

UNITES STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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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.

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IPR2024-00310  
Patent 10,932,207 B2

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Record of Oral Hearing  
Held: June 12, 2025

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

IPR2024-00310  
Patent 10,932,207 B2

APPEARANCES:

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The above-entitled matter came on for hearing on June 12, 2025,  
commencing at 1:31 p.m. EDT, via video teleconference.

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

(1:31 p.m.)

JUDGE HOFFMAN: I'm Judge Hoffman. Judge Ogden and Judge Cass are also appearing today. I'd like to welcome both the Petitioner and the Patent Owner.

Let me start off by asking, who is on the line today for Petitioner?

MR. CAMERON: Matthew Cameron from McKool Smith.

JUDGE HOFFMAN: Mr. Cameron, welcome. Is there anyone else on the line for Petitioner?

MS. SHOMAKER: Yes, Your Honor, Casey Shomaker from McKool Smith is also on.

JUDGE HOFFMAN: Who will be providing the arguments on behalf of Petitioner today?

MR. CAMERON: I will, Your Honor.

JUDGE HOFFMAN: Mr. Cameron, thank you.

And who do we have on the line for the Patent Owner?

MR. WYDE: My name is Joshua Wyde. I'm with Alavi Anaipakos, and I believe I'm the only one on the call. If anyone else is on the call for Patent Owner, please speak up now.

It doesn't look like it.

JUDGE HOFFMAN: Thank you, Mr. Wyde.

MR. WYDE: You're welcome.

JUDGE HOFFMAN: Again, welcome. To ensure that the transcript of this hearing is clear, we ask you to identify yourselves before speaking, to speak directly into the microphone, and to identify specific slide numbers and any other pertinent identifying information when referring to your

1 demonstratives. Please mute yourself when not speaking. If you encounter  
2 any more technical difficulties today, please let us know immediately.

3 I will remind everyone that we do have a public line, so please do not  
4 disclose anything that is confidential. We have allotted 60 minutes per side  
5 pursuant to our hearing order. Petitioner will open the argument and may  
6 reserve rebuttal time. Patent Owner will then respond to Petitioner's  
7 arguments and may reserve sur-rebuttal time.

8 When you are arguing, please speak slowly, and if you hear another voice,  
9 such as one of the judges, please stop talking so that we do not talk over each  
10 other. If either party believes that the other party is presenting an improper  
11 argument, please raise the issue during your presentation; please do not  
12 object at the time by interrupting the other party's presentation.

13 I will be keeping track of the time, but it would also be helpful if the parties  
14 could keep track of their time.

15 With that, I'll ask Counsel for Petitioner and Patent Owner whether there are  
16 any other preliminary matters you'd like to discuss before we go into the  
17 arguments. Mr. Cameron?

18 MR. CAMERON: None from Petitioners, Your Honor.

19 JUDGE HOFFMAN: Thank you. Mr. Wyde?

20 MR. WYDE: No, none for Patent Owner.

21 JUDGE HOFFMAN: Very well. Mr. Cameron, do you wish to reserve any  
22 rebuttal time?

23 MR. CAMERON: Yes, I'll reserve 10 minutes.

24 JUDGE HOFFMAN: Ten minutes. So you'll have 50 minutes; let me put  
25 that on the timer. Okay, you may begin speaking when you are ready.

26 MR. CAMERON: May it please the Board. I'm sharing Petitioner's

1 demonstratives, so please let me know if you have trouble seeing my screen,  
2 but it should be appearing on your end.

3 Since we've had a change in panel since the Institution Decision, I thought it  
4 would be helpful to start with a bit of background regarding the technology  
5 that's relevant to this case. Turning to Petitioner's demonstrative, Slide 4, at  
6 the highest level, this case is about a type of technology called the random  
7 access procedure and essentially, the random access procedure is the process  
8 in a wireless system by which a mobile device can raise its hand to tell the  
9 network that it has data that it needs to transmit to the network or receive  
10 from the network. The reason it's called the random access procedure is  
11 because the network doesn't know when a mobile device is going to request  
12 signaling resources for transmission or reception.

13 JUDGE HOFFMAN: Mr. Cameron, I'm so sorry to interrupt. Could you  
14 give the judges 30 seconds to pull up your demonstratives through our  
15 system? Because we're not able to see them on the screen.

16 MR. CAMERON: Okay, no problem.

17 JUDGE HOFFMAN: I'll restart your time because I think we were a little  
18 distracted.

19 MR. CAMERON: Should I -- given that you can't see my screen, should I  
20 simply abandon the screen-sharing functionality and instead just call out the  
21 relevant documents?

22 JUDGE HOFFMAN: Yes, I think that'll work. Like I said, we'll pull up the  
23 slides on our own screen, and as long as you identify the Slide number, we  
24 should be good.

25 MR. CAMERON: Okay. Mr. Wyde, out of curiosity, were you able to see  
26 my screen?

1 MR. WYDE: I was.

2 MR. CAMERON: Okay.

3 JUDGE HOFFMAN: All right, I reset your time, and you may begin when  
4 ready.

5 MR. CAMERON: Okay. As we were discussing, Petitioner's  
6 demonstratives provide a background overview of the technology that's  
7 relevant to this case. In particular, Slide 4 is the Slide that we were  
8 discussing before the brief break, shows that there are basically two types of  
9 random-access procedure that are relevant to this case. The conventional  
10 type of random-access procedure occurs in four steps, and that is shown in  
11 the figure on the left side of Slide 4. The four-step random-access procedure  
12 has been used in every wireless technology, basically since the dawn of time,  
13 but certainly within the last 30 years.

14 There's a relatively newer process, introduced for the first time in 5G, where  
15 you can complete the random-access process in two steps instead of four. In  
16 theory, this reduces the amount of time it takes to achieve a connection, often  
17 called latency. As a result, there are potential benefits to using this new  
18 optional 2-step random-access procedure compared to the conventional 4-  
19 step random-access procedure.

20 Just like the timing by which a mobile device is going to need uplink or  
21 downlink resources for transmission, mobile devices are randomly distributed  
22 around the base station and, as such, the signal strength, or the transmission  
23 strength that the mobile device needs to transmit the random-access  
24 preamble, which is the first step in all random-access procedures, depends on  
25 where the mobile device is located relative to the base station and things like  
26 whether the mobile device is indoors or outdoors. Even if you're right next to

1 a base station but the mobile device happens to be in a bank vault, you're  
2 going to require a much higher transmission power for the preamble to reach  
3 the base station than if there's nothing but open air between the mobile device  
4 and the base station. As a result, the transmission power of these random-  
5 access preambles is variable.

6 Turning to Petitioner's demonstrative 5, the way that skilled artisans have  
7 come up with to deal with these -- the issue of configurable transmission  
8 power is called power ramping. Since at least 3G, more than 20 years ago,  
9 the way it works is the mobile device will start with a particular -- an initial  
10 transmission power and it will transmit the random-access preamble at that  
11 initial power. If a connection to the network is achieved via that initial  
12 transmission power, the process is over and there's no power ramping. On  
13 the other hand, if the initial transmission power is insufficient because the  
14 mobile device does not receive a response from the network, the mobile  
15 device increases the transmission power by a configurable step size and  
16 essentially the mobile device tries again. If that doesn't work, the mobile  
17 device repeats the process, each time incrementally increasing the  
18 transmission power until a connection is achieved. That's shown in this  
19 figure from a well-known textbook authored by two engineers at Nokia.

20 I'll also note for the record that Dr. Mahon's report, Exhibit 1003, from  
21 paragraphs 46 through 49, provides what I consider to be a very good and  
22 detailed overview of this process of power ramping and why it is  
23 foundational to the transmission of random-access preambles.

24 Turning to Slide 6, and I don't believe this to be in dispute, but this Slide  
25 includes two excerpts from Dr. Mahon's report to both technical  
26 specifications from the 3G and 4G standard, showing that the power-ramping

1 process that we're going to discuss today has been used for a very, very long  
2 time. The excerpt on the left is from the 1999 release of the 3G WCDMA  
3 standard. This has been around for decades, and it is still part of 5G today.

4 Turning to the substantive disputes, the first and potentially most important  
5 issue for the Board to decide relates to claim construction. The reason this  
6 issue is so important in this case is that Patent Owner does not dispute that  
7 the challenged claims are rendered obvious by the combination of Petitioner's  
8 references Lee1 and Lee2 under the Board's preliminary construction of the  
9 term shown on the screen: the function preamble initial received target  
10 power, which could have an input of either 0 or 1, and the function power  
11 ramping step, which could have an input of either 0 or 1.

12 Of course, Patent Owner does dispute the obviousness contentions based on  
13 its proposed construction, and Petitioners will address that construction after  
14 we address the Board's preliminary construction.

15 As a bit of background, as the Board may recall, neither party expressly  
16 proposed a construction in their initial filings. Petitioner did not expressly  
17 propose a construction of these terms in the petition, and neither did Patent  
18 Owner propose a construction in its Patent Owner preliminary response.

19 However, the Board noted that there was an implicit dispute between the  
20 parties because, under Petitioner's initial interpretation of the claims,  
21 functions, the claimed functions could be satisfied even if you were using the  
22 same values for either a 2-step random-access procedure or a 4-step random-  
23 access procedure. Patent Owner, on the other hand, implicitly disagreed with  
24 that interpretation of the claims, asserting that the power-ramping functions  
25 must correspond, by definition, to one of those types of random access, either  
26 the 4-step contention-based procedure or the 2-step contention-based

1 procedure, and the Board resolved that claim-construction dispute  
2 preliminarily in its Institution Decision.

3 As the Board found, the functions that are part of the challenged claims are  
4 discrete functions that require different values. However, the Board declined  
5 to adopt Patent Owner's full implicit construction of the disputed terms,  
6 which also required that the inputs for the claimed functions, either 0 or 1,  
7 correspond to a particular type of random-access procedure. And it's that  
8 language that corresponding to a particular type of random-access procedure,  
9 that is the key dispute underlying claim construction in this case.

10 Turning to the parties' proposed constructions, there has been some  
11 uncertainty, at least on behalf of Petitioners, as to precisely what Patent  
12 Owner was arguing. Looking at Petitioner's demonstrative 10, Petitioners  
13 actually asked Patent Owner if it would please provide its proposed  
14 construction in a simple chart format so that it would crystallize the dispute  
15 and it would prevent the parties' or at least decrease the likelihood of the  
16 parties talking past one another.

17 As you can see, Patent Owner politely declined to provide such information,  
18 and so we didn't have a concrete disclosure of what Patent Owner's position  
19 was when we prepared the demonstratives. Luckily, it seems that we got it  
20 right, looking at Patent Owner's demonstratives. I'm going to shift to Slide  
21 19, which I think frames the dispute.

22 Looking at Petitioner's Slide 19. I'll give the Board just a second to turn  
23 there. The dispute is whether the language in red should be added or inserted  
24 to the end of the relevant claim limitations. Patent Owner contends that the  
25 claims require that preamble initial received target power 0 and power  
26 ramping step 0 correspond to the 4-step random-access procedure, while the

1 functions with preamble initial received target power 1 and power ramping  
2 step 1 must correspond to the 2-step contention-based random-access  
3 procedure. The question is whether the Board should essentially add those  
4 limitations to the end of elements 4D and 4E in the challenged claims.

5 JUDGE OGDEN: This is Judge Ogden. Is it possible, even if we don't add  
6 that language that you've underlined in your demonstrative that says the 4- or  
7 2-step contention corresponds with the random-access procedure, couldn't we  
8 just get that -- that same essential result just by looking at the first part of  
9 limitations 4D and 4E? Which says that -- if 4D says that -- it says for the 4-  
10 step contention-based random-access procedure and then it, you know,  
11 proceeds to say that the two functions have an M value of either 0 in the case  
12 of the 4-step contention or 1 in the case of the 2-step contention. Maybe  
13 that's just saying the same thing, but it's already there in the claim language.  
14 So, even if we just stuck with our construction from the Institution Decision,  
15 is it possible that maybe what Patent Owner is trying to get at here is already  
16 there in the claims?

17 MR. CAMERON: I don't think so. The reason for that is, if you look at  
18 Patent Owner's substantive arguments, essentially what they are saying is that  
19 the values for preamble initial received target power and power ramping step  
20 must uniquely correspond to the number of steps. Such that you would have  
21 one set of values that is exclusively used for the 4-step random-access  
22 procedure and then a separate set of values that is exclusively used for the 2-  
23 step random-access procedure. That language or that limitation --

24 JUDGE OGDEN: That --

25 MR. CAMERON: Yes, Your Honor.

26 JUDGE OGDEN: That's not what -- that doesn't seem to me to be what's

1 reflected on this Slide. You know, you're saying uniquely correspond to, but  
2 that's not what you're saying the Patent Owner's position is here. It just  
3 corresponds to, which may or may not be a unique correspondence.

4 MR. CAMERON: So if it only needs to correspond in some cases but not  
5 correspond in all cases, then I agree that that satisfies -- that is generally  
6 consistent with the Board's preliminary construction. What the Board  
7 rejected essentially was Patent Owner's contention that you needed to -- I  
8 know it's not using the exact same language on the Slide, but Patent Owner's  
9 contention that you need to set the values for the power-ramping parameters  
10 for were based upon the type of random-access procedure being used.

11 In other words, that you intend to use a particular set of values for one type  
12 of random access procedure or one step, you know, number of steps in the  
13 random access procedure and then intend to use a different set of steps. So  
14 you know, a different set of values for a 4-step versus 2-step, and that is what  
15 the claims are lacking. The claims do not say that you have this special set of  
16 parameters that are particular to the 2-step and then a different set that are  
17 particular to the 4-step. Instead the claim simply requires that you use  
18 different parameters for a 2-step procedure compared to what you might use  
19 for a 4-step procedure.

20 JUDGE OGDEN: So Petitioner wouldn't disagree with saying that, if it's a  
21 4-step contention-based random-access procedure, that  $M$  equals 0, and if it's  
22 a 2-step contention-based random-access procedure, then  $M$  equals 1.

23 MR. CAMERON: I'm not entirely sure I understand your question.

24 JUDGE OGDEN: I'm just saying that your position is that there could be a  
25 correspondence between whether it's a 4-step or 2-step procedure and the  
26 value of  $M$  in this function. Just that it's -- you're saying it's not an if and

1 only if kind of a correspondence. You're saying that if it's a 4-step procedure  
2 then M equals 0; if it's a 2-step procedure then M equals 1. Is that what  
3 you're saying, and would you agree with that?

4 MR. CAMERON: Certainly, we would agree that a correspondence -- if  
5 there is a correspondence that would satisfy the claim language. What we  
6 disagree with is that the claims require such a correspondence. In other  
7 words, M equals 0 could apply to a 4-step procedure and it could also apply,  
8 as we will see, to a 3- or 2-step procedure, depending on how you count the  
9 steps for a non-contention-based random-access procedure.

10 Similarly, M equals 0 could have nothing to do with the number of steps. It  
11 simply requires that the power ramping parameters are different than those  
12 used where M equals 1. And I believe that was the real crux of the Board's  
13 preliminary construction of the claim language is that these claims require  
14 different power ramping parameters, but they do not require that the  
15 difference between the two is that that difference be tethered to the number of  
16 steps that are being used to perform random access.

17 And so I'll turn back briefly to Slide 8, which includes the relevant language.  
18 If you look down from the Institution Decision, this is Paper 9. The Board  
19 states, however, we preliminary decline to adopt Patent Owner's full implicit  
20 construction of the disputed terms, which also requires that input 0  
21 corresponds to the 4-step procedure and input 1 corresponds to the 2-step  
22 procedure. And if we turn to Slide 13, actually let's move to Slide 14, I think  
23 that conclusion was the right one.

24 The reason for that is an input of 0 has no independent meaning. It's  
25 basically a placeholder. It's not saying, you know, if it was specific to the  
26 number of steps, it would make more sense to say the input is 2 versus an

1 input of 4. The reason that Patent Owners use an input of 0 is simply to  
2 signify a potential difference. And this is akin to in claim drafting where you  
3 use terms like first and second to distinguish different elements of the claim.  
4 Right? By using terms like first and second, the only thing you are  
5 conveying is that what is used, what modifies -- what the term that first  
6 modifies is different from the term that second modifies. It does not further  
7 indicate that those terms are different based upon, you know, whether a  
8 decision is going to be made one way or the other.

9 I'll also note, turning to Slide 11, Patent Owner has taken shifting positions  
10 on the specific issue that Your Honor raised. So, looking specifically at the  
11 right side of the slide. In Patent Owner's preliminary response, its proposed  
12 construction involving the corresponding language was clearly tied to the  
13 numerical value of the inputs. You can see Patent Owner argues that the two  
14 separate functions that have a definition for at least two inputs, 0 and 1,  
15 correspond to the 4-step and 2-step process, respectively.

16 Petitioners rebutted that argument in the reply. And then in the sur-reply,  
17 Patent Owner came back and said that Petitioners were attacking a Strawman  
18 and ignoring the pertinent claim language. Because Patent Owner's  
19 construction is really based on the language quoted in the bottom panel on  
20 the right side of Slide 11 for the 4-step contingent based random access  
21 procedure and for the 2-step contingent based random access procedure. And  
22 that is that language that indicates the following functions correspond to the  
23 given steps, not the 0 or 1 on their own.

24 I'll note that Petitioner's position that the Board got it right regardless of  
25 which claim language Patent Owner attempts to invoke to support its  
26 proposed construction. And you can see that if you turn, for example, to

1 Petitioner's demonstrative 15. Petitioner's demonstrative 15 includes an  
2 excerpt of the specification, one of the excerpts or portions that Patent Owner  
3 itself relies on. And as you can see, the values for M equals 0 and M equals 1  
4 are not uniquely tied or they do not correspond to the number of steps. And  
5 you know that because M equals 0 also applies to the non-contingent based  
6 random access procedure. And as you can see on the figure reproduced on  
7 the right of Slide 15, the non-contention based random access procedure is  
8 not a 4-step procedure.

9 You know, the number of steps required varies depending on which  
10 reference you read. Some references call the non-contingent based procedure  
11 a 2-step process. Others, for example Lee1 refers to it as a 3-step process.  
12 And really the number of steps isn't material here. What matters is that the  
13 non-contention based random access procedure is clearly not a 4-step  
14 process. And I don't want to jump ahead too far, but on this same slide, if  
15 you look down to the bottom of the portion of the specification, and this is  
16 cited by Patent Owner, it includes a separate function that is not claimed.  
17 Delta\_preamble F is configured by higher layers, RRC. Each delta\_preamble  
18 F value corresponds to a physical random access channel format.

19 So this slide shows that Patent Owner was perfectly aware how to describe a  
20 particular function as corresponding to something else. It uses the language  
21 that Patent Owner seeks to read into the claims, but it uses that language to  
22 describe functionality that is not claimed and that is significant. By using  
23 different language to describe the two functions the presumption as a canon  
24 of claim constructions that Patent Owner intended for there to be a difference  
25 in how that language is used.

26 Turning briefly to the process --

1 JUDGE OGDEN: So Mr. Cameron, I just kind of want to crystallize so I  
2 can make sure I understand your position. And I think part of, part of the --  
3 maybe some of the back and forth between the parties here has to do with the  
4 word correspond. And I think that's a little bit of an ambiguous term because  
5 there's two -- there's a couple of ways in which things can correspond. One  
6 is, I mean, it can be a one-way correspondence. You know, if it's a 4-step  
7 procedure then  $M$  equals 0. If it's a 2-step procedure then  $M$  equals 1. Or it  
8 could be like the reverse of that which is if  $M$  equals 0 then it's a 4-step  
9 procedure. If  $M$  equals 1 then it's a 2-step procedure, or it could be the  
10 combination of those if and only if kind of a relationship.

11 It's my understanding that you're saying that there's a correspondence in the  
12 direction of saying that if there's a 4-step procedure, then  $M$  equals 0. If it's a  
13 2-step procedure, then  $M$  equals 1. It doesn't sound like you dispute that, but  
14 you dispute the other direction saying that if, if  $M$  equals 0, then necessarily  
15 it has to be a 4-step procedure. And likewise if  $M$  equals 1, it necessarily has  
16 to be a 2-step procedure. You're saying that in some cases if  $M$  equals 1, then  
17 it could be a 3-step procedure, right?

18 MR. CAMERON: Essentially, yes. So what we are saying is that  $M$  could  
19 equal 1 for a 4-step procedure, as an example. I guess the term they use is 0.  
20 So let me stick with their terminology.  $M$  could equal 0 for a 4-step  
21 procedure. But the fact that  $M$  equals 0 is not because a 4-step procedure is  
22 being used.  $M$  equals 0 is just a placeholder indicating that you're going to  
23 use different values. But you don't need to select the values for the 4-step  
24 procedure specifically because a mobile device is executing a 4-step  
25 procedure. Conversely, the mobile device doesn't need to select a value of 1  
26 specifically because the mobile device is executing a 2-step procedure.

1 In other words, the values are not tethered exclusively to the number of  
2 steps. You could pick a different value for reasons that have nothing to do  
3 with the number of steps that are part of the random access procedure that  
4 happens to be performed. And if you look at slide -- back to Slide 11 and I  
5 apologize, this appears to be the only slide that doesn't include slide  
6 numbering in the bottom right corner. But looking back at Slide 11, you  
7 know, if you look at, and certainly the proposed construction includes the  
8 word corresponds, and there is some ambiguity to that construction. The  
9 substance of Patent Owner's argument, I think is well represented in the  
10 panels to the left. What Patent Owner is saying is that the claims require  
11 different power settings based upon the number of steps.

12 Alternatively, what they're saying is that 0 -- a value of  $m$  equals 0 is set for.  
13 And again, set is the language they're reading into the claim, not four, set for  
14 the 4-step procedure and 1 is set for the 2-step procedure. Finally, towards  
15 the bottom, and this is from Patent Owner's response, Patent Owner states  
16 that that's what's missing from the prior art. That the prior art misses -- is  
17 lacking a teaching to use different power settings based upon whether the  
18 UE, the mobile device, is doing 2-step or 4-step contention procedure. That  
19 is what the Board -- the Patent Owner is attempting to read into the claim and  
20 that is what the Petitioners understood the Board to be rejecting, at least in  
21 their preliminary construction of the claim language.

22 JUDGE CASS: Counsel, this is Judge Cass. If I could just clarify to make  
23 sure I understand the positions here. So your understanding that, and maybe  
24 it's better question for Patent Owner, but since we're talking about their  
25 construction, I'll ask you now. Your understanding that Patent Owner's  
26 construction is that in step 4d for the 4-step contention -- for the 4-step

1 procedure, preamble received target power and power ramping step, that  
2 those two functions have a first input value and that in 4e with a 2-step  
3 procedure, those same two functions have a second input value that is  
4 different from the first input value.

5 MR. CAMERON: That does not go all the way to Patent Owner's proposed  
6 construction. Effectively, that is what the Board's preliminary construction  
7 was.

8 JUDGE CASS: So do you -- and so you would agree with that construction  
9 that I just --

10 MR. CAMERON: Yes.

11 JUDGE CASS: Okay. So your understanding is that Patent Owner is going  
12 a step further and saying in step 4d for the 4-step procedure, the input has to  
13 be 0, the value 0, and for 4e, the input has to be the value 1 and no other  
14 values can be used. Is that your understanding?

15 MR. CAMERON: No. Effectively, what Patent Owner is arguing is that for  
16 the 4-step procedure the value must be 0 because the mobile device is using a  
17 4-step procedure. Conversely, for the 2-step procedure the value must be 1  
18 because the mobile device is engaging in a 2-step procedure.

19 In other words, what Patent Owner argues is that the decision to use either a  
20 value of 0 or 1, which again have no independent meaning, they're just  
21 placeholders, must be based on which type of random access procedure the  
22 mobile device decides to execute. Whether it's 2-step or 4-step. That's what  
23 Patent Owner is seeking to read into the claims and that's what we disagree  
24 the claims require.

25 Now certainly Patent Owner could have claimed that if it wanted to, but it  
26 didn't. And potentially the reason for that, if you look at the specification of

1 the '207 patent, the specification actually never even expressly says that you  
2 can use different values or different numbers of steps. That is the implication  
3 of describing, you know, a first set of values tied to the number 0 and a  
4 second set tied to the number 1. But it never says expressly that they could  
5 be different.

6 And moreover, it never addresses or even hints at why they might be  
7 different. And that's important because if you're going to claim a particular  
8 set of values for the 2-step procedure versus the 4-step, you would think the  
9 specification of the patent would say something about what types of values  
10 are appropriate for 2-step procedures versus the types of values that are  
11 appropriate for 4-step procedures. And the spec never even comes close to  
12 addressing that issue. And you can compare that with a reference like Lee2,  
13 which is expressly about using different values depending upon whether the  
14 mobile device is executing a particular, what Lee2 refers to as, case. Right?  
15 Lee2 actually uses the language Patent Owner seeks to read into the claims  
16 numerous times saying that the power ramping and initial transmission power  
17 correspond to a particular case. And then Lee2 further describes why you  
18 would use different values for some cases than others. And that's what's  
19 missing from the '207 patent and that you would expect to see if the claims  
20 were really as specific as Patent Owner contends.

21 JUDGE CASS: Thank you, Counsel.

22 MR. CAMERON: Turning to Slide 20 and before we move on from claim  
23 construction, there are some assertions and Patent Owner's Sur-Reply that its  
24 proposed construction all along has been based on the plain language of the  
25 claims, that it isn't attempting to read anything from the specification into the  
26 claims.

1 I excerpted the portion of Patent Owner's response that addresses its  
2 proposed construction of the Functions and Steps 4d and 4e. Patent Owner  
3 quite clearly states, in the portions that are highlighted yellow, that Patent  
4 Owner seeks to construe the claim language based on what's in the spec. And  
5 if you look at the portions of the specification cited by Patent Owner, none of  
6 those portions of the specification actually use the specific language that  
7 Patent Owner seeks to read into the claims.

8 Again, looking at Slide 22 of Petitioner's demonstratives, I've highlighted in  
9 purple this delta preamble function. Patent Owner seeks to conflate the  
10 claimed functionality with this unclaimed delta preamble functionality and  
11 that is where Patent Owner extracts the corresponds language. That language  
12 isn't used anywhere else in the patent in a place that's relevant to this  
13 particular claim construction issue. And turning to Petitioner's next slide,  
14 Slide 23, you can see that directly in Patent Owner's response where it says a  
15 person of ordinary skill in the art would recognize that the same treatment of  
16 M and F where F corresponds to the format also supports that the M  
17 parameter of the claim corresponds to the higher layer configuration of the  
18 power with M being dependent upon whether the system is performing 4-step  
19 or 2-step procedure. And the final part of that sentence again, I think is really  
20 the key dispute, is Patent Owner's argument that the value of the power  
21 ramping functions must be dependent upon whether the system is performing  
22 4-step or 2-step. That language of course is not in the claims and it also isn't  
23 in the specification.

24 JUDGE CASS: Counsel, this is Judge Cass. I'm struggling a little bit to  
25 understand what it means for M to be dependent on whether the system is  
26 performing a 4-step or 2-step procedure. Again, this is not your construction,

1 so it may be not totally fair to ask you about it, but I'll do it anyways. I mean,  
2 the way I'm reading the claim is that you've got a certain value that is used  
3 for 4-step, another value that's used for 2-step and the input is determining  
4 which procedure is being used. While here it seems like to say that the value  
5 of M is dependent on which procedure is being performed seems a bit  
6 backwards to me. Is that your reaction as well? You're kind of putting the  
7 cart before the horse and making the M dependent upon which procedure is  
8 performed instead of the procedure dependent upon which input is given.

9 MR. CAMERON: So I think, and I don't want to speak for Patent Owner,  
10 but Petitioners do not agree that the value of M is selected specifically  
11 because the mobile device is executing, you know, a 4-step or a 2-step  
12 procedure. Petitioner's position, and I think the position best supported by  
13 the claim language itself and the specification, is that the selection of the  
14 value is completely independent of the type of random access procedure that  
15 is being used. So you could use one set of values for the 4-step procedure  
16 and a different set of values for the 2-step procedure. Certainly, that's a  
17 requirement of the claims under the Board's preliminary construction that  
18 Petitioners have subsequently adopted as part of the trial process in this case.

19 What the claims do not require is that the decision of which value to use is  
20 made specifically because the mobile device decided to use a 4-step  
21 procedure instead of a 2-step procedure or vice versa. That's what essentially  
22 Patent Owner is trying to read an intent element into the claims that the  
23 mobile device has to intend to use a particular set of values when it is doing  
24 4-step, versus when it is doing a 2-step. And that's not what the claims  
25 require.

26 JUDGE CASS: All right, thank you for that clarification.

1 MR. CAMERON: And of course I would encourage the Board to ask Patent  
2 Owner. This is something that Petitioners have also wondered and that was  
3 part of the reason that Petitioners reached out seeking just a very clear,  
4 concise statement as to what Patent Owner's position was as to the specific  
5 claim language that it is construing and precisely what it contends that claim  
6 language means.

7 Unless there are any further questions about -- well, before I move on, I'll  
8 note that the prosecution history also does not support Patent Owner's  
9 argument. Looking at Slide 24 of Petitioner's demonstratives, Patent Owner  
10 relies on a handful of statements that were made by the examiner where the  
11 examiner uses language such as associated with and language such as based  
12 upon. As a threshold issue, Patent Owner is not seeking to use that specific  
13 language in its proposed construction or at least as far as Petitioners can tell,  
14 it isn't seeking to use that specific language. And Patent Owner never  
15 explains you know, I hate to use the same language, but Patent Owner never  
16 explains how the language used by the examiner corresponds to the  
17 construction that Patent Owner is proposing for this claim language. And so  
18 that's a threshold issue.

19 But a secondary issue is if you look at the prosecution history as a whole, as  
20 the Board observed in its Institution Decision, what the examiner is really  
21 noting is that the prior art lacks a teaching of using different parameters. The  
22 examiner never says that what is lacking from the prior art is a teaching that  
23 you use one set of parameters specifically that correspond to a number of  
24 steps and a different set of parameters corresponding to either the 4-step or  
25 the 2-step procedures.

26 Turning to Slide 29 and again moving on from claim construction, unless the

1 Board has any additional questions about the claim construction issue, I think  
2 it's important to note that claim construction really is issue dispositive in this  
3 case. Petitioners have shown that the challenged claims are obvious under  
4 any proposed construction, either the preliminary construction adopted by the  
5 Board or Patent Owner's proposed construction. Again, as best as Petitioners  
6 understand it from the various filings in this case. But if the Board decides to  
7 maintain its preliminary construction, Patent Owner does not dispute that  
8 Lee1 and Lee2 render the challenged claims obvious.

9 Even under Patent Owner's proposed construction, Patent Owner does not  
10 dispute that elements 4pre, so the preamble, through 4c shown on Slide 29  
11 are rendered obvious by Lee1 and Lee2. Instead, the only elements that are  
12 in dispute, again only under Patent Owner's proposed construction, are 4d  
13 and 4e.

14 I'll briefly cover the relevant disclosures in the prior art, given that I don't  
15 think there's really any material dispute concerning those disclosures.

16 Turning to Slide 31 so you can see here, and as the Board found in its  
17 Institution Decision, Lee1, petitioner's first reference, clearly teaches both the  
18 4-step and 2-step contention based random access procedures that are the  
19 subject of claim elements 4a through 4c. Turning to Slide 32, both Lee1 and  
20 the second reference relied upon in the petition or by Petitioners, Lee2, teach  
21 the conventional procedure for power ramping.

22 The difference between Lee1 and Lee2 is that Lee1 is silent as to whether  
23 you would use different power ramping parameters for the 2-step versus 4-  
24 step procedure. By contrast, Lee2 expressly teaches that it would be  
25 beneficial to use different power ramping parameters depending on the type  
26 of random access that is being performed. Now again, the fact that Lee2

1 teaches that there is a dependence on the parameters being used and the type  
2 of random access does not mean that the challenge claims are limited to that  
3 relationship. All that it means is that Lee2 teaches an embodiment that would  
4 fall within the claim language, even if the claims are broader than what Lee2  
5 discloses.

6 Turning to Slide 33, we can see here that Lee2 teaches different power  
7 ramping functions, as I mentioned earlier, including different power ramping  
8 functions according to the condition of the user equipment that is performing  
9 random access, and that is in Paragraph 109 of Lee2. And you can see that in  
10 the slide to the right that as an example for a mobile device that is  
11 transitioning from idle to connected mode, it uses a first set of power ramping  
12 values, including a relatively low initial transmission power which is  
13 represented by the relatively low bar, the initial Tx bar in the figure, and  
14 progressively ramping up over time. That's basically the conventional way  
15 that it's done, and it's been done that way since 3G.

16 Lee2 also teaches that in some cases you can reduce the time delay  
17 expediting the process of connecting mobile devices to the network if you  
18 vary those power ramping functions. And you can see that in the handover  
19 case, Case 3, for example, where the initial transmission power is  
20 considerably higher in Case 3 than in Case 1. The reason for that, the reason  
21 for starting at a higher transmission power, is that that can lower the amount  
22 of time it takes the mobile device to connect to the network, particularly if  
23 there is significant path loss between the mobile device and the base station.

24 So if the base -- if the mobile device is right next to the base station, it may  
25 not require that high of a transmission power to achieve a connection in an  
26 expeditious manner. Conversely, if the mobile device is inside of a building

1 with thick walls, for example, it may need a relatively high transmission  
2 power to achieve a connection in a relatively short amount of time. And so  
3 Lee2 is teaching that you can vary those transmission power parameters,  
4 including the initial transmission power and the power ramping step size to  
5 suit the needs of the moment, essentially.

6 As shown on Slide 34, the Board found that it would be obvious for a person  
7 of ordinary skill in the art to combine the 2- and 4-step procedures taught in  
8 Lee1 with the configurable power ramping parameters taught in Lee2, and  
9 that that combination would have resulted in multiple scenarios that meet the  
10 claim language where input M is dependent upon event type as explicitly  
11 taught in Lee2. In other words, by combining the references in at least some  
12 cases you will use different transmission power, different transmission power  
13 parameters, different ramping step and different initial transmission power  
14 for the 4-step versus the 2-step procedure. Now, you won't necessarily use  
15 different values all the time in all cases, but you inevitably and necessarily  
16 will use different transmission power parameters at least sometimes.

17 And as noted in Petitioner's filings, and as the Board knows very well,  
18 combinations of prior art that sometimes meet the claim elements are  
19 sufficient to show obviousness. It is not Petitioner's burden to show that  
20 combining Lee1 with Lee2 would result in a system that always satisfies the  
21 claim elements. And I'll also note that the decision cited on Slide 35 of  
22 Petitioner's demonstratives, the Unwired Planet versus Google decision,  
23 actually related to a very similar issue to Patent Owner's proposed  
24 construction in this case.

25 In that case, the Patent Owner argued that the claim language required you  
26 to prioritize mobile devices that are further away, and the claim certainly did

1 require that prioritization. But the Patent Owner further argued that you  
2 needed to prioritize mobile devices that are further away from the base  
3 station because they are further away. And that is what the Federal Circuit  
4 rejected. That as long as the combination of prior art would result in at least  
5 some cases where mobile devices further from the base station were  
6 prioritized, that was sufficient to show obviousness. Petitioners did not need  
7 to show that in all cases, combining the prior art would result in prioritizing  
8 mobile devices that are further away from the base station.

9 Turning to Slide 36, I'll move on from the Board's preliminary construction  
10 and transition into Patent Owners proposed construction. Again, I don't  
11 expect --

12 JUDGE HOFFMAN: You have a five minute warning.

13 MR. CAMERON: Okay, thank you. And I'll just note for the record that I  
14 don't expect any arguments from Patent Owner that the prior does not render  
15 the claims obvious under the Board's preliminary construction.

16 Starting with Slide 37, Petitioners have shown a clear motivation to combine  
17 Lee1 and Lee2 to reduce latency between the two procedures. As Petitioner's  
18 expert Dr. Mahon explains, the process for decreasing latency disclosed in  
19 Lee1 is to complete random access procedure in fewer steps than was  
20 required in the prior art, 2 versus 4 steps. Conversely, the procedure for  
21 decreasing latency in Lee2 is to have variable power ramping parameters.  
22 Those two solutions are synergistic with one another, they're complementary,  
23 and so a person of ordinary skill in the art would be motivated to combine  
24 Lee1 and Lee2 to achieve lower latency or a system that could connect with  
25 lower latency than either solution disclosed in Lee1 or Lee2 could achieve on  
26 its own. The Board observed and found that Petitioners had demonstrated

1 this rationale in the petition. And as far as I'm aware, Patent Owner has not  
2 challenged that reducing latency is a legitimate and valid motivation to  
3 combine these references.

4 Turning to Slide 39, and this is where I'll end, what Petitioners are arguing  
5 under Patent Owner's proposed construction is that by combining Lee1 and  
6 Lee2 you will in effect generate a system that uses different power ramping  
7 parameters because the mobile device is engaged in 2-step random access  
8 procedure compared to a mobile device engaged in 4-step random access  
9 procedure. And what I mean by that is if you look at the bottom two cases,  
10 Case 3 and Case 4 shown on Slide 39, those cases modify the standard power  
11 ramping process that's been in existence for decades to enhance or to improve  
12 the latency of the connection in those particular cases.

13 Similarly, the 2-step random access procedure is intended to lower latency  
14 and enhance the time of achieving a connection. And so the modification  
15 would be to use the elevated power ramping parameters disclosed in Lee2  
16 with the 2-step random access procedure disclosed in Lee1. On the other  
17 hand, for the 4-step random access procedure, no modification is required  
18 whatsoever. Petitioner's position is that if you do not change the way that the  
19 4-step procedure has always been done, you will necessarily satisfy the claim  
20 language. And you can see that looking at the top of the figure, Case 1, and  
21 Case 2. Lee2 expressly says that those two power ramping figures, the low  
22 initial transmission power with progressive ramping steps, correspond to the  
23 prior art to Lee2, basically the way things have always been done. That's  
24 how it's always been done for the 4-step procedure. Thus, there is no change  
25 required at all when combining Lee1 and Lee2 to practice element 4d of the  
26 claims. The only change is in the final claim limitation 4e, and Petitioners

1 have shown that a person of ordinary skill in the art would have been  
2 motivated to make that change such the power ramping parameters  
3 correspond to the 2-step procedure to reduce the latency as much as possible.  
4 Thank you.

5 JUDGE HOFFMAN: Let me ask you one question in terms of what we're  
6 looking at on this slide. So is your combination proposing that instead of  
7 having the different power parameters for the different events, instead of --  
8 when you incorporate Lee2 to Lee1, it's incorporating the fact that you can  
9 vary the power parameters depending on the needs as opposed -- so you're  
10 not directly putting the varying of events into Lee1, just the concept --

11 MR. CAMERON: Yes.

12 JUDGE HOFFMAN: -- of varying power?

13 MR. CAMERON: Correct.

14 JUDGE HOFFMAN: All right, thank you very much. You have 40 seconds  
15 left. So I'll just end it there unless there's any questions for Mr. Cameron.

16 MR. CAMERON: Can I reserve the 40 seconds for my rebuttal?

17 JUDGE HOFFMAN: Sure. It's at 35 seconds, but yes, you have 10 minutes  
18 and 35 seconds remaining for rebuttal.

19 And with that, Mr. Wyde, when you are ready, I will reset the timer here.  
20 How much time would you like to reserve for rebuttal?

21 MR. WYDE: I'd like to reserve 45 minutes. I'm sorry, 15 minutes and use  
22 45 minutes. But I doubt I will use the entire time.

23 JUDGE HOFFMAN: Okay, very good. You may begin your argument  
24 when you are ready.

25 MR. WYDE: Okay. I am going to try to share my screen, but you let me  
26 know if it doesn't work. Let's see. Okay. Can you see the shared screen?

1 JUDGE HOFFMAN: Yes, we can see it. Thank you.

2 MR. WYDE: Okay.

3 JUDGE OGDEN: Yeah, I can't see it here, so maybe, maybe not. Maybe if  
4 you could just refer to the slides, I'd appreciate it. Thank you.

5 MR. WYDE: I will certainly refer to the slides as well. So I'm on Slide 2.  
6 All right. So by way of preview, I'll just tell you what I'm going to discuss.  
7 First, the claims at issue. Second, the claim construction issues that have  
8 arisen and remain in the case. And then third, why, in view of the correct  
9 claim construction, Petitioners have not shown unpatentability over Lee1 and  
10 Lee2. So let's take a look at the claims first, and I'm on Slide 4. I'm getting a  
11 little bit of feedback. I'm going to turn down my output, but it might be  
12 somebody's not muted. All right. So I'm on page 4 and as illustrated here,  
13 the Patent Owner can -- sorry, the patent contains four independent claims, 1,  
14 4, 7 and 8 and four dependent claims 2, 3, 5 and 6. And Petitioners have only  
15 challenged independent claims 4 and 8 and dependent claims 5 and 6 are  
16 dependent from claim 4. However, Patent Owner's arguments are limited to  
17 the independent claims, so there are no issues presented for the dependent  
18 claims 5 and 6 for the Board. And turning to page 5, moreover, claims 4 and  
19 8 have parallel structures. Claim 4 covers a system, a base station, while  
20 claim 8 covers a method, specifically a communication method used for a  
21 base station. So therefore we can look at claim 4 as representative and claim  
22 8 will rise and fall with the same arguments given for claim 4.

23 All right. So the issues are very narrow and I'm turning to claim  
24 construction and I'm now on page 7. So this slide shows representative claim  
25 4 with the limitations enumerated as the Petitioners have numbered them in  
26 the petition and the disagreements regarding claim construction and obvious

1 disconcern, the last two limitations, 4d and 4e. So limitation 4d reads for the  
2 pre -- for the 4-step contention based random access procedure, the preamble  
3 received target power is given based at least on preamble initial received  
4 target power 0 and power ramping step 0. And limitation 4e has a parallel  
5 structure that reads for the 2-step contention random based access procedure  
6 and has 1 as input into the initial target and power ramping functions.

7 Now I'll say -- I'll say here that, and we've said it before that this is awkward  
8 phrasing because the effect comes before the cause. So I don't think it  
9 changes the meaning of the claim at all to take the introductory phrase and  
10 just put it at the end and it sounds better in a human way. So it would read,  
11 the preamble received target power is based given on at least preamble initial  
12 received target power 0 and a power ramping step 0 for the 4-step contention  
13 based random access procedure. And similarly you could do the same with  
14 4e, you could put it at the end.

15 Now Mr. Cameron, when discussing his Slide 19 said that Patent Owner is  
16 trying to append something that looks like the initial clause to the end, but  
17 there's no necessity to do that. It's -- that is -- that limitations are already  
18 there. The beginning, the 4-step to the comma. All right, turning to --

19 JUDGE OGDEN: Mr. --

20 MR. WYDE: Yes?

21 JUDGE OGDEN: Mr. Wyde, in Petitioner's slide, they, I believe they  
22 include the word correspond there. Do you -- is it your position that there has  
23 to be some correspondence between the value of M and, you know which  
24 type of procedure it is that goes beyond just the fact that if it's a 4-step  
25 procedure then M equals 0. If it's a 2-step procedure then M equals 1, is there  
26 some aspect of correspondence behind -- beyond that, such as intent that you

1 are saying needs to be there?

2 MR. WYDE: No.

3 JUDGE OGDEN: In the prior art as well?

4 MR. WYDE: No, you expressed it correctly, 0 is 4, the 4-step procedure,  
5 and that's the language of the claim. And we read this, define it, as 0  
6 corresponds to the 4-step and 1 corresponds to the 2-step.

7 JUDGE OGDEN: And by correspondence, are you talking about a one-way  
8 correspondence? So that if it's 4-step, then M equals 0. If it's 2-step, then M  
9 equals 1. Just a one way correspondence in that direction?

10 MR. WYDE: I think I'm going to -- obviously, let me see, I think I  
11 addressed this. All right. Let's see if I can make this clearer. All right. So,  
12 I'll try to say this in another way. The way the patent -- the way Patent  
13 Owner sees it is the question is whether the input 0 sets or tells the system to  
14 use the values for the 4-step procedure and the value 1 sets or tells the system  
15 to use the values for the 2-step procedure. Now I'm using different language.  
16 We just -- so by way of further explanation, but it has to correspond. That is,  
17 if I told you that the input was 0, you would know the corresponding 0 power  
18 values that the UE would use for the 4-step procedure. And if I told you the  
19 inputs were 1, you would know the values the UE would use if it were doing  
20 a 2-step procedure. So these are other ways of saying it, but it means the  
21 same thing in our opinion.

22 JUDGE OGDEN: I don't think that that is quite saying the same thing as  
23 what I just said before. That seems to be saying that if M equals 0, then it's a  
24 4-step procedure. And if M equals 1, then it's a 2-step procedure. But I was  
25 suggesting the other way around, which seems to be what Petitioner is  
26 arguing, which is it goes the other direction. If it's a 4-step procedure, then M

1 equals 0. If it's a 2-step procedure, then M equals 1. You're saying that it's  
2 the reverse or that maybe --

3 MR. WYDE: No, that's right.

4 JUDGE OGDEN: -- correspondence. In other words, if and only if it's a 4-  
5 step procedure, then M equals 0, and if and only if it's a 2-step procedure,  
6 then M equals 1.

7 MR. WYDE: No, I don't think that's right.

8 JUDGE OGDEN: Is that what you're saying?

9 MR. WYDE: No, these are -- these are comprising claims. So there could  
10 be other correspondence. I think -- look, the reason the Federal Circuit says  
11 we read these in light of the specification is because this specification teaches  
12 you how it works. And I think this excerpt here; I'm on Slide 12. It's from  
13 the patent, column 29, lines 40 through 50. The specification is teaching you  
14 how the system works.

15 All right. So it says the preamble initial received target power is configured  
16 by the higher layers, the RRC, or the radio resource control, for M equals 0  
17 and M equals 1. And the specification goes on to say that for the 4-step  
18 contention based random access procedure then M equals 0 and for the 2-step  
19 contention based random access procedure then M equals 1. So if you're  
20 doing the two, you use the values for M equals 0 or M is set to represent the  
21 4-step and M is set to 1 to represent the 2-step. That is, the description  
22 teaches that the RRC sets M equals 0 or M equals 1, the power that  
23 corresponds to those for the 2- and 4-step procedure. So it's configured by  
24 the RRC, and then when the UE actually does the procedure, the two or the  
25 four, it uses the power that corresponds to M equals 0 for the 2-step, 4-step,  
26 and M equals 1 for the 4-step.

1 So Petitioner disparaged the fact that or tried to make an argument that  
2 because they do use correspond for preamble that they knew how to use it  
3 and they must not have meant that. But when speaking about the delta  
4 preamble in the same section, they talk about how the RRC layers also  
5 configure the delta preamble, which is a function of the PRACH format F and  
6 specifically says that the delta preamble corresponds to the input F. And then  
7 elsewhere and the citation I think is 30, 19 through 21, the specification uses  
8 the same for language to show that F is a parameter which indicates the  
9 appropriate delta preamble to use. The delta preamble that the UE will use.

10 So they used the same for language. And yes, they explicitly said that the  
11 delta preamble corresponds to the PRACH format, where they didn't  
12 explicitly say that the M equals 1 and M equals 0 corresponds to the 2- and 4-  
13 step procedure, but they did use parallel language and they did note that the  
14 delta preamble is a correspondence. And so we read this as they use the  
15 exact same methodology to indicate the PRACH format to use based on F  
16 and they specify the same power to use for the M equals 1 and M equals 0.

17 Now Mr. Cameron also -- well, I don't think you got -- he did talk a little bit  
18 about the non-contention based random access procedure and how --

19 JUDGE HOFFMAN: Mr. Wyde?

20 MR. WYDE: Yes.

21 JUDGE HOFFMAN: Sorry, let me -- before we move on from the delta  
22 preamble F, Petitioner pointed out in column 30, lines 14 and 15, it also says  
23 that the delta preamble F may correspond to the PRACH format F. So how  
24 would you address that?

25 MR. WYDE: Well, the specification then is not definitive that it has to, but  
26 there's no claims saying that it must. In this case we have claims that say for

1 the 4-step procedure and for the 2-step procedure. So in the same way the  
2 specification allows M equals 0 to correspond to the 2-step and the non-  
3 contention based, the limitations themselves are more restrictive, so it's not in  
4 conflict. If there were claims that specified that the delta preamble had to  
5 correspond, that would be fine in light of the specification that said it may.  
6 So you have what's required in the claims and what's permissible in the spec  
7 and I don't see any problem with that.

8 JUDGE HOFFMAN: Okay, understood. Turning back to the claim, I just  
9 would like to get your take on the limitation 4a says that it's configured to  
10 control a 2-step procedure and a 4-step procedure. And so what would be  
11 your response if -- it seems like you're saying that, you know, all of the 4-step  
12 procedures have this input 0 and all of the 2-step would have input 1. So  
13 what is your -- how would you address interpreting the claim as requiring just  
14 a single 2-step procedure and a single 4-step and that particular 4-step has the  
15 input 0 and the particular 2-step has the input of 1?

16 MR. WYDE: Yeah, I haven't thought about that. So let me, let me read  
17 these claims here. So the first thing that comes to mind is A clearly is not a  
18 limitation on -- or the general rule is A doesn't mean one and only 1; A  
19 typically means one or more. So reading it like that, it would be the control  
20 circuit is configured to control one or more 2-step contention based random  
21 access procedures and for one or more 4-step contention based random  
22 access procedures. And then in light of that if you go below it would be for  
23 "the" and just because, again, we have a singular referring back to a previous  
24 limitation that doesn't further mean single.

25 So again, I think that would read that as for the one or more 4-step  
26 contention based random access procedure and for the one or more 2-step

1 contention based random access procedure. So again I read that as being yes,  
2 all 4-step contention random access procedures use the 0 and all 2-step  
3 random access based procedures use the power given for the input M equals  
4 1. That's how I think I'd read it. But it's off the cuff because I haven't, I don't  
5 think Petitioners have raised that or I haven't had time to consider that.

6 JUDGE HOFFMAN: Understood. The example in the Institution Decision  
7 didn't use that terminology, but that's essentially what that example was  
8 getting at in terms of you have these particular procedures happening. And  
9 so you could have a situation where you have a particular procedure that is 4-  
10 step with that given input and another procedure that's 2-step with the other  
11 input.

12 MR. WYDE: Yes, I think, but with the other input -- right, but the way --  
13 right. So I -- that if the Board reads it as you just -- you set it based on  
14 something other than the procedure and you have two different values there's  
15 the 2 and 4. Yes, I think Petitioners are correct. If that's the way the Board  
16 reads these limitations, then the argument that I present today and we present  
17 in our proceedings doesn't hold. So it is claim based. It is a claim-based  
18 argument and it does depend on us getting the claim construction that we're  
19 advocating for.

20 JUDGE HOFFMAN: Okay, thank you.

21 MR. WYDE: Sure. You're welcome.

22 All right. So trying to get back to where I was. I'm on page 8 now. So  
23 normally I don't go into the history of where we were, except in this case it --  
24 I think it informs the live issues that are still here. In the Petition, the  
25 Petitioners argued under Ground 1 that Lee1 rendered the claims anticipated  
26 based on the claim construction whereby the same preamble initial received

1 target power and power ramping steps satisfied limitations 4d/8d and 4e/8e.  
2 Petitioners have abandoned this position in their response. Now all parties  
3 agree that the functions and the limitations D and E separately evaluate to  
4 different input.

5 Turning to page 9, but I'm revisiting this history because Petitioner's original  
6 Ground 1 shows that it is Petitioner's position that Lee1 teaches to use the  
7 same values for 0 and 1 functions, i.e., the same power for the 4 and 2-step  
8 procedures. And this understanding of Lee is still relevant to the live issue of  
9 whether Lee1 in view of Lee2 renders the claims obvious. And I will revisit  
10 this topic when we're discussing the unpatentability, but I wanted to mark it  
11 here while we're discussing the claim construction.

12 All right. So also the still disputed claim construction issue for the Board is  
13 whether the input of 0 corresponds to the 4-step and 1 corresponds to the 2-  
14 step. This has always been Patent Owner's position as shown on the right.  
15 And it is clear, at least to Patent Owner, that Petitioner's original position put  
16 forth in the Petition was the same. Petitioner's original position shown by the  
17 fact that Petitioners explain the input N into the initial power ramping  
18 functions, quote, signifies that the values of these parameters differ for the  
19 different types of random access, i.e., N equals 1 corresponds to a first type  
20 of random access and N equals 2 corresponds to a second type of random  
21 access. This is shown on the right.

22 On Slide 11 now. After institution, Petitioners now argue that the Board  
23 should maintain its preliminary construction that the input of 0 and input of 1  
24 do not have to correspond to the 4 and 2-step procedures. And I'll note that  
25 Petitioners use the terminology not as this is its construction, but it's as the  
26 Board's preliminary construction and not Petitioner's new construction. And

1 I listened very closely and Mr. Cameron continues to discuss the Board's  
2 construction today. This is in contradistinction to the earlier claim  
3 construction issue as to whether the inputs of 0 and 1 are independently  
4 evaluated for the functions where the Petitioners explicitly adopted the  
5 Board's construction as their own in their reply.

6 So in short, there's a question based on the response as to whether Petitioners  
7 have actually changed their position at all or whether they still actually agree  
8 with Patent Owner that the limitation means an input of 1 -- 0 corresponds to  
9 the 4-step based random access procedure and an input of 1 corresponds to  
10 the 2-step random access procedure. So we already talked about Slide 12, so  
11 I'm going to skip over to 13.

12 And on 13 we have the prosecution history again. And here the examiner  
13 understood that how the UE behaves is based upon, that's the language that's  
14 used here, the configuration information received from a base station. So for  
15 instance, if the UE receives either M equals 0, it would set that power  
16 ramping step for the 4 or 2-step procedure commensurately. Now Mr.  
17 Cameron says based on isn't correspond to, but I would argue based on is  
18 stronger than corresponds to. Based on is a clear if then this type language  
19 rather than the corresponds to that Patent Owner is advocating.

20 I'm on page 14. So as Patent Owner pointed out, the word for has the plain  
21 ordinary meaning of having the thing mentioned as a reason or cause or  
22 representing the thing mentioned as in F is for fascinating. And on page 15,  
23 Patent Owners expert Dr. Sundaresan confirmed that a POSITA would  
24 understand that the claims used for in this plain ordinary way. That is that  
25 UE sets the initial power ramping step four procedure for the 4-step  
26 procedure if M equals 0 and for the 2-step procedure if M equals 1.

1 Petitioners did not address -- did not cross examine Dr. Sundaresan or  
2 specifically address this testimony.

3 On page 16, moreover, here we see Dr. Sundaresan testified that the claims  
4 used the notation and language of functions and that when a POSITA took  
5 this into account this would also confirm that the inputs correspond to the  
6 different step cases. So that is, if you had a function  $F$  of  $X$  then saying  $X$   
7 equals 1 -- sorry,  $X$  equals 1 would mean  $F$  of  $X$  equals 2. That would mean  
8 1 corresponds to 2, or said another way, the dependent variable 2 is set based  
9 on the input 1. So the for language is also when taken in taking the language  
10 of the function and this is clearly a function with the parentheses and the  
11 input value. Mr. Sundaresan indicated that this was another indication that  
12 this is how it should be read. And again, this expert testimony went  
13 unaddressed.

14 All right. So with this understanding of the claim construction, I'm going to  
15 turn to the merits regarding why Petitioners do not show any limitation  
16 unpatentable over Lee1 in view of Lee2 and I'm on Slide 19. So turning to  
17 the merits, Petitioners say that in some cases it is beneficial to use a relatively  
18 low power transmission for the 4-step procedure and then jump to the  
19 conclusion that it would have been obvious to use a different elevated power  
20 setting for the 2-step procedure.

21 Turning to page 20. However, the cases where Lee teaches to use a  
22 relatively low level of transmission power is based upon the UE's distance  
23 from the base station and a UE's distance to the base station is the same  
24 regardless of whether the UE is doing a 4 or 2-step procedure. Patent Owner  
25 pointed this out in his response and Petitioners did not address this argument.  
26 And I'll note here that the RSRP, the reference signal received power, is

1 generally a measure of the signal strength of the cell tower's reference signal  
2 based on the distance the phone is from the base station, as well as other  
3 things like the interference between the UE and the base station. As Mr.  
4 Cameron pointed out, whether it's inside or outside, that kind of thing. But  
5 these factors, these inputs do not change on based on whether the UE is doing  
6 a 2 or 4-step procedure.

7 In short, Lee2 does not teach or suggest using different powers based on  
8 different procedure types, but rather to use different power based upon  
9 distance the UE is from the base station. Now, Mr. Cameron also discussed  
10 Case 3 of the Lee2 cases and said that you use higher initial power to speed  
11 up the connection. What Lee2 actually says is that you use high power  
12 because Case 3 is a handover and a handover is where the UE is between two  
13 base stations. That is the base station knows the UE is on the edge of the  
14 cell, the extreme distance away from the tower before the UE ends up in a  
15 different cell. That's what Lee2 teaches. That's when you use higher power  
16 because of the distance.

17 So turning to page 21, Petitioners also put up a Strawman and the Patent  
18 Owner is arguing to use the same transmission all the time for 2- and 4-step  
19 procedures, but this is not Patent Owner's position. Patent Owner's position  
20 is that Lee2 says to choose the power based upon distance. So the UE would  
21 use the same power for the 2- and 4-step procedures if the phone was at the  
22 same distance from the base station and performing the same connection  
23 type. For example, the handover.

24 Turning to page 22, Petitioners conclude that a POSITA would have been  
25 motivated to follow Lee2's teachings to use different power settings based  
26 upon the circumstances of the random access transmission, citing Lee2 in

1 paragraph 109. But as just explained, the circumstances in paragraph 109  
2 refer to the type of connection that is a proxy for distance and the type of  
3 connection is independent from whether the UE is doing a 2 or 4-step  
4 procedure. Now, as foreshadowed when earlier discussing the claim  
5 construction, Petitioner's interpretation of its own primary reference, Lee1,  
6 the only one of Petitioner's references that actually discloses both the 2- and  
7 the 4-step procedure, does exactly what Petitioners now say what Petitioner  
8 would not do, use the same transmission powers for both the 2- and 4-step  
9 procedures.

10 So this is Petitioner -- the petition at 31. They say to the extent that Patent  
11 Owner contends that the preamble 0 and 1 must differ, Patent Owner would  
12 be incorrect. So we have an actual teaching in their primary reference that  
13 says they'd use the same power for the two steps.

14 Turning to page 23. So Petitioners have argued that Patent Owner is trying  
15 to negate an obvious combination of Lee1 and Lee2 by saying they could be  
16 combined in a different way than Petitioners argue. But what Patent Owner  
17 is actually pointing out is that Petitioners have not initially shown an obvious  
18 combination. So Mr. Cameron indicated that we said they couldn't be  
19 combined and it wouldn't be a motivation to combine. That's not true. Our  
20 point is they wouldn't be combined in the way that the patent claims where  
21 you set the power based on the 2 or 4-step procedure.

22 So the Federal Circuit, and here we have Magnum Oil Tools, is clear that  
23 Petitioners always have the burden to show why the combined references  
24 would be combined to the claim language first, and here Petitioners have not  
25 done so. Nonetheless, Patent Owner went the extra step and explained why  
26 the references actually teach to use the same power for the 2- and 4-step

1 procedure and vary the power based upon distance.

2 Petitioner also further discussed the Unwired patent case today. I don't  
3 remember that additional discussion in the briefs, but to the extent that those  
4 limitations in Unwired Planet didn't have the 4 -- the 2- and 4-step  
5 limitations, this case is distinguishable because we actually have claim  
6 language here that has the for the 2- and for the 4-steps.

7 All right, so I'm going -- I had slides 24, 25, 26, 27 and 28. I'll discuss the  
8 new RSRP motivation to combine and why we think it's procedurally  
9 improper. But I didn't hear Mr. Cameron bring it up today. So they're there.  
10 It's in the briefing. I'll just say that none of the case law that Petitioners cite  
11 note that, or support, the contention that Petitioners are free to divert from  
12 their areas that they put in the petition and I'll cite -- they, Petitioners, put  
13 forth Sirona Dental Systems. It's on page 25. It's also in the brief. I think it's  
14 pretty clear this is a Supreme Court case and it's the Federal Circuit  
15 interpreting the Supreme Court case, and it says nothing in the Director --  
16 nothing suggests the Director enjoys a license to depart from the petition and  
17 institute a different IPR than of his own design, and it says it two or three  
18 more times. So I'll leave it there. I think that's correct.

19 JUDGE HOFFMAN: Mr. Wyde?

20 MR. WYDE: Yes.

21 JUDGE HOFFMAN: I just want to follow up on something with that. In  
22 paragraph 109 of Lee2, it talks about, you know, setting different power  
23 ramping and initial transmission power according to the condition of user  
24 equipment that is performing the random access. My understanding of the  
25 reference is that turning to paragraph 71, it talks about setting the different  
26 power ramping and power based on events and then it says they may be

1 modified so that the parameters are further set according to user equipment.

2 And then it talks about the RSRP. And so with that I want to get your  
3 thoughts on whether the RSRP is actually brought in by paragraph 109.

4 MR. WYDE: I see. So in other words, 109 comes later referring to above.  
5 Then it refers to paragraph you said 71?

6 JUDGE HOFFMAN: Yes, because Petitioner did mention earlier about the  
7 condition of user equipment.

8 MR. WYDE: Uh-huh.

9 JUDGE HOFFMAN: And I just like to see if you have any thoughts on  
10 that?

11 MR. WYDE: Right. So I think our first, our first response is that this was  
12 not in the petition. But barring that, the RSRP is the same for whether you're  
13 doing a 2- or 4-step procedure. So it says you can vary based on RSRP, but it  
14 doesn't say you could you vary based on R -- I mean, so the -- you vary based  
15 on RSRP and RSRP is the same whether you're doing a 2- or 4-step  
16 procedure. What Petitioners would have to do is then look at the '207 patent  
17 itself which says that they used, it used, RSRP as a decision point. But I  
18 think the case law is clear that you don't use the '207 patent against itself.  
19 That is what the '207 patent claims and teaches.

20 So I guess in short the -- even if the RSRP theory isn't procedurally improper  
21 and even if you consider it, let's think about what we have here. Lee2 teaches  
22 variable power, but to vary the power based on distance the user equipment is  
23 to the base station or even the RSRP. But it's uncontroverted that the  
24 measured RSRP is based upon distance, environmental configurations, et  
25 cetera, and does not vary depending on whether the UE is doing a 2- or 4-  
26 step. And we know Lee1 does have the 2-step procedure and teaches to use

1 the same power for both. So putting the two references together would teach  
2 a POSITA that you can use the 2- and 4-step procedures. But it doesn't say  
3 vary the power based on the number of steps in the procedure. It says you  
4 can vary it based on the type of procedure which is a proxy for distance that  
5 you use from the base station regardless of the number of steps. So it's the  
6 '207 patent that claims setting the different power for the different steps, i.e.,  
7 the RRC provides a basis for that and then the 4- and 2-step powers are set  
8 commensurately. But that's something that '207 adds, and I don't think it's  
9 something that's found in Lee1 or Lee2.

10 JUDGE HOFFMAN: Okay, thank you.

11 JUDGE CASS: Counsel, this is Judge Cass. If I could maybe ask a  
12 somewhat related question. So Petitioner put up their Slide 39, which is a  
13 modification of Figure 2 of the two that purports to represent the combination  
14 that they're making here. Why is that not correct? What's your response to  
15 that slide and presentation?

16 MR. WYDE: Okay. So why is -- what is Lee2 -- what's different about  
17 Cases 1 and 2 and 3 and 4 -- 1 and 2 from 3 and 4? 3 and 4 are -- 4 is data  
18 resume and 3 is handover. So I think Mr. Cameron said that -- he argued that  
19 this is done to speed up the connection. But again that's not what Lee2 said.  
20 Lee2 says Case 3 is the handover and that's the paradigmatic. You must be at  
21 the edge of the cell. So it's a proxy that you're the farthest. You increase the  
22 power because you need that power because you're the farthest from the UE.  
23 It doesn't have anything to do with whether you're doing a 2- or 4-step  
24 procedure. And data resume, I believe that's after the handover. So the UE is  
25 going from Cell 1 to Cell 2. The information has been transmitted from  
26 between the base stations and so you don't have to do a new connection. You

1 can just do this kind of data resume case and then pick up on the new cell.  
2 But again you're now transitioning into a new base station.  
3 Again, the base station knows you must be at the periphery and you're  
4 farther away. That's what Lee2 says why you use the initial power. It doesn't  
5 say anything about the 2- or 4-step and there's nothing that says the  
6 handovers are always 2 and data resume are always 2. They're always the  
7 farthest from the base station. That's why it uses higher power and then a  
8 lower ramping step.

9 Whereas the other two, the idle and the -- it's hard to read the RRC  
10 connection re-establishment, I believe it says, the base station doesn't know  
11 where the UE is and so it just defaults to I guess it's standard. So it can't use  
12 the -- because it's uncertain, it can't use the distance as a proxy.

13 So my retort would be that that is what Lee2 teaches, and Mr. Cameron also  
14 said Lee1 is silent today, but Lee1 is not silent. Lee1 -- what Petitioner said  
15 Lee1 teaches is use the same values for 2 and 4 and to the extent Patent  
16 Owner says differently, we're wrong. So putting those together, you do not  
17 end up with this crossed out modified system. You end up with -- you still  
18 base it on the procedure type because it's a proxy for distance and the 2- and  
19 the 4-steps are the same based on Lee. So I think I answered your question.

20 JUDGE CASS: Okay. Thank you, Counsel.

21 MR. WYDE: You're welcome. I'll ask if there's any --

22 JUDGE OGDEN: I'd also like to ask you kind of on similar lines. It seems  
23 like the combination of Lee1 and Lee2 they -- there's a couple of aspects of  
24 this, maybe we could put them on separate axes. On 1 axis there's 4-step and  
25 2-step, there's different possibilities and on the other axis there's low power  
26 and high power as two possibilities. Suppose, you know, if we were to

1 decide that Lee doesn't, you know, that there's nothing in either Lee1 or Lee2  
2 that specifically says that you change the power parameter specifically just  
3 because it's 2-step rather than 4-step.

4 It seems like you've got four possibilities here. Either, you know, 4-step and  
5 low power, 4-step, high power, 2-step low power, 2-step, high power. If  
6 there's only these four possibilities, would have a person of ordinary skill in  
7 the art just -- would it have been within their level of skill to just choose any  
8 one of those four options? And if, and if so, it seems like we have an option  
9 where under a 4-step procedure you've got one set of power parameters and  
10 then under a 2-step procedure you've got a different set of power parameters.  
11 And maybe that's enough to meet the claim. So what do you think about  
12 that?

13 MR. WYDE: I don't disagree with anything you said, except perhaps there's  
14 more than the 2 and the 4. There's non-contention and I don't know what  
15 others there are out there, but certainly randomly, if you -- if you chose a  
16 system that didn't -- if they weren't corresponding, if you just sort of  
17 randomly, or for some other reason, mixed and matched. Yeah, I -- we don't  
18 concede, we don't -- we don't argue that under the preliminary Institution  
19 Decision, if the Board construes the claims as they not needing the  
20 correspondence, that is they are set based on the 2 and the 4, that that would  
21 randomly happen and I think Petitioners have already pointed out it doesn't  
22 always have to.

23 We don't disagree with that case law, we couldn't. But that all stems and is  
24 premised on the different claim construction. So how the -- how the Board  
25 rules claims construction, I think determines the final written decision, quite  
26 frankly.

1 JUDGE OGDEN: Thank you.

2 MR. WYDE: Okay. And I'll just reiterate -- oh, go ahead. I heard another  
3 question.

4 JUDGE HOFFMAN: Just following up on what you said. But even under  
5 Patent Owner's proposed construction, going back to what Judge Ogden  
6 asked, if the 2-step procedure is an improvement over the conventional 4-step  
7 and then we're combining reference Lee1 with another reference that talks  
8 about it being known to vary the power settings depending on the situation,  
9 depending on the procedure that's occurring, whether that's triggered by an  
10 event or the measured RSRP. Would that be within the level of ordinary  
11 skill? Would a POSITA -- would it be obvious to a POSITA to combine  
12 those even though neither Lee1 nor Lee2 directly teaches power settings are  
13 set according to the different procedure, but when you combine those two  
14 references, you get that combination?

15 MR. WYDE: I respectfully disagree that Lee2 it doesn't teach that. It  
16 teaches something. It teaches to use the same and Lee2 teaches distance, and  
17 distance is not dependent upon the steps. So I think a POSITA reading the  
18 two, and my expert also has testified that a POSITA reading the two, would  
19 not differ the power based on the number of steps. Lee2 says to use the same  
20 power. Petitioners have conceded that.

21 So we have Federal Circuit case law that says references have to be  
22 considered for all their -- all that's taught. And here we have an explicit, and  
23 agreed by the parties, that Lee2 if it uses 2 and 4, it uses the same power. So  
24 we have an explicit teaching to do it. And it certainly -- Lee1 doesn't say that  
25 there's an advantage to higher power for the 2 and the 4. It says use the same.  
26 Nor does Lee2. It says you can use RSRP as a measure. But again, RSRP is

1 based on the location and the environment and not the number of steps. So it  
2 is the distinction. It is what we believe is claimed. And we do not think  
3 Lee1 or Lee2, you know, a POSITA reading both of them would be led in  
4 that direction without impermissible hindsight.

5 Again, I'll paraphrase the Federal Circuit. It said, once you put the problem  
6 and the solution together, everything seems obvious. But you have to come  
7 up with a form of amnesia where you do not know that this is what happened.  
8 You're looking at Lee1 what it teaches use the same power for both steps.  
9 You're looking at Lee2. It says use a proxy for distance not dependent on the  
10 steps. And so I don't think a POSITA would arrive at the invention. If you're  
11 asking whether it's capable, of course it's capable. We're not saying there's  
12 some impediment but --

13 JUDGE HOFFMAN: Two-minute warning.

14 MR. WYDE: Okay, I must be running out of time.

15 JUDGE HOFFMAN: Yeah, I said two minute warning.

16 MR. WYDE: Okay, so we're not arguing that there's some impediment to  
17 implementing it. The '207 patent implemented it, so it's clearly  
18 implementable. But we just don't think that the -- there is a motivation to  
19 combine or Petitioners have correctly enunciated one. So I don't have  
20 anything further if there aren't any other questions.

21 Okay, I don't hear any.

22 JUDGE HOFFMAN: Okay. You have one minute remaining on your time,  
23 so I'll add that.

24 MR. WYDE: Okay.

25 JUDGE HOFFMAN: Thank you very much. And now, Mr. Cameron, you  
26 have I'll estimate that 35 minutes back.

1           So I'll give you 11 minutes for rebuttal and I will start the timer when  
2 you begin speaking.

3   MR. CAMERON: Thank you, Your Honor. Just a couple of responses to  
4 some of the points opposing counsel made. First, I'd like to start with  
5 opposing counsel's demonstratives, if the Board still has those up. I'll share  
6 my screen, but it's been inconsistent whether the Board will be able to see it.  
7 I have Slide 7 from opposing counsel's demonstratives. There was a  
8 question, I believe, by you, Judge Hoffman, as to whether the antecedent  
9 basis in steps 4 -- elements 4d and 4e was limited to the singular 2-step and  
10 4-step random access procedures introduced in earlier elements of the claim.  
11 And opposing counsel suggested that the indefinite article "the" recaptures  
12 the prior use of one or more that is typically connoted by A.

13 I'll note that the Federal Circuit has repeatedly expressly rejected that  
14 position, including somewhat recently in the decision of *Salazar v. AT&T*  
15 *Mobility*. I'd be happy to provide the specific citation after the hearing that  
16 would be helpful, but the case law is crystal clear that if you introduce an  
17 item using the indefinite Article A and then refer back to that item  
18 subsequently in the claim using either the or said, the reference back is  
19 singular, it is not plural, and it would not cover all as opposing counsel  
20 suggested as a matter of law.

21 In addition, turning to opposing counsel's Slide 12, there were a few  
22 questions about the excerpt that opposing counsel has at the bottom of this  
23 slide where it states the base station apparatus 3 may transmit higher layer  
24 RRC information parameter for indicating delta\_preamble F and opposing  
25 counsel drew a parallel between the use of for in that sentence and the claim  
26 language, which also uses for.

1 Now, I would ask the Board to please turn to Petitioner's slides and I will  
2 give you the number shortly. Slide 22, the excerpt on the right of Petitioner's  
3 Slide 22 is a more complete version of the sentence that Patent Owner relied  
4 on and tied to the claim language. You can see at the bottom of the  
5 paragraph it states the base station apparatus 3 may transmit higher layer  
6 RRC information parameter 4 indicating delta preamble. Remember that 4  
7 was highlighted by Patent Owner as signifying what the claims mean.

8 If you look above the sentence that Patent Owner relied upon, it expressly  
9 says that each delta preamble may correspond to a PRACH format F. Thus,  
10 under Patent Owner's own interpretation of the specification, the claims do  
11 not require a correspondence between the input to the function and the  
12 number of steps, or the format of the steps, or anything else. The  
13 specification says that it could. It may correspond, but it does not necessarily  
14 have to correspond.

15 One other point on claim construction. There were several suggestions that  
16 Petitioners have agreed with Patent Owner's proposed construction all along.  
17 That simply is not true. The excerpt that Patent Owner cites in its slides is  
18 incomplete. And I'll note that if you look at the petition where Patent Owner  
19 extracts that sentence, there is a citation that's missing from Patent Owner's  
20 demonstratives, and that citation is to paragraphs 59 and 60 of Lee2.

21 If the Board turns to paragraphs 59 and 60 of Lee2, it will see that Lee2  
22 expressly states that the variable in in the functions in Lee2 does, in fact,  
23 correspond to the event or the case giving rise to the random access  
24 procedure. That is just the teaching of Lee2, and Petitioners fully agree that  
25 that teaching would satisfy the claim. Petitioners never said the claims are  
26 limited to such a teaching, and that's what Patent Owner is suggesting that by

1 somehow mapping disclosure from the prior art to the claims, Petitioners  
2 have conceded that the claims are coextensive with that disclosure in the  
3 prior art. Of course, claims can be broader than the prior art you assert  
4 against them for purposes of invalidity. A narrower piece of prior art still  
5 invalidates a broader claim.

6 There was also some suggestion by Patent Owner that Lee1 teaches using  
7 the same transmission power parameters for both the 2-step and 4-step  
8 procedures, and that's not quite right. Lee1 does not address one way or the  
9 other whether there would be differences between the power ramping  
10 parameters that you use for 2-step or 4-step procedures. That's precisely why  
11 Petitioners are advancing an obviousness combination instead of an  
12 anticipation argument. If Lee1 expressly taught different power ramping  
13 parameters for the 2-step procedure compared to the 4-step procedure, then  
14 we wouldn't be here because Lee1 would obviously teach the alleged  
15 invention, even under Patent Owner's interpretation of the claims.

16 I'll also note in one of Patent Owner's responses that the reason the  
17 combination of Lee1 and Lee2 does not render the claims obvious is because,  
18 quote, the references wouldn't be combined in the way the claims require  
19 where you set the power based upon the number of steps. Again, I think that  
20 is the crux of the claim construction issue here, is that the claims do not  
21 require that the power is set based upon the number of steps. It merely  
22 requires that the parameters used be different.

23 Then, turning briefly to the RSRP issue. I'm going to turn to Petitioner Slide  
24 Number 45. Patent Owner sort of glossing over the history of how RSRP  
25 came to be involved in this case. The Board is certainly right that Petitioners  
26 cited paragraph 109 of Lee2 in the petition numerous times, and Petitioners

1 expert also cited paragraph 109. Petitioners did not cite any of the specific  
2 paragraphs preceding paragraph 109 that directly address this concept of  
3 RSRP, though Petitioners would submit that, of course, the RSRP  
4 measurements discussed in Lee2 are at least examples of the conditions that  
5 are referenced in paragraph 109.

6 Setting that aside, it is Patent Owner who brought this issue into the case.  
7 Specifically on Slide 45, I've exerted a portion of Patent Owner's preliminary  
8 response. Where Patent Owner is arguing that the claimed invention is  
9 different than what is taught by the combination of Lee1 and Lee2 and Patent  
10 Owner cites paragraphs 26 and 27 of Dr. Sundaresan's expert declaration. If  
11 we turn to paragraphs 26 and 27, which are shown on Slide 46, Dr.  
12 Sundaresan's argument, his opinion, to distinguish Lee2 is directly tied to this  
13 RSRP issue.

14 He argues that the decision to use 2-step versus 4-step random access  
15 procedure claimed in the '207 patent is based on these RSRP measurements.  
16 By contrast, he argues that Lee2's decision to use different power ramping  
17 parameters is based on distance. I assume that Patent Owner is now  
18 regretting submitting this argument because of course Lee2 expressly teaches  
19 that the decision to use different power ramping parameters can be based on  
20 the exact same measurements that the '207 patent teaches could be used to  
21 determine whether you're going to use the 4-step or the 2-step procedures.  
22 I've copied two examples here on Slide 47 showing Lee2's disclosure of this  
23 RSRP.

24 JUDGE HOFFMAN: Two minutes.

25 MR. CAMERON: Thank you. I'll also note as explained in Lee2, the way  
26 that the base station decides whether it is going to hand over a mobile device

1 to another base station is also based on these RSRP measurements. I mean,  
2 the base station isn't tracking like the GPS location of these mobile devices.  
3 The mobile device, as explained in Lee2, performs measurements from the  
4 reference signals of the base station it's currently connected to and  
5 neighboring base stations. And if those measurements reveal that the path  
6 loss between the mobile device and a neighboring base station is less,  
7 meaning that there is a stronger connection to a neighboring base station, the  
8 network may very well hand the mobile device over to that neighboring base  
9 station. So this issue of RSRP is far more interrelated with not just the claims  
10 of the challenge patent, but the prior art that Patent Owner suggested, at least  
11 to begin with.

12 Now, of course, if the reply brief that Petitioner submitted shined a spotlight  
13 on RSRP without the Board or Patent Owner previously mentioning RSRP at  
14 all, Patent Owner may very well have a legitimate objection that doing so is  
15 improper and that any new evidence or arguments based on RSRP should be  
16 excluded. But that isn't the case here. Patent Owner itself shined a spotlight  
17 on RSRP. It just turns out that Patent Owner's argument based on RSRP  
18 backfired and Patent Owner is now attempting to distance itself from RSRP  
19 arguing that it's improper for the Board or for Petitioners to address RSRP in  
20 their filings, and of course that's not true.

21 If Patent Owner's RSRP argument held, right, and that it was an actual valid  
22 distinction and the Board and Petitioners ignored it, Patent Owner would  
23 argue that that is reversible error for failing to address the record. Patent  
24 Owner is only complaining about RSRP because RSRP does not support  
25 Patent Owner's argument. And if anything shows that the prior art, the  
26 obvious combination that Petitioners have presented, is far more intermingled

1 with the claims than Patent Owner suggested.

2 And I'll finally note that the prosecution history, the admitted prior art in this  
3 case, shows that using 2-step versus 4-step random access procedures based  
4 on RSRP was known prior to the patent. That was not the invention that the  
5 inventors came up with in the '207 patent, and that's crystal clear from the  
6 record. Thank you.

7 JUDGE HOFFMAN: Thank you so much, Mr. Cameron. Before we move  
8 on, are there any further questions from my co-panelists.

9 JUDGE OGDEN: This is Judge Ogden, none for me.

10 JUDGE HOFFMAN: Thank you very much. I'm not seeing any questions,  
11 so I will give Mr. Wyde 18 minutes if you would like to take it, and I will  
12 start your time when you begin speaking.

13 MR. WYDE: Okay, I will take a few. Mr. Cameron brought up the *Salazar*  
14 case. Again, we're kind of far afield. None of this was in the briefing, but in  
15 *Salazar*, the claims had a computer that had to do certain things and each  
16 limitation said that computer had to do A, then B, then C. And the district  
17 court said, well, it's got to be the same computer that does all those functions.  
18 And the Federal Circuit said, yeah, that's true in this particular claiming  
19 format where you refer back to the same thing that has to do the different  
20 functions, it has to be the same computer.

21 I think here we're in a different situation where it's not a claim format where  
22 you have the same thing listed doing different things. It's more in the general  
23 realm that A and B -- A does not mean a single and B, even though it refers  
24 back to A doesn't mean -- doesn't then again mean a single thing. I think that  
25 is the case law absent the particular type claim structure that was in *Salazar*.

26 Mr. Cameron talked about the additional language in the patent regarding

1 the fact that the PRACH format may correspond and he says therefore you  
2 see, it doesn't have to but the claims don't have may in them. The claims say  
3 for the 2 and for the 4, not it may for the 2 and it may for the 4. Again the  
4 claims are very clear what's required.

5 Mr. Cameron points out that -- he pointed to the prior art as having a  
6 correspondence and that it meets the claim limitation but it's not limited to  
7 the claim limitation. Well, Petitioners certainly didn't make that distinction  
8 in the petition. I think they pointed it out because it was relevant because that  
9 is what they thought the claim required and that's what they pointed out in the  
10 prior art.

11 Then I'll just touch on the last thing Mr. Cameron said. He started talking  
12 about the RSP -- RSRP and intermingled and how it's more complicated.  
13 None of that's in the briefing. There's one paragraph that he recites the  
14 Board's position and I pointed out the premise and his conclusion and why it  
15 was incorrect. I think that's what the Board should -- that's what the Patent  
16 Owner wrote and I think that's what the Board should consider and not the  
17 ancillary and new arguments brought here today for the first time at the oral  
18 hearing. And with that I'm done and will take any questions.

19 JUDGE HOFFMAN: Thank you, Mr. Wyde. Are there any further  
20 questions from my co-panelists for Mr. Wyde?

21 I'm not hearing any questions. Counsel, thank you so much for appearing  
22 and answering our questions today. We appreciate your level of  
23 preparedness and I think it was very helpful for myself and my co-panelists.  
24 We'll take this case under advisement and issue our final written decision in  
25 due course. The panel will be leaving now but please remain on the line for  
26 the court reporter as they may have some questions about spellings. Take

- 1 care now. Thank you.
- 2 (Whereupon, the above-entitled matter went off the record at 3:28 p.m.)

IPR2024-00310  
Patent 10,932,207 B2

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