

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GENERAL MOTORS LLC,
Petitioner,
v.
EDWARD H. NORTRUP,
Patent Owner.

Case IPR2023-00994
Patent 10,444,028 B2

Record of Oral Hearing
Held: August 29, 2024

Before JEFFREY S. SMITH, GEORGIANNA W. BRADEN, and
MICHELLE N. WORMMEESTER, *Administrative Patent Judges*.

APPEARANCES:

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The above-entitled matter came on for hearing Thursday, August 29, 2024, commencing at 10:00 a.m. EDT, via Video-conference.

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

10:00 a.m.

JUDGE WORMMEESTER: Thank you. Good morning, everyone. We have our final hearing in IPR2023-00994. General Motors v. Edward H. Nortrup, concerning U.S. Patent No. 10,444,028. I'm Judge Wormmeester, and with me are Judges Braden and Smith. Thank you for being here today.

We want to start off by clarifying a few items. First, our primary concern is your right to be heard. If at any time during the proceeding you encounter technical or other difficulties that undermine your ability to adequately represent your client, please let us know immediately, for example, by contacting the team members who gave you the connection information.

Second, for the benefit of the judges, opposing counsel and Court Reporter, please identify yourself each time you speak. When not speaking, please mute yourself. Third, we have the entire record, including demonstratives. When referring to demonstratives, papers, or exhibits, please be explicit and identify any slide numbers or page numbers.

Finally, please note that members of the public may be listening to this oral hearing. Anyone have any concerns about that?

MR. BISENIUS: No.

JUDGE WORMMEESTER: Okay. Thank you.

MR. NORTRUP: No.

JUDGE WORMMEESTER: Thank you. Okay. Well, let's get the parties' appearances, please. Who do we have for Petitioner?

MR. BISENIUS: Patrick Bisenius and Joseph Herriges.

JUDGE WORMMEESTER: Okay. Great, thank you. And who will

1 be presenting the argument?

2 MR. BISENIUS: We will both be presenting.

3 JUDGE WORMMEESTER: Okay. Great, thank you. Good
4 morning, counsel, and thank you for being here with us. Patent Owner, who
5 do we have?

6 MR. NORTRUP: We have Ed Nortrup, and we have Steven Driscoll.
7 And on the phone, we have Barry Bumgardner. But Barry won't be
8 presenting today. I'll be doing most of the presenting and Steve may do
9 some of the presenting.

10 JUDGE WORMMEESTER: Okay, great. Thank you very much.
11 Welcome to everyone. We've set forth the procedure for today's hearing.
12 But just to remind everyone the way this will work, each party will have 60
13 minutes to present arguments. Petitioner will go first and may reserve
14 rebuttal time. Patent owner will then present its response and may reserve
15 surrebuttal time.

16 And we want to ask you to remember that the demonstratives you
17 submitted are not part of the record. The record of the hearing will be the
18 transcript. We'll maintain a clock and try to give you a warning when you're
19 reaching the end of your argument. Are there any questions before we
20 proceed?

21 MR. BISENIUS: No.

22 MR. NORTRUP: No, not here.

23 JUDGE WORMMEESTER: Okay. Great, thank you. Let's see. Mr.
24 Bisenius, will you be reserving any time today?

25 MR. BISENIUS: Yes, we'd like to reserve 15 minutes for rebuttal,
26 please.

1 JUDGE WORMMEESTER: Okay. I'll start the clock. And you can
2 begin when ready.

3 MR. BISENIUS: Good morning, Your Honors. My name is Patrick
4 Bisenius, representing Petitioner General Motors. I'm going to be discussing
5 the substantive arguments regarding application of the cited prior art
6 references to the challenged claims. And my colleague, Mr. Joseph
7 Herriges, is going to discuss the availability of the Simske reference as prior
8 art in this proceeding.

9 I'd like to start out by turning to slide 4 of Petitioner's demonstrative
10 slides. Here we have a brief overview of the '028 Patent. In general, the
11 '028 Patent is related to navigation systems that collect traffic information,
12 use that traffic information to calculate a fastest route to a destination, and
13 provide that information to drivers and their vehicles. The '028 Patent
14 describes it, one way in which it collects traffic information is by using cell
15 phones as probes.

16 On the lower left, highlighted in yellow here, it states the methods and
17 systems may include collecting a plurality of cell phone locations and
18 mapping locations of the cell phone locations. Turning to slide 5, here we
19 have claim 1 of the '028 Patent. The petition challenges all claims of the
20 '028 Patent, claims 1-31, but Patent Owner has only presented arguments
21 with respect to claim 1, and so therefore we will be focusing our
22 presentation on claim 1.

23 Here, I've highlighted a few elements of claim 1. In yellow, it recites
24 “wherein the traffic condition is at least in part based on a plurality of cell
25 phone speeds estimated through an assessment of multiple locations of each
26 of a plurality of cell phones.” Now, at this point in time of the proceeding,

1 there's no dispute between the parties that the references disclose tracking of
2 cell phone speeds as an assessment of multiple locations of each of the
3 plurality of cell phones.

4 The next element in green recites, “wherein each of the plurality of
5 cell phones further has a user initiated permission set comprised of a list of
6 authorizations that permit a user to selectively enable or disable access to
7 user cellphone location data.”

8 Now, the patent owner represented some arguments in their
9 preliminary response based on a narrow interpretation of this element, but
10 the patent owner has not re-raised that claim construction or those arguments
11 based on the narrow interpretation in their Patent Owner's response, and
12 therefore waived that argument.

13 At this point in time of the proceeding, there's no dispute that the
14 Knockart reference, the primary reference in the petition, discloses a user-
15 initiated permission set comprised of a list of authorizations that permit a
16 user to selectively enable or disable access to user location data of
17 Knockarts in vehicle system. The only dispute remaining is whether the
18 record demonstrates that it would have been obvious to implement such
19 functionality in a cell phone based on the Knockart-Feldman combination.

20 I'd now like to move ahead to slide 8 of Petitioner's slides. Here we
21 have some excerpts from Knockart, the primary reference used in the
22 petition. On the right here we have figure 1. Figure 1 shows a number of
23 vehicles that have in-vehicle Knockart systems. They're receiving signals
24 from GPS satellites, using that information to calculate their own locations
25 and provide that information to a centralized server.

26 Paragraph 74 on the left discusses that the communications between

1 the in-vehicle systems and the central server occur over a cellular telephone
2 system. It also describes some of the information provided from the vehicles
3 to the central server, including the starting location of the vehicle, the speed
4 of the vehicle, and the heading of the vehicle.

5 Looking at figure 1, we see that the central server is also receiving
6 information from an external information system. Paragraph 77 reproduced
7 on the left discusses that the external information can include additional
8 traffic information from other sources. So Knockeart discloses using the in-
9 vehicle systems as traffic probes to collect traffic information, and it's also
10 collecting additional traffic information from other external sources.

11 Figure 1 also shows a map provider in communication with the central
12 server. The central server uses this --

13 JUDGE BRADEN: Counsel?

14 MR. BISENIUS: Yes.

15 JUDGE BRADEN: We appreciate you going through this, but
16 perhaps you could jump ahead a little bit to Patent Owner's arguments about
17 self-reporting location data, and then their arguments that stem off of that.

18 MR. BISENIUS: Correct. All right. We can move ahead to slide 11.
19 So in a few minutes, I'm going to talk about the two different configurations
20 for the Knockeart-Feldman combination described in the petition and why
21 those two different configurations are important at this point in the
22 proceeding.

23 But with respect to the second configuration, which is the only
24 configuration that Patent Owner presents arguments against, the patent
25 owner has insisted over and over again that Feldman does not disclose self-
26 reporting of location information by cell phones.

1 Here on slide 14, we've reproduced several excerpts from the patent
2 owner's surreply. One example on the upper left, they stated, "Petitioner's
3 Ground One argument has a fatal flaw. The argument is based on
4 Petitioner's mistaken belief that Feldman discloses cell phones self-reporting
5 location data. Feldman does not disclose this." Another example on the
6 upper right, "Nowhere does Feldman disclose cell phones transmitting
7 location data as part of its technique for collecting traffic information."

8 Patent Owner has made this assertion over and over again, and all of
9 Patent Owner's substantive arguments are based on the assumption that this
10 assertion is true, but it is not. Turning to slide 15, we see a portion of
11 paragraph 53 of Feldman, and Feldman could not be more clear. Cell
12 phones self-report their location information. Other areas of Feldman
13 discuss the fact that Feldman receives traffic information from a variety of
14 sources.

15 One of those variety of sources is the source that the patent owner
16 focuses on in the patent owner's response, tracking of cell phones through
17 monitoring handovers between cell phone towers. That is one of the sources
18 of location information described by Feldman. But Feldman also expressly
19 discloses self-reporting location information by cell phones.

20 Here's one example. As we can see on slide 15, paragraph 53 states,
21 "the present invention features mobile sensors as most advantageous for
22 acquiring vehicular traffic data and information, even though they have
23 lower confidence levels." Then states, "A growing number of mobile
24 wireless communication devices are increasingly being installed or carried in
25 vehicles, and are capable of transmitting vehicular locations to a
26 computerized central data and information receiving and processing

1 system.”

2 So this sentence is very clear. The mobile sensors include mobile
3 wireless communication devices, and those mobile wireless communication
4 devices are capable of transmitting their own vehicular location to the
5 central server.

6 And then the very next sentence tells us what types of devices are
7 examples of these mobile wireless communication devices. It states, “Such
8 mobile wireless communication devices are telemetric devices with GPS
9 capabilities, anti-theft devices, and driver-carried devices such as computer
10 laptops and cellular phones.”

11 So in just this one example in Feldman, we see the mobile wireless
12 communication devices are capable of transmitting their own locations to the
13 server, and one example of those mobile wireless communication devices
14 are cellular phones. Now, there are numerous other examples in Feldman of
15 self-reporting location information by cell phones, and I'm going to get to
16 those in several slides. But I wanted to highlight this section early.

17 And just in case this clear language of Feldman wasn't clear enough,
18 turn to slide 16, with Dr. Braasch discussing what a POSITA would have
19 understood from reading this section of Feldman. And Dr. Braasch states,
20 Feldman makes clear that one of its sources of traffic information is GPS-
21 enabled cell phones transmitting vehicular locations to a central traffic
22 server. He then analyzes the sentences from paragraph 53 of Feldman that I
23 just discussed with respect to the previous slide.

24 Now, notably, the patent owner has not provided any evidence to
25 refute this analysis by Dr. Braasch. Patent Owner has not presented any
26 expert testimony to refute this. And after Dr. Braasch submitted his second

1 declaration, which is quoted here, the patent owner did not seek to depose
2 Dr. Braasch. So there's currently no evidence to refute this clear analysis by
3 Dr. Braasch of the clear teachings of Feldman.

4 As I mentioned, I'm going to discuss some other portions of Feldman,
5 discuss self-reporting of location information by cell phones a little later on
6 in the slides. But for now, I want to turn to slide 18 of Petitioner's slides.
7 And I want to discuss the two proposed configurations for the Knockeart-
8 Feldman combination as articulated in the petition.

9 So here, in yellow, we stated that the first configuration would involve
10 applying the teachings of Feldman to Knockeart to implement all or a
11 portion of Knockeart's in-vehicle systems as cellular phones for the purpose
12 of collecting probe vehicle traffic data.

13 We then state, and I've highlighted this in green, this is our second
14 proposed configuration, alternatively or additionally, so an alternative or
15 additional configuration, a POSITA would have been prompted to
16 implement Knockeart's system to utilize Feldman's vehicle traffic data
17 collected by tracking vehicle-carried cellular phones as one of the external
18 traffic information sources expressly described in Knockeart.

19 So as I discussed earlier, Knockeart receives traffic information from
20 external sources. So in this alternative configuration, we said, okay, you are
21 going to use the specific cell phone from Feldman as traffic probes that are
22 going to provide some of that external traffic information. But as we've
23 shown here, this is our alternative --

24 JUDGE WORMMEESTER: Sorry, I have a question about the
25 distinction. What's highlighted in yellow, the primary configuration, is that
26 the cell phones being implemented as the in-vehicle systems?

1 And then I guess I'm having a hard time understanding, or I guess I
2 just want clarification on the difference between that and the alternative
3 configuration. Is it that you're maintaining the in-vehicle system in
4 Knockeart, but you're adding the cell phone in the vehicle that also grabs
5 data? So now you have two sources of information, the in-vehicle system as
6 well as the cell phone?

7 MR. BISENIUS: The proposed configuration is actually slightly
8 different, and I'm going to get into the details of that in some other examples
9 in later slides. But the proposed configuration in this first configuration for
10 the combination is that we're taking Knockeart's system with all its
11 functionalities, in-vehicle system, and we're simply implementing it as a cell
12 phone.

13 So Knockeart already discloses it has capabilities to communicate
14 over the cellular telephone network, and Knockeart also discloses it already
15 has capabilities for audio communication because it describes audio
16 communication with an operator at the central server location. And all we're
17 doing is we're taking Knockeart's system with all its functionality and
18 implementing it as a cell phone.

19 JUDGE WORMMEESTER: Okay.

20 MR. BISENIUS: That's the first proposed configuration. So in that
21 configuration, the resulting cell phone has all the functionality of
22 Knockeart's system, and acts as --

23 JUDGE SMITH: And counsel, let me ask you. If Knockeart already
24 communicates over a cell phone system, why isn't that enough to describe
25 the cell phone? What's the difference between communicating over the cell
26 phone system and communicating using a cell phone?

1 MR. BISENIUS: Well, we believe that it certainly would be
2 appropriate to view Knockeart as disclosing a cellular phone --

3 JUDGE SMITH: The reason why -- I mean, you don't think it's
4 enough, otherwise you wouldn't have brought in the other reference. Why
5 are you bringing in the other reference?

6 MR. BISENIUS: Out of an abundance of caution, honestly.
7 Knockeart describes that it communicates over a cellular network, but that
8 includes data communication over a cellular network, and describes voice
9 communication with the operator at the central server system. What may
10 arguably be missing from Knockeart is that it does not actually expressly
11 describe the in-vehicle system as a cell phone, and does not expressly
12 discuss sending and receiving outgoing calls to any available number.

13 It discusses voice communications with the operator, but doesn't
14 expressly describe that you could place an outgoing call to anyone or receive
15 an incoming call from anyone.

16 JUDGE SMITH: So if you can already communicate over the cell
17 phone network using Knockeart, why do you need the cell phone to do it?
18 Knockeart already does it.

19 MR. BISENIUS: Out of an abundance of caution, in case the term
20 cellular phone was interpreted narrowly in the claims --

21 JUDGE SMITH: Well, no, I mean, in terms of -- from what a person
22 of ordinary skill would do. Like a person of ordinary skill is looking at this
23 device that already communicates with a cell phone network, and then he's
24 going to go to the expense of redesigning the system to use a cell phone in
25 place of a system that already -- what benefit is there to the person of
26 ordinary skill in doing that?

1 MR. BISENIUS: So if we could turn to slide 9 of Petitioner's slides.
2 On the right here we have figure 2 of Knockeart, and there wouldn't be a
3 massive redesign required. As we see, it already has cellular communication
4 capabilities, and it already has hands-on --

5 JUDGE SMITH: Well, I'm asking you about the benefit. What is the
6 benefit?

7 MR. BISENIUS: The benefit is that the user would be able to place
8 outgoing phone calls to anyone they want to call, not just the operator of the
9 traffic system, and receive incoming calls from anyone that wishes to call
10 them.

11 I'd like to note that the claims do not require that the claimed cellular
12 phone is a handheld cellular phone. I know in the year 2024, when we hear
13 the word cell phone, we instinctually think about the devices we carry
14 around in our pockets. But a cellular phone has a broader definition than
15 that.

16 A cellular phone can be a vehicle-installed device, and Dr. Braasch
17 actually testified that in the combination, Knockeart's system could be
18 implemented as a vehicle-installed cellular phone, or as a handheld-carried
19 cellular phone. There would be benefits to both configurations.

20 JUDGE SMITH: I'm still not hearing the benefit. What are the
21 benefits?

22 MR. BISENIUS: Well, the benefit of implementing Knockeart's in-
23 vehicle system to have full cellular telephone communication capabilities
24 would be then the user could use that system to send outgoing calls to
25 anyone that they want to call. They can call their parents, call their family.
26 They wouldn't be restricted to only communicating with the operator of the

1 vehicle navigation system, which Knockeart does not say it's restricted to
2 that, but it just doesn't give other express examples.

3 JUDGE SMITH: But I mean in terms of figuring out this roadway
4 map with traffic conditions. There's no benefit to that, is there? There's no
5 benefit. I mean, you have this Knockeart system that figures out the traffic
6 conditions using the system that it currently has, and then you add a cell
7 phone to it, and it still functions to figure out traffic conditions. I mean,
8 there's no real benefit in terms of determining traffic conditions to adding a
9 cell phone. At least, I haven't heard it yet. What's the benefit?

10 MR. BISENIUS: We would agree that there's a benefit of -- sorry, we
11 would agree that all the functionality of Knockeart's system with respect to
12 using those in-vehicle systems as traffic probes would remain the same.
13 And so, one improvement, as I mentioned, is that now you have full cellular
14 capability with Knockeart's in-vehicle system.

15 But we also propose that in the resulting combination, you could
16 implement Knockeart's system as a handheld cell phone, and therefore use
17 all the functionality from Knockeart's system, put it into a handheld cell
18 phone, and then this would prevent a user from having to buy a specialized
19 system in the vehicle and a separate handheld cell phone that they can carry
20 around outside their vehicle.

21 So the benefit there would be that the user only has to buy one device.
22 They'd have a cell phone, they would have all the functionality of
23 Knockeart's system in their cell phone, and then they'd just have one device.

24 But then, alternatively, we also describe the fact that you could implement
25 Knockeart's system as an in-vehicle installed cellular phone, and that would
26 allow for full cellular communication capabilities by that device.

1 JUDGE SMITH: Okay.

2 MR. BISENIUS: So I'd like to turn to slide 19.

3 JUDGE WORMMEESTER: I'm sorry, I just wanted to go back to my
4 original question. Can you go over the alternative configuration just so I can
5 understand the differences between the primary and alternative
6 configurations?

7 MR. BISENIUS: Okay, yeah. Yes, turn to slide 18. The primary
8 configuration, as we were just discussing, is you take Knockart's in-vehicle
9 system, keep all the functionality of Knockart's in-vehicle system, and
10 simply implement it as a cell phone. So that could either be an in-vehicle-
11 mounted cell phone, or it could be a user-carried cell phone that has all the
12 functionality of Knockart's system.

13 The alternative configuration that we've described here is that
14 Knockart's system would remain exactly how it is, and that one of those
15 external traffic sources would be Feldman's system, which Feldman collects
16 location information and traffic information from a variety of sources. One
17 of those sources being cell phones that self-report their own location
18 information.

19 JUDGE WORMMEESTER: Okay.

20 MR. BISENIUS: So the reason that these two different configurations
21 now become important is because Patent Owner only presents arguments
22 with respect to the second configuration. All of Patent Owner's arguments
23 are based on the assertion that Feldman does not disclose self-reporting of
24 location information by Feldman's cell phones.

25 As I've discussed a little bit, and I'm going to get to in additional
26 detail, Feldman does disclose self-reporting of location information by cell

1 phones. But even ignoring that for now, the patent owner has presented no
2 arguments with respect to the primary proposed configuration in the petition
3 that would take Knockeart's system with all of Knockeart system's
4 functionality and simply implement it as a cell phone.

5 The patent owner has not argued that a POSITA would not have been
6 motivated to implement Knockeart's system as a cell phone. The patent
7 owner has not identified any problems that might occur with attempting to
8 implement Knockeart's system as a cell phone. And the patent owner has
9 identified no flaws with any of the several articulated reasons in the petition
10 that we described as to what had motivated a POSITA to implement
11 Knockeart's in-vehicle system as a cell phone.

12 So I'd like to turn to slide 19 of Petitioner's slides. On the upper left
13 here, we have a sentence from page 10 of the petition. The patent owner has
14 seized on this one sentence and reads it out of context, ignores everything
15 else in the petition and everything stated by Dr. Braasch in his first
16 declaration, and insists that the Board must take a narrow interpretation of
17 the sentence.

18 He recites, in either case, the resulting system would have used
19 Feldman's techniques for collecting traffic information using vehicle-carried
20 cellular phones to populate Knockeart's traffic database.

21 Now, Patent Owner is interpreting this sentence narrowly and out of
22 context to insist that in the proposed combination, we can only rely on the
23 techniques described by Feldman for collecting traffic probe data, and we
24 must ignore all the disclosures of Knockeart with respect to collecting
25 vehicle traffic probe data.

26 But if we look at the rest of the petition or the rest of the statements of

1 Dr. Braasch in his first declaration, it becomes very clear that what we meant
2 here, and what is clear here, is that we're not taking only the teachings of
3 Feldman with respect to collecting traffic probe data and throwing away
4 everything from Knockeart. We're taking Feldman's broader teaching, that
5 cell phone --

6 JUDGE WORMMEESTER: I'm sorry --

7 JUDGE SMITH: He dropped out.

8 JUDGE WORMMEESTER: -- I think you froze.

9 JUDGE SMITH: He's gone, yeah, he's gone.

10 JUDGE BRADEN: So perhaps should we go off the record for about
11 5 minutes and let's see if we can get him back online?

12 JUDGE WORMMEESTER: That works. Let's go off the record.

13 (Whereupon, the above-entitled matter went off the record at 10:25
14 a.m. and resumed at 10:25 a.m.)

15 MR. BISENIUS: Oh, we're back on the record?

16 JUDGE WORMMEESTER: Yes.

17 MR. BISENIUS: All right. So as I was discussing what this actually
18 meant in the petition, it becomes clear when you read it in context by the
19 sentence in the upper left of slide 19, is that we're taking Feldman's broader
20 teaching that you can use cell phones as traffic probes. And we're simply
21 applying that to Knockeart's system with all of Knockeart's system's
22 functionality and simply implementing it as a cellular phone.

23 This becomes clear when we look at the rest of the petition and Dr.
24 Braasch's first declaration. On the lower right of slide 19, just the next
25 paragraph in the petition, we describe that a POSITA would have recognized
26 that it would have been beneficial to replace, enhance, or supplement at least

1 some of the in-vehicle location tracking systems described by Knockeart
2 with cell phone based location tracking.

3 And so we can see here one modification we propose, which relates to
4 our second proposed configuration, is you replace those traffic probes with
5 Feldman's cell phone traffic probes. We also propose enhancing or
6 supplementing those in-vehicle systems by simply implementing them as
7 cell phones.

8 Turn to slide 20, when discussing the reasons to combine Knockeart
9 and Feldman, we expressly stated that Knockeart expressly discloses that the
10 in-vehicle system communicates wirelessly with the server over a standard
11 analog cellular telephone system or digital cellular telephone links. Thus, it
12 would have been obvious to implement Knockeart's in-vehicle system using
13 cell phones.

14 We could not have been more clear. We're implementing Knockeart's
15 in-vehicle system with all of its functionality as a cell phone based on the
16 broad suggestion of Feldman that you can use cell phones as traffic probes.
17 I'd like to skip ahead to slide 26 of Petitioner's slides. So here we have a
18 discussion --

19 JUDGE WORMMEESTER: I'm sorry, I have a quick question about
20 the alternative configuration. If you're adding a cell phone to Knockeart's
21 in-vehicle system and the claim says the traffic condition is at least in part
22 based on a plurality of cell phone speeds, what is tracking the cell phone
23 speed at this point? Is it the cell phone itself or is it the in-vehicle system in
24 the alternative configuration?

25 MR. BISENIUS: In the alternative configuration in which we're
26 relying on Feldman's specific cell phones as the vehicle traffic tracking

1 devices, the cell phones are self-reporting their location information and then
2 the server is looking at the changes in location and the timestamps of those
3 changes in location to determine the speed of the cell phone.

4 JUDGE WORMMEESTER: Okay. So in both configurations the cell
5 phone is self-reporting its location.

6 MR. BISENIUS: Correct.

7 JUDGE WORMMEESTER: Okay, got it. Thank you.

8 MR. BISENIUS: So looking at slide 26, this refutes Patent Owner's
9 assertion that the petition throws away all functionality from Knockeart's
10 system with respect to traffic probes and relies only on Feldman's teachings
11 with respect to using cell phones as traffic probes. This element 1.4 recites
12 wherein the traffic condition is at least in part based on a plurality of cell
13 phone speeds estimated through an assessment of multiple locations of each
14 of a plurality of cell phones.

15 Now if we'd intended to throw out all of Knockeart's functionality,
16 then it would make no sense that we started out the discussion of this
17 element describing Knockeart's system's functionality. And we
18 demonstrated that Knockeart's in-vehicle system has all this functionality, it
19 simply just doesn't call its in-vehicle system a cell phone. Later on in this
20 analysis we discussed how it would have been obvious to implement
21 Knockeart's system as a cell phone.

22 And then for our alternative configuration, we discuss how Feldman
23 also discloses this through Feldman's technique of self-reporting location
24 information from cell phones.

25 Turning to slide 27, we once again see several examples from the
26 petition where we were clear about what our first configuration was. On the

1 upper left, we discussed Knockeart further describes that the user interface
2 of the in-vehicle cellular phone probes in the resulting Knockeart-Feldman
3 combination includes, and then we describe what's included in the user
4 interface.

5 So once again, here we're describing you're keeping the functionality
6 from Knockeart, you're simply implementing it as a cell phone. The next
7 excerpt from page 27 of the petition, we discuss that the Knockeart-Feldman
8 combination in which the in-vehicle systems for probe vehicles are
9 implemented as cell phones. So once again, our primary proposed
10 configuration for the Knockeart-Feldman system is simply taking
11 Knockeart's in-vehicle system and implementing it as a cell phone.

12 Slide 28 is another example in which we discuss in-vehicle systems of
13 probe vehicles implemented as cell phones in the Knockeart-Feldman
14 combination are expressly described as presenting lists and then describe
15 more disclosures from Knockeart. We could not have been more clear.
16 We're retaining, in our primary proposed configuration, we're retaining the
17 functionality of Knockeart systems, simply implementing it as a cell phone.

18 Turning to slide 29, we have Dr. Braasch discussing these two
19 different configurations as well. In yellow, we discuss the primary
20 configuration is all of the in-vehicle systems described by Knockeart would
21 have been implemented as vehicle-mounted or user-carried cell phones.

22 So once again, he's describing that either you could use Knockeart's
23 in-vehicle system, already installed in the vehicle, simply add full cellular
24 capabilities to it, or it could be a user-carried cell phone that has all the
25 functionality of Knockeart's system. He then describes the alternative
26 configuration shown here in green.

1 In the alternative or in addition to such a modification to Knockeart's
2 system based on Feldman, a POSITA would have been prompted to
3 implement Knockeart's system to utilize Feldman's vehicular traffic data
4 collected by tracking vehicle-carried cellular phones. We could not have
5 been more clear that there were two different configurations and Patent
6 Owner has presented no arguments with respect to the first configuration.

7 I'm going to skip ahead a couple of slides to slide 31. I have several
8 slides in here showing excerpts from Dr. Braasch's first declaration, which
9 he described as his first primary configuration. All these portions of Dr.
10 Braasch's first declaration are cited in the petition, so I'm not going to read
11 all of them, but I just want to highlight one more on slide 31.

12 Here in yellow, he clearly described implementing Knockeart's in-
13 vehicle system with already existing cellular phones. Patent Owner has
14 presented no arguments that counter or go against this primary proposed
15 configuration of simply taking all the functionality from Knockeart's system
16 and implementing it as a cell phone.

17 JUDGE WORMMEESTER: I have one question. Sorry, I keep
18 asking about the alternative configuration. If you're adding the cell phone
19 and you're tracking the cell phone, is the in-vehicle system still providing its
20 location? So are you double-tracking? Are we tracking the car twice, once
21 through the cell phone and once through the in-vehicle system?

22 MR. BISENIUS: You wouldn't be tracking the car twice. You'd be
23 tracking different cars. The claim 1 and the rest of the claims in the '028
24 Patent do not require the vehicle that's receiving this information to be a cell
25 phone traffic probe. It just says that it's tracking location data of cell phones
26 and using those cell phone speeds as traffic data.

1 And so, in that second alternative configuration, someone that paid for
2 Knockeart's system is going to have Knockeart's in-vehicle system, but some
3 of the traffic information used by the central server is going to come from
4 cell phones of people that subscribe to Feldman's system, a different system,
5 and it's going to be tracking their cell phones.

6 And so the cell phone that's being tracked is in a different vehicle in
7 that alternative proposed configuration. And the claims don't require that the
8 tracked cell phone is also the system that receives this traffic information.

9 JUDGE WORMMEESTER: Okay. So in that configuration, you're
10 just adding the phone to the system, not to the actual vehicle itself.

11 MR. BISENIUS: Correct.

12 JUDGE WORMMEESTER: So some cars will have the cell phone as
13 a probe, and some cars with the in-vehicle system will also be used as
14 probes.

15 MR. BISENIUS: Correct.

16 JUDGE WORMMEESTER: Okay. All right, thank you.

17 MR. BISENIUS: So turning to slide 35 of the Petitioner's slides, I am
18 going to discuss the alternative configuration here. And this is based on
19 Feldman's teaching that here highlighted in yellow on the left, it acquires a
20 variety of the vehicular traffic data and information associated with the
21 oriented road section network from a variety of sources, and then calculates
22 a mean normalized travel time value for each oriented road section.

23 And so what's important here is that it's collecting from a variety of
24 sources. The patent owner in their presentation is going to focus on one of
25 those sources, because Feldman is clear. It doesn't want to limit itself to any
26 one source. It doesn't want to limit itself to only devices that are capable of

1 self-reporting their location information. So it will track some cell phones
2 based on cell phone tower handovers. That's one of the sources of vehicular
3 traffic data.

4 But Feldman also expressly describes that one of its sources is self-
5 reporting of location information by cell phones that have that capability.
6 And so on the same slide, looking at paragraph 24, it states that using
7 vehicular traffic data and information acquired from mobile sensors of a
8 cellular telephone mobile communication network.

9 Now in a few more slides, I'm going to talk about Dr. Braasch's
10 analysis of this paragraph, but basically it states that when Feldman
11 describes a mobile sensor of a cell phone mobile communication network,
12 it's talking about a cell phone. When it says that it acquires the information
13 from that device, from the cell phone, it means--it's exactly what it says. It's
14 acquiring the information from the cell phone, not from the network tracking
15 that cell phone.

16 This becomes clear on the next slide, slide 36. On the left, we have
17 paragraph 8 from Feldman, which we discussed in the petition and
18 Petitioner's reply. This describes that it uses well-known global positioning
19 systems and or other types of mobile wireless communication or electronic
20 vehicular tracking technologies. Then it lists an example of one of those
21 with cellular telephones.

22 Patent Owner has turned to the end or in this sentence, insisted that
23 that completely separates the GPS-enabled devices from all the rest of the
24 devices listed in the sentence, such as the cellular telephones, but Dr.
25 Braasch has testified that a POSITA reading this would have understood it's
26 describing cellular telephones as one of these GPS-enabled devices. And

1 that becomes clear when we look on the right side of slide 36.

2 I've talked about paragraph 53 before, but once again, it describes
3 mobile sensors. It says mobile sensors include mobile wireless
4 communication devices. Those mobile wireless communication devices are
5 capable of transmitting vehicular locations to computerized central data, and
6 information receiving the processing system. And those mobile wireless
7 communication devices include cellular phones.

8 Feldman describes other methods of tracking cellular phones, but it
9 also does expressly disclose self-reporting of location information by
10 cellular phones to the server system. Now note here that it uses the term
11 mobile sensors. Other places in Feldman, rather than listing all the different
12 examples of mobile sensors, since it already told you those here, it simply
13 just uses the term mobile sensors.

14 So on slide 37, and we see paragraph 35 of Feldman, and it discusses
15 that mobile sensors are electronic devices providing dynamic vehicle
16 location and velocity data and information to the computerized central traffic
17 data and information handling system. So once again, self-reporting of
18 location information by mobile sensors and other portions of Feldman
19 expressly disclose that an example of a mobile sensor is a cell phone.

20 Turn to slide 38, we have Dr. Braasch discussing these disclosures of
21 Feldman, and he states, Feldman makes clear that one of the sources of
22 traffic information is GPS-enabled cell phones transmitting vehicular
23 locations to a central traffic server.

24 Turn to slide 39, we have Dr. Braasch discussing paragraph 24 of
25 Feldman, and he states, after quoting paragraph 24, he states, this disclosure
26 reveals that Feldman expressly describes acquiring vehicular traffic data

1 from the mobile phones themselves and not exclusively from monitoring cell
2 tower handovers.

3 JUDGE WORMMEESTER: And counselor, you have about 10
4 minutes left.

5 MR. BISENIUS: Thank you. Turn to slide 40. Once again, Dr.
6 Braasch is discussing paragraphs 7 and 8 of Feldman, and once again
7 concludes that what a POSITA would have understood from Feldman is that
8 at least some of the cellular phones described by Feldman are tracked
9 through self-reporting of location information from the cell phones.

10 Turn to slide 41, we see Dr. Braasch discussing paragraphs 35 and 53
11 of Feldman. And I'll point out, this is from Dr. Braasch's first declaration, so
12 this has been on the record the entire time. And he describes, the mobile
13 sensors or electronic devices provide dynamic vehicular location and
14 velocity data and information to the computerized central traffic data and
15 information handling system.

16 And then in this same paragraph, he discusses how Feldman discloses
17 that one express example of such mobile sensors are cellular phones. Are
18 there any additional questions on the second proposed configuration for the
19 Knockheart-Feldman combination?

20 JUDGE WORMMEESTER: Not from me, thank you.

21 MR. BISENIUS: Just very briefly, turning to slide 43, I'm not going
22 to read all these quotes here. We had an additional argument in the
23 petitioner's reply about how Knockheart's technique for restricting access to
24 location information of a probe would have been equally applicable to
25 Feldman's technique for tracking cell phones through handovers.

26 We've discussed quite a bit how it clearly would have been applicable

1 to techniques where the cell phones self-report their location information,
2 but in the petitioner's reply, we also discussed that it would have been
3 applicable to Feldman's technique for tracking cell phones based on cell
4 phone tower handovers.

5 I'm not going to get into the details about that argument here. This
6 argument is not necessary for the Board to find it in favor of the petitioner,
7 and so therefore, we'll rest on the papers with respect to this particular
8 argument.

9 JUDGE WORMMEESTER: Thank you.

10 MR. BISENIUS: If there are no further questions about the
11 application of the Knockeart-Feldman combination to the challenge claims,
12 I'm going to turn things over to my colleague, Mr. Herriges, and he's going
13 to discuss why Simske is available as prior art in this proceeding.

14 MR. HERRIGES: Good morning, Your Honors. Again, may it
15 please the Board. Joe Herriges for General Motors, Petitioner. In the
16 interest of time, I'm going to be pretty brief here, but just briefly address
17 what's basically a legal argument about the status of Simske as prior art
18 under Section 102(e).

19 And as my colleague Mr. Bisenius referenced, this is relevant to
20 claims 7 and 8. There's no real dispute here that is a general matter. The
21 prior art date for a published patent application is the date of that
22 application, not the date of its eventual publication. This has been well-
23 established going back to the original pre-statutory Alexander Milburn case
24 from the Supreme Court. It's been subsequently reiterated in Hazeltine and
25 backed in cases from the Supreme Court and Federal Circuit.

26 And it's also been the long-running practice of the PTO in ex-parte

1 proceedings and then continuing into IPRs after the passage of the AIA.
2 Indeed, as Your Honors are likely aware, the PTO intervened in the linked
3 Samsung case that Nortrup cites in their papers to make this position clear,
4 stating that for as long as patent applications have been published, quote, the
5 USPTO has consistently applied the generally applicable priority rule for
6 patent applications in the context of examinations and in our partners'
7 review, and there is no reason to think that Congress intended otherwise with
8 the passage of the AIA. And this makes good sense.

9 If you look at the interaction of Section 311 and Section 102, Section
10 311B articulates categories of prior arts that can be used to challenge a
11 patent in an IPR, patents and printed publications. The question of whether
12 Simske falls into that category is undisputed. There's no dispute here that
13 Simske is a printed publication by virtue of its publication by the PTO. The
14 question then of whether Simske is indeed prior art is answered by separate
15 statutory section of Section 102.

16 And consistent with Supreme Court, Federal Circuit, and the PTO's
17 longstanding practice on this issue, Simske is prior art under 102(e), and
18 there's no reason to treat it differently than the courts have historically, than
19 the PTO has historically as well, and we would urge Your Honors to
20 continue to follow that judicial and agency practice in this proceeding.

21 So if there are no questions on this particular issue, I think we'll
22 reserve the remainder of our time for rebuttal.

23 JUDGE WORMMEESTER: I don't have any other questions. Okay,
24 great. You'll have about 5 minutes left.

25 MR. HERRIGES: Thank you, Your Honors.

26 JUDGE WORMMEESTER: Mr. Nortrup, will you be reserving any

1 time?

2 MR. NORTRUP: Yes, we'll reserve 20 minutes.

3 JUDGE WORMMEESTER: All right, you can start when you're
4 ready.

5 MR. NORTRUP: All right, thank you. Well, good morning. It is still
6 morning. And if it pleases the court, I'm Ed Nortrup, counsel for the patent
7 owner. I am also the patent owner and the inventor. Not that it matters
8 much at the moment, but just so you're aware. I have my co-counsel here,
9 Steve Driscoll. He may be helping present as we go through. And Barry
10 Bumgardner, he's on the phone. He won't be assisting in the presentation, at
11 least we don't think so, hence he's on the phone.

12 I did want to point out that I don't qualify for the LEAP program. I
13 did look at it, but my years of practicing prevent that. But otherwise, I've
14 not ever presented to the Board or in a federal district board either. So just
15 maybe latitude where needed. I don't think I need any latitude. And, you
16 know, I wanted to -- let me share my screen here. I'm not sharing my
17 screen. Look at this. Let me share the presentation. Can you see the
18 presentation?

19 JUDGE WORMMEESTER: Yes, thank you.

20 MR. NORTRUP: Okay, great. So, you know, I think that this IPR is
21 pretty straightforward. I think the process has worked well to flush out the
22 issues. I think we are very narrow in our conversation right now. I'll try to
23 emphasize things I think that you already know and certainly answer your
24 questions to the best of my ability.

25 If we move on to slide 2 here, we see that we're talking about
26 Petitioner's argument and the combination, you know, the Knockeart-

1 Feldman combination fails to disclose all the elements of the claim, of the
2 claims. And there's one independent claim and the rest are dependent. And
3 so there's no disclosure of self-reporting cell phones.

4 That's the big nut here, I think, is that I think that these sections that
5 petitioner is referring to are not disclosing a self-reporting cell phone. And
6 thus there's no ability to enable or disable access to location data.

7 JUDGE BRADEN: But counselor, what about paragraph 53 of the
8 Feldman reference? Could you go ahead and jump to that and address
9 Petitioner's argument that the cell phones are capable of transmitting vehicle
10 location and self-reporting that location data?

11 MR. NORTRUP: Yeah, I'll love to. Hang on one sec. And what I
12 want to do is bring up that paragraph. And let me see if I can share. I'm
13 going to try to share that PDF with you so we're all looking at it.

14 JUDGE BRADEN: Actually, counselor, you don't need to share it
15 with us. If you'll just cite to it, we have it electronically.

16 MR. NORTRUP: Okay, great. Okay. So what we have there is --
17 oops. So when looking at Feldman paragraph 53, I'll start off by saying that
18 there's nothing in here, you know, talking about a cell phone that's
19 transmitting the cell phone's location.

20 If we go right to the end column, there are no columns, in the second
21 column of page 6, what we have is -- I'll start with the however, right?
22 However, the present invention features mobile sensors as the most
23 advantageous for acquiring vehicle traffic data and information, even though
24 they have lower confidence levels.

25 First of all, lower confidence levels than what? If we go to the end of
26 the prior column, you see that it started off with systems of fixed sensors and

1 traffic reports of historical and or events related to vehicular data and
2 information are commonly the most common sources. So they're talking
3 about, like induction loops and whatnot, induction loops under the ground or
4 cameras that are at fixed locations and they're saying what we really want to
5 focus on now are mobile sensors.

6 And I know Petitioner tries to suggest that what is meant by mobile
7 sensors is a phone, but mobile sensors are really a larger category of things
8 and, you know, meant to self-locate. So we have these devices out there that
9 are self-locating, like Knockeart, and it says next, a growing number of
10 wireless communication devices separate from these mobile sensors.

11 A growing number of wireless communication devices are
12 increasingly being installed and carried in vehicles. And are capable of
13 transmitting vehicle locations. It does not say capable of sending cell phone
14 locations. And so that's clear. It's very much, you know, like not --

15 JUDGE SMITH: Mr. Nortrup, how is it clear? I mean, I think that
16 there's a presumption implicit in this sentence that the cell phone is
17 transmitting the vehicular locations because the cell phone is within the
18 vehicle. That's how it knows the vehicle location. Isn't that -- how else
19 would the cell phone know the vehicle's location?

20 MR. NORTRUP: Yes. So I think what's being said here. Great
21 question. And I definitely want to stick on this with you. What's really
22 happening here is they're saying that there are mobile sensors in vehicles like
23 a GPS system in a vehicle. And we can now get access to that data on the
24 vehicle by using mobile communication devices. And so the mobile
25 communication device here is transmitting the data that's from the
26 navigation system, for example, in the vehicle. Now, I agree --

1 JUDGE BRADEN: But counselor, the last sentence specifically says
2 such driver carried devices such as computer laptops and cellular phones.

3 MR. NORTRUP: Yeah. So --

4 JUDGE BRADEN: And does that not undercut your argument?

5 MR. NORTRUP: Yeah, because that's a wireless communication
6 device. That's not a sensor, right? So it starts off with we want to use
7 sensors. We like sensors. We put them in the vehicles like a GPS --

8 JUDGE BRADEN: It says a growing number of mobile wireless
9 communications devices.

10 MR. NORTRUP: Yeah.

11 JUDGE BRADEN: And one of the examples of one of these wireless
12 communication devices is a cell phone.

13 MR. NORTRUP: Yeah, agreed. And what I'm agreeing, what I'm
14 saying is that the wireless communication device, in this situation, in these
15 paragraphs, it's a phone. It can be a phone. Let's say the wireless
16 communication device is a phone, there's nothing in this paragraph saying
17 that it's sending the location of the phone. Okay? We don't know where the
18 phone is. We know where the vehicle is, right? And the thing that Feldman
19 points out to us very well is that there's a real difference between a cell
20 phone's location and a vehicle's location. A cell phone --

21 JUDGE SMITH: I mean, Mr. Nortrup, I'm still not clear on how the
22 cell phone is going to know the location of the vehicle.

23 MR. DRISCOLL: May I speak, may it please the court. I'm Steve
24 Driscoll. I'd like to jump here if I could, Mr. Nortrup. I'd like to point out
25 that there is an ambiguity to this paragraph, as Mr. Nortrup has highlighted.
26 It talks about vehicle location. The claim is specific to cell phone location.

1 And that's an important distinction. Okay? That's not a minor detail. We're
2 talking about cell phone location. It doesn't say cell phone location here. It's
3 ambiguous, but the one thing that we know for sure is --

4 JUDGE BRADEN: But, Mr. Driscoll, it specifically says driver
5 carried devices.

6 MR. DRISCOLL: Right.

7 JUDGE BRADEN: Such as cell phones.

8 MR. DRISCOLL: That's correct. What I'm just --

9 JUDGE BRADEN: So the cell phone is being carried by the driver in
10 the vehicle.

11 MR. DRISCOLL: Yes, I agree with that. So there is a driver carried
12 cell phone. Let's call it cell phone, and that it's capable of transmitting
13 vehicle location. It doesn't say how that location data is gathered. There's
14 nothing in there that talks about gathering cell phone location data, nothing.
15 There's nothing --

16 JUDGE WORMMEESTER: Sorry. And paragraph 55, just if you
17 continue reading down from where we're looking at, it talks about locations
18 of mobile sensors, right? So why would it talk about locations of mobile
19 sensors if location of the vehicle is something separate? Paragraph 55,
20 fourth line. The second full sentence.

21 Well, the first sentence talks about acquiring the vehicle traffic data
22 and information from a mobile sensor system, which is performed by
23 tracking a sample of mobile sensors, which I believe you're saying is the cell
24 phone that's in the vehicle.

25 MR. NORTRUP: No, I think -- this is Ed again. And I just want to
26 go back. We can go back to 53 again. And maybe you have this and maybe

1 I'm the one being dense. We really have -- they're talking about two
2 separate devices, two separate electronic devices. There's a mobile sensor
3 that we want to get data from. And there's a mobile communication device,
4 a wireless communication device, where we can we can use that second
5 device as a channel to send the sensor data.

6 So sensors and wireless communication devices are separate things.
7 They're clearly separate things. And what the cell phone is is an example of
8 a communication device of something that's a pipe. So if I have it in my
9 pocket, you know, and they're loosely saying these things. But if I have it in
10 my pocket and I can somehow get the location data from the GPS system in
11 the vehicle, and the phone can communicate it off. But that's not a cell
12 phone's -- it's not the cell phone's location. It may be coincidental at times,
13 but it's literally the vehicle's location.

14 JUDGE SMITH: Mr. Nortrup, let's say we agree with your premise
15 that there's a difference between what Feldman is calling mobile sensor and
16 wireless communication device. Let's say we agree with you. Those are
17 two separate things. So within the vehicle, there's a mobile sensor and then
18 there's the wireless communication device. In this case, we're talking about
19 a cell phone. And so this mobile sensor is determining the location of the
20 vehicle. The cell phone is intaking that location and then transmitting it.

21 So, and even if we accept your premise, the location of -- when the
22 cell phone transmits the location provided by the mobile sensor, the cell
23 phone is by virtue of the fact of being carried by the driver in the car. The
24 location of the cell phone also, and in this case, even though the location of
25 the cell phone doesn't come from the -- triangulating the communication
26 towers or something internal to the cell phone itself, it's still the location of

1 the cell phone. Am I wrong about that?

2 MR. NORTRUP: They can coincide for sure, right. They're, you
3 know, when it's carried, when the cell phone is carried in the driver's pocket
4 and it reports the GPS from the vehicle, the two systems, the cell phone and
5 the vehicle may be together.

6 JUDGE SMITH: Isn't that enough? In that case, isn't that enough to
7 meet the claim language, cell phone location data? I mean, it is the location
8 of the cell phone.

9 MR. NORTRUP: No.

10 JUDGE SMITH: Why not?

11 MR. NORTRUP: Because there's a real -- that interpretation ignores
12 the challenge you have when you're trying to use cell phones to represent
13 vehicles, cell phone locations to represent vehicle locations. A vehicle GPS
14 system, we all know that the data from that system represents the vehicle.
15 It's GPS. It's associated digitally with that vehicle. If you collect GPS data
16 from the vehicle, you know it's a vehicle location.

17 If you collect cell phone location data, a cell phone's literal location,
18 you do not know that it's associated with a vehicle. You don't know what it's
19 associated with. It might be associated with someone sitting behind a desk
20 or wherever, right? That's the definition of a cell phone or the, you know,
21 the -- what we think of when we see a cell phone is this thing that you can
22 put in your pocket and you can walk wherever you want. So that cell phone
23 location data has to be treated much differently. And that's where Feldman
24 fills the blank.

25 JUDGE WORMMEESTER: In paragraph 7 of Feldman, it talks
26 about using the mobile sensor as transmitting the vehicle location. It also

1 talks about electronic devices being used to transmit the vehicle locations.
2 And I understand what you're saying about the cell phone being in
3 someone's pocket. But isn't that what paragraph 60 is talking about? That's
4 the whole process of filtering and prioritizing the information. So they're
5 using the handover data.

6 So if there's handover data, then that means there's movement or fast
7 enough movement, which indicates it's a car. But that doesn't take away
8 from the fact that they're getting information from the cell phone. They're
9 just deciding which cell phones they want to get the information from.

10 MR. NORTRUP: Yes. So we --

11 JUDGE WORMMEESTER: And I'm getting that understanding from
12 my reading of paragraphs 59 to 60 and 61. It's where Feldman talks about
13 the choice of sample units.

14 MR. NORTRUP: That's right. So Feldman really does -- it compares
15 and contrasts. And I think your question might just need a little bit of
16 unpacking. So I want to start by saying that Feldman really compares and
17 contrasts different location technologies, right? They talk about GPS
18 systems in vehicles and they talk about tracking cell phones with a cellular
19 network. And they really compare and contrast all through Feldman in that
20 way.

21 And one of their points is that you really want to -- in order to get a
22 massive amount of data, you want to collect cell phone locations because
23 everybody is going to have a cell phone, but not everybody is going to have
24 a navigation system in their vehicle. So now we want to track cell phones.
25 So the way -- so now how do we do that, right? We have to know how we
26 go about doing that.

1 And while we're looking at Feldman, you say Feldman's way of doing
2 it is to collect some data from the cell phones, but it's not location data. And
3 I'll get to why that's really important. It's not collecting location data from a
4 cell phone. It's collecting administrative messages to identify which cell
5 phone tower is connected to the cell phone. And then the network knows
6 where the tower is. Geospatially knows where the tower is.

7 So it then has an approximate area of where that cell phone is. And
8 they have a great need to keep connectivity. And so if that cell phone starts
9 moving, they might hand it off to another tower that's more appropriate
10 power bandwidth, you know, whatever it is.

11 And so they're collecting these administrative messages. And then
12 what is -- so that's not location data. The phone doesn't -- it's like this
13 unwitting participant in this scheme of the of the network provider. And it
14 uses these silent administrative messages in calculations. Then it calculates,
15 okay, I think he's near this tower. I think that since he's near that tower and
16 he's moved about this fast, he's probably on this road. So it's a lot of
17 processing. It --

18 JUDGE WORMMEESTER: What paragraphs are you basing this
19 explanation on?

20 MR. NORTRUP: You know what? If we go to figure 3, if you go to
21 figure 3 in Patent Owner's presentation. Let me get to -- I'm sorry, page 5.
22 Sorry. Figure 3 of Feldman. Do you have that?

23 JUDGE WORMMEESTER: Figure 3 of Feldman.

24 MR. NORTRUP: Okay, good. Figure 3 of Feldman. Figure 3 of
25 Feldman and the associated description. This is really the heart of Feldman's
26 collection technique. And what they're representing here, we have all these

1 pies and we have this line in the middle. The line in the middle, that dark
2 line in the middle, 90, is representing their ultimate calculation. Their NTT,
3 their Normalized Travel Time. That's the ultimate processing of data that
4 they may determine that this cell phone moved along that path.

5 And the way they did it was Feldman describes these pie shapes 72,
6 74, 76. Really they only describe those particular example cites, but all
7 these little pie shapes are representing areas near a tower, near a cell phone
8 tower. So they're --

9 JUDGE WORMMEESTER: I just want to know, though, when you
10 were talking about not collecting location data, but administrative messages,
11 where is that? I guess that was the real question.

12 MR. NORTRUP: I got you. So they -- it might have taken a minute,
13 but I'll answer quickly in two ways. One way is Dr. Braasch, the petitioner's
14 expert, agreed with us. That's how it works. And in Feldman itself, I've got
15 to find it. Let me just search. All right. So let's see. I think I just found it
16 in paragraph 60. Data acquisition from cellular phones is controlled by a
17 server connected to a particular cell network.

18 The operation of cellular phones provokes a large amount of
19 administrative and control messages that flow in the cellular phone network
20 whenever a cellular event occurs. For example, initiation of a call,
21 completion of a call, transmission of a short message --

22 JUDGE WORMMEESTER: This is in the context of choice of
23 sample units, which is in the context of step C, at paragraph 56 that
24 describes prioritizing filtering and controlling the vehicular traffic data. But
25 in the prior step discussed, acquiring a variety of vehicular traffic data and
26 information, step B, starting at paragraph 51, that is where Petitioner is

1 pointing to, for example, 53, that says the mobile devices are transmitting
2 the location data.

3 MR. NORTRUP: Yeah. And I can help you, and I don't mean to cut
4 you off.

5 JUDGE WORMMEESTER: And I think they're all consistent with
6 each other. You can still have the cell phone transmit its location data. And
7 then in the filtering step, you're going to prioritize, well, we want the data
8 coming from a car, not the data coming from a pedestrian. And so we're
9 going to go and look at the handover.

10 So I think that all is consistent with each other. Just because you're
11 looking in the filtering step, just because you're looking at the handover
12 information does not mean that you are not -- that the cell phone can't
13 transmit location data. That's why you're looking at the handover
14 information, according to Feldman. It's to filter out the slow-moving traffic,
15 like pedestrians.

16 MR. NORTRUP: Yeah, and I --

17 JUDGE WORMMEESTER: And then figure -- I mean, I'm sorry.
18 Paragraph 7 specifically says, the use of mobile sensors or electronic devices
19 physically located in or attached to vehicles automatically transmit vehicle
20 locations.

21 MR. NORTRUP: Yeah, go ahead.

22 JUDGE WORMMEESTER: It just -- I'm having a hard time
23 understanding how we're not tracking the cell phone location. The cell
24 phone isn't self-reporting.

25 MR. NORTRUP: Yeah, and the reality is, you know, I think we're
26 taking logical steps outside of Feldman. I mean, what Feldman is saying,

1 wherever it's explicit, Feldman is saying that we like mobile sensors and we
2 like GPS in the vehicle. That's what we like. And then Feldman says, but
3 let's track cell phones. Let's track actual cell phone locations. It's going to
4 bring other problems into this situation. We are going to have to filter. You
5 don't have to filter GPS data that comes from a vehicle because you know it
6 comes from a vehicle.

7 So Feldman says, let's track cell phones, even though it's going to give
8 us additional problems. And even though it's not as accurate, you know, if
9 you want accuracy, use GPS. But if you want volume of data from all roads
10 and not just the people that have GPS navigation systems in their vehicles,
11 let's track cell phones. And then they go on to say how they track cell
12 phones.

13 And so they -- and then they go on to teach of principles of doing that.
14 And the way they do it is to say, I don't want to change my cell phone. It's
15 very clear, you know, in the beginning of Feldman here, we could find that
16 too. But Feldman is saying I don't want to make specialized cell phones.
17 Feldman is saying I want to track the cell phones that are already out there
18 and the ones that don't need specialization.

19 So the way I'm going to do that, since they don't know their location,
20 I'm going to locate them. I'm going to on the network side, I'm going to
21 locate them. And that data, that location data, that cell phone location data
22 winds up by being inaccessible to the user or the phone, right? You can't
23 turn access to that off. And I think at a high level, when you step back a
24 little bit, that's the principle taught by Feldman.

25 JUDGE SMITH: And why can't you turn access to that off? I don't
26 understand. I mean, if you have the cell phone that's transmitting this data,

1 why can't you tell the cell phone stop transmitting this data?

2 MR. NORTRUP: Yeah. So and we went over that with the expert as
3 well, Petitioner's expert as well. And he agreed that it's these administrative
4 signals that the network is using. And the --

5 JUDGE SMITH: Let's say -- yeah, forget administrative signals.
6 Let's say, you know, whether it's from an external sensor, whether it's from
7 whatever. There's some data indicating the vehicle's location that the cell
8 phone is sending. That data identifying the location of the vehicle and it's
9 being sent by the cell phone that's inside the vehicle. Why can't a user tell
10 the cell phone to stop?

11 So I guess before I get to my main question, let me just start off by
12 saying, you know, in terms of interpreting the scope of the claim, I think as
13 far as I understand, we're using the plain meaning to interpret these phrases.
14 So, I mean, the plain meaning of cell phone location data is data that
15 represents the location of the cell phone. That's the plain meaning.

16 Now, if there's some specialized meaning in the specification that
17 excludes obtaining this location from a sensor external to the phone, we'll do
18 that. But, you know, as of right now, as far as I understand it, that this cell
19 phone location data encompasses data that indicates the location of the cell
20 phone.

21 So when the cell phone is close enough to a sensor to receive location
22 data from that sensor, that cell phone location data under the plain meaning
23 of location data of the cell phone, that's what it is. So, I mean, and then you
24 can correct me if I'm wrong, if there's some reason why we should limit cell
25 phone location data to just location data that is somehow internal to the cell
26 phone or somehow limited to the cell phone network. You can explain it to

1 me.

2 But starting with the plain meaning of cell phone location data is the
3 data identifying the location of the cell phone. We have a sensor next to the
4 cell phone that's giving the location. The cell phone is transmitting that data.
5 Why can't a user tell the cell phone to stop transmitting that data?

6 MR. NORTRUP: Great. Let me get to that claim language myself.
7 And when we talk about -- so what we're really talking about is the phrase at
8 the end, where the traffic condition is based on a plurality of cell phone
9 speeds estimated through multiple locations of the plurality of cell phones.

10 Yeah, and if you look into this specification, the Nortrup
11 specification, you will find a lot of conversation about tracking cell phone
12 locations. And one of the primary ways of doing it in the Nortrup way of
13 doing it is with a GPS cell phone in the cell phone. And then we go into
14 why -- the problems that that causes. But it is the location data of the cell
15 phone. And the claim 2 refines that a bit to make it specific to the phone
16 communicating its respective location. So we are talking about the location
17 of the cell phone and the fact that the cell phone --

18 JUDGE SMITH: Well, claim 2 -- excuse me, sir, claim 2 just says
19 that the cell phone communicates the location through the cell phone
20 network. So, I mean, you have the cell phone sitting next to a sensor,
21 getting location data from the sensor and then communicating it through the
22 network.

23 I mean, you're telling us your spec says the cell phone contains the
24 GPS device internally. Well, I mean, does the spec require us to read that? I
25 mean, normally we don't read examples from the specification into the
26 claim. Are you asking us to read that example into the claim?

1 MR. NORTRUP: I might turn to my friend Steve on that.

2 MR. DRISCOLL: Yeah, when interpreting the plain language of this,
3 of course, we have to do that in light of the specification. The specification
4 indicates that there's a location sensor in the cell phone. Your interpretation
5 that it's just really communicating a location of a mobile sensor. You know,
6 I think what you're saying is maybe can a mobile sensor transmit its location
7 data to the cell phone, which then in turn transmits that to the cellular.

8 I think a plain reading of a specification that claims--indicates that no,
9 the location data of the cell phone is just that. It's the location data of the
10 cell phone --

11 JUDGE SMITH: Where does the specification require the location
12 sensor to be inside the cell phone? Where does the specification?

13 MR. DRISCOLL: I wouldn't say -- I mean, I think it's just the
14 interpretation of it. I don't know if there's a per se requirement, but there's a
15 discussion of the cell phone and its location generating -- it's the way it
16 generates its location data.

17 JUDGE SMITH: It's an example. It's not a requirement. Is that
18 right?

19 MR. DRISCOLL: Well, I think it's how you interpret the claim.

20 JUDGE SMITH: I'm just asking you, is it an example or is it a
21 requirement?

22 MR. DRISCOLL: I would say it is a requirement that the location of
23 the cell phone be cell phone generated, not that it be --

24 JUDGE SMITH: Okay. Where does the specification say that?

25 MR. DRISCOLL: I don't have that.

26 JUDGE SMITH: Okay. Thank you.

1 MR. NORTRUP: Yeah, I think we could probably find that. You
2 know, the specification talks about a couple of ways of locating a cell phone.
3 And it really broadly, you know, it talks about GPS. It talks about tower
4 triangulation, right? Like, you know, Feldman doesn't talk about
5 triangulating using separate towers. But in the present specification, we did.
6 And then the phone would collect up -- would do the measurements itself as
7 opposed to the network doing it. So it would possess the location data.

8 And the other thing that you could look at in the specification is with
9 respect to exactly this enablement and disablement process related to figure -
10 - here it is. So related to figure 54 in the Nortrup specification, there is a --
11 that's where there is an illustration of these on-off switches, you know, to
12 turn location on and off.

13 And in connection with that, like Steve said, I don't have it all right in
14 front of me to digest it so quickly. But if you look at 54 and you look at
15 location data, what you'll see there is the mechanism is that the cell phone
16 knows its own location, its location. And these switches are turning on and
17 off location, you know, availability or access to the location data stored on
18 that phone.

19 JUDGE SMITH: And I guess I just have one more --

20 JUDGE WORMMEESTER: Counsel you have about 5 minutes. Just
21 wanted to let you know.

22 JUDGE SMITH: I just have one more real quick question. I don't
23 want to take up all your time on it. One of the combinations that Petitioner
24 made is taking the device of the primary reference and implementing the
25 entire functionality of the primary reference's device on a cell phone.

26 So, you know, even if we accept your premise that Feldman itself

1 doesn't disclose the cell phone's self-reporting location data that the cell
2 phone internally generates itself, I mean, the device of Nortrup is doing that.
3 And if the device of Nortrup is entirely implemented on the cell phone, why
4 wouldn't that be enough to meet the claim limitation?

5 MR. NORTRUP: I'm not quite sure I understood that question. The -
6 -

7 JUDGE SMITH: So the -- I want to make sure you understand what
8 I'm asking you, because this is important. The combination, one of the
9 combinations is taking the device of the primary reference, not Knockeart.
10 So you take Knockeart's device, you take all that functionality and you put it
11 on the cell phone. So you have a cell phone that has, I guess, one of the apps
12 on the cell phone would be Knockeart's traffic device. So you have the cell
13 phone.

14 So Knockeart's device by itself already has this mobile device that
15 determines location and transmits location. So now you have a cell phone
16 that has Knockeart's device that determines location and transmits location.
17 Why wouldn't -- even if Feldman doesn't disclose determining the location
18 internally to a cell phone, why wouldn't putting Knockeart's device entirely
19 within the cell phone be enough for the cell phone to generate the location
20 internally? Do you understand my question?

21 MR. NORTRUP: I do. I think I do. I think I understand your
22 question, and Steve might have to help me out a little bit. But, you know,
23 when we looked at Petitioner's argument, the petitioner is trying to say that
24 Feldman's collection techniques are really not needed in that configuration.
25 That's what they were saying today.

26 But the reality is, in their argument, they clearly unequivocally state

1 that if you're going to make this combination, you're going to look to
2 Feldman for its collection techniques. You're not going to just implement,
3 you're not going to just convert the Knockeart navigation system into a
4 phone. Feldman specifically, in the background section there, Feldman
5 really criticizes, or I shouldn't say criticizes, but it really is harsh on phones
6 needing to be reconfigured in some way.

7 So when we look at the petitioner's argument, they say, I'm going to
8 put it in a cell phone, but that's not really it. They really, in their reply, they
9 eliminated a paragraph that puts reliance on Feldman's collection techniques.

10 And when you look at Feldman, you say how are we going to collect data
11 from these cell phones now? You say, well, we're going to do it by this
12 tower configuration. And if you put that GPS system in a cell phone, it
13 would -- you could still use it for navigation, right?

14 You know, Feldman isn't talking about a navigation system even
15 really, from a navigation application perspective. It's talking about
16 collecting data about traffic. And how are we going to do that? The
17 petitioner has said how are we going to do that? We're going to do it the
18 way Feldman does it.

19 MR. DRISCOLL: Yeah, that's right. I'd like to point out the question
20 that you asked before. This is Steve Driscoll speaking. You asked a
21 question before, why would you combine the cell phone, Feldman, with
22 Nortrup? Why did you do that? What's the benefit? You asked that
23 question over and over again. I'd like to answer that question. If you turn to
24 their presentation, page 18, let me do that myself here.

25 MR. NORTRUP: You probably only have a minute or two.

26 MR. DRISCOLL: Okay. If you look at page 18 where they're giving

1 the two different configurations, the very next page is a paragraph. So page
2 18 is their -- two different configurations. Conspicuously eliminated is the
3 very next sentence, which is actually on the next page. But it was actually
4 part of the paragraph. And it says, in either case, the resulting system would
5 have used Feldman's techniques for traffic information gathering.

6 So that's their argument. That's what Feldman is for. That's why they
7 believe it's necessary. That's what we addressed in our replies. The first and
8 second configuration, that's a non-issue. This is what both of them have in
9 common. This is what we take issue with, that the Feldman techniques do
10 not involve cell phones acquiring, collecting their own location data. That
11 location data, as Mr. Nortrup has explained, is collected on the network site.
12 The cell phones don't know where they are.

13 MR. NORTRUP: I hope that's -- I'm glad we focused on these items.
14 They are the important items. I think there's more in my presentation that
15 you've seen already. But I hope we've brought some clarity to these issues.
16 And I guess I would then say that's it for that. And we can reserve the rest
17 of our time for our rebuttal as well.

18 JUDGE WORMMEESTER: Thank you. So you went 2 minutes into
19 your rebuttal, so you'll get 18 minutes.

20 MR. NORTRUP: Okay.

21 JUDGE WORMMEESTER: All right. So I think counsel you have
22 20 minutes left. I'm just setting the clock real quick. And you can start
23 when you're ready.

24 MR. BISENIUS: Thank you, Your Honor. Patrick Bisenius is for
25 Petitioner. I'd like to turn to paragraph 53 of Feldman. There was quite a bit
26 of discussion in both our original presentation and Patent Owner's

1 presentation of this paragraph.

2 So Patent Owner appears to now be arguing that when Feldman
3 describes in both this paragraph and several other paragraphs that the mobile
4 wireless communication devices transmit vehicular locations to the
5 centralized server, that this vehicular location is somehow distinct from the
6 location of the cell phone.

7 I'd just like to point out that that argument does not appear in any of
8 the briefs in the record prior to today. They are making that argument for
9 the first time today, that the vehicular locations described in Feldman are
10 somehow separate from the cellular phone locations.

11 I'd also like to discuss that Patent Owner seems to be implying that the
12 mobile sensors described in this paragraph and the term mobile wireless
13 communication devices are somehow two different devices and the mobile
14 sensor is the only thing determining the vehicle location and perhaps the
15 mobile wireless communication device is acting as some communication go-
16 between from the mobile sensor to the server.

17 Well, first off, that argument does not appear anywhere in the record
18 prior to today. But more importantly, Feldman's disclosure simply does not
19 support that interpretation. Feldman does not describe a mobile sensor in
20 the vehicle and then a separate mobile wireless communication device that
21 acts as a communication go-between with the server.

22 Feldman's clear. It's describing mobile sensors, a broad term, and
23 that's giving you examples. It's saying that, hey, some of these mobile
24 sensors are these growing number of mobile wireless communication
25 devices that are increasingly being installed or carried in vehicles. It tells
26 you that one of those is a cellular phone.

1 So Petitioner's interpretation of Feldman, which is a correct
2 interpretation, is that Feldman is telling you these mobile wireless
3 communication devices, which include cell phones, are examples of the
4 mobile sensors. And this is how Petitioner has interpreted things the entire
5 time.

6 I'd ask you to please turn to Exhibit 1003, which is Dr. Braasch's first
7 declaration in the proceeding. And specifically, I'd like to discuss paragraph
8 80 of Dr. Braasch's first declaration in Exhibit 1003. This is found on page
9 56 of Exhibit 1003. So here we have Dr. Braasch discussing how a POSITA
10 would have interpreted the overall disclosures of Feldman regarding what it
11 means when it says mobile sensor.

12 So going about halfway down this paragraph, we have a sentence that
13 starts on the right side of the paragraph with the word Feldman. Dr. Braasch
14 stated, Feldman discloses that it was known in the art to collect traffic data
15 using mobile sensors or electronic devices physically located in or attached
16 to vehicles. Sending to paragraph 7.

17 And then the next sentence, Dr. Braasch tells you what Feldman tells
18 a POSITA about the mobile sensors. The primary example of such a mobile
19 sensor described in Feldman is mobile wireless devices such as cellular
20 telephones that were used to collect and report dynamic vehicle location and
21 velocity data information.

22 So Dr. Braasch has made Feldman's disclosure clear. Feldman is not
23 describing a separate mobile sensor and then a different mobile wireless
24 communication device that acts as a go-between. Feldman is describing
25 mobile sensors that include cellular telephones and are self-reporting their
26 location information to the server. I just --

1 JUDGE SMITH: Counsel, can I ask you, does this mean that you
2 agree with Patent Owner's premise that a cell phone receiving location data
3 from an external sensor is beyond the scope of the claim?

4 MR. BISENIUS: We do not agree with that interpretation. As I
5 mentioned, that argument has appeared today for the first time --

6 JUDGE SMITH: No, I understand. You're saying it's a new
7 argument. I'm just asking you substantively, do you agree with it or disagree
8 with it?

9 MR. BISENIUS: We disagree with that premise that that would be
10 outside the scope of the claim. We also, because Feldman clearly discloses
11 tracking the vehicle location data --

12 JUDGE SMITH: Sorry to interrupt. Can you explain why you think
13 it's within the scope of the claim?

14 MR. BISENIUS: Well, clearly when claim 1, and I want to use the
15 claim language itself, I'm being clear. It's discussing where in the traffic
16 condition is at least in part based on the plurality of cell phone speeds
17 estimated through an assessment of multiple locations each of a plurality of
18 cell phones. It's saying it's an estimation of the speed and it's an assessment
19 of the locations of the cell phones.

20 And obviously it's not requiring exact precise locations of the cell
21 phones all the way down to the millimeter. The GPS signals, there's a range
22 of where the GPS signals can determine the precise location of the cell
23 phone. So it's not saying we have to tell you the exact pinpoint on the planet
24 Earth where this cell phone is located. It clearly is referring to locations of
25 cell phones. Like, a fairly specific location, but the purpose is that you're
26 tracking the speed of the vehicle. You're tracking the speed of the cell

1 phones --

2 JUDGE SMITH: Sorry to interrupt again. I don't want to spend too
3 much time on this, but just real quickly, I mean I think Patent Owner's point
4 was the reason why the scope of the claim doesn't cover external sensors is
5 because we're reading that limitation in light of the spec. The spec requires
6 the location to be determined internal to the cell phone. Is that true or not?

7 MR. BISENIUS: We don't believe that the claim requires
8 determination of location by the cell phone. We think it would be sufficient
9 for, let's say there was a separate mobile sensor included in the case of the
10 cell phone, that would still tell you the location of the cell phone. We
11 believe that if the cell phone was on a mounting device on the dashboard of
12 the car, a location determined for that mounting device on the dashboard of
13 the car is still telling you the location of the cell phone.

14 There's no requirement in claim 1 or any other claims of the '028
15 Patent that the cell phone needs to self-determine its own location and then
16 report it. It just talks about tracking of cell phone speeds. And actually,
17 claim 1 doesn't even require self-reporting of the cell phone speed. It isn't
18 until claim 2 that that's recited.

19 JUDGE SMITH: Okay, thank you.

20 MR. BISENIUS: I'd just like to end by pointing out that the Board
21 doesn't even need to reach this issue. The first configuration for the
22 Knockart-Feldman combination is very clear in the petition. We're taking
23 Knockart's system, all of its functionality, simply implementing it as a cell
24 phone.

25 Today, the patent owner was arguing that there would be difficulties
26 in doing that, and Feldman would teach against such a modification. But

1 Patent Owner hasn't made those arguments before, and so they haven't been
2 addressed on the record. There simply are no arguments in the prior briefing
3 that it would not have been obvious to take Knockeart's system and simply
4 implement it as a cell phone.

5 JUDGE SMITH: I think, if I could just summarize real quickly, I
6 think Patent Owner said more than that. Patent Owner said, given the fact
7 that the primary reference already determines the location, the idea of
8 locating Knockeart entirely within Feldman's cell phone.

9 You're relying on Feldman to teach tracking location over cell phone,
10 but that reason kind of disappears if you're implementing the primary
11 reference entirely within Feldman. You're no longer relying on Feldman's
12 location tracking, you're relying on Knockeart. I think that was Patent
13 Owner's point. If you could just real quickly speak to that.

14 MR. BISENIUS: Yeah, we believe that the patent owner is attacking
15 the references in isolation in there. They've been asserting that Knockeart
16 does not disclose a cell phone self-reporting its own location information. It
17 discloses its individual system --

18 JUDGE SMITH: No, I think they were saying that you don't need --
19 if you're incorporating the primary reference entirely within Feldman, all of
20 the location tracking from Feldman is no longer a reason to bring in
21 Feldman. You already have it from the primary.

22 MR. BISENIUS: We would agree. For the primary configuration,
23 you don't need to take Feldman's specific techniques, although we did
24 specify that that second configuration would be alternatively or in addition
25 to the primary configuration. So you could have a system where you have
26 Knockeart's in-vehicle systems implemented as cell phones, and also you're

1 using Feldman's separate system to track other cell phones using Feldman's
2 techniques. And those traffic sources could be combined together.

3 Both Knockeart and Feldman discuss combining traffic from a variety
4 of sources in order to get a complete traffic data picture. But it still doesn't
5 change the fact that the benefit of implementing Knockeart's system as a cell
6 phone is that now the user has a single device that does everything that
7 Knockeart does, plus it's a cell phone that has full cell phone communication
8 capability.

9 We identified that as one of the reasons that would have motivated a
10 POSITA to implement Knockeart's system as a cell phone, is now the user
11 only has one device to carry around.

12 And that most users had a cell phone already, and so therefore
13 implementing Knockeart's functionality in a cell phone would have led to a
14 greater number of devices that could be tracked for traffic probe data,
15 because you'd have all the functionality of Knockeart's system. You'd have
16 cell phones that users were increasingly carrying around by the mid-2000s,
17 and therefore a greater source of traffic data through such an
18 implementation. If there are no other questions, Petitioner rests.

19 JUDGE WORMMEESTER: Thank you. All right. Mr. Nortrup,
20 you'll have 18 minutes, and you can begin when you're ready.

21 MR. NORTRUP: That's great. Thank you very much. Steve, did you
22 want to kick off the rebuttal?

23 MR. DRISCOLL: Sure, thank you. This is Steve Driscoll. There's
24 been discussion today of the location data and the vehicle. I believe the
25 location data of the vehicle and the cell phone being synonymous, possibly.
26 And that issue is new. That's never been discussed before. And we think

1 there's a good reason why it hasn't been discussed, because when you look at
2 the total -- when you look at the specification, when you look at the intrinsic
3 record, the cell phone data, using cell phone data presents certain challenges.

4 If you use probe data, vehicle data, much of what's discussed in the
5 patent and the claims, the idea of tracking that to determine whether or not
6 it's on a road, determining whether it's in a vehicle, all of that's meaningless,
7 because if it comes from the probe. If it comes from the mobile sensor, you
8 know it's in a vehicle. So it would make everything superfluous that we're
9 doing with that data, with the cell phone location data.

10 That's why it must be coming from the cell phone. The claim would
11 not make sense. The spec wouldn't make sense otherwise. Let me make that
12 point. I want to go back to the paragraph in question on page 24 of their
13 presentation. I think it's important to understand that initially in the reply, in
14 the petitioner's reply, there were many instances in Feldman where they said
15 Feldman disclosed the idea of cell phones collecting and self-reporting data.
16 Now we're down to just one example. I mean, that's interesting.

17 I think what we do -- well, this is an ambiguous example. As we said,
18 it talks about mobile sensors and then communication devices like cell
19 phones communicating that data. And as I said before, they're not the same
20 thing. The location data of the cell phone is not the same thing as the
21 location data from the mobile sensor. And so when you look at just the
22 language of that spec, that language of that paragraph, there's nothing there
23 about cell phone location data. There's nothing.

24 And instead, it seems like we're focusing on this rather ambiguous
25 paragraph while ignoring Feldman almost entirely. Feldman spends a lot of
26 time comparing and contrasting the mobile sensor, i.e., probe-type

1 approaches that use GPS and the cell phone approach. Compares, contrasts
2 the benefits of each. And then it decides to go with cell phone. When you
3 read Feldman -- and we've outlined this in our surreply. There's little doubt
4 that it's about cell phone, and it's not about GPS related devices. And in fact
5 the whole location, the whole invention --

6 JUDGE WORMMEESTER: So are you saying Feldman requires a
7 GPS and a cell phone?

8 MR. DRISCOLL: No, I think what Feldman does is, Feldman likes
9 the location data or the location specificity of GPS systems. It likes that. It
10 acknowledges that those systems, those probes, those mobile sensors, are
11 better than cell phones, more precise. The problem is they're just not
12 ubiquitous enough. There's not enough of them out there.

13 So then they say we're going to -- and this is just a recognition that
14 Feldman didn't think about GPS being in phones because he said we're going
15 to come up with a way of essentially emulating a GPS, or if you will, by
16 coming up with a different scheme for location data.

17 We're going to figure out where these cell phones are as they go
18 through cells, and the hands-offs occur. We'll do this on the network side.
19 Cell phones still doesn't know where it is. But we'll know where it is, and
20 that's the data we'll use to calculate these traffic these traffic patterns. And
21 so --

22 JUDGE WORMMEESTER: Counsel --

23 JUDGE BRADEN: In paragraph --

24 JUDGE WORMMEESTER: Sorry, go ahead.

25 JUDGE BRADEN: I would say in paragraph 53 of Feldman, it
26 specifically says that these mobile wireless communication devices have

1 GPS compatibilities. So I'm not sure that I agree with your argument. Why
2 would this disclose that you have GPS in those wireless communications
3 and not foresee the use in the tracking that it's specifically discussing? And
4 in paragraph 54, saying that the invention is applicable to all of these types
5 of mobile sensor systems.

6 MR. DRISCOLL: The mobile sensor system is not the cell phone.
7 It's a device that determines the location of the --

8 MR. NORTRUP: Yeah, so if we look at -- I think what you're
9 pointing to, Your Honor, is the piece that says such mobile wireless
10 communication devices are, and it gives a list of what they might be,
11 telemetric devices with GPS capabilities, anti-theft, blah, blah, blah, and
12 then driver carried devices such as laptops and cell phones.

13 That's not saying cell phones with GPS. That's giving a list of
14 separate things, and I believe what they're saying when they say telemetric
15 devices with GPS, they're talking about Knockeart, right? They're talking
16 about a device that has communication ability, you know, a transceiver, and
17 it also has GPS.

18 But they're not saying that the cell phone has that. They're really just
19 saying that as an example of a device that communicates, there are these
20 types of things, and a phone is a thing that communicates and can be used to
21 communicate the vehicle's data.

22 JUDGE SMITH: Mr. Nortrup, isn't -- I mean, one thing we're looking
23 at is, what do these references say to a person of ordinary skill in the art?
24 Not just, what do they literally say, period, and that's it. But what we, you
25 know, one of skill in the art, wouldn't one of skill in the art understand that
26 cell phones can provide location data? Looking at the combined teachings

1 of Knockeart and the secondary references --

2 MR. DRISCOLL: Yeah, I'd like to address that. Yeah, that argument
3 has never been made. If you're suggesting that one of skill in the art, in light
4 of the specification or light of this prior art would understand that it would
5 include or be obvious. That's an argument that hasn't been made. There was
6 no Graham analysis saying that in light of vehicle data, location data, or the
7 art in front of us, that having a cell phone --

8 JUDGE SMITH: But, I mean, wasn't that within the knowledge of
9 ordinary skill at the time of this invention, that --

10 MR. DRISCOLL: That's not in the petitioner's argument.

11 JUDGE SMITH: Okay.

12 MR. DRISCOLL: Yeah, there's no Graham analysis, and there's, you
13 know, that argument has not been made.

14 JUDGE SMITH: But, I mean, we're looking at two references that
15 both disclose these mobile devices providing location data of a vehicle.
16 And, you know, the idea that one of skill in the art can, can look at this and
17 say, I can get location data from a vehicle through a cell phone. You're
18 saying that's beyond the level of skill, you're giving these references?

19 MR. NORTRUP: Well, I think, maybe Steve, I can help out a little bit
20 too there. I think when you look at Feldman as a whole, right, so Feldman is
21 being brought in for a reason. And --

22 JUDGE SMITH: Well, we would look at both references, the
23 combined teachings of both references.

24 MR. NORTRUP: Yeah, and I think the biggest problem that one
25 would have, and I'm not speaking as the expert. I think we can go through
26 Petitioner's expert's testimony and find this, is that the -- and I mentioned

1 this before, Knockeart, everybody knows the coded data that comes out of a
2 Knockeart vehicle represents a vehicle. And if they want to take all of that
3 stuff and put it into a cell phone, now what's the best way to track that cell
4 phone?

5 And Feldman is just really clear, especially in the beginning, the
6 beginning and the background section, you focus on that and you realize that
7 what they're saying is, no, we get it. We get that Knockeart exists, is really
8 what they're saying. We get it. But the way to track -- the way to get a
9 volume of data significant enough to make these traffic estimations is to
10 track ordinary cell phones. And we're going to do that through this system
11 of, on the network side, and we'll derive their locations.

12 And Feldman even talks about the problem they have with that, and
13 with respect to privacy, they know that the data they're collecting isn't
14 available to the user. And they talk about in there, you know, a couple of
15 methods that, like, you would delete the data as soon as you're done using
16 the data, you know, something like that.

17 But I think if you take a look at Feldman as a whole, which has been
18 brought to our attention as the way you should be tracking a cell phone, you
19 would say that they are comparing themselves to Knockeart and saying
20 Knockeart's not the way to do it.

21 MR. DRISCOLL: Okay.

22 MR. NORTRUP: Well, hey --

23 MR. DRISCOLL: Yeah, I also want to, you know, go back to Ed's
24 initial comments that this -- we see this as being a situation where they've
25 not shown or they've not demonstrated that all the elements of the claim are
26 in the combination. As we said, the element number 1.5 and element 2, we

1 submit are not found. So it's a question of failing to demonstrate that all
2 elements are in the combination of prior art provided.

3 JUDGE WORMMEESTER: I have one question. It's, you know, if
4 we were to agree with you on some level, isn't knowing the location or
5 sending the location of the vehicle going to be the same as sending the
6 location of this cell phone because it's in the vehicle?

7 MR. DRISCOLL: We've addressed that before, and I'll do so again,
8 that no, the two are different. The two are different. What's important here
9 is, you know, is -- or can we say that location data for the vehicle and
10 location data for the cell phone, they're the same thing? No, they're not the
11 same thing. They're very different.

12 Location data for the cell phone requires that determinations be made
13 on whether or not it's in a vehicle. Okay? And that's what the claim is
14 about. There's a lot of discussion about the velocity of the moving vehicle,
15 you know, where it is, and how we determine that this cell phone is in a car.
16 That's part of what the whole claim is about. That's about what this
17 invention is about.

18 And to say, no, we're going to say that it could be from the probe or
19 could be from the mobile sensor, that totally guts what this invention is all
20 about. No, it can't be from that. If we have that information, that location
21 data, then a couple of things. First of all, that data is extremely limited, and
22 that's why it doesn't work. That's why those systems don't work. That if it's
23 coming from the vehicle itself, it's going to be limited. We want the
24 ubiquitous data from cell phones. We don't want the more limited data from
25 probes.

26 And so, that's why they really can't be considered synonymous. And

1 ultimately, the phone could be outside of the probe and it wouldn't be in the
2 same location, but it still might communicate it. There's nothing to be said
3 that the phone wouldn't have some sort of wireless link to it that could
4 extend indefinitely.

5 So there's no -- we can posit that what if they're in the same place,
6 they would be the same data. But that's not what the claim says, and that's
7 not how the claim would be interpreted, giving really the invention of the
8 Nortrup patent. Does that answer your question?

9 JUDGE WORMMEESTER: I think so. Thank you.

10 MR. NORTRUP: Yeah, it's good. Good. Well, I tell you, I think the
11 -- as I said in the beginning, I think this process has worked well. I think
12 that, you know, you sound like you're attuned in, and I hope we have
13 answered all of your questions. You know, this is not very complicated, but
14 it gets confusing and I hope you see your way through that. And I'd
15 entertain any other questions. I hope we didn't stop anybody from asking
16 questions. And Steve, did you say -- did you look like you had one more
17 comment?

18 MR. DRISCOLL: No, I was just going to say thank you. Are there
19 any more questions?

20 JUDGE WORMMEESTER: I don't have any questions. Thank you.

21 MR. NORTRUP: Great.

22 MR. DRISCOLL: Thank you for your time.

23 MR. NORTRUP: I said -- and then one of the things I wanted to say
24 there in closing is that, you know, there's so many bad things said about
25 IPRs in the world, and I think that I really appreciate this process. It's
26 worked really quite well. If you don't rule in my favor, I may be shifted the

1 other direction again. But I'll tell you, it really is, you know, flushes things
2 out. And it's not all that -- it's pretty cost-effective as compared to the
3 alternatives. So thank you for being part of the process.

4 JUDGE WORMMEESTER: And thank you to everyone for being
5 here. We appreciate all the parties' time. The case is submitted and the
6 hearing is adjourned.

7 (Whereupon, the above-entitled matter went off the record at 11:51
8 a.m.)

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