

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC, SAMSUNG ELECTRONICS CO., LTD.,
and SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioner,

v.

NARISTE NETWORKS PTY. LTD.,
Patent Owner.

IPR2023-01374
Patent RE48,206 E

Record of Oral Hearing
Held: January 14, 2025

Before BENJAMIN D. M. WOOD, LYNNE H. BROWNE, and
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

APPEARANCES:

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The above-entitled matter came on for hearing at 1:00 PM EST on
Tuesday, January 14, 2025, at the U.S. Patent and Trademark Office, via video-
teleconference.

P R O C E E D I N G S

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JUDGE WOOD: Good afternoon. We're here for oral argument in IPR202322 - sorry Google LLC, Samsung Electronics Company, Limited and Samsung Electronics America, Incorporated v. Nariste - I hope I'm pronouncing that right - Networks Proprietary Limited. I'm Judge Wood. With me on the panel are Judges Browne and Marschall. Can we get a roll call from Petitioner, please?

MR. HABER: Yes, Your Honor. Benjamin Haber for Petitioners Google and Samsung. I have some client representatives on the public line, as well.

JUDGE WOOD: All right. Mr. Haber, will you be presenting for Petitioner this afternoon?

MR. HABER: Yes, Your Honor.

JUDGE WOOD: All right. Thank you. And can we get a roll call for Patent Owner, please?

MR. JUGLE: This is Steven Juggle with Alavi Anaipakos for Patent Owner, Nariste.

JUDGE WOOD: Thank you. Mr. Juggle, will you be presenting for Patent Owner today?

MR. JUGLE: Yes, I will be.

JUDGE WOOD: All right. Thank you. From the hearing order, Paper 18, Petitioner will have 45 minutes to present argument in this case, and Patent Owner will have 45 minutes to respond. Petitioner will open the hearing by presenting its case. Patent Owner will respond to Petitioner's argument. Petitioner may reserve rebuttal time to respond to arguments

1 presented by Patent Owner, and Patent Owner may reserve time for sur-
2 rebuttal. Are there any questions or concerns before we begin?

3 MR. HABER: No, Your Honors.

4 JUDGE WOOD: All right. Thank you.

5 MR. WYDE: Your Honor, I just want to put on the record that I'm
6 Joshua Wyde, also for Patent Owner, and I'm here in attendance.

7 JUDGE WOOD: All right. Thank you, Mr. Wyde.

8 MR. WYDE: You're welcome.

9 JUDGE WOOD: So Mr. Haber, would you like to reserve any of
10 your 45 minutes for rebuttal?

11 MR. HABER: Yes, Your Honor. I'd like to reserve 15 minutes
12 for rebuttal.

13 JUDGE WOOD: Fifteen minutes. All right. The time is 1:03.
14 We are familiar with the record in this case, so you can begin when you're
15 ready, Mr. Haber.

16 MR. HABER: Thank you, Your Honors. Let me first share my
17 screen, to make sure that we're looking on the same place. One moment.
18 All right. Okay. I think I should be sharing. Can you see my screen?

19 JUDGE WOOD: Yes.

20 MR. HABER: All right. Thank you, Your Honors. Good
21 morning, Your Honors, or afternoon. May it please the Board, Benjamin
22 Haber for Petitioners, Google and Samsung. I'm going to be discussing the
23 '206 Patent today. We're going to start with a brief overview of the alleged
24 invention and the prior art. I'm going to touch on a couple of claim
25 construction issues, and then I'm going to address the prior art grounds that
26 were raised in the Petition.

1 So first, the alleged invention, you can see on Slide 4, the '206
2 Patent is related to turning on and off GPS to conserve power. On Slide 5,
3 you can see from the cover of the patent, it is a reissue. In the file history,
4 there is a reissue declaration that was submitted by the Patent Owner, stating
5 the Patent Owner's intent to broaden the scope of the original claims. And
6 in that declaration, the Patent Owner described that the new claims are
7 directed to a set of allowed parameters used to make determinations for
8 controlling power.

9 So on Slide 6, you can see the reissued claims. There are actually
10 nine claims that are challenged, but three of them - there are three sets that
11 are similar claims, that have all of the same elements, that will be treated
12 together. So you can see on the right reissued Claims 37 through 39, and
13 they recite the parameters that are used to make determinations for
14 controlling when to power on GPS.

15 You can see on the left-hand side of Slide 6, those parameters are
16 identified in Figure 2, 210, 212, and 220. They are things like the current
17 radio position and the positioning error. The important thing to note is that
18 the reissued claims are not limited to, for example, the neural network
19 algorithm that is described in this figure, or the other adaptive prediction
20 techniques that are specifically described in this specification.

21 So turning to the prior art, the first prior art reference that is
22 asserted is Watters. Watters is related to a system that uses both GPS and
23 cellular positioning techniques to provide an effective and efficient position
24 location information system. You can see Watters' system on Slide 9, on the
25 left-hand side. It's Figure 10 of Watters. You can see a GPS receiving
26 portion, a mobile cellular portion. Those are used to provide positioning.

1 And then on the right-hand side of Slide 9 is Figure 12, which is an
2 algorithm that describes how these positioning techniques are used to turn on
3 and off the GPS. We'll talk about this in more detail later in the
4 presentation.

5 We also have the second ground based on Nohara. Nohara is
6 similarly based - similarly a system that uses GPS and cellular positioning
7 techniques, and like Watters, you can see on Slide 11, Figure 22 describes
8 the system of Nohara has a GPS receiver and a cellular receiver used to
9 determine position, and a flow chart describing how those different
10 positioning and positioning errors are used to power on the GPS.

11 Before we get into the details of the prior art, I wanted to touch on
12 some claim construction disputes. The primary issue here relates to the term
13 "at least one of a current radio position and position error of said mobile
14 device." You can see that in Slide 11 - Slide 13, Claim 37. Now, the
15 Petition presents a conjunctive and disjunctive view of this claim. In the
16 conjunctive view, both a position error and a position would have to be used
17 concurrently to power on GPS. And in the disjunctive view, which is
18 broader, only one of those would be required, a radio position and a position
19 error.

20 And both of those views are presented in the Petition, and in the
21 Patent Owner Response, the Patent Owner has stated that the Patent Owner
22 believes that the disjunctive view is appropriate, and so all that needs to be
23 shown to practice these claims is use of either position to turn on GPS, or
24 position error to turn on GPS.

25 JUDGE WOOD: Mr. Haber?

26 MR. HABER: Yes?

1 JUDGE WOOD: This is Judge Wood. Is there any real dispute
2 that “at least one of” means one or more? In other words, the disjunctive
3 interpretation would be the correct interpretation?

4 MR. HABER: Respectfully, Your Honor, the dispute on this term
5 is related to an issue that came up in the underlying litigation. It has to do
6 with the reissued claims and the doctrine of recapture. And there is an
7 argument that was presented in the district court relating to case law, that
8 really could be interpreted either way. But in order to kind of resolve this
9 reissue issue that is not at issue here in the IPR, we did present the
10 conjunctive view.

11 I think, you know, just looking at the claim language, I don’t
12 believe there is a dispute that “at least one of” means one or the other. The
13 issue is one that’s at play in the district court litigation that is currently
14 stayed. So as far as this proceeding goes, there’s no dispute.

15 JUDGE WOOD: Thank you.

16 MR. HABER: In the Petition, there is also a “means” term. We
17 proposed a construction in the Petition as to the means term. There is no
18 dispute. The Patent Owner and the Patent Owner Response does not dispute
19 that construction. What the Patent Owner does do is they proposed a
20 construction of a different term, “a position error of said mobile device
21 determined from the wireless communications network.” Patent Owner
22 takes the view, kind of a narrow construction for position error, wherein a
23 position error must be a measurement of error measured in units of distance,
24 and also that the claimed determination specifically involves a calculation of
25 position error. That is Patent Owner’s view expressed in the Patent Owner
26 Response.

1 Now, what we explained in our Reply in response to that position
2 is that the term “position error” is not specifically defined in the
3 specification with any meaningful specificity. Position error I think has a
4 plain and ordinary meaning, which is consistent with what kind of the
5 specification broadly says. There is an error between a predicted position
6 and an actual position. And so we think the term “position error” would
7 have been understood by one of skill in the art, under that broad
8 understanding that there is some difference between a prediction and actual
9 position.

10 Now, the Patent Owner seeks to read in a number of limitations
11 into this term “position error.” As I’ve just explained, there’s nothing in the
12 specification or the intrinsic record that justifies those limitations. Position
13 error can be determined in any number of ways. It’s not limited to specific
14 measurements or calculations. It can be statistical. It can be an estimate. It
15 can be an approximation. It’s not limited to particular units. It can have
16 meters. It can have angular units. You can have lat/longs. You can have no
17 units at all.

18 Position error is not limited to be expressed or calculated with
19 distance. It can be a percentage. It can be a confidence level. The point is
20 that a position error has to kind of reflect that there is a difference between
21 an actual position and a predicted position, and that’s all that’s required by
22 the claims.

23 But importantly, there’s really no need to construe this “position
24 error” term to resolve the patentability issue here. Under the disjunctive
25 view, the claim is met by using only “current radio position,” and that’s
26 taught as explained in Ground 1, based on Watters alone. So Watters alone

1 uses a position error, invalidates - use of position invalidates these claims
2 by itself. But putting that aside, both Watters and Nohara do actually teach
3 or suggest a position error with units of distance, as the Patent Owner has
4 narrowly sought to construe the term, and so it doesn't avoid prior art, in any
5 event.

6 So I have on Slide 20 a summary table. On this table, you can see
7 a green checkmark. The green checkmark, each one of those is
8 independently sufficient to invalidate these claims under the disjunctive
9 view or the conjunctive view. And so, I will talk about each one of those in
10 detail.

11 So first, Ground 1, based on Watters. So Watters described a
12 system that goes through a very set process to determine how GPS should be
13 powered on to effectively conserve power. The first step is to take a GPS
14 first fix in block 1200. Then GPS is turned off. Then there is a radio
15 position that is calculated using cellular infrastructure, and you can see on
16 slide 25, Watters' Figure 3, how that's done. There are three base stations
17 that are used to triangulate the current radio position of the device.

18 Then Watters explains a number of inquiries that can be done at
19 block 1230, in order to power on GPS. One of those alternative inquiries is
20 a determination of how far in space the mobile terminal has moved since the
21 last GPS update. And if the mobile terminal has moved 100 meters, for
22 example, then the GPS update would be called for, and the GPS would be
23 turned back on. And it is that motion, that difference between the GPS
24 position and the current position, that is used to turn on GPS, and so the
25 calculation is dependent on the current radio position.

26 Now, Petitioner's expert, Mr. Andrews, has explained essentially

1 that you have two points. You have a GPS point and a current radio point,
2 and determining the distance between those two points is simply a matter of
3 finding the difference, geographic difference between those points, and
4 you'll determine whether or not that is greater than 100 meters.

5 Now, there is not really a substantial dispute on this term. I asked
6 Dr. Pullen exactly this question. I asked him here in his deposition, one way
7 to determine the difference between a position calculated at block 1220
8 using cellular, and a first fix calculated at block 1200 using GPS would be a
9 simple subtraction, right? And what he said is, yes. Subtracting the cellular
10 position from the GPS in this case, would give you an estimate of the
11 distance between those two fixes, those two positions.

12 And again, I asked him, the method that we just described, of
13 subtracting the GPS location from the location determined by cellular could
14 be used to determine how far in space the mobile terminal has moved since
15 the last GPS update? And he said yes, it would be an estimate of that
16 distance. So there really is no dispute among the experts that that 100
17 meters would have been obvious to calculate by simply taking a first
18 position and a second position and finding the difference between them.

19 Now, what Patent Owner says in their Sur-reply is there are a
20 number of ways that you can calculate distance. That's all well and good.
21 There may be a number of ways that you can calculate distance. That does
22 not actually lessen what Watters teaches. Watters teaches that you have a
23 first position and a second position, and you want to figure out a difference
24 between them. And the experts agree that an obvious way to do that would
25 be to simply do a simple comparison of those two points. And, you know,
26 as I mentioned earlier, on Slide 32, Watters' use of the current radio position

1 is enough, in and of itself, to invalidate these claims under the disjunctive
2 view.

3 JUDGE WOOD: Mr. Haber? I'm sorry to interrupt. So there are
4 different ways to measure the distance traveled. Is it Petitioner's position
5 that there's just one way that is more obvious than the other ways, that being
6 subtracting or getting the difference between the GPS fix and the fix
7 determined by the cellular network?

8 MR. HABER: Effectively, Your Honor, yes, that is our position.
9 There is information that Watters provides, and Watters provides a GPS
10 point and a current radio position, and it says to figure out how far away
11 they are. The obvious way to do that would be to just compare one point
12 from another point. Patent Owner comes up with other ways, including
13 Doppler shifts and accelerometers and a number of other ways. Those do
14 exist. But that is not what Watters actually teaches. What Watters actually
15 teaches is you have two points, and you want to figure out the distance
16 between them, and the obvious way to do that would be just to do a simple
17 subtraction.

18 JUDGE WOOD: Thank you.

19 JUDGE MARSCHALL: If I could add a question in here?

20 JUDGE WOOD: Sure.

21 JUDGE MARSCHALL: As I understand your argument, it's that
22 a POSITA looking at Watters would interpret it the way that you just
23 described, and that you are not relying on inherency; is that correct?

24 MR. HABER: Correct. We are not relying on inherency. What
25 we are relying on is specifically these teachings in Watters that says that you
26 want to determine how far in space something has traveled. And then one of

1 skill in the art, looking at that, would look at the additional teachings of
2 Watters that says you have a starting point and a current point. It would
3 have been obvious to simply do a subtraction.

4 JUDGE MARSCHALL: I guess that's my confusion, or maybe
5 there is an alternative argument there. In one interpretation of your
6 argument as I read it, you're looking at this whole paragraph. You're getting
7 different fixes based on GPS and cellular networks. And one of ordinary
8 skill reading it would understand that when you are calculating a distance,
9 you would use those previous steps, which would meet the claims without
10 using inherency, correct?

11 MR. HABER: Yes, Your Honor.

12 JUDGE MARSCHALL: But then you also use the word obvious
13 in your Reply and Reply declaration, which is kind of an alternative, in my
14 view. To me, they're two different things. You know? Is one of ordinary
15 skill in the art reading this just seeing it right there, and the other is, okay,
16 maybe it's not there but it sure would have been obvious to use these
17 positions to calculate a distance? I'm wondering if you're arguing both
18 things at the same time in one argument, or if they're kind of two alternative
19 arguments to get you to the finish line?

20 MR. HABER: Yes. Frankly, Your Honor, I think both of those
21 things are true. Whether they're alternative arguments or different
22 arguments, I'm not - I don't know that we're making alternative arguments.
23 Our argument generally is an obviousness argument. I think the teachings of
24 Watters are fairly plain. But to the extent that one of skill in the art would
25 have to kind of add their own knowledge to reading Watters, I think that
26 does bring us to the obviousness argument, which is why it's not an

1 anticipation argument.

2 JUDGE MARSCHALL: Okay. Thank you.

3 MR. HABER: Now, as I mentioned, that is not the only teaching
4 of Watters. Watters continues. After talking about how far in space a
5 device has traveled, it continues to describe an additional technique where
6 the update frequency of GPS is based on accuracy. And on Slide 33, we
7 have at the bottom this just teaching of Watters - of course, the rate at which
8 GPS updates are needed will depend on the conditions under which the
9 mobile is operating, with less frequent updates needed, if the mobile
10 terminal is in an area where cellular network infrastructure signals are
11 known to be of good accuracy. So this is an additional thing that Watters
12 teaches you can do. You can turn the GPS on and off more frequently,
13 depending on accuracy.

14 Now, Watters talks about various conditions that can affect
15 accuracy, and one of those specifically is what it calls multi-path errors.
16 Multi-path errors are signal propagation errors. That's Slide 34, what
17 Watters says, a change in time measurement by the mobile terminal that
18 does not accurately represent the actual distance change of the mobile device
19 from base station, thereby rendering an inaccurate location determination.

20 So Watters explains that this accuracy that it discusses can be
21 based on multi-path errors, which cause a prediction that does not
22 correspond to where the device actually is. And Watters actually teaches a
23 bit more about multi-path errors. There is another teaching where describing
24 multi-path errors, they specifically put an uncertainty in units of distance on
25 multi-path propagation. A distance of about 150 meters can be typical,
26 based on multi-path conditions.

1 So Watters does teach, one, using accuracy, which is reflective in
2 positioning errors, and it actually teaches a specific distance number
3 associated with that. And Petitioner's expert, Mr. Andrews, again, has
4 explained what one of skill in the art would have understood regarding good
5 accuracy versus poor accuracy, and turning the GPS on and off more
6 frequently, based on Watters' teachings.

7 Now, Patent Owner's argument against Watters' specific teaching
8 includes a position which is just not actually accurate. In their Patent
9 Owner's Sur-reply, they make this argument: all Watters teaches is that
10 error exists, and that some signals have better accuracy than others. That is
11 not all that Watters teaches. We just looked at what Watters teaches is that
12 error exists. It can be due to multi-path propagation. It can result in certain
13 errors related on the order of 150 meters, and in fact, based on that error
14 condition, you should turn on and off GPS. So Watters teaches substantially
15 more than what Patent Owner is suggesting here. And in fact -

16 JUDGE WOOD: Mr. Haber, Judge Wood again. There does seem
17 to be a bit of a leap between signal quality, if you will, and position error.
18 You know, one can, I imagine, determine signal quality in different ways,
19 without requiring the actual determination of any kind of position error; is
20 that correct?

21 MR. HABER: That is correct, Your Honor. One can determine
22 signal quality in any number of ways. That is correct.

23 JUDGE WOOD: There's no direct teaching in Watters to turn on
24 GPS based on a position error. There's a leap, if you will, between signal
25 quality and the effect of signal quality on position error; is that right?

26 MR. HABER: I think that's a fair assessment, Your Honor. There

1 is no disclosure, direct disclosure for anticipation purposes, for example,
2 connecting accuracy to position error. But there is substantial teaching I
3 think in Watters that would lead one of skill in the art to that conclusion.

4 JUDGE WOOD: Thank you.

5 MR. HABER: And again, so we have Slide 38, which I just
6 wanted to highlight again. You know, the positioning in Watters is
7 sufficient to meet the claims, and position error alone is sufficient to meet
8 the claims, assuming this disjunctive view.

9 Now, I wanted to talk about Nohara, unless there's anything else
10 Your Honors wanted to discuss with respect to Watters. Nohara is a similar
11 system that uses GPS and cellular positioning techniques to power on GPS.
12 What's shown in Slide 40 is Figure 23 of Nohara. So Nohara begins by
13 determining the position of the mobile station at step 1022, and that is done
14 in a similar way to what's disclosed by Watters. We have base station,
15 triangulation technique to find the position of a mobile station.

16 Then in the next step, Watters teaches to determine if a position
17 error is greater or smaller than a threshold. That's at block 1024. If the
18 position error is greater than a predetermined value, then we proceed down
19 the right-hand side of Figure 23. The first thing that Watters teaches to do is
20 at step 1026, show the positioning condition to the user. Watters says that
21 display unit 16 displays that a favorable positioning position has not been
22 obtained, thereby presenting the positioning condition to users or others.
23 You can see on Slide 44 what this looks like in Nohara. This is Figure
24 15(b).

25 And what Watters says in paragraph 215, when the positioning
26 error HDOP is greater than a predetermined value, the display unit 16 makes

1 on-screen displays, such as the circle C err equivalent to the magnitude of
2 the positioning error. You can see in the lower left-hand corner that figure,
3 P is the position with an error bubble around it, showing to the user the error
4 condition.

5 And this is again something that I asked their expert about. Their
6 expert essentially agrees that what Nohara does when there is an error
7 condition is show C err, and that is an error range around the position. What
8 their witness says is it's a circle derived for the display that intends to
9 characterize what the error might be. And so, I asked them again. The
10 range is going to be some distance, right? And he says the radius is the
11 distance from the center of the circle.

12 So Patent Owner's expert admits that Nohara displays this error
13 condition, which is an error distance range. And then after doing a number
14 of other checks, the GPS is turned on, and GPS positioning mode is enabled,
15 and a new GPS position is developed. And so, that's how Watters uses
16 position error to turn on its GPS.

17 Now, Patent Owner's dispute regarding Nohara is really focused
18 on its erroneously narrow claim construction. What they say is that the
19 information conveyed by HDOP is not what is meant by the use of position
20 error in the claims of the '206 Patent. Their argument is based entirely on
21 other claim construction position. They really have no response at all, if
22 Your Honors don't accept that position. And what is taught by Nohara,
23 again, its use of position error independently satisfies these claim elements.

24 Now, the argument that they do present, the claim construction
25 argument, actually doesn't distinguish Nohara, and what they say about
26 Nohara, they're really arguing against what Nohara specifically discloses.

1 They take the position that Nohara's definition appears consistent with the
2 conventional unit list definition of HDOP, and since in their view, position
3 error has to be calculated using units, they say that Nohara doesn't teach the
4 claims as they construe it.

5 The problem is that isn't actually what Nohara says, and their
6 experts agree that Nohara actually does its calculation using distance units.
7 And so, on Slide 50 we have an expert from Dr. Pullen's declaration. On the
8 left-hand side is Nohara. Nohara includes a number of equations. The first
9 one is equation 9. It includes parameters ΔR and ΔX , which are
10 range errors and position errors, and Patent Owner's own expert says they
11 have units of distance squared.

12 And then when you look at a pseudoinverse matrix in equation 10,
13 again, what their own expert says is that Nohara could be interpreted as
14 weighting factors that have units of distance squared. And when you get
15 actually to the HDOP calculation on Slide 51, again, their expert says that
16 interpreting the covariance entries, σX and σY , as having units of
17 distance squared, Nohara's equation 11 would result in a weighted version
18 of HDOP in units of distance.

19 So the plain teaching of Nohara actually does include calculations
20 based on distance, and the experts, again, are not really meaningfully
21 disputing this. Their expert says it. Our expert says it. That is just what
22 Nohara teaches. Now, they tend - they seem to be taking a position that
23 Nohara doesn't mean what it says, that it actually means something different
24 than its expressed disclosure, but there's no basis for that position. That is
25 simply an incorrect reading of Watters, and not consistent with the claim
26 disclosures in Watters.

1 And so, Nohara alone, again, even under the narrowest
2 construction that they put forward, discloses the claims with its use of
3 position error alone. Now, I wanted to talk about Ground 4, which is our
4 combination ground. And the combination ground is set forward in the
5 Petition for the broader conjunctive view, wherein you have to use both
6 position error and a position, and that comes from the combined teachings of
7 Watters and Nohara.

8 And so, on Slide 56 we have the combination that we presented in
9 Ground 4. Importantly, Patent Owner doesn't dispute motivations to
10 combine Watters and Nohara. They simply dispute the references, the
11 teachings of the references individually. You can see on Slide 12 what the
12 combination looks like. We have Watters' Figure 12, and then Nohara's
13 teaching to use position error, and Watters' teaching to use distance based on
14 a current position. Those are all kind of integrated into block 1230, and that
15 Watters proceeds as Watters teaches.

16 And you can see exactly how that works in the sequence of the
17 next few slides. So this is a modified version of Nohara Figure 15(b). In the
18 first step, which is what Watters teaches, you take a GPS fix. You kind of
19 put a 100-meter bubble around that GPS fix, and as long as the current
20 position hasn't moved outside of that bubble, you don't need to update the -
21 you don't need to turn the GPS back on. And you add the expert teaching
22 from Nohara to put the error circle around the position, so that there is some
23 positioning error associated with that positioning technique.

24 Then as the user - go to the next Slide 57. As the user moves
25 around within that 100-meter circle, in this case, they haven't exceeded the
26 100 meters, nor has their error bubble exceeded 100 meters, so the GPS

1 doesn't need to be turned back on. In the next slide, you can see the user has
2 approached the edge of the 100-meter circle. There's some error associated
3 with that positioning. The error bubble is outside the circle, and so the GPS
4 will be turned back on. And so, this is how the combined Watters/Nohara
5 teaching works and satisfies the claims.

6 Now again, Patent Owner's argument is contradicted by Nohara.
7 Their position is really that the C err value is not a range, and that is just not
8 what Nohara says. Here we have on Slide 60, paragraph 160 of Nohara,
9 circle C err is displayed around the present position, with the range
10 converted from the positioning error HDOP as the radius. So I think Watters
11 is very - I'm sorry, Nohara is very clear that what's being done here is what
12 we described in the last few slides.

13 And again, I think when I asked the expert about this, he agreed
14 that C err is going to be some distance value that is determined, calculated
15 based on the position error HDOP. And so, again, that gets us to Slide 62,
16 which is kind of the summary slide. So even under the narrowest view of
17 the claims, conjunctive view, their very specific claim construction, Watters
18 and Nohara disclose the claims, and they have no argument that
19 distinguishes the prior art.

20 There are a few other issues and grounds that I'll touch on briefly.
21 There is a dependent claim, Claim 39, that requires, in addition to position
22 error and current radio position, another parameter used to turn on GPS, and
23 it lists three different parameters. One of those is a last position determined
24 by GPS. If you look at the parties' papers, the parties argued about the first
25 one of these parameters, a last satellite position.

26 And frankly, Patent Owner's view is incorrect, and Petitioner's

1 view is correct for all of the arguments - reasons that are presented in our
2 papers. But it really doesn't matter, because the last position determined by
3 GPS is plainly what is used in Watters anyway, to do that distance
4 calculation. So, you know, Watters specifically teaches this claim element.

5 And then we have additional grounds, Grounds 3 and 5, adding
6 another reference, Lau, to reach a dependent claim that has to do with
7 putting the GPS into low-power mode instead of completely turning it off.
8 That teaching comes from Lau, and Lau specifically has a low-power GPS
9 mode that would have been added to the system of Watters and Nohara,
10 again, to conserve power and allow for a quick turn on of GPS.

11 That is my opening presentation. If Your Honors have any
12 questions right now, I'd be happy to answer them, or I can reserve the
13 remainder of my time for rebuttal.

14 JUDGE MARSCHALL: This is Judge Marschall. I was
15 wondering if you could respond with respect to those dependent claims to
16 Patent Owner's argument in the Sur-reply that Watters does not teach any
17 recording of previous satellite positions or times, and then therefore it does
18 not teach using those recorded values to determine when to power on its
19 GPS module?

20 MR. HABER: Yes. So there's two responses. The first one is the
21 one that I gave here, which is the claim doesn't actually require using a
22 satellite position. Just using the last position determined by GPS is
23 sufficient. And so, you don't even need to resolve those arguments. But the
24 second one is that what Watters teaches is specifics of how the GPS system
25 operates. Let me see if I can switch to put on the screen Watters. Sorry.

26 And part of the GPS kind of protocol, and this is described by Mr.

1 Andrews, is making calculations based on GPS satellite ephemeris, and the
2 GPS determination, the GPS fix is based on knowledge of where the satellite
3 is at any given time. And that is based on a satellite position, the last
4 satellite position. So the very nature of determining GPS, and this is kind of
5 where Watters - I'm sorry. This is the patent - and this is sort of where
6 Watters is describing, at a high level, how GPS works. That is part of how
7 GPS fixes are determined.

8 And so, it's not an accurate statement to say that Watters doesn't
9 teach using a last satellite position. It may be correct that, you know, after
10 that GPS ephemeris is used for GPS positioning, it's not recorded. But it is
11 certainly dependent on the last satellite position, because that is how a GPS
12 position is determined.

13 JUDGE MARSCHALL: Doesn't that kind of conflate the first two
14 items listed in the claim, the last satellite position and the last position
15 determined by GPS, if they're saying that, hey, any time you determine a
16 position by GPS, you're going to have to use the last satellite position?

17 MR. HABER: Well, so I don't know that it conflates them. They
18 are different things. They are different pieces of information. I think it is
19 true that determining GPS is based on a last satellite position, and so they are
20 different requirements. They just happen to be met kind of during the same
21 process. And so, at the end of the process you get a GPS position which
22 satisfies the second limitation, but going through that process, you actually
23 have to do it based on satellite position, which meets the first part of the
24 requirement.

25 JUDGE MARSCHALL: I understand your position. Thank you.

26 JUDGE WOOD: Mr. Haber, you have about 14 minutes left for

1 your rebuttal.

2 MR. HABER: Okay. Great. Let me stop sharing my screen.
3 Let's see if I can figure out how to do this. I apologize. Am I still sharing
4 my screen?

5 JUDGE BROWNE: This is Judge Browne. You're not sharing
6 your screen.

7 MR. HABER: Okay. Great. I managed to do it despite myself.

8 JUDGE WOOD: Mr. Jugle, it is 1:37. You may proceed when
9 you're ready.

10 MR. JUGLE: All right. Thank you, Your Honors, and may it
11 please the Board. Just give me a second to share my screen here. And can
12 everybody see this?

13 JUDGE WOOD: Yes.

14 MR. JUGLE: All right. Thank you very much. So we anticipate
15 using about 35 minutes for argument, and reserving 10 minutes for rebuttal.

16 JUDGE WOOD: Ten minutes for rebuttal. Got it.

17 MR. JUGLE: Yes. So as a brief overview, first we're going to go
18 over the meaning of "position error," then we're going to talk about how
19 Watters doesn't disclose a position error, how Watters doesn't disclose a
20 current radio position, and that Nohara does not disclose a position error,
21 either.

22 Before we get started, I want to talk a little bit about the
23 requirements of the claim. So it says that you have to make a - there's a
24 determination made of when to power on a GPS module, and that's
25 dependent on at least one of a current radio position or position error of said
26 mobile device, and each of those has to be determined from the wireless

1 communications. All right.

2 So as an initial matter, we don't think that this construction that
3 position error is expressed in units of distance is dispositive, but we do think
4 that the idea that position error is a difference between a predicted position
5 and a measured position, and it's determined from the wireless radio
6 network, is the important concept to take away here.

7 Position error, as a POSITA would understand it, it's like throwing
8 darts at a dartboard. If you want to be at the center, how far you are away
9 from the center is your error. Now, whether you express that in units of
10 distance or some other measurement such as a percentage, when you're
11 taking into account the width of the dartboard, that kind of comes out in the
12 wash, but it's this idea that position error is the difference between where
13 you are and where you think you should be.

14 Okay. The '206 Patent is consistent with this, right? It talks about
15 the difference between a predicted position and the actual position measured
16 at time t can be used to formulate the position error, and the inventor, in
17 prosecution of the '870 Patent, which was the patent that led to the '206
18 reissue, was consistent that the reported error is measured in units of meters.
19 So if it's less than a certain distance, GPS is powered on. If the error is
20 greater than a certain amount, it's powered on. So it's determining how,
21 again, far you are from where you think you should be or want to be.

22 JUDGE WOOD: Mr. Jugle?

23 MR. JUGLE: Yes?

24 JUDGE WOOD: Does the '206 Patent define position error -

25 MR. JUGLE: It does not.

26 JUDGE WOOD: - precisely?

1 MR. JUGLE: Precisely, no.

2 JUDGE WOOD: All right. Thank you.

3 MR. JUGLE: Yes. So Petitioner's argument that Watters -

4 JUDGE MARSCHALL: This is Judge Marschall. If I can -

5 MR. JUGLE: Yes?

6 JUDGE MARSCHALL: - interrupt?

7 MR. JUGLE: Yes, Your Honor.

8 JUDGE MARSCHALL: Yes. I don't see any definition, either, of
9 positioning error in the patent, although you're arguing that it's kind of
10 implicit, or it's consistent, at least, with the POSITA's understanding of the
11 term, which requires some sort of distance. I guess my problem with that is
12 Nohara itself, Nohara is a POSITA, at least, you would think, in this field,
13 since Nohara is an inventor, and used the term position error in a way that is
14 in conflict with the way you're using it. And I'm wondering what your
15 response is to that. How could we decide in your favor on this claim
16 construction issue, saying a POSITA would clearly view position error as
17 meaning what Patent Owner says it means, when Nohara itself is a POSITA,
18 and uses it differently?

19 MR. JUGLE: Yes. So at a high level - and I'll get to this in more
20 detail when I talk to Nohara. But at a high level, I think what you see from
21 the '206 Patent is it's talking about determining your position error from the
22 wireless radio network, determining it after the fact. So you're getting your
23 position error, and it's a difference from where you're predicted to be versus
24 where you are.

25 Nohara's HDOP, we've argued isn't a position error, because it is
26 a statistical estimate of where your position error may come out. We're

1 going to talk about how really all HDOP does is give you a curve of what
2 your position errors may be. So it's entirely predictive. It's trying to get
3 ahead of position error. It's saying you may be in a circumstance where you
4 have some position error, and I'm going to use HDOP as a threshold, but it
5 isn't actually determining what your position error is.

6 JUDGE MARSCHALL: Okay. I understand that position. I just
7 have a gut level problem with saying a POSITA would clearly understand
8 position error to be this narrow version, when something else in the record is
9 a POSITA understanding it more broadly. And that's the -

10 MR. JUGLE: Well, and -

11 JUDGE MARSCHALL: There may not be an answer to that.

12 MR. JUGLE: I think also, Nohara eventually - it characterizes its
13 HDOP as a position error. It's saying, I'm going to regard this as error. I'm
14 going to treat this as error in lieu of my actual error. That's how we interpret
15 Nohara.

16 JUDGE MARSCHALL: Okay. Thank you.

17 MR. JUGLE: So it recognizes what position error is, and it
18 chooses to use that HDOP measurement in lieu of position error, because it
19 provides a statistical distribution.

20 JUDGE MARSCHALL: All right. I understand your position.
21 Thank you.

22 MR. JUGLE: All right. Thank you. So back to Watters. Watters
23 doesn't disclose that powering GPS is dependent on position error
24 determined from the wireless radio network. What Watters discloses is that
25 you power on GPS based on three potential factors. The first is what's
26 shown in Figure 12, which is whether there's a requisite number of cellular

1 signals available. And then alternative inquiries are either how long it has
2 been since the last GPS update, so just a measurement of time, or how far
3 the mobile terminal has moved since the last GPS update.

4 So first we're going to tackle position error. So using a requisite
5 number of cellular signals isn't a position error; it's just a count of the
6 cellular signals present. It appears that Petitioners are not arguing that it is,
7 but just very briefly, Watters only discloses - Watters discloses that if
8 enough cellular signals exist, if you don't turn on GPS, if there's not enough,
9 you do turn on GPS, you turn on GPS, it's just a determination of how many
10 signals it can detect. It doesn't give you a position error.

11 Now, what Petitioners also argue is that there's this - that the
12 determination in Watters is based on position error, because Watters
13 discloses that if you think you have bad position error, you increase the rate
14 at which GPS updates are needed. But that's teaching that a dependency of
15 GPS update is based on time, and an attempt to mitigate potential error, so
16 I'm going to get ahead of my error by reducing my time.

17 That's the exact same thing as its alternative inquiry, of basing it
18 on the time since the last GPS update. It's not basing it on a position error
19 that is determined from the wireless communications network, and Watters
20 doesn't disclose making such a determination of position error at all.

21 All right. So Petitioners also argue that Watters' disclosure of
22 making a determination of how far a mobile terminal has moved is a
23 disclosure of using the current radio position to make that determination of
24 when to turn on the GPS. But determination of how far something has
25 moved doesn't disclose determining its position, for two reasons. First, the
26 difference between two position measurements doesn't give a measurement

1 of how far something is moved. For example, if you travel in a circle, you
2 can get back very close to where you started. You may have moved a very
3 long distance, but you're going to show a very small difference in your first
4 and your second position. What I -

5 JUDGE WOOD: Mr. Jugle?

6 MR. JUGLE: Yes?

7 JUDGE WOOD: This is Judge Wood. Sorry. Why would
8 Watters' system care about movement that doesn't change position? Why
9 would it be necessary to turn the GPS on, regardless of the amount of
10 movement, if the actual position hasn't changed significantly?

11 MR. JUGLE: So I think Watters discloses using - one reason that
12 our expert discusses that Watters discloses using time as a proxy. But if you
13 have something that's moving very quickly, maybe you want to have a
14 moving time window, because you want more frequent updates if
15 something's moving quickly. So you can take your total distance traveled,
16 which will give you sort of this moving time window to adjust for rapidity of
17 movement.

18 The other reason to do it is you can measure, at the time, as our
19 expert discussed, methods of determining distance moved, for example using
20 Doppler shift, were actually very accurate. You can measure from
21 accelerometer data or Doppler shift, velocities and accelerations very
22 accurately, which if you make that determination then based on how far
23 you've moved, you potentially mitigate deficiencies in taking two position
24 measurements, which may have some inherent inaccuracy in them.

25 So it's a way to, again, try to get ahead of this idea of error. There
26 could be error in the cellular network position measurement, but we're going

1 to get ahead of it by using these alternative methods to determine when to
2 turn GPS on, whether it's the number of cellular signals, or a time interval,
3 or the total distance something has moved. We're not going to look at a
4 change in cellular position at all. We're going to use different measurements
5 to try to reduce potential error in Watters.

6 JUDGE WOOD: Thank you.

7 MR. JUGLE: All right. So as I just discussed, at the time, there
8 were ways to accurately get distance traveled, and you could - a POSITA
9 would have recognized it using Doppler shift or onboard accelerometer data
10 could give you very accurate accelerations in velocities, which would allow
11 you to determine, to accurately determine the distance that you've moved,
12 not just how far you were from the starting point. And Watters discloses
13 using those alternative inquiries to make its determination of when to turn on
14 GPS. Next up, it's Nohara -

15 JUDGE BROWNE: This is Judge -

16 MR. JUGLE: Yes?

17 JUDGE BROWNE: Excuse me. This is Judge Browne.

18 MR. JUGLE: Yes?

19 JUDGE BROWNE: On your last slide, you seem to imply that
20 Watters teaches Doppler shift and onboard - use of an onboard
21 accelerometer. I don't see any citations for that. Is that your position, that -

22 MR. JUGLE: No. No. Watters -

23 JUDGE BROWNE: - Watters discloses -

24 MR. JUGLE: Watters does not disclose that, but our position is
25 that those measurements, at the time that Watters was filed, were known to
26 those of skill in the art.

1 JUDGE BROWNE: Thank you. I have an understanding of your
2 position.

3 MR. JUGLE: All right. Thank you. Next I'm going to move on
4 to Nohara.

5 JUDGE MARSCHALL: Actually, before you go on -

6 MR. JUGLE: Yes?

7 JUDGE MARSCHALL: - looking at those two alternatives, I
8 don't think Petitioner disputes that those are possible ways to determine a
9 distance. It's just that under their view, a POSITA would view Watters as
10 disclosing how to do it the traditional way of using the cellular network or
11 GPS network, which is actually described in Watters. So it's kind of a fair
12 interpretation of Watters to think that it's using the positions it actually
13 discloses and describes, rather than something like Doppler shift or onboard
14 accelerometer, which it does not describe. What is your response to that
15 argument?

16 MR. JUGLE: Well, again, I think it goes towards what Watters is
17 trying to do, which is to prospectively get ahead of problems with
18 determining position using the cellular network. So it's using other methods
19 of moving that far. And additionally, so using two points in space only
20 gives you the distance between those two points.

21 Now, you've asked, you know, why would Watters care about how
22 far you've overall gone, but if you're prospectively worried about one of
23 those or both of those measurements of your location being inaccurate,
24 instead of using those to base the determination of when to turn on your
25 GPS, you could use, you know, a more accurate measurement to determine
26 the distance that you've moved. So that's our position.

1 JUDGE MARSCHALL: I guess I would find that argument more
2 persuasive if Petitioner was saying it's inherent that the GPS and cellular
3 based points are being used to determine this distance, and you come back
4 and said, well, it can't be inherent. There's two other possible ways to do it
5 that Watters never mentions. But I guess I - since they're not relying on
6 inherency, they're saying a POSITA would read it as using the points in
7 space that they've already found, it seems like the fact that there are other
8 methods of determining distance is kind of irrelevant to me.

9 MR. JUGLE: So -

10 JUDGE MARSCHALL: Maybe your arguments hold weight, but I
11 don't get these other methods of determining distance that Watters never
12 mentions as being that helpful.

13 MR. JUGLE: Well, so I think if we go back up to Figure 12 of
14 Watters, it also discloses - so it discloses taking the cellular position, but if
15 you have that, you just go back around to keep using that, right? It doesn't
16 ever make a disclosure of using that difference, and it already tells you to get
17 it, so it would have been very easy for Watters to make that disclosure. So
18 our position is that Watters is concerned with something else.

19 JUDGE MARSCHALL: Okay. Thank you.

20 JUDGE WOOD: One final question, Mr. Jugle, or -

21 MR. JUGLE: Yes?

22 JUDGE WOOD: - another question. Is there anything in the
23 record to suggest relative power usage by each of those three possible ways
24 of determining distance traveled?

25 MR. JUGLE: No, I do not believe there is, Your Honor.

26 JUDGE WOOD: All right. Thank you.

1 MR. JUGLE: All right. I'm going to move on to Nohara now. So
2 Petitioners argue that Nohara makes its determination of when to turn on
3 GPS based on its value of what Nohara refers to as HDOP, or horizontal
4 dilution of precision. There isn't really a dispute here that if HDOP exceeds
5 the threshold, the Nohara GPS is powered on, and if it's lower than the
6 threshold, it's not. The dispute here is entirely about whether HDOP is a
7 positioning error, and it's our position that it is not.

8 Now, Nohara, as I briefly discussed earlier, it knew what error
9 was, and we think its disclosure makes clear that it is treating HDOP as a
10 proxy for error, and it isn't saying that HDOP is positioning error. It's
11 saying the value of HDOP shall be regarded as the positioning error. So it's
12 using HDOP as a proxy, but that use of HDOP doesn't change the nature of
13 what HDOP is.

14 And what HDOP is, is a function of the transmitter geometry of a
15 wireless system, so it's entirely dependent on where the base stations are in
16 relation to the mobile unit, and all it does is provide a statistical distribution
17 of potential error, potential position errors. But alone, HDOP doesn't
18 provide what the error of a mobile terminal is.

19 So - and this is confirmed experimentally. So our reference
20 Specht, which our expert discusses, experimental investigations show that
21 position error can vary significantly at a given HDOP. So what the
22 experiments in Specht showed was that for various HDOP, so HDOP of .6,
23 so HDOP of .7, HDOP of .8, a particular position error had a certain
24 probability of being true, if you took a bunch of measurements, but at any
25 given time, what your position error was wouldn't be known strictly from
26 HDOP. And again -

1 JUDGE WOOD: Mr. Jugle, is it relevant that the Specht document
2 is not prior art, so it would not have been available to one of ordinary skill in
3 the art at the time of the invention?

4 MR. JUGLE: No, I don't think so, because I think it is illustrating
5 something fundamental about HDOP which was known at the time, which is
6 that HDOP is a statistical characterization of potential errors, and not a
7 measurement of position error. And I think the data in Specht, drawing
8 those curves may not have been available at the time of Nohara, but the
9 relationship between position error and HDOP was telling. And the Specht
10 reference just serves to make that conceptually concrete. Did that answer
11 your question, Your Honor?

12 JUDGE WOOD: Yes, I believe so. So one of ordinary skill in the
13 art at the time of the invention would have known that the correlation
14 between HDOP, H-D-O-P and position error is or was not strong?

15 MR. JUGLE: That's correct. And it is not a one-to-one
16 correlation. It is not deterministic. It's stochastic. So HDOP gives you a
17 curve that you could find that the position error is likely to lie upon, but
18 alone, it doesn't give you what your position error is.

19 JUDGE WOOD: Thank you.

20 MR. JUGLE: So this discussion of whether HDOP is expressed in
21 units of distance or is unitless is a little bit of a red herring. Nohara starts
22 out defining HDOP in a manner of one familiar to a person of skill in the art.
23 It appears that the co-variants, matrix A of Nohara, is unitless, until Nohara
24 assumes that - makes an assumption of a near equivalency that it is not -
25 Nohara never explains why it does this. But at the end of the day, that
26 doesn't fundamentally change that the HDOP of Nohara provides a

1 statistical prediction, and not a measured position error.

2 So regardless of whether Nohara's HDOP is ultimately expressed
3 with units of distance or is dimensionless, it's still only providing this
4 statistical distribution. Normalizing it into a measure - an expression with
5 dimension still doesn't provide that difference of how far you are from
6 where you thought you were going to be.

7 So essentially, much like Watters, Nohara is trying to get ahead of
8 position error. It's looking at the configurations, the geometry of its base
9 stations, to turn on GPS when it thinks - when there may be a distribution of
10 error that is high enough to warrant turning on GPS. So it's trying to get
11 ahead of it using HDOP as a proxy for error, but it's only using HDOP to
12 predict the potential distribution of errors, while the '206 Patent is clear that
13 what you need to do is determine your error, and then you make the decision
14 of whether to turn the GPS on or off.

15 So in summation, neither reference cited by Petitioners discloses
16 either determining when to turn GPS on, based on a current radio position or
17 a position error. The Watters determination of when to turn its GPS on is
18 dependent on a number of cellular signals, or alternatively, a time or
19 distance traveled, but none of those things is a position error, and distance
20 traveled does not make use of current radio position. Likewise, Nohara's
21 use of HDOP is a use of a statistical characterization, but it is not a position
22 error determined from the wireless communication center. And unless there
23 are any questions, I rest my opening presentation.

24 JUDGE MARSCHALL: Yes. I have a question about Nohara. Is
25 your argument about Nohara dependent on our acceptance of your claim
26 construction position, and if not, you know, what is left of your argument if

1 we decline to adopt your proposed construction?

2 MR. JUGLE: So I do not think it is dependent on our claim
3 construction position. I think that what we've shown with Nohara, going
4 back to, again, the Specht reference, is your position error - now, in Specht,
5 it is, position error is expressed in units of meters, but again, you may be
6 able to express it in different ways. But any particular measurement you
7 take, your HDOP gives you the likelihood of having a certain error, but it
8 doesn't give you what that error is. And you can be way out in the tail, or
9 right in the center.

10 So a lower HDOP raises the curve and makes it more likely that
11 you may have lower error, but it doesn't mean that your error is a certain
12 number. And our view is that even without our construction, what the '206
13 claim language requires is that "position error" is determined, so it has to be
14 a determined thing, a measured thing, and not something that is just
15 statistically predicted.

16 JUDGE MARSCHALL: Okay. I understand your position on
17 that. I just had a question about Claim 39 and the related limitations, and the
18 other dependent claims. It talks about determining the imbedded GPS
19 module should be powered on, depending on at least a last satellite position,
20 a last position determined, and a last time determined by the GPS.

21 And at least for that last one, a last time determined by the GPS, it
22 seems like Watters does address that in Column 22, when it talks about
23 using how long in time it has been until the last GPS update to determine
24 whether to turn it on. So I'm wondering what your response is to
25 Petitioner's reliance on that portion of Watters for that limitation.

26 MR. JUGLE: So I think Watters doesn't explicitly disclose that. I

1 think most electronics have internal clocks. I think that determination of
2 how long it has been in time does not necessarily use the last time
3 determined from GPS. It could be based entirely on the internal clock. But I
4 don't dispute that Watters discloses that using a time interval as a basis for
5 turning on GPS.

6 JUDGE MARSCHALL: Okay. Thank you.

7 JUDGE WOOD: All right. Thank you, Mr. Jugle. You have 20
8 minutes left for rebuttal.

9 MR. HABER: I think -

10 JUDGE WOOD: Mr. Haber?

11 MR. HABER: Yes. If you can stop sharing?

12 MR. JUGLE: Oh, yes. Let me -

13 MR. HABER: Get myself all situated again. All right. I think I'm
14 sharing my screen, right?

15 JUDGE WOOD: Yes.

16 MR. HABER: All right. So I really just wanted to hit on a couple
17 quick points. When you're -

18 JUDGE BROWNE: Mr. Haber?

19 MR. HABER: Yes?

20 JUDGE BROWNE: You're showing us a meeting appointment. I
21 think you might have the wrong screen shared.

22 MR. HABER: Let's see. I might have the wrong screen shared. I
23 apologize for that. Just one moment. All right. Is that better? I didn't sign
24 up for any other meetings. Yes. So I did just want to talk through a couple
25 points. I think one of the questions that Your Honors just asked my
26 colleague, I think is important, and the question was, you know, assuming

1 that you don't accept their construction, do they have a response regarding
2 Nohara?

3 And Counsel gave a fairly long answer, and ultimately, his
4 conclusion was that their requirement is that a position error required a
5 specific measurement. It is not sufficient to have characterization,
6 description, you know, it's some other - something other describing
7 determined position error, other than a specific number. And that really is
8 their construction, and the fact of the matter is that is not what the claims
9 require.

10 But even if it was what the claims require, Watters' teachings
11 specifically disclose it, and it's disclosed in connection with - I'm sorry -
12 for example, 15(b). So what Watters says is that the positioning error,
13 HDOP, which is - Watters is very plain. HDOP is positioning error. And it
14 -

15 JUDGE WOOD: You're referring to Nohara now, correct? You
16 said Watters a few times. I just wanted to make sure your
17 (INDISCERNIBLE) is clear.

18 MR. HABER: Yes. I mean Nohara. I apologize. So Nohara -

19 JUDGE WOOD: That's Slide 44?

20 MR. HABER: Yes, Slide 44. We have paragraph 214 of Nohara.
21 The positioning error, HDOP - that is what Watters uses to describe
22 positioning error - is used specifically to create an error circle. An error
23 circle is displayed to the user, C err. That is the magnitude of positioning
24 error. It is a specific number. It is, you know, whatever the units that are
25 shown on that map, they're units of meters. That circle will have a radius
26 and units of meters. It is a specific number that is calculated from the

1 HDOP. So it is just one - their position is based on their erroneously
2 narrow construction, and it is simply not an accurate description of Nohara,
3 because Nohara does describe determining this error circle.

4 JUDGE WOOD: Can you respond to Patent Owner's argument in
5 the briefing - I don't believe it came up today - that the error circle is not
6 something that you relied on in your Petition, and it was a brand new
7 argument in the Reply, and kind of implicitly, that we should not consider it?

8 MR. HABER: Yes, Your Honor. So that is a brief argument that
9 they make. I think they have a sentence or two on that. The issue is that
10 Patent Owner put forward a very narrow claim construction in their Patent
11 Owner Response. That narrow claim construction was not something that
12 we addressed in our Petition, so in Reply to their Patent Owner Response, as
13 part of the response to their very narrow claim construction, we provided
14 some additional disclosures of Nohara that respond to their narrow position.

15 But, you know, all of these arguments about positioning error and
16 HDOP, that is all what we set forward in the Petition, and then when they
17 came in with an additional claim construction argument, we pointed to
18 additional teachings that are consistent with what we said in our Petition,
19 that further make clear that their construction really doesn't distinguish
20 Nohara, in any event.

21 The only other brief point that I wanted to make, and I wanted to
22 turn back to Dependent Claim - let me just see which one it is - Dependent
23 Claim, I think it's 39. Just scroll up to the beginning, where I have the
24 slides. Dependent Claim 39 and the related claims. As Your Honors noted,
25 there is a requirement to use at least one of those conditions. They really
26 have no response to the last two, the use of the last two, the last position

1 determined by GPS.

2 Watters discloses take a first fix and do a difference between those,
3 the current position and the last position, and the last time. Watters teaches,
4 again, to use a time. Patent Owner is able to come up with potentially other
5 ways that that time can be measured in the system, but again, that really is
6 irrelevant. What Watters actually teaches is the use of GPS, and GPS has
7 time characteristics. And so, the time that's disclosed by Watters is a GPS
8 time. One of skill in the art would have understood that.

9 JUDGE WOOD: It's your argument that there may be other ways
10 to calculate the time, such as an internal clock, but a fair reading of Watters
11 is that it's using the GPS time?

12 MR. HABER: Yes, Your Honor. It's similar to the other
13 arguments that we're making. There may be a number of obvious ways to
14 calculate time, but what Watters teaches is to use GPS, and then to use time,
15 and one of skill in the art would have understood that an obvious way to do
16 that would be to just use the time from the GPS.

17 The last point was a point that I - one of Your Honor's raised with
18 opposing counsel. The only evidence they have in the record that they
19 attempt to use to dispute the plain teachings of the Nohara prior art that
20 HDOP is a position error is a document that is not actually prior art. I think
21 that is, you know, a stretch. They are attempting to overcomplicate the
22 references, and bring in things that aren't actually prior art, to dispute claim
23 teachings of the prior art grounds that are at issue here.

24 With that, Your Honors, I think I can conclude my presentation,
25 unless Your Honors have any additional questions. We request that the
26 challenged claims be cancelled.

1 JUDGE WOOD: All right. Thank you, Mr. Haber. I do not have
2 any additional questions. I don't believe Judges Marschall or Browne do
3 either, so thank you for your presentation.

4 MR. HABER: Thank you, Your Honors.

5 JUDGE WOOD: Mr. Juggle, you have 20 minutes.

6 MR. JUGLE: Thank you, Your Honors. I almost certainly will
7 not need all of that, but there is one point that I would like to address. I'm
8 going to share my screen here. All right. Can everybody see my screen?

9 JUDGE WOOD: Yes.

10 MR. JUGLE: All right. You should be looking at an excerpt from
11 Nohara which Petitioner has just displayed, discussing how the circle,
12 referred to as C err, is generated. And what Nohara says is that it's
13 equivalent to the magnitude of the positioning error HDOP. So Nohara is
14 clear that to draw that circle, it is not doing anything else with HDOP to get
15 further down the road to position error. It is just taking the magnitude of
16 HDOP, presumably turning it into a radius or diameter, and drawing a circle
17 around it.

18 Now, what we have shown through Specht - and again, even
19 though this isn't prior art, it makes clear that HDOP was known to be a
20 statistical distribution - is that your magnitude of your HDOP, so whether
21 it's .6, .7, .8, doesn't give you your position error, necessarily. So at an
22 HDOP of - for example, to make the conversation easy, 1, roughly half of
23 your position errors are greater than 1, and half of them are less than 1, just
24 looking at this.

25 So taking HDOP and making it into a circle may allow Nohara to
26 present the user with something that makes the user feel good. I don't know.

1 But it doesn't provide the user with information about what their actual
2 position error is. It provides them with a circle that, at least based on later
3 statistical data, shows that about half of the position errors are going to fall
4 in that circle, and about half of them are going to be outside of that circle.

5 And you could do that for any value of HDOP, because HDOP is
6 just a single number. So you can draw a circle with a radius of .6, .7, .8.
7 Drawing a circle with a radius of HDOP isn't telling a user their position
8 error. And that is fundamentally our argument, that HDOP and the position
9 error are fundamentally different, because HDOP, at the end of the day, is
10 just a characterization of the curve that the position errors may fall on, not a
11 determination of the position error itself.

12 JUDGE WOOD: Mr. Jugle, is it safe to say that Nohara considers
13 HDOP to strongly correlate to position, position error?

14 MR. JUGLE: I think it's -

15 JUDGE WOOD: According to Figure 15(b)?

16 MR. JUGLE: I think it's fair to say that Nohara chooses to use
17 HDOP in lieu of using position error. Whether it's because Nohara believes
18 there's a strong correlation, or just because that was an easy measurement to
19 get to because it can be determined from the geometry of the system, I don't
20 think Nohara discloses that, and I'm not going to speculate on that for
21 Nohara.

22 JUDGE WOOD: Thank you.

23 MR. JUGLE: I do not have any other points I would like to raise
24 at this point. So if there are more questions, Your Honor, I'm happy to field
25 them, but otherwise I will rest, and ask that the Board find the claims of the
26 '206 Patent valid.

1 JUDGE WOOD: All right. Thank you, Mr. Juggle, Mr. Haber.
2 Thank you both for your presentations. I don't have any further questions.
3 Judge Marschall, Judge Browne? I think we are done here this morning, or
4 afternoon, rather. Thank you again, and we will take this case under
5 advisement. This hearing is adjourned.

6 MR. HABER: Thank you, Your Honors.

7 MR. JUGLE: Thank you, Your Honors.

8 (Whereupon, the above-entitled matter went off the record at 2:13
9 p.m.)

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