and in particular, whether they are broadening, whether they
16 comply with requirements of Section 112, and whether they are anticipated
17 or obvious over Lee or Lee and Agiwal, which are two prior art references
18 asserted by Petitioner during the original petition for Lee and then in
19 response to Patent Owner's original motion to amend.

20 The original claims here, Claims 1 through 4, have been
21 surrendered. The motion to amend that we're dealing with is a non-
22 contingent motion to amend. In fact, a revised non-contingent motion to
23 amend. And so Claims 1 through 4 are gone and we're only looking at the
24 revised substitute claims. Now, the first set of substitute claims were also
25 abandoned in favor of the revised substitute claims, so I just want to get that
26 out of the way first.

1 Now, just some background. The petition originally asserted two
2 grounds -- one based on Lee and one based on Brismar. For the ground
3 based on Lee, Patent Owner asserted a distinction based on only one element
4 of the original claims that is element 1C and corresponding element 3B in
5 the original claims, and those elements or limitations correspond to the
6 limitations 7C and 8B in the revised substitute claims.

7 In its guidance and its institution decision, the Board found the Lee
8 grounds persuasive, and so Petitioner is focused on Lee based grounds in
9 response to Patent Owner's motions to amend. Now, the first set of revised
10 claims or the first set of amended claims -- and I have those diagramed on
11 Demonstrative 6, so we're looking at Exhibit 1012, page 6 -- the initial
12 substitute claims revise the claims in two major substantive ways, and on
13 page 6 of Exhibit 1012, I've reproduced Claim 7. Claim 7 corresponds to
14 original Claim 1, and there's a corresponding Claim 9 with the same
15 substantive edits or amendments, and that corresponding original Claim 3.

16 So Claim 7 was amended substantively in a couple of different
17 ways. First, the association between the value tag and the second type SIB
18 was changed to an association between a value tag and a group of plural
19 second type SIBs, and that's reflected primarily in limitation 7B of original
20 substitute Claim 7. And then there are conforming edits in 7C and 7G, as
21 well. And then in limitation 7G, there was also a change in what the
22 determining step or the determining aspect of the claim addressed. And 7G
23 required determining whether the group containing the second type SIB
24 rather than the second type SIB had changed based on the value tag.

25 So Petitioners opposed the initial motion to amend based on,
26 among other things, a broadening argument focused around the new

1 association between the group of -- or the value tag and the group of second
2 type SIBs, and then the determining step, and also raised indefiniteness
3 arguments and introduced Agiwal as a reference, and Agiwal is Exhibit
4 1008. And Petitioners provided expert testimony combining Agiwal and
5 Lee in an obviousness combination, and in addition to a ground based on
6 Lee alone.

7 So the Board in response -- or not in response. So the Board
8 provided preliminary guidance and I've summarized that at Slide 8 of
9 Petitioner's Exhibit 1012. And by and large, the Board agreed with
10 Petitioner. The only aspect of Petitioner's opposition to Patent Owner's
11 motion to amend, the Board did not preliminarily agree with Petitioner, was
12 on anticipation over Lee and that argument was just not addressed. Instead,
13 obviousness over Lee, or Lee and Agiwal was addressed.

14 And in its preliminary guidance, the Board found that persuasive,
15 as well as the broadening and indefiniteness arguments that the Petitioner
16 raised. In response to this guidance, Patent Owner revised its motion to
17 amend and further amended the independent substitute claim. So I have that
18 reproduced on Slide 9 of Exhibit 1012. Now, the first -- the limitations
19 through 7F were unchanged, and then there were some additional changes in
20 7G and 7H.

21 So in 7G, the determination was changed back to whether the
22 second type SIB was changed, as opposed to whether it's a group, including
23 the second type SIB was changed. And then 7H was added. And 7H, I
24 think, is going to be the main limitation that we talk about for the purposes
25 of novelty and obviousness, when we get to that later.

26 But 7H takes the requirement from original Claim 2 that the

1 second type SIB be broadcast after the change, and requires the group,
2 including the second type SIB, to be broadcast after the change, and then
3 further imposes the limitation on the form that that broadcast takes. And it
4 recites a compressed format that is used for that broadcast and includes only
5 the changed parameters from the group, including the second type SIB, and
6 we'll get to that in more detail later.

7 Patent Owner also raised a claim construction argument regarding
8 what it means to be a second type SIB, and we will deal with that later as
9 well. And the only limitation that Patent Owner relied on to distinguish over
10 the Lee, or Lee and Agiwal grounds was the last limitation. So that's
11 limitation 7H in Claim 7, and limitation 8F in revised substitute Claim 8.

12 Okay. So I'd like to start by addressing the broadening arguments
13 that Petitioner has raised in its opposition to the revised motion to amend
14 and then move on to the other grounds. I'd like to start with broadening
15 because broadening is Patent Owner's burden. And so you don't necessarily
16 have to agree with us. You just don't have to agree with them that it's not
17 broadening. And so if you don't like the potential broadening aspects of the
18 claims that I describe, if you agree with us that the claims are broader for
19 another reason, you can find that Patent Owner has failed to carry their
20 burden in proving that their amendments are non-broadening.

21 And what it means to be broader in this context is that if you scoop
22 anything into the scope of the claim that was not covered by the original
23 claim, and so it doesn't matter if the claim is narrower in one way. If it is
24 broader in another way, then that counts as broadening and that claim is not
25 allowed under the rules of law. Okay. And I've summarized the case law or
26 the -- the main case on this is *Sisvel v. Sierra Wireless*, and I have a

1 highlighted quote of that on Slide 13 of Exhibit 1012, if the Court would like
2 to see that.

3 So we have two primary arguments on improper broadening. The
4 first is that the revised substitute claims change the relationship between the
5 value tag and the second type SIB from the original claims, from a one-to-
6 one correspondence to a correspondence between a value tag and a group.
7 So the value tag goes from an individual value tag to a collective value tag
8 and that's broadening in our view because that scoops in potential
9 embodiments that would not be covered by the original claim.

10 So if the Court would take a look at Slide 16 of Exhibit 1012,
11 you'll see that in the original claim, limitation 1B required a value tag and a
12 corresponding second type SIB, and in turn, a determination as to whether or
13 not that second type SIB was changed based on a value tag. And so what
14 that's looking at is a binary determination for one SIB based on whether or
15 not one value tag changed.

16 And as I read the claims, and I think the natural way to read the
17 claims is that requires a one-to-one correspondence between the SIB and the
18 tag. So if the SIB changes, there's a value tag change, and if the SIB doesn't
19 change, there's not a value tag change. And that is -- the Board agreed with
20 that preliminarily, and then that aspect of the claims was not changed in the
21 revised substitute claims.

22 So Patent Owner has argued that there's no requirement for a one-
23 to-one correspondence between the value tag and the second type SIB, and
24 that an association just means a connection. But if you look at Slide 19 of
25 Exhibit 1012, I've illustrated what this kind of change allows. That is by
26 making the tag a collective property of a group of SIBs, it allows the SIBs in

1 a group, for example, to change. And so which SIBs the tag even applies to
2 can change over time. And that transforms the tag from a collective -- or
3 from an individual property of a SIB to a collective property of a group of
4 SIBs, and that's fundamentally different.

5 So in the example illustrated here, if one of the parameters in SIB
6 1, for example, changes, but SIB 1, as part of the change in system
7 information, is moved out of the group that the tag applied to and a different
8 set of SIBs is in the new group, and there are no changes in those SIBs, then
9 there's no need for the tag to change, even though the information in SIB 1
10 could've changed. So by applying the tag to a group, what the tag is saying
11 is now fundamentally different. The tag is now saying that there is a change
12 somewhere within this group of SIBs, but not necessarily on any one SIB.
13 And so in our view, that allows the claim to be -- the new claim to be
14 practiced, where the old claim would not. So it'd be --

15 JUDGE HOFFMAN: Mr. Hansen?

16 MR. HANSEN: Yes.

17 JUDGE HOFFMAN: Can you point to any evidence, intrinsic
18 evidence, to support your interpretation of the original claim to be limited to
19 this individual value tags, as opposed to interpreted more broadly to include
20 both individual and collective value tags?

21 MR. HANSEN: Yeah. So the embodiment of claim -- or not of
22 claim -- of Figure 5, and that's -- let me pull up the patent. So it's the
23 embodiment of Figure 5, and I think it's Figures 5 through 7, has a one-to-
24 one correspondence between the value tags and the SIBs.

25 JUDGE HOFFMAN: Right, but my question is, for example,
26 could original Claim 1 have been interpreted more broadly to include, for

1 example, Figure 15?

2 MR. HANSEN: So I don't think so. So for Figure 15, if -- so if
3 you look at Group IDX 1, if -- there are three different SIB IDs in Group
4 IDX 1. There's no way to determine in Figure 15, based on the value tag
5 changing, whether the first, second, or third SIB ID changed. And the
6 original Claim 1 requires determining whether or not a particular second
7 type SIB that's changed is based on the value tag, and comparison of value
8 tags. And there's no disclosure for Figure 15 of a particular second type SIB
9 being identified based only on a comparison of value tags that would
10 identify which second type SIB is the one that's changed.

11 JUDGE HOFFMAN: Okay, thank you.

12 MR. HANSEN: Okay. So the Board in its preliminary guidance,
13 at least, agreed that the relationship between a value tag and a group is a
14 broader relationship than the one recited in the original claims. That's Paper
15 23 at page 6. Okay. Now, the revised substitute claims introduce a partial
16 broadcast of changed system information blocks as well. And that's a
17 second aspect of improper broadening that I'd like to -- that Petitioner would
18 like to raise.

19 So if you'd turn to Slide 22 of Exhibit 1012, there is a binary on
20 demand versus broadcast piece of information that the first type system
21 information block needs to include for each second type SIB, and original
22 limitation 1C requires that when there's a change of a second type SIB that
23 was on demand, the corresponding information for that second type SIB
24 needs to change from indicating that the second type SIB is provided on
25 demand to indicating that the second type SIB is provided by broadcast.

26 And so we have a switch. We have to switch from on demand to

1 broadcast and that's true for the entire SIB. It's not true for only part of the
2 SIB. And so that means that for -- in the example on Slide 22 -- if parameter
3 3 doesn't change, it gets transmitted by broadcast, along with parameters that
4 do change in the original embodiment. And I've illustrated what happens
5 with the revised substitute claim on Slide 23.

6 And so what happens with the introduction of a new kind of
7 broadcast? The compressed format broadcast of limitation 7H is that now a
8 so-called broadcast includes less than the entire second type SIB. And so
9 this information that's supposed to indicate whether a second type SIB is
10 broadcast or on demand is now -- it's no longer a piece of binary
11 information, because if what occurs in 7H is a broadcast, which limitation
12 7H says it is, then only a partial broadcast satisfies the broadcast requirement
13 of 7C. If, on the other hand, that doesn't count as a broadcast, then there's no
14 way to then request the second type SIB because it's no longer on demand.

15 So basically, you've introduced a third option and if the claim is
16 not indefinite, which I'll address later because of this ambiguity, then you
17 introduced a possibility where only a partial broadcast would count as a
18 broadcast. And if only a partial broadcast counts as a broadcast, then you no
19 longer have the same requirements that were in the original claim. That
20 required the information in the first type SIB to indicate whether the second
21 type SIB is on demand or broadcast, because now we have this parameter 3
22 which is unchanged, not being broadcast and not being on demand.

23 So in our view, this is -- it either renders the claim indefinite by
24 making ambiguous what it means to broadcast, or it broadens the claim by
25 allowing less than all of the second type SIB to be broadcast. And one of the
26 arguments that the Patent Owners has raised about this -- so Patent Owner

1 claims that the original element 1C -- original limitation 1C does not
2 actually require a broadcast and that Petitioners are trying to read that
3 limitation up. And I disagree with that because what the claim requires is
4 information indicating the second type SIB is provided by broadcast. And if
5 the second type SIB is not actually provided by broadcast, then whatever
6 information you point to doesn't indicate that it is provided by broadcast.

7 So by requiring information that indicates that the second type SIB
8 is provided by broadcast, either the claim is met and the second type SIB is
9 provided by broadcast, or if the second type SIB is not provided by
10 broadcast at that point, then the claim is not met because whatever
11 information you're going to point to can't indicate that the second type SIB is
12 provided by broadcast because it's not. So by logical necessity from original
13 limitation 1C, the second type SIB has to be provided by broadcast under the
14 original claims. And with 7H now less than the second type SIB can be
15 provided by broadcast after a change.

16 JUDGE CASS: Counsel, this is Judge Cass.

17 MR. HANSEN: Yes.

18 JUDGE CASS: Would it be possible in the original claims -- I
19 guess in both original and amended claims -- to interpret providing the
20 second type SIB by broadcast to include providing some of the information
21 in the second type SIB by broadcast? The partial information, but not
22 maybe the full SIB?

23 MR. HANSEN: So I don't think so because there's an antecedent
24 basis issue. And so you have a second type SIB, it changes, you indicate the
25 change, and then you have to change from indicating that the changed
26 second type SIB is provided on demand to saying that it's provided by

1 broadcast. None of that allows you to change what the second type SIB is,
2 so it's one thing. And so I think you'd be outside of the claims if you
3 changed what was in the second type SIB, as you march through the claim.

4 JUDGE CASS: So is that absolute? So suppose you just left off
5 one little piece of it and 99 percent of the second type SIB was provided,
6 but, you know, not 100 percent. Would that also fail to meet the original
7 claim?

8 MR. HANSEN: Yeah. I think --

9 JUDGE CASS: Is it that strict?

10 MR. HANSEN: Yeah, I think everything needs to be in there. So
11 just stepping back a bit and -- so the role of system information in a cellular
12 network is to communicate an agreed and understood set of parameters for
13 how the cellular network works from the network to the UEs. It's kind of a
14 complicated handshake. So the UEs are -- in terms of the claim, the UE is a
15 wireless terminal, so the handsets.

16 In order for the handsets to know what they need to do to talk to
17 the network and what they need to use -- what they need to do to use the
18 particular services in the network, the network provides system information
19 describing what services are offered and how the handset can access those
20 services. And those messages are sent a lot, so they're highly optimized.
21 And so if you send part of it, but not all of it, then the UE is missing some
22 information.

23 And so sending just part of a system information block is going to
24 leave the UE thinking that there was an error in the transmission. So you
25 send a SIB so that the UE has the SIB, and sending just part of the SIB, that
26 is a departure from ordinary practice, and you would need to say, I'm only

1 sending, you know, this one parameter here. It wouldn't be considered
2 transmitting the SIB. It would be considered transmitting some other piece
3 of system information that's less than that full block.

4 JUDGE CASS: Okay, thank you. Let me follow up and go back
5 to the discussion on Slide 23, where you have revised substitute Claim 7 and
6 then various parameters. I just want to make sure I understand how these
7 parameters match up to what's in the claim. So could you delineate that a
8 little bit more specifically? Like what's an example of parameter 1A or
9 what's parameter 1, parameter 2, parameter 3 in this example you have on
10 the right?

11 MR. HANSEN: Yeah. So in this example, the parameter 1, 2, and
12 3 would be different things that would be within a particular set, and so
13 forgive me, I don't have all of them memorized. But for example, to
14 perform random access in the cellular network, one of the parameters that
15 the cellular network provides is an identification of the particular codes that
16 the base station is listening for. And so the UE would -- when it listens to
17 system information, would listen to that system information block to get the
18 set of codes that it needs to use to perform random access. And so that
19 would be an example of a parameter.

20 Now, the value of the parameter that I'm trying to illustrate here
21 would be A. So parameter 1 is always going to be in that system
22 information block and a change in that parameter is not a change in what the
23 parameter -- it's a change in the value of the parameter. Not a change in
24 which parameters are included in the system information block.

25 JUDGE CASS: Okay. So in your example here on the bottom, the
26 bottom left, you've got parameter 1 and 2 have changed and parameter 3 has

1 not, and does that correspond to the original claim or what does that kind of
2 correspond to?

3 MR. HANSEN: Yeah, so that's how I would understand the
4 broadcast of the second type SIB after a change, is it includes both the
5 changed value and the unchanged value, because you're broadcasting the
6 SIB, not only a subset of the values of the SIB.

7 JUDGE CASS: And so what you have on the right there, that's in
8 the revised amended claim where you're just broadcasting the changed
9 information, but not the information that remains the same?

10 MR. HANSEN: Right. So that's intended to illustrate the
11 compressed format second type SIB. Now, the compressed format that's
12 discussed in 7H also includes the changed parameters of the other second
13 type SIBs within the same group, and so you're not even getting just those
14 two parameters. You'd get a mess of various different parameters from
15 different SIBs and you'd have to sort out which parameters belonged in
16 which SIBs and which locations in order to interpret the result.

17 JUDGE CASS: All right, but I guess it's your point that because
18 the revised amended claim doesn't require parameter 3Z to be constant and
19 in there, that it's broader than the original claim?

20 MR. HANSEN: Right. Yeah. So as I interpret 7H, it allows for
21 the transmit by broadcast of the second type SIB to only include the changed
22 values, and whereas the original claim required the transmit by broadcast of
23 the changed second type SIB, which would be both the changed values and
24 the original values that were the same prior to the change.

25 JUDGE CASS: All right. Thank you, Counsel.

26 MR. HANSEN: Okay. I'll move on to indefiniteness, if there are

1 no further questions on this broadening issue.

2 JUDGE HOFFMAN: I do want to -- I want to revisit limitation 7G
3 before we move on. I just want to clarify that my understanding is correct.
4 So you're saying that whether or not the second type SIB belonging to the
5 group has changed is determined based on a value tag. You're interpreting
6 that to mean whether or not a particular second type SIB has changed, as
7 opposed to any of the second type SIBs in the group has changed?

8 MR. HANSEN: Yeah. That's how 7G reads and that's --

9 JUDGE HOFFMAN: Okay.

10 MR. HANSEN: -- what limitation 1G required. So if you follow
11 the procedural history, that was one of the arguments that we raised about
12 the problems with original substitute Claim 7 was that it changed the
13 determination from a determination about a SIB to a group of SIBs, and then
14 in -- I have the -- it's kind of complicated, but I have a redline on Slide 18,
15 Exhibit 1012, which shows the change from substitute Claim 7 to revised
16 substitute Claim 7, which shows the group containing the second type SIB
17 being deleted and a corresponding edit being made to return the
18 determination to relate to the second type SIB, as opposed to just a group
19 containing the second type SIB.

20 JUDGE HOFFMAN: Right, but just --

21 MR. HANSEN: It was --

22 JUDGE HOFFMAN: Just to clarify, though, because on the
23 current proposed substitute claims, your interpretation is that the second type
24 SIB is a particular one of the group --

25 MR. HANSEN: Yeah, so --

26 JUDGE HOFFMAN: -- rather than how it is in the original

1 claims? Okay.

2 MR. HANSEN: Yeah. So 7C, in the revised substitute claims,
3 kind of sets in motion the set of events where there's a change of a second
4 type SIB belonging to a group. And then in 7G, there's a required
5 determination of whether or not the second type SIB, so that refers to -- back
6 to the second type SIB that was previously recited -- whether or not that
7 second type SIB has changed, is determined based on a value tag. And so at
8 least the way that I'm interpreting the claims, the revised substitute claims
9 restore the requirement that a particular second type SIB, that whether or not
10 it's changed, needs to be determined based on the value tag, but the value tag
11 is now associated with the group and not with that particular SIB, so.

12 JUDGE HOFFMAN: Okay, thank you, Counsel.

13 MR. HANSEN: So on --

14 JUDGE CASS: Counsel, this is Judge Cass. Let me just follow-
15 up with that a little bit. Let me first make sure I understand what's being
16 shown on the right side of your Slide 19, which has these diagrams of the
17 groups -- the first one, SIB 1 and SIB 2, and the bottom one, SIB 2 and SIB
18 3. In your illustration here when you're referring to the second type SIB
19 belonging to the group and then whether or not the second type SIB
20 belonging to the group has changed, are you referring to a particular one of
21 those SIBs in the drawing on the right of the figure?

22 MR. HANSEN: Yeah, so --

23 JUDGE CASS: I'm trying to match up --

24 MR. HANSEN: So --

25 JUDGE CASS: -- you know, the claim language to your boxes
26 here.

1 MR. HANSEN: Yeah. So if any SIB in the group changes, as I
2 interpret the claim, the tag would have to change, but what's happening or
3 what this patent and this claim are trying to address is changing system
4 information. And one of the ways that you can change system information
5 is you can change how it's grouped. And so if you have a tag that's
6 associated with the group, then that tag, while it can increment based on a
7 change in the SIBs in the group, which is what's recited, the problem is that
8 it's not tied to the actual SIB. And so which group a SIB is part of can
9 change over time.

10 And so the tag, because it is a collective tag for a group of SIBs
11 and not a tag that is associated with or connected to a particular SIB, it no
12 longer has the property that it changes when a particular SIB changes. Now,
13 if a SIB in a group changes and the tag's relationship to the group stays the
14 same and the SIBs in the group remain the same, then when the SIB
15 changes, the tag will have to change.

16 JUDGE CASS: So in other words here, you could say that the
17 second type SIB belonging to the group has changed. I mean, that could
18 refer to SIB 1 because SIB 1 is no longer in the group.

19 MR. HANSEN: Yeah. So --

20 JUDGE CASS: Is that --

21 MR. HANSEN: Yeah. So SIB 1 changes, but as part of the
22 change in system information, you've changed which group SIB 1 belongs
23 to, then the tag might not change because the tag is no longer associated with
24 SIB 1 after the change in system information.

25 And this is the hazard when you have a tag that's associated with
26 a -- with the collection of things and not with one particular thing. So the

1 original claims, as we've interpreted them, require the second type SIB to be
2 associated with the tag and the tag to be associated with the second type SIB,
3 so you can make this whether or not determination. It either has changed or
4 it hasn't, and by instead associating the tag with the group, you create a
5 problem with the function of the tag, such that if the group composition
6 changes, the tag need not change if there's no change in the SIBs in the new
7 group.

8 JUDGE HOFFMAN: Two minute warning, Mr. Hansen.

9 MR. HANSEN: All right.

10 JUDGE CASS: Okay. Thank you, Mr. Hansen.

11 MR. HANSEN: So on indefiniteness, I'd like to start out -- let's
12 switch to just 10 minutes on rebuttal, so I'll take another like 12. So on
13 indefiniteness, there are two main arguments that we want to raise. First is
14 the grouping of second type SIBs that include less than the -- or fewer than
15 the total number of second type SIBs, and the problem that we see here is
16 that it creates an arbitrary classification.

17 So both our expert and Patent Owner's expert agree that there can
18 be more than two kinds of SIBs. And in fact, the revised substitute Claim 7
19 introduces a third type of SIB on its own, this compressed format second
20 type SIB. And so we have more than two different kinds of SIBs, and
21 potentially, we can have an unlimited number of different types of SIBs.
22 And so whether or not the claim is practiced, is determined not by any actual
23 technical operation of the device, but it's a box drawing exercise.

24 How do we arbitrarily classify the SIBs into two or more groups?
25 And I've illustrated that on Slide 26 where I've got identical systems, and
26 just by classifying the second type SIBs in blue one way or another, I either

1 am practicing this part of the claim or I'm not. And so without some sort of
2 objective ruler to determine whether or not a SIB is a second type SIB, as
3 opposed to some other kind of SIB, there's no acceptable objective boundary
4 for the claim. And --

5 JUDGE HOFFMAN: Mr. Hansen? Mr. Hansen?

6 MR. HANSEN: Yeah.

7 JUDGE HOFFMAN: Question. In your petition on page 5 --

8 MR. HANSEN: Um-hum.

9 JUDGE HOFFMAN: -- it states that the '958 patent further
10 classifies a second type of system information, the non-essential system
11 information, which is defined as all other types of information excluding the
12 first type of information required for initial access. So --

13 MR. HANSEN: Mm-hmm.

14 JUDGE HOFFMAN: -- I'm curious as to how your position has
15 changed from the petition to now. If there's been -- or if these positions are
16 consistent.

17 MR. HANSEN: They're consistent. So that's one example in the
18 patent, but it's just one example and both experts in the case have
19 acknowledged that there are additional potential classifications of SIBs.
20 That's also a classification of system information, not system information
21 blocks. System information blocks are collections of system information
22 and both the Lee reference and the Agiwal reference discuss classifying
23 system information based on the particular kinds of services that are
24 supported.

25 And so Agiwal, for example, has three or four different services
26 that are discussed. V2X is one of them. There's a device-to-device, D2D,

1 kind of system information. There's a V2X type of system information and
2 there's an MBMS type of system information discussed in Agiwal, and those
3 are grouped separately. And changes in those different kinds of system
4 information are signaled separately in Agiwal. And so that indicates that
5 there are, at the very least, subtypes of system information and if we're
6 getting into whether or not some piece of system information or some
7 system information block is a type or a subtype, we're getting to the point
8 where we are either making or unmaking the practice of the claim based
9 on -- not on the operation of the underlying system, but how we choose to
10 draw boxes around stuff, how many different colors can we color in these
11 SIBs.

12 And in our view, that doesn't provide a sufficient objective
13 boundary for determining whether or not this requirement that a plurality but
14 less than all of the second type SIBs are included in a certain group. If I can
15 change what is and isn't a second type SIB, then I can control -- I can change
16 the scope of the claim after the fact to include accused devices and exclude
17 prior art. And that's exactly what you're not allowed to do with the claim.

18 JUDGE CASS: So Counsel, following -- this is Judge Cass --
19 following up on Judge Hoffman's question, and it does seem like, in the
20 petition on page 5, you're characterizing it that the '958 patent is providing a
21 definition of first and second types of system information. Are there other
22 portions of the patent itself? I mean, not the prior art or extrinsic evidence,
23 but of the patent itself that include other types of system information besides
24 these two?

25 MR. HANSEN: I'm not aware of other examples in the patent, like
26 that is examples in the patent with a third type of system information block

1 or a fourth type of system information block. Although Patent Owner's
2 expert said that additional types of system information block are supported
3 and within the scope of the claims. So I mean --

4 JUDGE CASS: All right, thank you.

5 MR. HANSEN: -- there's not a positive example. The patent does
6 expressly disclaim any limitation from the body of the patent being read into
7 the claims, and I realize that's boiler plate that's in a lot of patents, but you
8 kind of can't have it both ways. That is the words in a patent have meaning
9 and either when we write in the patent as is -- let's see. This is at lines 26:65
10 to 27:12, the patent expressly says that although the description above
11 contains many specificities, they should not be construed as limiting the
12 scope of the technology disclosed herein.

13 So if the patent's going to say that you can't read embodiments into
14 the claims, then we shouldn't turn around and read embodiments into the
15 claims, especially here where the Patent Owner had the ability to amend the
16 claims, to say exactly what the Patent Owner wanted to say was the second
17 type system information block.

18 So here, unlike in the District Court, Patent Owner has the ability
19 to make this amendment. And instead of making the amendment to actually
20 narrow the claim to read on what Patent Owner now argues second types of
21 SIB information should be, or second type system information block should
22 mean, Patent Owner chose not to do that and instead to argue claim
23 construction when both of the experts in the case disagreed with the Patent
24 Owner.

25 The other issue on indefiniteness is the compressed format
26 broadcast that we discussed already, and it's the same issue that we

1 discussed in the context of broadening, and that is if -- except from an
2 indefinite standpoint, it raises the question of is the -- what is meant by a
3 broadcast? Can I broadcast only part of a second type SIB and have that be
4 a broadcast or not? And this ambiguity introduced by the claim amendment
5 renders the scope of the claim uncertain, so I don't know when I've broadcast
6 a second type SIB.

7 How many of the parameters in a second type SIB need to be
8 broadcast for the second type SIB to be broadcast? If no part of a second
9 type SIB is changed, then none of the second type SIB -- none of the
10 parameters in the second type SIB are broadcast. But under 7H, that second
11 type SIB has been broadcast in the compressed format, even though none of
12 the individual parameters in the second type SIB have been broadcast. So in
13 our view, this new kind of broadcast disrupts the binary nature of the
14 broadcast on demand switch in the opening part of the claim and renders that
15 distinction indefinite because now we have a gray area.

16 JUDGE HOFFMAN: Two-minute warning, Mr. Hansen.

17 MR. HANSEN: Okay. So moving on to written description. So
18 the Patent Owner pointed to Figure 35 for written description and
19 enablement support for this compressed format broadcast, but on reply,
20 Patent Owner pointed to the embodiment of Figure 17. But the embodiment
21 of Figure 17 is an on demand embodiment, as opposed to a broadcasted
22 embodiment, and this shows the problem of revised substitute Claim 7.

23 So revised substitute Claim 7 requires the comparison of a value
24 that's stored on a wireless terminal into value that is broadcast in a first type
25 SIB. But the only place where this comparison could conceivably be
26 performed in order to transmit something by broadcast would be at the

1 network node. And the network node does not have access to the value tag
2 stored on the wireless terminal when it's in a broadcast mode. It would only
3 ever potentially get that information when it's in an on demand mode.

4 There's no disclosure about getting that information from the
5 wireless terminal in the broadcast mode of operation, and that's on top of the
6 fact there's never any disclosure about how to actually determine which
7 parameters have been changed based on these two value tags. So in the
8 disclosure in the patent, the value tags are changed incrementally based on
9 the change, so there's a new version of system information, there's a new
10 value tag. It gets incremented by one. There's no disclosure about how you
11 figure out, based on comparing those two values, that -- so a difference of
12 one -- what system information was changed, what to broadcast or what the
13 wireless terminal should expect.

14 And so while there could be a comparison of other things, there's
15 not a comparison of those two value tags because any change in system
16 information would result in the same change of value tags. And so just the
17 comparison of the two value tags can't provide you with the information you
18 need to identify which parameters have changed in which second type SIBs
19 in the group. So I'll reserve the rest of my time for rebuttal.

20 JUDGE HOFFMAN: All right. Thank you, Mr. Hansen.

21 MR. HANSEN: Thank you.

22 JUDGE HOFFMAN: You have 10 minutes remaining for rebuttal.
23 And with that, Mr. Wyde, when you are ready, please let us know how much
24 time you would like to reserve for rebuttal.

25 MR. WYDE: I'll also do -- I'll do 10 minutes, please. I don't think
26 I'm going to take all of my time, but we'll set that as an aspirational goal.

1 JUDGE HOFFMAN: Okay, so I'll set your time for 50 minutes
2 and I'll start the timer when you begin speaking.

3 MR. WYDE: Okay, thank you. And I am going to share my
4 screen, but if I hear anybody talk, I will stop and address your questions, so
5 feel free to interrupt if anything piques your interest. Let's see.

6 Okay, so thank you, Your Honors, and may it please the Court. By
7 way of preview, I'm just going to give a short overview of where we are at
8 this point and address Petitioner's assertions that the claims don't have
9 written description and they're not enabled.

10 And then I'm going to turn to the claim construction disagreements
11 which clearly has to do with what it means to be a second type SIB and after
12 that, I plan to move onto the assertion of the claims are broadening and
13 indefinite, and I guess I will skip the actual merits of obviousness and
14 anticipation because that would be beyond the scope, as I don't think that
15 was discussed in the opening argument.

16 All right. So let's first look at the claims. Petitioner was thorough
17 and walked through a complicated procedural history, but where we are now
18 it's quite simple. The Board is being asked -- so first of all, Petitioner's
19 challenged Claims 1 through 4, and 2 and 4 depended on independent
20 Claims 1 and 3, respectively, didn't challenge 5 and 6. Patent Owner is
21 cancelling the dependent Claims 2 and 4, so at this point, the only issue for
22 patentability that remains for the Board is whether substitute Claims 7 and 8
23 meet the requirements for amendments and whether they're obvious over the
24 cited prior art.

25 Turning to page 5, substitute Claim 7 and 8 are merit claims,
26 having substantive similar limitations, although the lettering is off a bit. But

1 Claim 7 claims the access node and Claim 8 is a method for an access node,
2 but otherwise, they're similar. So we're going to look at Claim 7 as
3 representative and all of the arguments are equally applicable to Claim 8, as
4 well.

5 All right. Turning to page 6, I've grouped the limitations
6 concerning the first and second type SIBs here and the relationship among
7 the two. Now, prior to the amendments, the claims required that upon a
8 change of a second type SIB, the associated information in the first type SIB
9 would indicate that the second type SIB, previously available upon demand
10 now indicates that it will be broadcast. After the amendments, the recited
11 value tag in the essential SIB, the first type SIB, covers a group of multiple
12 non-essential SIBs containing the second type SIB. Each of the second type
13 SIB has its own SIB ID and the group has a group identifier, and this is
14 shown here in Figure 15.

15 And lastly, the determination of the changed second type SIB in
16 the group is at least in part done by comparing the value tag associated not
17 only with the second type SIB, but the group containing the second type SIB
18 at the wireless terminal with a similar value kept at the node, and I'll go into
19 that in more detail. We'll discuss why it can't be associated with a group
20 containing the second type SIB without also being associated with a SIB.

21 But before we get there, let's look at the remainder of the
22 limitations on page 7. And here, we've grouped the limitations regarding
23 transmission and what the transmitter either has to be configured to or what
24 it actually has to transmit. And now the claims require transmitting by
25 broadcast, the group containing the second type SIB in compressed format,
26 which as claimed, is sending only the changed plural parameters in the group

1 containing the second type SIB. So the second type SIB will always be sent
2 because the group containing the second type SIB is sent, so it will always
3 be sent.

4 All right. So turning to written description support. I'm now on
5 page 9. So Petitioners argue there's no written description support for
6 limitations such as 7H here and corresponding limitation 8F, but Patent
7 Owner took the language almost verbatim from the '958 patent specification,
8 so there's clearly written description support.

9 Here we have the limitations color coded with a corresponding
10 disclosure from the specification showing each and every portion of
11 limitation 7H. In yellow, we see the broadcast after the change, shown in
12 green, and in pink, it shows the second type SIB, the non-essential system
13 information being transmitted. In blue, we see the group is transmitted in
14 compressed format. And in gray, we see that the changes can be determined
15 based on the comparison the value tag stored at the wireless terminal, and
16 the value tag for the second type SIB at the node, and the technology is
17 enabled. So I'm on page 11 now. Petitioners argue that --

18 JUDGE HOFFMAN: Mr. Wyde, before we --

19 MR. WYDE: Yes.

20 JUDGE HOFFMAN: This is Judge Hoffman. Before you move
21 on from the written description support, I just wanted to refocus on
22 limitation 7G, the whether or not limitation.

23 MR. WYDE: Okay.

24 JUDGE HOFFMAN: This is the limitation Petitioner characterizes
25 as the one to one ratio.

26 MR. WYDE: Um-hum.

1 JUDGE HOFFMAN: So it seems that Petitioner is interpreting
2 this claim to require a determination that a particular second type SIB in the
3 group has changed based on the value tag.

4 MR. WYDE: Um-hum. That --

5 JUDGE HOFFMAN: Can you --

6 MR. WYDE: Oh, go ahead.

7 JUDGE HOFFMAN: Is that your interpretation, as well --

8 MR. WYDE: Yes, it is.

9 JUDGE HOFFMAN: -- of the claim limitation?

10 MR. WYDE: Yes, it is. We agree on that.

11 JUDGE HOFFMAN: Okay.

12 MR. WYDE: The claims --

13 JUDGE HOFFMAN: Can you --

14 MR. WYDE: -- used to require the determination of whether a
15 second type SIB has changed, and they still require a determination of
16 whether particular second type SIB has changed.

17 JUDGE HOFFMAN: Okay. Can you point us to the written
18 description support that a particular second type SIB, that you can determine
19 it's been changed based on the changed value tag of the group?

20 MR. WYDE: Yes. So it was my next slide, so I'll just go back to
21 Slide 11 here.

22 JUDGE HOFFMAN: Sure.

23 MR. WYDE: Okay. So how does the patent teach that you can
24 determine whether a particular type SIB has changed? Well, in blue here,
25 and I'm looking at the excerpt is 1001, column 13, lines 1 through 17. It
26 says in the first act, 12-1, changing the value tag when at least one of the

1 plural parameters of the second type system information systems and to store
2 the parameter identifier for at least one of the plural parameters for which
3 the content changes.

4 In other words, when there's a change, the value tag gets updated,
5 but there's also a list or accompanying indication of the change, and so by
6 storing, keeping, memorializing the changes, upon update of the value tag,
7 the system knows exactly what's changed and the claims itself require that a
8 particular second type SIB -- that is -- let's go back to the claims for a
9 second. It requires -- upon a change of the second type SIB -- sorry, 7G -- to
10 determine whether the second type SIB has changed or is determined based
11 on a value tag, but I think you might be asking about the one-to-one
12 relationship.

13 These are comprising claims, whether or not the second type SIB
14 has to be determined based on a value tag, but there's no requirement that it's
15 determined only or exclusively on the value tag. It could be determined on
16 the value tag and, for example, a comparison of those parameters that the
17 system had stored when detecting a change, or it could be determined based
18 on the value tag and a comparison of all of the SIBs in the group, or it could
19 be a one to one. But there is no requirement that -- in this comprising
20 claim -- that it be determined based on a value tag and only on a value tag.
21 It just has to be in part because these are comprising claims determined
22 based on a value tag. So I think I addressed your question head on. If not,
23 please let me know and I'll try to -- if there's something I missed on your
24 question, I'll go back on it.

25 JUDGE HOFFMAN: No, that answers it. Thank you.

26 MR. WYDE: All right. You're welcome. Okay. So Petitioner is

1 also, you know -- they said we're cherry picking embodiments and I'd like to
2 point out as in -- as mentioned in the briefing, the patent itself says that the
3 broadcast after updated technology of Figure 26 may be utilized in
4 conjunction/combination with any other example, embodiments and the
5 modes described herein. So the patent itself talks about, I guess, motivation
6 to combine the different embodiments. It doesn't have -- so we can look to
7 functionality in one embodiment and functionality in another embodiment,
8 especially the broadcast after update technology, and it says explicitly that
9 these different teachings can be combined.

10 All right. I'll also note that -- so Petitioners -- I listened in the
11 opening presentation. They talked about that there's no way for the node to
12 understand what's stored at the terminal, but there's no limitation regarding
13 communication of a value tag from the terminal to the node.

14 I mean, there is embodiments where a terminal will ask and give
15 the value stored in the node, and then the node will explicitly note it, but the
16 node implicitly knows what the last value tag it broadcast or sent to a
17 particular node was. So it does, in fact, or can understand what the value tag
18 stored at the terminal is and make a comparison. It doesn't have to receive
19 what it had already sent. There's no specific limitation regarding that. So I
20 think that's an important point.

21 So turning to page 12. Petitioners, they say it's impossible. This
22 couldn't possibly be done. How can you compare based on the value tag the
23 change -- the plural parameters that have changed, but Petitioners argued
24 here that Lee teaches exactly this. So Petitioners will undercut their own
25 argument by alleging that the prior art supposedly teaches the limitations,
26 which Petitioner say are impossible to practice. You can't have it both ways.

1 The claims can't be impossible and also taught. Of course, I think the truth
2 here is that the claims are enabled, but not taught.

3 All right. So let's switch to claim construction. Let's turn to page
4 14. Patent Owner has explained the meaning of compressed format and
5 parameters. Petitioners haven't put forth any issue with these limitations, but
6 let's just quickly review them for context. Specifically, compressed format
7 is defined by the claim as including only one of the changed plural
8 parameters and parameters are defined in the specification as sub-portions of
9 the SIB. And as noted in the prior art that Petitioners have brought forth, a
10 SIB might be thousands of bits wide.

11 So for instance, if a SIB has 32 bits, parameter 1 might be bits 1
12 and 2; parameter 10 might be bits 31 and 32, for example. So that's where
13 we -- we're starting with compressed format and parameters. But the real
14 bone of the contention between the parties -- and I'm on page 15 now -- is
15 whether the '958 patent specifically defines the second type SIB so as to
16 inform one of skill in the art with reasonable certainty about the scope of the
17 invention.

18 Patent Owner's position is that viewing the entire patent as an
19 integrated document would inform those of ordinary skill in the art with
20 reasonable certainty that the second type SIB are all SIBs that do not have
21 essential system type information, i.e. that are not first type SIBs.
22 Petitioners, on the other hand, argue that this is indefinite, that second type
23 SIB lacks any requirements, could include any kind of information, and in
24 fact, the first type SIB could also be a second type SIB.

25 Turning to page 16 and as a preliminary matter, the Petitioners
26 invoke the broadest reasonable interpretation, but this isn't the correct

1 standard. In motions to amend in the IPR, it is clear that the claims are
2 construed, as they are in District Court under the Phillips standard.

3 Turning to page 17. Moreover, Petitioners reveal that their real
4 position is that absent a disclaimer, a term must include an item. For
5 example, they say absent a disclaimer that the second type SIB can't be a
6 first type SIB, the second type SIB must include a first type SIB, but this
7 anything not explicitly disclaimed is included claim construction standard
8 isn't even correct under BRI, much less the more restrictive Phillips
9 standard. Under Phillips, claims must be read in view of the specification,
10 and it is okay to look at the preferred embodiment, which can shed light on
11 the intended scope of the claim, as the last Federal Circuit case here on Slide
12 17 notes.

13 Turning to page 18. The first thing to note is that the second type
14 SIB is not a new term. It was pervasively in the original claims as shown
15 here. Indeed, second type SIB was cited nine times in independent Claim 1.
16 Turning to page 19. And as explained in the briefing, the '958 patent uses
17 the term "second type system information" and "non-essential system
18 information" interchangeably. And here we see that this is true right from
19 the beginning of the patent in the abstract, meant to give a concise overview
20 of the invention. It says the second type system information or -- and there's
21 a typo here -- it says, non-essentially type system information, but that
22 should be non-essential type system information.

23 Page 20. In the opening presentation, I heard Petitioners say, but
24 the second type system information block of the claim is different than the
25 second type system information discussed in the specification. But the
26 second type system information block is simply a block of second type

1 system information, so if a POSITA understands the first term, he or she
2 understands what a block of the first term is. So if you understand what a
3 second type of system information is, you understand what a second type of
4 system information block is.

5 Turning to page 21. The prosecution history also indicates the
6 second type SIB is not indefinite. The examiner never issued an indefinite
7 rejection, and the examiner had no problem identifying the second type SIB
8 in the prior art. Turning to page 22. Probably most telling is that Petitioners
9 also did not have any problem identifying a second type SIB in Petitioner's
10 invalidity analysis. Now, the Board pointed to the petition, but Petitioners
11 still -- this is in the latest op, they say -- and this is on -- or I guess they're
12 citing their expert, as well, so their expert agrees.

13 It says that these types of specialty SIBs, the MBMS, D2D, V2X
14 and WLAN, are subtypes of non-essential SIBs, i.e. that is second type SIBs.
15 So Petitioners have talked about -- have at least evidenced understanding
16 that they understand what a second type SIB is and it's the same
17 understanding that Patent Owner has.

18 All right. Turning to page 23. So the Federal Circuit said you can
19 also look at the prior art to determine whether these terms are terms of art.
20 In here, the prior art that Petitioners rely upon also shows that a second type,
21 referred hereto as a second category, is a well-known moniker that a
22 POSITA would understand. It shows that the second type SIBs are all
23 information, not including in the first, which have a special system
24 information in it. So again, triangulating to the same meaning.

25 All right. Our expert testified that -- he explained that he
26 understood from reading the specification that a second type SIB are also the

1 ones that are carrying non-essential system information. Now, Petitioners
2 pointed to a different portion of the -- of his expert testimony, which I think
3 is in his deposition on pages 48 and 49 and I think if you read it closely,
4 what they asked him is, could there be a third type.

5 It says so does anything in the claim prevent the existence of a
6 third type of system information and Dr. Sundaresan says, well, it teaches
7 that the second type of information is the first. I'm on lines 20 to 22 of
8 Exhibit 1011, his deposition. And then they follow up, so could there be
9 additional types of system information in addition to the one the claims
10 recite? And he says, yeah, there could be, and I read these -- I think a fair
11 reading is, yeah, you could define third types. If there's none defined in the
12 specification, there's none defined in the claims, but yeah, somebody could
13 in theory have done that, but that's not what this patent is talking about.

14 All right. Turning to page 25. Petitioners also argue that the
15 claims themselves talk about a third type of SIB, but that's not true. What
16 they're pointing to is limitation 7H and 8 -- I have 88 here, but I think it
17 should be 8F -- transmitting or transmit by broadcast after the change, the
18 group identifier, and the group containing the second type SIB in a
19 compressed format. So these limitations are discussing the mode of
20 transmission, not a type. And they also point to SIBs being broadcast or on
21 demand as types. These are conflation of the mode of transmission and the
22 type. The specification only talks about two types and it talks about multiple
23 methods of transmissions of those two types.

24 All right. And this is the last slide on the second type SIB and I'm
25 on page 26. So under Phillips, the Federal Circuit says, you should
26 preserve -- the Board should preserve validity of practicable, and based on

1 found claim construction principles. And as I just walked through, there's
2 ample intrinsic, extrinsic evidence that informs the POSITA, with reasonable
3 certainty, as to what a second type SIB is. So preserving validity is
4 practicable in the situation.

5 All right. So I'm now going to turn to the broadening issues. I'm
6 on page 28 now. So Petitioners argue that the limitations regarding the
7 determination of whether a second type SIB is changed is broadening, i.e.
8 the terms and limitations 7G and 8E. Specifically, they argue that the
9 determination based on a value tag associated with the group containing the
10 second type SIB is broader than a determination of a value tag based on a --
11 associated with a second type SIB.

12 And here, we see Claim 7G. So we took a detour earlier, but I'll
13 repeat myself here. First note that before and after the change, what is
14 determined is the same, whether or not the second type SIB has changed.
15 Second, note that the change doesn't have to be solely determined based on
16 the value tag. These are comprising claims and as such, a determination can
17 be based on a value tag and something else, like a comparison of the
18 changed parameters or upon the value tag and the comparison to other tags
19 in the group.

20 So on page 16 of Petitioner's deck, they're trying to impose this if
21 and only if requirement into the original limitation. Most of the time it is
22 Patent Owner that is accused of reading embodiments in, but in this case, I
23 think it's the reverse. There is no if and only if. There is no one-to-one
24 limitation. So what Petitioner seemed to be focused on is that the value tag
25 associated with the group containing the second type SIB does not have to
26 be associated with the second type SIB, but this is not correct, and we point

1 this out.

2 And I'm on page 29 now. So this illustration shows that the value
3 tag associated with a group containing the second type SIB is always
4 associated, as well, with the second type SIB. So as seen here, the value tag
5 in yellow is for the group, shown in red, having the second type SIB in blue.
6 And by definition, the value tag will always be associated, i.e. connected or
7 related, and I'll back up one slide because that's -- associated means
8 connected or related. And I'm back to Slide 29. So the value tag will always
9 be associated or connected to the group in this way. The value tag cannot be
10 connected or related to the group containing the second type SIB without
11 having the shown relation to the second type SIB itself.

12 Now, in Petitioner's opening remarks or opening argument, they
13 talked about the SIB switching out of the group, but then the group, again,
14 by definition, wouldn't be the group containing the second type SIB. This is
15 a relationship that's imposed by the claim limitations itself. I can't see how a
16 second type SIB could leave the group containing a second type SIB. It
17 seems an impossibility. I didn't pick up on that in the briefing, but to the
18 extent that that's there, I don't think that's possible.

19 All right. So turning to page 30. Petitioners also argue that the
20 claims are broadening because the original claims required transmitting by
21 broadcast a second type SIB upon a claim, but this premise simply isn't true.
22 The original claims only required an indication that the second type SIB
23 would be broadcast. This is shown here in Claim 1C, for example. None of
24 the claims, other than the now cancelled Claim 4, required actually
25 transmitting a second type SIB.

26 With that understanding and turning to page 31, the fact that any

1 portion of a second type SIB is transmitted is not problematic.
2 Alternatively, Petitioners argue that if a second type SIB was not actually
3 broadcast, then the indication that the second type SIB would be provided by
4 broadcast would not so actually indicate, but this is just -- it seems like a
5 logical fallacy. An indication that X is going to happen doesn't stop being
6 such an indication, even if X never happens. Again, the original claims,
7 corresponding to the substantive claims, did not require transmitting a
8 second type SIB at all.

9 So I'm on page 32 now. Petitioners also argue that a partial
10 broadcast of the second type SIB would not have practiced the original
11 claims. And again, this too is wrong, and it is again premised on the
12 incorrect belief that the original claims required a transmission of the second
13 type SIB at all. The original claims here shown -- we've got 1pre to 1G --
14 there's no requirement of transmission.

15 So the fact that the substantive claims now have a previously
16 unrecited partial broadcast of a second type SIB doesn't affect whether the
17 claim is practiced. The original claims are comprising claims, meaning that
18 if all the recited limitations occurred or are present, the claims would still be
19 practiced, even if an unrecited partial broadcast of a second type SIB
20 occurred.

21 Now, switching to indefiniteness. Petitioners -- I'm on page 34
22 now -- so Petitioners argue that limitation 7H and 8F are indefinite as -- they
23 say contracting, but I think listening to the argument this morning, they
24 mean contradicting -- the requirements of limitations 7B and 8A, and 7C and
25 8B, because the second type SIB is not provided by broadcast as some or
26 none of its constituent system information is actually broadcast. So I can't --

1 again, I can't imagine a scenario where you would meet the claims and none
2 of the constituent information is actually broadcast. The claim requires
3 transmitting the group containing the second type SIB in compressed format.

4 So by transmitting -- and it was the upon the change of the second
5 type SIB that caused the value tag to change, so the second type SIB will
6 always be broadcast. It will only be (INDISCERNIBLE) required to be
7 broadcast in a compressed format. But again, this is just a rehash of their
8 previous argument as premise on the fact that there was a requirement to
9 provide a second type SIB by broadcast at all. There wasn't, as highlighted
10 here, only information indicating whether a second type SIB would be
11 broadcast was required. So the fact that only partial or part of a second type
12 SIB got broadcast is not problematic. It's just a further limitation.

13 Okay. So we didn't get to the merits of the obviousness or
14 anticipation, so I will stop here and ask if there's any questions.

15 JUDGE HOFFMAN: Are there any questions from the panel?
16 Okay. I'm not seeing any questions. I will pause your time and give you 20
17 minutes -- 22 minutes back, so you have --

18 MR. WYDE: Okay. Thank you, Your Honor.

19 JUDGE HOFFMAN: -- 32 minutes --

20 MR. WYDE: All right, let me stop.

21 JUDGE HOFFMAN: -- for rebuttal. And now, Mr. Hansen,
22 you're up. Ten minutes of rebuttal time and I will start the timer when you
23 are ready.

24 MR. HANSEN: Sure. Thank you. Eric Hansen for Petitioners.
25 May it please the Court. So I'd like to start out by addressing Slide 9 from
26 Patent Owner. What Patent Owner has done to try and show written

1 description and enablement of limitation 7H is combine two different
2 embodiments, embodiment of Claim 35, which is a broadcast embodiment,
3 and an embodiment of Claim 17, which is an on-demand embodiment.

4 And you can see that in the quoted text, relating to act 17-4, there
5 is, relative to the terminal reported value tag, in the broadcast embodiment,
6 there is no terminal reported value tag and that's the crux of one of the
7 problems we have with their claim that is it requires a comparison with a
8 value tag stored at a wireless terminal, but that can't happen in a broadcast
9 embodiment because that's an on demand behavior. And so what they've
10 done is they mixed and matched different aspects of contradictory
11 embodiments in their patent to try and make a claim, and that doesn't work.
12 For written description, they have to show possession of the invention, and
13 they can't take, you know, one part --

14 JUDGE OGDEN: Counsel?

15 MR. HANSEN: -- of one embodiment and -- yeah?

16 JUDGE OGDEN: Counsel, I believe that your friend pointed to a
17 passage in the '958 patent that sort of seemed to say that you could combine
18 different embodiments together. What do you make of that?

19 MR. HANSEN: Yeah. So just saying, hey, you can make
20 spaghetti out of what I've shown here, that doesn't get you a written
21 description. To borrow from Judge Bryson, there are no blaze marks to
22 show us that they had possession of this particular embodiment that they're
23 now trying to claim.

24 Instead, they disclosed disparate contradictory embodiments and
25 they say you can mix and match, but that creates a problem because there's
26 no disclosure of how to get the information stored at the UE, at the wireless

1 terminal, up to the network in the broadcast embodiment, and it defeats the
2 whole purpose of the broadcast embodiment to have the UEs reporting their
3 own particular value tags that they have stored and then broadcasting the
4 result, because different UEs, different wireless terminals, potentially have
5 different value tags because they've come into the network at different
6 points.

7 They've been engaged in discontinuous reception. They might not
8 all have the most recent same value tag and that's why the claim recites the
9 value tag is stored at the UE and not just the most recent value tag
10 transmitted by the base station. They're different. And there's no disclosure
11 in the patent for linking those two things.

12 Additionally, my friend suggested that there was disclosure in the
13 patent for determining which parameters have changed by looking up the
14 parameters associated with different value tags. That is not a comparison of
15 the value tags. That's using the value tags as an index into a different system
16 and then comparing the values of those stored parameters in that different
17 system to determine which parameters have changed. That's not
18 determining which parameters or which SIBs have changed based on a
19 comparison of the value tags. Those are two distinct concepts.

20 My friend also suggested that comprising rescues the claim from
21 this whether or not requirement that is what the claims -- what the original
22 claims require is that whether or not the second type SIB has changed is
23 determined based on a comparison of value tags. And that whether or not
24 requires a binary relationship. So if the value tag changes, the second type
25 SIB is changed.

26 If the second type SIB has not changed, the value tag doesn't

1 change. Whether or not cuts off the ability to go and say, well, we'll
2 consider the value tag and what time of day it is and, you know, which
3 particular UE that is, and whether other stuff has been going on. You can't
4 pull in a bunch of other stuff and still satisfy whether or not, because
5 whether or not requires you to determine one of two states based on the
6 recited information.

7 JUDGE OGDEN: Counsel, what about the language "based on" in
8 that limitation 7G? How does that relate to -- does that bring in anything
9 under the fact that this is a comprising claim that -- does that kind of broaden
10 that beyond what you're saying?

11 MR. HANSEN: So I think "whether or not" is more important
12 than "based on" there. So we need whether or not based on X, and so if the
13 condition can change without the value tag changing, then we're not
14 determining whether or not the SIB has changed based on the value tag.
15 And if the value tag can change without the SIB changing, then we're not
16 determining whether or not the SIB has changed based on the value tag.
17 We're determining it based on other things.

18 So my friend mentioned that that we made an impossibility
19 argument that is rebutted by the prior art that we cite. So the impossibility
20 argument relates to the particular value tags that are disclosed in the patent.
21 So in the patent, the only value tags that are disclosed increment each time
22 there's a change. And so an increment by one, it doesn't tell you what was
23 changed. It maybe gives you an index into some other information that may
24 be used for comparison, and that's different from the value tags in the prior
25 art. So in the prior art, the value tags are tied to particular kinds of system
26 information that are linked to classes of system information.

1 My friend suggested that we made a BRI and not a Phillips
2 analysis of the claims scope, and I disagree with that. We did give credit to
3 the patent. We just didn't ignore the part of the patent that said that we are
4 supposed to ignore the particular embodiments and examples in the patent.

5 My friend also relied on descriptions classifying system
6 information into two types, in arguing that there are only two types of
7 system information block. And I think that's a mistake. So system
8 information is organized into blocks. A block of system information might
9 have some essential and some non-essential system information.
10 Particularly, where essential system information, as my friend has said, is
11 defined as only the system information required to access the network.

12 And so there's very little system information that's actually
13 required to access the network. Most system information is going to be non-
14 essential system information. And so most blocks -- even the blocks
15 containing the essential system information -- will also contain non-essential
16 system information. So simply saying that there are two kinds of system
17 information, even if we agree with that, that doesn't mean that there are only
18 two kinds of system information blocks.

19 JUDGE HOFFMAN: Mr. Hansen, you have three minutes left on
20 your time. We're going to add five minutes to both of your times. If you
21 could please address the prior art challenges in your remaining time.

22 MR. HANSEN: Sure.

23 JUDGE HOFFMAN: We'd appreciate it. Thank you.

24 MR. HANSEN: So the principal dispute between the parties
25 relates to the last limitation of the proposed substitute claims or of the
26 revised substitute claims, and I think it's pretty clear that Lee teaches the

1 missing piece or the piece that the Patent Owner alleged would be missing.
2 So Patent Owner has not disputed that elements 8E or 7G are satisfied. And
3 if you look at elements 7G and 8E, they require the use of a value tag to
4 determine what second type SIB groups have changed.

5 And Lee teaches this at paragraphs 168 and 169 and then teaches at
6 177 and 178 that the UE can then request the specific missing SIB that it
7 needs for particular service. So the -- in Lee, the UE can both identify the
8 changed SIBs based on the value tag and request the required SIBs based on
9 the service type or the group to which that particular SIB belongs.

10 Agiwal teaches the organization of system information into groups
11 of sets with tags and identifiers, and then the updating of tags and identifiers
12 when that information changes. So that is -- that kind of sets the table for
13 limitation 7H and limitation 8F. In limitation 8F -- or limitations 7F and 8G,
14 there it goes. I apologize -- or 8F and 7H. I apologize. It's alphabet soup a
15 little bit. So paragraph 167 of Lee teaches the broadcast of the changed
16 system information or all system information during a specified period.

17 And so when the network broadcasts the change to system
18 information, as opposed to all system information, what it's doing is that it's
19 using the compressed format that the claims now recite -- that the revised
20 substitute claims recite. And so by only broadcasting the change system
21 information, Lee teaches the compressed format. Now, Lee already teaches
22 using the value tag to determine what system information has changed, as
23 does Agiwal. And both Lee and Agiwal already teach grouping.

24 And then the other aspect of limitation 7H and 8F, which I don't
25 think was disputed, but is taught by Agiwal, is the inclusion of the group
26 identifier in the broadcast of the system information group. And Dr. Stark

1 went into the motivation to combine Lee and Agiwal, and there's no rebuttal
2 testimony on that and I haven't seen any argument on there being a
3 motivation to combine them.

4 And so between Lee and Agiwal, we have a determination of what
5 system information has changed based on the value tag. We have broadcast
6 after a change of only the changed system information, and we have
7 inclusion of the group identifier in the broadcast of the system information --
8 of the group of system information blocks. And so it's our position that Lee
9 and Agiwal combined teach the last limitation. Any questions on that?

10 JUDGE HOFFMAN: Not seeing any questions.

11 MR. HANSEN: Okay. If there are no further questions, I'll save
12 the rest of my time. And thank you very much.

13 JUDGE HOFFMAN: Okay. Thank you very much, Mr. Hansen.
14 We appreciate it. Give me a minute to adjust my timer here.

15 MR. WYDE: Sure.

16 JUDGE HOFFMAN: Okay. Mr. Wyde, you have 36 minutes.

17 MR. WYDE: I promise you I will not use --

18 JUDGE HOFFMAN: You may -- you can begin when you're
19 ready.

20 MR. WYDE: All right. Thank you very much. So I'll address the
21 response first. So I listened very closely to the arguments that Mr. Hansen
22 made regarding the supposed lack of enablement and written description,
23 and at least to me, when you review the record, it sounds very much more
24 like a utility argument that he's saying that somebody wouldn't do this
25 maybe in the real world, but this is what the patent teaches, this is what the
26 patent claims. I think there is written description and there is enablement.

1 Whether there's infringement is an argument for a different day and a
2 different forum, so that's all I'll say about the first part of the argument.

3 Second, if you look at Claim 7C, all of these claims -- and Mr.
4 Hansen noted earlier in his argument that this -- what starts all of this is upon
5 a change of a second type SIB. That's how these things -- that's how the
6 whole claim is put into motion. It's a causal relationship, that these claims
7 couldn't be anticipated and cannot be infringed, i.e. the scope of the claim is
8 that the second type SIB has changed. So it will be transmitted with the
9 group. There's never a situation where the second type SIB isn't transmitted
10 to the group because the claims require it to have been changed. So the
11 plural parameters that are changed in the second type SIB will always be
12 transmitted with the group containing the second type SIB.

13 All right. And then lastly -- I'm going to share my screen again.
14 For the patentability over Lee and Agiwal -- I'm on page 36. So at the top of
15 the slide is the actual limitation 7H and 8F, and this is where we say, there's
16 patentability. But in the first -- I've seen here in the first excerpt at the --
17 below the actual claim, Petitioners rewrite the claim as, quote, "requiring
18 that upon an update of non-broadcast system information, the changed
19 system information be broadcast without the broadcast of unchanged non-
20 broadcast system information." And I'll note, I changed require to requiring,
21 to make the sentence clear.

22 And then in the second excerpt, this is -- this rewritten claim is
23 what they -- Petitioners address. They say, Lee further teaches that when a
24 network changes a particular type of on demand system information, the
25 network information broadcasts the change system information. So they
26 rewrite it and then they attack the straw man.

1 Turning to page 37. So first of all, procedurally, that -- and why --
2 the explanation for why Lee teaches this is simply a string citation to all
3 these other documents, and Petitioners simply refer to the prior documents
4 saying that the limitations are anticipated for, quote, "generally the same
5 reasons." So this is an improper incorporation by reference. Petitioners
6 haven't explained what the same reasons are in this document, in this
7 opposition. They expect the Board to go back and be the proverbial
8 archeologist.

9 But putting that aside -- and I'm on page 38 -- all the other
10 documents that Petitioner relies upon addresses claims of different scope.
11 So they rely on Claims 8 and 10 in the motion to amend and the original
12 Claims 2 and 4, but none of these limitations have the limitations of 7H and
13 8F in the revised motion to amend, and Petitioners haven't addressed the
14 differences. So as shown here, Petitioners did not address the SIBs as
15 having parameters, sending only changed parameters and comparing the
16 group value tags. These are new limitations. In short, Petitioners haven't
17 facially met their burden to show each and every claim as anticipated by
18 relying upon their previous argument that -- for claims that have a different
19 claim scope.

20 And then for the same limitations, Petitioner's Lee plus Agiwal
21 combination be relied completely on that previous Lee argument, but as just
22 discussed, Petitioner's Lee argument addresses a made up claim rather than
23 the limitations of the actual claim. So Petitioner's argument is facially
24 unfirm and they haven't added anything from Agiwal from the Agiwal/Lee
25 combination. And with that, that's the end of my presentation. I'll take any
26 questions, if there are any at this time.

1 JUDGE HOFFMAN: Are there any further questions from my co-
2 panelists? Okay.

3 JUDGE OGDEN: None from me.

4 JUDGE HOFFMAN: Okay. Well, Counsel, thank you so much.
5 We appreciate your level of preparedness today. It was very helpful for us.
6 And we will take this case under advisement and issue our final written
7 decision in due course. The panel will be leaving now, but please remain on
8 the line for the Court Reporter, as they may have some questions about
9 spellings.

10 MR. WYDE: Sure.

11 MR. HANSEN: Thank you very much, Your Honor.

12 JUDGE HOFFMAN: Yes, thank you.

13 (Whereupon the above-entitled matter went off the record at 2:44
14 p.m.)

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