

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,)
)
Petitioner,)
)
vs.) Review Case No. IPR2025-00032
) U.S. Patent No. 11,563,338
CHARGE FUSION TECHNOLOGIES,)
LLC,)
)
Patent Owner.)

VIDEOCONFERENCE DEPOSITION OF DR. STEVEN GOLDBERG
TAKEN ON BEHALF OF THE PETITIONER
NOVEMBER 3, 2025

VIDEOCONFERENCE DEPOSITION OF DR. STEVEN
GOLDBERG, produced, sworn, and examined on the 3rd day
of November 2025, between the hours of 9:00 o'clock in
the forenoon and 6:00 o'clock in the evening of that
date via Zoom videoconference, before KARA D. INCE, a
Certified Court Reporter within and for the State of
Missouri, in a certain cause now pending UNITED STATES
PATENT AND TRADEMARK OFFICE, BEFORE THE PATENT TRIAL
AND APPEAL BOARD, wherein TESLA, INC., is the
Petitioner and CHARGE FUSION TECHNOLOGIES, LLC, is the
Patent Owner.

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Reporter's Note: All exhibits were retained by counsel.

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* * * * *

(The deposition commenced at 10:00 a.m.)

THE COURT REPORTER: We are on the record.
My name is Kara Ince. I am a Missouri Certified
Court Reporter, CCR License No. 1348. Today's date
is November 3, 2025. Will the witness please raise
their right hand.

DR. STEVEN GOLDBERG,
of lawful age, being produced, sworn, and examined
on behalf of the Petitioner, deposes and says:

MS. RAW: Let's begin with introductions
just for the record. So I'm Lydia Raw from Erise IP
representing Tesla, Inc., the Petitioner today.

MR. TECCE: And my name is Fred Tecce from
Altima Advisors, and I represent the patent owner.

EXAMINATION

BY MS. RAW:

Q. Okay. Good morning, Dr. Goldberg.

A. Good morning.

Q. Can you just state your location for the
record today.

A. I'm in Cupertino, California,
C-U-P-E-R-T-I-N-O.

Q. Okay. And I understand you've been
deposed many times; is that correct?

1 A. That's correct.

2 Q. And many of those depositions were
3 virtual; is that correct?

4 A. A number of them were, yeah, after the
5 pandemic.

6 Q. Okay. So just a few ground rules, which
7 I'm sure are very familiar to you. We do have a
8 court reporter today who is taking down what
9 everyone's saying. Because of that, I'm going to be
10 really intentional to not talk over you, and I'd ask
11 you to do the same just so that we have a clear
12 record, and we make the court reporter's job easier;
13 fair?

14 A. That's -- that sounds like a good plan.

15 Q. All right. And I usually take breaks
16 about every hour. If you want to take breaks sooner
17 than that, just let me know. I just ask if I have a
18 pending question, that you go ahead and answer that
19 pending question before we take a break; all right?

20 A. That sounds good too.

21 Q. All right. And if for any reason today
22 you can't understand one of my questions or there's
23 something about it you need clarification on, I ask
24 that you let me know so that I can provide that
25 clarification, and we can have a clear record.

1 Can you do that for me?

2 A. Yes, I can.

3 Q. All right. And, finally, if you do
4 provide an answer to my question, I'm going to
5 understand that you did understand my question; is
6 that fair?

7 A. Yes.

8 Q. All right. Is there any reason you
9 couldn't provide complete truthful testimony today?

10 A. There is not.

11 Q. All right. Do you have anything that
12 you've brought with you to your deposition today?
13 Any paper or electronic copies of anything?

14 A. Okay. So my understanding -- I did get an
15 email that was forwarded to me -- I think, from your
16 side -- that asked that I have electronic -- clean
17 electronic copies of my declaration; so I have a
18 PDF. The patent, I have a PDF of that, and I have
19 PDFs of all the prior art that was asser- -- or
20 offered up in the case.

21 On my desk, I do have some papers, but
22 nothing is visible related to this case. I've got
23 my notebooks stacked up away from me. I'm just
24 looking at the screen, and I'll take guidance from
25 you as to what to look for.

1 Q. Okay. Perfect.

2 And I know you've done a lot of IPRs
3 before; so all those documents that you just
4 mentioned that you have in PDF, you understand that
5 they either have a paper number or an exhibit number
6 on them? Are you familiar with that labeling?

7 A. Oh, well, mine don't because I -- mine are
8 just on my computer, but I do understand that there
9 are exhibit numbers associated with them.

10 (Deposition Exhibit No. 2002 was marked
11 for identification.)

12 BY MS. RAW:

13 Q. Okay. So, for example, the PDF of your
14 declaration that you have?

15 A. Is Exhibit 2002, maybe, something like
16 that.

17 Q. Yes.

18 A. Some of the I summarized -- some I
19 memorized.

20 Q. Okay. Does it say -- does your copy say
21 "Exhibit 2002" at the bottom of it?

22 A. One moment. I'm just going to minimize
23 the video screen. I'll move over so I can open up
24 simultaneously what you just asked for.

25 Okay. What I have in front of me, it's --

1 it does have in the lower right-hand corner
2 "Exhibit 2002." Counsel did send me this copy.
3 So ...

4 Q. Perfect. Perfect.

5 And all of those PDFs that you have,
6 they're all clean; right? They have no notes or
7 highlighting that you've added to them?

8 A. Oh, no, I mean, I --

9 Q. Perfect.

10 A. -- I probably -- they're the ones I
11 downloaded from Google or something. They don't --
12 I don't mark on any PDFs, no.

13 Q. Okay. Perfect.

14 All right. So how I do IPR depositions, I
15 just ask that if at any point you want to reference
16 any of these documents in that clean folder of PDFs
17 you have, that's fine, just let me know so that I
18 know what you're looking at, and the record is clear
19 as to what you're looking at; is that fair?

20 A. It is.

21 Q. All right. Perfect.

22 So hit- -- sitting here today, are you
23 aware of any inaccuracies in your declaration in
24 this case?

25 A. Well, I -- I committed one to memory,

1 Paragraph -- it's not an inaccuracy. It's a
2 grammatical error. So there's no issue with the --
3 the -- it just -- how it's read. So if you go to
4 Exhibit 2002, Paragraph 30, I stated in the second
5 sentence, "I disagree with," and then later, said,
6 "Is irrelevant." You can just eliminate "I disagree
7 with."

8 Q. Okay.

9 A. It's just I -- I doubly stated my
10 position. That's all I know of.

11 Q. Okay. All right. Can you, please, look
12 at Paragraph 16 of your declaration.

13 A. Yes.

14 Q. Okay. And Paragraph 16 lists the
15 documents that you considered in preparing this
16 declaration; correct?

17 A. Yes.

18 Q. Are there any other documents that you
19 considered in writing this declaration that aren't
20 either listed here or, specifically, referenced, for
21 example, in a footnote later in the declaration?

22 A. Well, sitting here today, I -- everything
23 that I looked at should be -- should be either
24 listed here in Paragraph 16 or other places in
25 the -- in the -- in the document. I don't --

1 sitting here, I don't know of any others that I
2 didn't mention.

3 Q. Okay. Can you turn to Paragraph 24,
4 please.

5 A. Sure. Okay.

6 Q. All right. Do you see that Paragraph 24
7 sets out that counsel told you to assume the
8 priority date is July 11 of 2008?

9 A. I see that sentence, yes.

10 Q. Is that accurate? Is that the priority
11 date you applied for purposes of your declaration?

12 A. I -- I don't -- there's no reason for me
13 to think that that's not a true statement. It's in
14 my report. I stand by my report.

15 Q. Okay. Before July 11 of 2008, had you
16 done any work on electric vehicles?

17 A. Well, there weren't a lot of -- I worked
18 at Trimble Navigation where I worked on tracking
19 systems and communications systems and location
20 systems for vehicles, and I worked on lots of
21 different fleets. I don't recall if any of them
22 were electric or not.

23 But during that period of time, I was very
24 closely tied to the -- in that position, to the
25 automotive industry and to the fleet tracking

1 industry, and there may have been electric vehicles.
2 That wasn't the focus of what I was doing at that
3 time.

4 Q. Okay. When was your first experience
5 working on an electric vehicle?

6 A. Would you say -- okay. I guess I want to
7 understand the question, please.

8 When you say "working on," what -- what do
9 you mean by that?

10 Q. Sure. When was the first time that you
11 had a job where either analyzing or designing
12 something for an electric vehicle was part of your
13 job?

14 A. Well, a lot of the things that I worked on
15 would have worked on gasoline or internal combustion
16 engine vehicles or electric vehicles. So a lot of
17 the things that I did related to both.

18 So if you're asking did I work on
19 something that could be used in electric vehicles
20 years ago, I'm -- so communication systems, tracking
21 systems, whatever.

22 Q. So -- well, I was asking specifically was
23 when you first worked on something that was used on
24 an electric vehicle, not that could have been used
25 on an electric vehicle.

1 A. Well, I don't -- again, I mean, in many of
2 the jobs I worked -- I -- you know, where I was
3 employed, the products were purchased by vendors
4 that could have put them in any vehicles. So I
5 don't know what the end users used my products for.
6 I never worked for an automotive company. I was a
7 board member of automotive companies, but as an
8 engineer, I never worked for an automotive company;
9 so therefore, I don't know what people used my
10 products for. So I couldn't tell you.

11 Q. Okay. Have you ever worked on the design
12 of an electric vehicle charging system?

13 A. Well -- so, again, as an engineer, I'm
14 trying -- I'm trying to recall. The first thing
15 that comes into my mind, I was on the board of
16 directors of Lucid Motors for five years, from 2013
17 to 2018. And I was -- I wasn't involved with
18 engineering; I was on the board of directors. But
19 I'm a technical guy, and it was a startup company.
20 And there were many conversations about charging and
21 charging systems that happened between me and
22 management and sometimes at the board level, just in
23 terms of what features the car was going to have.
24 So I did at that time.

25 Prior to that -- I don't -- I -- I don't

1 recall. I might point out that from 2009 to present
2 day, my day job has been -- well -- I -- I was
3 the -- my first CEO position was in -- I'm sorry --
4 in approximately -- let's see -- I'll have to look
5 back at my resume, but it's just right around 1997,
6 1998.

7 But I was the CEO of four early-stage
8 companies, and one of the investors in one of the
9 companies invited me to join their firm as a venture
10 capitalist, where I was kind of the deep tech guy.
11 And from about 2009 to present day, I look at
12 hundreds and hundreds of different technologies that
13 I've looked at a lot of electric vehicle deals, and
14 that's been one of the things that I've looked at.

15 And during that -- during evaluations of
16 whether or not we make an investment, I was often
17 the person who did the technical diligence on the
18 vehicles.

19 Now, you're asking me about -- you asked
20 me different questions at different times. You
21 asked me if I've ever -- many, many, many times I've
22 worked on electric vehicle analysis in terms of did
23 the technologies perform the way they promised and
24 that sort of thing.

25 But most of that happened after 2009,

1 after I joined as a venture capitalist. Before
2 that, I did consulting with ventures -- with the
3 venture folks. I just don't remember if it was ever
4 about electric systems.

5 Q. Have you ever designed a graphical user
6 interface for an electric vehicle?

7 A. I don't think so, no.

8 Q. Okay. Have you ever designed an HVAC
9 system for an electric vehicle?

10 A. Well, I don't think so, no.

11 Q. Okay. In Paragraph -- back to your
12 declaration, in Paragraph 17 through 23?

13 A. I'm sorry.

14 Q. So I'm at -- in your declaration, starting
15 at paragraph 17?

16 A. Yes, I'm there.

17 Q. Okay. Perfect -- perfect.

18 So in Paragraph 17 through 23 of your
19 declaration, do you see that that's the legal
20 framework section of your declaration?

21 A. I do.

22 Q. Okay. And just confirming, that
23 accurately sets out the legal framework you applied
24 when rendering your opinions in this case; is that
25 correct?

1 A. Well, these -- this is all guidance I had
2 received from counsel. I either used the words I
3 understand or I've been informed. I'm not an
4 attorney, and I -- I'm assuming that it's accurate
5 and is -- generally from my -- I've done this many,
6 many times. I -- I'm generally comfortable with
7 what -- what's presented here.

8 Q. Okay. In Paragraph 24, which was the
9 paragraph we looked at a moment ago about the level
10 of a person of ordinary skill in the art.

11 Do you see that paragraph?

12 A. I do.

13 Q. Do you see that your definition doesn't
14 mention electric vehicles in it?

15 A. What -- are you referring to the first
16 sentence of Paragraph 25?

17 Q. Apologies. Yes. Let me reask that.
18 Thank you for clarification.

19 So in Paragraph 25, do you see that you
20 set out -- it begins, "In my opinion, and for
21 purposes of this petition, a POSITA at the time of
22 the claimed invention of the '338 Patent would have
23 had," and, then, you set out a definition of POSITA.

24 Do you see that?

25 A. I do.

1 Q. Okay. Do you see that that definition
2 doesn't refer to an electric vehicle?

3 A. Well, I disagree. It says, "Testing of
4 automotive systems."

5 Q. Are automotive systems necessarily a
6 reference to electric vehicles?

7 A. Automotive systems is a very broad term.
8 I didn't come today with a construction of
9 automotive systems, but my -- my general
10 understanding is that it refers to all automotive
11 systems.

12 Q. Sure.

13 So -- and I want to make sure I'm
14 understanding you accurately. You're saying
15 automotive systems can include electric vehicles --

16 A. Of course.

17 Q. -- right?

18 A. Of course, they can.

19 Q. Okay. But automotive systems could also
20 include gas-powered vehicles; correct?

21 A. It could. Yeah.

22 Q. Okay. So is it fair to say that in the
23 definition of POSITA set out in Paragraph 25, that
24 definition could be met by someone that doesn't
25 necessarily have electric vehicle experience?

1 A. Well, what I said there was automotive
2 systems, embedded systems or equivalent -- yeah. I
3 think -- I think the important point to note here is
4 electric vehicles are -- consist of electric motors
5 and batteries, which people with an engineering
6 degrees generally spend some time talking about
7 electromagnetics, charging, batteries, current flow,
8 concept of charge and current.

9 So I think the combination of the
10 engineering discipline and automotive systems kind
11 of covers the areas that would include electric
12 vehicles.

13 Q. Are you familiar with how to measure the
14 charge capacity of a battery?

15 A. That -- am I familiar with -- I'm
16 certainly familiar with techniques. Didn't come
17 prepared to give an engineering presentation.

18 So I guess the short answer would be, yes,
19 it's a combination of -- and just -- just for the
20 record, I'm on the board of directors of a lithium
21 ion battery company for electric vehicles, Solid
22 Power. I'm sure you saw that in my resume. So I --
23 I just came back from a board meeting from -- on
24 that company. And the issues of battery capacity,
25 energy density, charging rate, these are things that

1 I talk about all the time.

2 So am I familiar -- there's
3 electrochemistry involved. There's, you know,
4 conductivity of the materials. It's a fairly
5 complex issue. So am I familiar with it? Yes. I'm
6 not an electric chemist.

7 Q. Okay. Would you agree that a POSITA
8 that's a -- the priority date of the '338 Patent
9 would also have been familiar with how to measure
10 the capacity of a battery?

11 A. I'm not sure I understand the question.

12 Q. Sure.

13 So at the time of the '338 Patent, would a
14 POSITA have been familiar with how to measure the
15 charge capacity of a battery?

16 A. Again, the question sort of -- I'm not
17 sure what, specifically, you'd like -- when you say
18 "measure the capacity," are you saying measure the
19 amount of -- of charge in the battery, or measure
20 the theoretical capacity of a given battery
21 chemistry, which is more of an electric chemistry
22 question, which doesn't have anything to do with
23 these patents.

24 So I'm not sure, are you -- respectfully,
25 I'm just trying to understand. Are you asking the

1 context of these patents as it relates to capacity?
2 Are you asking in terms of an electric chemist
3 saying a given lead acid or a lithium ion or some
4 type of battery would have a certain capacity,
5 again, which in my mind is outside the scope of
6 these patents. I'm just not sure what your question
7 is.

8 Q. Yeah. Thank you for that clarification.
9 That -- that actually quite helps me understand what
10 your issue is.

11 So my question would be whether a POSITA
12 would be able to measure the total capacity of a
13 battery at the time of the '338 Patent?

14 MR. TECCE: Object to the form.

15 A. I would give the same answer. I'm --
16 total capacity is the same as capacity. The
17 capacity is, you know, kind of what the -- what the
18 technology will achieve. Total capacity is almost
19 redundant.

20 BY MS. RAW:

21 Q. Okay. So, then, would a POSITA have been
22 capable of measuring the capacity of a battery at
23 the time of the '338 Patent?

24 A. Are you -- again, I don't understand the
25 question.

1 Are you asking in the -- in the context of
2 electric chemistry if a POSITA would be able to go
3 into a lab, analyze the chemicals, analyze the
4 materials and make a determination of what the
5 capacity of a given battery was that came off a
6 production line, or are you asking about was the
7 battery charged to capacity and had a certain amount
8 of charge within it?

9 Q. The second one. So I'm asking about if a
10 POSITA has a battery in a vehicle they're working on
11 and that battery is at max charge, would that POSITA
12 be able to measure how much that max charge is for
13 that battery?

14 A. I -- again, I'm struggling with the
15 question because I'm used to using the term POSITA
16 in a certain context in terms of a POSITA -- I
17 work -- as you know, I've worked on many patent
18 cases for 17 years or so, and I always use the
19 concept of POSITA, a person of ordinary skill in the
20 art, understanding the patent when they read it, and
21 understanding we all use -- and they read it, could
22 they understand how it was built, did they
23 understand the language, you know, that sort of
24 thing.

25 I'm -- I'm confused as to your question,

1 would a POSITA been able to design a battery with a
2 certain capacity -- I -- I just don't understand how
3 that relates to a POSITA, what a POSITA does.

4 As a matter of fact, in Paragraph 24, I
5 say, "In determining the characteristics of a
6 hypothetical POSITA of the '338 Patent, I considered
7 several factors, including types of problems
8 encountered in the art, solutions to these problems,
9 the rapidity of which the innovations are made, the
10 education level of the active workers."

11 I didn't say anything about being able to
12 sit down and design a battery.

13 Q. My question had nothing to do with the
14 design of the battery; so let's see if I can clarify
15 that further.

16 My question is: Whether a POSITA working
17 on a vehicle that has a battery in it could measure
18 that maximum charge that that battery is capable of
19 holding?

20 MR. TECCE: Object to the form.

21 A. The question is -- and, respectfully, is
22 malformed. You don't measure the capacity. You --
23 you can determine the capacity based on the
24 chemistry. You would measure an amount of charge.

25 So the question, the way it was asked,

1 isn't correct -- again, respectfully, isn't correct
2 from an electrical engineering perspective.

3 BY MS. RAW:

4 Q. Could a POSITA, working on a vehicle with
5 a battery in it, measure how much charge is in the
6 battery when the vehicle -- or when the battery is
7 charged to its maximum charge?

8 MR. TECCE: Object to the form.

9 A. So it's -- it sort of depends on the
10 battery chemistry. Some battery chemistries, you
11 can do it by the actual amount of voltage that's on
12 the battery -- you could -- that relates in some way
13 to the capacity. There's probably -- it's probably
14 correlated some way to the actual rate of discharge
15 at a given time. It's a fairly -- the bottom line
16 is: Without knowing the specifics, it's kind of a
17 hypothetical. I just don't know.

18 BY MS. RAW:

19 Q. Have you ever owned an electric vehicle?

20 A. I have not.

21 Q. Okay. Have you ever rented an electric
22 vehicle?

23 A. My son has an electric vehicle; so I --
24 I ... And, again, I've -- I've been on the -- I was
25 on the board of an electric vehicle company for

1 five years and, you know, know quite a bit about
2 them.

3 Q. Have you ever charged an electric vehicle?

4 A. Me, personally? I don't think I've ever
5 plugged in a plug to an electric vehicle, no.

6 Q. Okay. Is the capacity of a battery
7 impacted by how old the battery is?

8 A. It is.

9 Q. Is the capacity of a battery impacted by
10 the temperature?

11 A. It is.

12 Q. Okay. And if you'll go to Paragraph 29 of
13 your declaration, please.

14 A. Yes.

15 Q. All right. Do you see that the last
16 sentence -- the last complete sentence on page 15 of
17 your declaration says, The '338 Patent makes clear
18 that charge amount, i.e., the claimed amount of
19 charge is different from charge level, which may
20 include distance of travel.

21 Do you see that sentence?

22 A. I do.

23 Q. Is it your opinion that charge amount is
24 always different from charge level?

25 A. In the context of the patent, they're

1 different.

2 Q. Okay. What is a charge level in the
3 context of the '338 Patent?

4 A. I'm going to open up the '338 Patent now.

5 Q. Okay.

6 MS. RAW: I'll state, for the record, that
7 in the IPR, this is Exhibit 1001.

8 (Deposition Exhibit No. 1001 was marked
9 for identification.)

10 BY MS. RAW:

11 Q. When you get there, can you, please, tell
12 me what column you're at.

13 A. I will. I'm looking now. I'm doing an
14 electronic search on charge; so I can quickly get to
15 the places I need to find.

16 Q. Okay. That's why I love the electronic
17 copies.

18 A. Me -- me too -- me too.

19 So could you ask the question again.

20 Q. Yep.

21 What is a charge level in the context of
22 the '338 Patent?

23 A. Well, I'll just start -- I'm not reading
24 from the patent -- I'll just start by saying that a
25 person of ordinary skill in the art -- well, early

1 on in the patent, it talks about charging, and I
2 guess it's just important -- there are -- I
3 acknowledge that there's a lot of terms that are
4 one-word different in this patent, you know;
5 charging level, charging range level, charging,
6 amount of charge. So it's -- it's very important
7 just to have a high level -- my opinion, and a
8 POSITA reading this patent, we first kind of look at
9 a high-level understanding of the entire concept.
10 So the battery has charge. There's a certain number
11 of coulombs, a measure of charge in the battery, and
12 when you're -- when you're charging the battery, you
13 put electric current in, which is so many coulombs
14 per second. And, then, when you charge the
15 battery -- even Mr. Andrews, in his deposition,
16 talked about -- and I can go to the quote -- but
17 he -- it -- just, generally speaking, talked about
18 the amount of charge as being the energy -- the
19 number of coulombs -- the charge in the battery.

20 So there's no -- there doesn't seem to be
21 any difference between, the two experts at least, on
22 what's in the battery is charge. So when you say
23 "charge level," if you're not referring to a
24 specific sentence in the patent, I can just say
25 outside the patent, there's as a person of ordinary

1 skill in the art or someone with greater than
2 person -- greater than a POSITA understanding, is
3 the level would relate to the amount of charge in
4 the battery.

5 Q. Okay. What's in the context of the '338
6 Patent does a charge range?

7 A. There's a section about that in the -- in
8 the patent. Again, in the patent, if you go to
9 Figure -- well, let me just see if I can find that
10 in the patent itself.

11 Okay. The top of Column 15, Line 1, it
12 does talk about the user -- I'm quoting from the
13 patent -- The user may also or alternatively view
14 and/or change the desired charge range level --
15 level, 720, an estimate of how far the vehicle can
16 trav- -- an estimate of how far the vehicle can
17 travel on a given charge amount, which may be a
18 general average and/or maybe computed based on a
19 specific itinerary or past driving habits, can be
20 determined, and it goes on.

21 So, here, it talks about it -- and if you
22 go to Figure 7, and look at that Identifier 720,
23 which is this -- they talk about charge range
24 level -- it's related to the amount of charge, but
25 it's an estimate, and it's determined.

1 Q. So looking at Figure 7, would you agree
2 that 720 shows that a user set a charge range of
3 110 miles?

4 A. No.

5 Q. Okay. What do you disagree with in my
6 sentence?

7 A. You have to go back to the -- the patent
8 where it talks about that's a computed -- that's an
9 estimated and computed number based on the amount of
10 charge and the charge level.

11 Q. Okay. So in your view, 110 miles is not
12 what the user chose to set in the context of
13 Figure 7?

14 A. That's an estimated number based on just
15 same answer.

16 Q. Okay.

17 A. One second, please, too. Here, I'm going
18 to -- go ahead.

19 Q. Okay. Would it have been within the skill
20 level of a POSITA to create a charging system that
21 could charge a vehicle so it had enough charge to go
22 110 miles?

23 A. Again, I think as a POSITA reading this
24 patent, it's very important to understand the
25 context of the patent. And, again, I -- I talked

1 about this -- this is not exactly the answer to your
2 question, but it's related -- and that is: All of
3 these definitions apply to the embodiments and the
4 invention and the patent, and, for example, we have
5 a situation -- if you go to Paragraph 33 ...

6 Q. Paragraph 33 of what?

7 A. Of my declaration. Sorry. Maybe it's
8 not. It's, like, Paragraph 33, 34, and 35. I won't
9 read them at the moment, but the whole concept here
10 is that you have a system that encompasses all the
11 embodiments of the patent by entering mileage. It
12 doesn't relate at all to how long you would keep the
13 air conditioning on to support a temperature for a
14 pet, for example. It's inconsistent with that
15 embodiment.

16 So, in my opinion, a POSITA would read
17 these definitions to understand how they would work
18 in the concept -- in the concept of the patent and
19 the embodiments of the patent.

20 Q. Okay. Because I'm still unclear what your
21 answer is to the question I'm -- I asked, I'm going
22 to ask it again.

23 So would it have been within the skill of
24 a POSITA to create a charging system that could
25 charge a vehicle so it had enough charge to go

1 110 miles?

2 MR. TECCE: Object to the form.

3 A. Again, you're kind of -- you're ask- -- I
4 didn't -- define a POSITA -- you know, when you talk
5 about designing a system from scratch, it
6 requires -- the POSITA -- I gave a definition of a
7 hypothetical POSITA, and I'll go back to that. Let
8 me -- I'm in my report again. I think I'm going
9 back to Paragraph 24 or 23.

10 (Reporter admonishment.)

11 THE WITNESS: I was talking to myself. I
12 apologize. I will speak up.

13 THE COURT REPORTER: Thank you.

14 THE WITNESS: You're welcome.

15 A. Yeah, I -- again, I'm not an attorney.
16 I -- it wasn't my expectation that a POSITA reading
17 this patent would independently have the ability to
18 design some hypothetical arbitrary system, which I
19 think is your question. I -- I understand that a
20 POSITA has to understand the patent, has to be able
21 to take the invention, and has to be able to create
22 it, and design it based on the patent, there has to
23 be some guidance. It seemed like the question
24 you're asking is: Sitting in a closed room with no
25 other information, would a POSITA be able to design

1 some system? That's a pretty high bar for an ar- --
2 some hypothetical system. I --

3 BY MS. RAW:

4 Q. Will you, please, go to the Claim 1 of the
5 '338 Patent.

6 A. Yes.

7 I'm there.

8 Q. Okay. All right. So I'm looking at
9 Limitation Age, which is the limitation that begins
10 at Line -- what is that?-- 52 of Column 29.

11 A. I'm there.

12 Q. So is the -- okay. Perfect.

13 Okay. I'm looking at the last clause of
14 that limitation, which begins on Line 59. It says,
15 And wherein, the vehicle charge indicator element
16 further comprises a slider by which an amount of
17 charge may be specified.

18 Do you see that?

19 A. I do.

20 Q. Okay. Could the amount of charge that's
21 specified be a maximum charge amount?

22 A. Let me -- my understand- -- I'm not an
23 attorney -- but if the word "maximum" isn't in
24 there, then a person of ordinary skill in the art
25 wouldn't read it that way. I don't know what you're

1 saying. You can't limit the claim more than it's
2 limited.

3 Q. So my question is not whether it's limited
4 to a max charge amount.

5 My question is: Whether, consistent with
6 this limitation, a slider could be used to set a
7 maximum charge amount?

8 A. In what context? Are -- you're giving me
9 a hypothetical question about maximum charge amount.
10 What are you referring to?

11 Q. So I'm trying to understand how you have
12 interpreted these claims for purposes of the
13 opinions you've provided in your declaration.

14 So if I'm trying to determine whether
15 something were to infringe Limitation 1H, and that
16 system had a slider, and someone set the slider to
17 an amount of charge, and that amount of charge was
18 the maximum amount of charge they wanted their
19 vehicle to have, would that be something that would
20 meet limitations 1H in your view?

21 A. Well, you're asking me a hyp- --
22 hypothetical --

23 MR. TECCE: Object to form.

24 (Reporter clarification.)

25 MR. TECCE: I said object to the form --

1 THE COURT REPORTER: Thank you.

2 MR. TECCE: -- which is the only
3 objections in which I'm entitled.

4 A. And my understanding of your question is
5 that it's a hypothetical question about someone
6 doing something, and would it infringe.

7 I guess, I'd have to look at. I'd have to
8 look at the context of what's happening. That's
9 what I did here. My opinions are in my report
10 and -- and, again, given the context of my report,
11 it's in rebuttal to prior art -- prior art -- I'm
12 sorry, to prior art that applies -- that the
13 Petitioner has applied and to -- Mr. Andrews has
14 applied to this IPR. That's what I responded to.

15 I do understand, I recall, generally
16 speaking, you know, if the prior art reads on the
17 patent, I guess, that's the same as infringing, but
18 I'm not -- I'm not a lawyer; so I'm not going to go
19 there; so I'm not sure -- I didn't really evaluate
20 infringement of a given product. I looked at
21 whether the prior art anticipated and/or found
22 obvious the patent claims.

23 BY MS. RAW:

24 Q. Where Limitation 1H refers to a slider by
25 which an amount of charge may be specified, is that

1 broad enough to encompass a slider being set to a
2 minimum charge amount?

3 MR. TECCE: Object to the form.

4 A. Well, again, I'm very happy to refer to
5 opinions that are in my report. You're asking me
6 reasonable questions, but the opinions that I gave
7 are the opinions in my report. And so you're asking
8 me a hypothetical, which may not be an unreasonable
9 question, but if it's not something that's in my
10 report, then I'd have to take a second to look at
11 it. And I'm not sure exactly how I would frame an
12 answer to that question. I can look through my
13 entire report. I'm not sure you want me to take all
14 that time.

15 BY MS. RAW:

16 Q. Okay. So, then, is it fair to say that,
17 sitting here today, you just don't have a specific
18 opinion on whether the phrase "slider by which an
19 amount of charge may be specified" could refer to a
20 maximum amount of charge or a minimum amount of
21 charge, for example?

22 MR. TECCE: Object to the form.

23 A. Yeah, I didn't say that either. I said I
24 have a number of opinions in my report, and I was
25 happy to go and look to see if -- if they address

1 your question. I didn't say I didn't have an
2 opinion.

3 BY MS. RAW:

4 Q. Okay. Sitting here today, are -- do you
5 recall providing an opinion on that question?

6 A. I certainly recall providing a number of
7 opinions related to amount of charge. I also
8 understand the -- the subtleties in this case are
9 important. And I talked about that just a few
10 moments ago, that the word "charged" shows up in a
11 number of phrases, number of definitions. And I
12 just want to be very careful as to be consistent as
13 to what my opinion is.

14 My opinions are in my report. If you'd
15 like me to take some time, I will see if that --
16 those opinions respond to your questions.

17 Q. Would you agree that it is valuable for
18 the operator of an electric vehicle to know how much
19 charge their electric vehicle has?

20 MR. TECCE: Same -- I'm sorry.

21 THE COURT REPORTER: Was there an
22 objection?

23 MR. TECCE: Yeah. Object to the form.

24 THE COURT REPORTER: Thank you.

25 A. Valuable is kind of a -- a -- a word that

1 has lots of connotations. Valuable in what sense?

2 And respectfully, I'm not trying to be
3 difficult, but we're -- we're trying to be accurate
4 here. Valuable -- I don't know what you mean by
5 valuable.

6 BY MS. RAW:

7 Q. Would you agree that it is valuable for a
8 vehicle operator to know whether or not their car's
9 battery is sufficiently charged to get them home?

10 MR. TECCE: Object to the form.

11 A. I think -- I think there's information
12 in -- in at least the patent or one of the pieces of
13 prior art that kind of talk about that concept. I
14 mean, I -- look, I understand that if you have an
15 electric vehicle and you'd like to know is it
16 charged enough to get, you know, to get you to your
17 destination, I would think that's important.

18 BY MS. RAW:

19 Q. Okay. Would that piece of information be
20 important regardless of whether you're sitting in
21 your vehicle or you're standing outside your
22 vehicle?

23 A. Now, that's a hypothetical question that
24 opens up all kind of things in this case, and we
25 both know that there are -- there's a number of

1 different scenarios brought forth by prior art that
2 relate to that question.

3 And so I will say I -- I directionally
4 understand the question, but I think specifically,
5 I -- it's important -- I've actually -- there's
6 several comments -- or there are several opinions in
7 my report about how important it is to understand,
8 depending on where you are.

9 If you're in a charging -- if you're in
10 a -- parking space next to -- directly next to a
11 charger and you pulled into that space for the
12 reasons of charging, it has a different meaning than
13 in some other situation. So ...

14 Q. Am I correct -- and please let me know if
15 I'm not -- that in your view, the term "amount of
16 charge," as used in this patent, would include
17 setting a percent charge?

18 A. Let me just go to my report.

19 If you look at my Paragraph 31.

20 Q. Okay.

21 A. And I'm just reading from my report.

22 "Further, it is my opinion that Figure 7
23 supports only the construction that, quote, amount
24 of charge, unquote, must be a percentage of the
25 charge of the battery."

1 Q. Okay. And if a vehicle's amount of charge
2 was 50 percent charged, would the driver of that
3 vehicle know how far they can go on 50 percent
4 charge?

5 A. Well, I've also said -- let me -- several
6 places in my report -- I think the point is -- keep
7 in mind that in several places, in my report, in
8 Letendre -- I think, in those two places
9 specifically, in the piece of prior art by the
10 gentleman Letendre, is that the -- the distance that
11 can be traveled for the amount of charge is a
12 function of a number of variables, including driving
13 habits, inclines, outdoor climate, the usage of air
14 conditioning or other battery depleting factors; so
15 distance is either estimated or calculated based on
16 an amount of charge.

17 I'm on my Paragraph 35 right now.

18 Q. Okay. So if the vehicle's amount of
19 charge was 50 percent charge, would the driver know
20 whether that's enough to get them home or not?

21 A. In what context are you asking the
22 question? I'm not sure.

23 Are we talking about the invention of the
24 '338? One of the pieces of prior art? I don't --
25 in what context?

1 Q. Let me rephrase.

2 So I'm trying to understand, under your
3 opinion that setting a slider to 50 percent charge
4 is setting an amount of charge, I'm trying to
5 understand what information that would provide to
6 the POSITA about the distance the vehicle can go.

7 A. Okay. Well, let's just go back to the
8 patent, then. Best place to go, usually.

9 So if you, again, to paragraph -- to
10 Column 15, the top, line 1, and so on. Again, the
11 second sentence, an estimate of how far the vehicle
12 can travel on a given charge amount can be
13 determined.

14 So -- and it says, "a user may determine a
15 desired distance to travel. And may set the charge
16 range" -- and it says, "To max the desired
17 distance."

18 So, again, the user is entering charge
19 level or amount of charge, and the -- and there's an
20 estimate computed or determined. That's all I'm
21 saying.

22 Q. Can you look back at Claim 1 of the '338
23 Patent.

24 So the final limitation of Claim 1, which
25 is Limitation N, refers to a predefined threshold.

1 Do you see that?

2 A. The one that says, "Send an alert"?

3 Q. Yes. It's also right before that, where
4 it says, "Determine that an amount of charge
5 residing in a battery if the electric vehicle has
6 reached a predefined threshold."

7 A. Yes, I do.

8 Q. Okay.

9 A. I see that.

10 Q. What is a predefined threshold?

11 A. In the context of the patent?

12 Q. In the context of the claims of the '338
13 Patent.

14 A. Okay. I'm -- I'm just doing an electronic
15 search to see if the patent has any specific
16 language. Sometimes the search thing doesn't work
17 so well.

18 Well, so in Column 15, lines -- it starts
19 on line -- line 53. The user -- the 52 starting --
20 "The user may turn, quote, all alerts on, unquote,
21 for example, and/or may individually activate small
22 Roman numeral i charge thresholds. For example,
23 minimum, maximum, and/or desired charge thresholds,
24 small Roman numeral ii, rate thresholds." And --
25 and then so on.

1 So it does talk about thresholds. And
2 predetermined, I think, is a commonly used word.

3 Q. Okay. So you would agree, then, the
4 context of the '338 Patent, a charge threshold could
5 be, for example, a minimum or a maximum; is that
6 right?

7 A. If you're asking me what the patent says,
8 the patent says, "For example, rate -- charged
9 thresholds, for example, minimum, maximum, and/or
10 desired charged thresholds."

11 Q. Okay. What is your understanding of the
12 relationship between the predefined threshold and
13 Limitation 1N, and the amount of charge set by the
14 user in Limitation 1H, if any?

15 MR. TECCE: I'm sorry, Kara, can I have
16 the question read -- oh, wait a second. I can see
17 it on the screen. I apologize for one second.

18 Thank you. Go ahead.

19 A. Well, could you ask the question again,
20 please.

21 BY MS. RAW:

22 Q. Yeah. What's your understanding of the
23 relationship between the predefined threshold in
24 Limitation 1N and the amount of charge set by the
25 user -- using the slider in Limitation 1H?

1 A. I heard the question. I understand it.

2 If you look at the bottom of page -- of --
3 in the patent, Column 15, the very last full
4 paragraph.

5 So you asked me what's the context. My
6 understanding of that particular limitation in
7 Claim 1, it relates to this portion of the patent.

8 As shown in Figure 7, The, quote, main,
9 unquote, menu item 706 may comprise a, quote, pet in
10 the car, unquote, button 732. The, quote, pet in
11 car, unquote, button 732 may, for example,
12 automatically set alerts and/or change parameters to
13 set levels conducive to maintaining the comfort and
14 safety of a pet left in a parked Vehicle. In such a
15 manner, for example, a user may safely leave a pet
16 in a parked vehicle by establishing and/or setting
17 charging parameters designed to keep the NC on to
18 maintain a cool vehicle and/or keep the heat on to
19 maintain a warm vehicle, and so on.

20 Q. Okay. So in your opinion, is there a
21 relationship between the charge threshold in
22 Limitation 1N and the amount of charge set by the
23 slider in Limitation 1H?

24 MR. TECCE: Object to the form.

25 A. Well, the -- limitation itself says

1 "charge," and, then, there's some language, "the
2 predefined threshold." So it's the charge reaching
3 a threshold.

4 So I didn't -- I don't think I have an
5 opinion related to the exact question you ask in my
6 report.

7 But if you're asking, are they related?
8 They are, just by the -- just based on the language
9 in the claim.

10 Does charge relate to amount of charge?
11 Of course, it's related. And so is -- and this
12 claim, this limitation is saying, "charge having a
13 pre-" -- "charge reaching a predefined threshold of
14 charge." They're all related.

15 BY MS. RAW:

16 Q. In your view, is the predefined threshold
17 in Limitation 1N the same as the amount of charge
18 that was set by a slider in Limitation 1H or not?

19 MR. TECCE: Object to the form.

20 A. Well, I only read the claim as the claim
21 reads. I -- again, I either would say I didn't
22 respon- -- I didn't create an opinion based on your
23 question. I -- my opinions relate to the claim as
24 it's stated, and to the prior -- and is a rebuttal
25 to the prior art that was presented. That's what I

1 did.

2 BY MS. RAW:

3 Q. Okay.

4 MS. RAW: Okay. Let's -- been -- we've
5 been going about an hour. Let's take a quick break.

6 (A recess was taken from 11:02 a.m. to
7 11:12 a.m.)

8 BY MS. RAW:

9 Q. All right. Looking still at Claim 1 of
10 the '338 Patent -- so I'm looking at the beginning
11 of Limitation 1H, that's the one that begins at
12 Line 52.

13 Do you see where it says, Wherein, there
14 at least one of the one or more charging preferences
15 is defined by user input received via a
16 photographic user interface, and adapted to
17 display a vehicle charge indicator element.

18 Do you see that?

19 A. I do.

20 Q. Okay. When the claim uses the phrase
21 "adapted to display," what is it saying must be
22 adapted to display that vehicle charge indicator
23 element?

24 A. I heard your question. Give me a moment
25 to think about it.

1 Well, I would read this -- so my response
2 to you would be: I would -- it is my job, as an
3 expert, to read this as a person of ordinary skill
4 in the art. I understand that humans are all
5 different and people's grammar is all different, and
6 I'm not an attorney, but I would read this as -- it
7 relates to what -- and we all understand what it
8 generally relates to -- it relates to Figure 7. It
9 talks about a -- a display -- a "vehicle charge
10 indicator element"; okay? And I think that's a key
11 component of this limitation, is this -- and it uses
12 the word, "graphical user interface," which is a
13 term of the art, and a vehicle charge indicator
14 element. And, then, the -- the limitation actually
15 discusses what that indicator element is comprised
16 of, and it has a first portion indicative of amount
17 of charge residing in a battery -- I'm not reading
18 exactly -- and a second portion indicative of an
19 uncharged capacity, and wherein the charge indicator
20 element further comprises a slider of which an
21 amount of charge may be specified.

22 So when I read that, I read: It's related
23 to charging preferences defined by the user.
24 There's a graphical user interface, and I think the
25 question really is -- you asked about adapted --

1 that the graphical user interface is comprised --
2 is -- includes -- or it displays a vehicle charge
3 indicator that is comprised of the elements that I
4 noted a moment ago. So I would read it as a person
5 of ordinary skill would read it.

6 Q. Okay. So, then, you would agree that --
7 well, strike that.

8 So, then, the phrase "adapted to display,"
9 the vehicle charge indicator element is saying that
10 the graphical user interface is adapted to display
11 the vehicle charge indicator element; is that fair?

12 A. I'm just going to check my report. I -- I
13 don't think I have anything about the term
14 "adapted." I think I read right over it. I see it.
15 I didn't read over it. I read the entire claim and
16 the entire limitation.

17 (Witness is reviewing document.)

18 A. So, for example, in response to your
19 question, if I go to Paragraph 111 of my
20 declaration -- and I don't have the -- I do have the
21 petition in front of me, which I could look at. I
22 know it wasn't one of the pieces of art that I
23 mentioned I would have on my computer. I have it.
24 It's a clean copy. It's not marked up or anything.

25

1 BY MS. RAW:

2 Q. Uh-huh.

3 A. But Paragraph 111, This is clear -- I
4 don't remember this exactly, but I -- I think it's
5 important here -- This is clear under petitioner's
6 assertion for Claim 8 where Petitioner states, The
7 GUI in the modified system is adapted to display an
8 alert.

9 So it looks as though Petitioner uses the
10 term "adapted" in a way that I -- I think a person
11 of ordinary skill would read the claim element of
12 Claim 1. And I -- I could go to -- one second,
13 please. I'll just -- I can go to the petition, I
14 think, at page 73. Yeah, I just want to point out,
15 I use it in a broad sense just like Petitioner does.

16 Q. Does Claim 1 require the same battery to
17 propel the vehicle and to run the air conditioning?

18 A. Again, there -- so understand the
19 question -- understand the question.

20 I do have opinions about some of the prior
21 art. Ziegler and -- I think it's Galvez-Ramos
22 are -- are prior art systems that have secondary
23 batteries.

24 And so you asked me: Does the patent
25 preclude those? I would tell you that the patent --

1 I don't think -- I'd have to reread the patent again
2 completely to see if there's any mention of a
3 secondary battery. I literally -- I don't think
4 it's in my report as to whether the patent has that
5 in there or whether it precludes it. I'd have to
6 read it again.

7 I mostly -- as I said earlier, I've
8 rebutted -- my report is really rebuttal to
9 Mr. Andrews and to the petitioner's opinions
10 about -- about the patent.

11 So I think, again -- I guess, I- -- I'd
12 have to stop there. I'd have to -- I'd have to
13 think about it because the -- the patent, if I go
14 back to the very -- one second, please -- if you go
15 to the background of the patent, Column 1, it really
16 talks about improvements in battery technology
17 provide a potential of econo- -- economically viable
18 electric-powered modes of transportation, and it
19 goes on. Oft -- one oft cited drawback of such
20 electrical vehicles is the need to plug them in
21 regularly to replenish their electrical charge.

22 A person of ordinary skill reading that --
23 obviously, I think the intention is to -- to talk
24 about sort of the ordinary use of an electric --
25 not -- ordinary implementation of an electric

1 vehicle. The owner of an electric vehicle -- I'm
2 reading from the patent -- As a result, the owner of
3 an electric automobile must oftentimes adhere to a
4 schedule of charging that renders the automo- --
5 unusable for protracted stretches of time. They're
6 talking about having the battery charged, and I
7 would -- I think the focus of the patent is charging
8 of the battery. It's the -- the battery used in
9 driving the vehicle.

10 I -- again, without reading the -- the --
11 the patent completely, I don't know if it opens up
12 the opportunity of a secondary battery, which I
13 think was your question.

14 Q. Okay. Can you turn to Figure 7 of the
15 '338 Patent, please.

16 A. Figure 7. Yep.

17 Q. Do you see near the bottom of Figure 7, it
18 says, Alerts, colon, and then there's an All Alerts
19 On box?

20 A. I do.

21 Q. Okay. Would you agree that a "pet in car"
22 is not the only type of alert described in the '338
23 Patent?

24 MR. TECCE: [Indiscernible.]

25 THE WITNESS: I'm sorry, was ...

1 THE COURT REPORTER: Was there an
2 objection?

3 MR. TECCE: No. I was trying to read the
4 question back.

5 A. I think we -- we go to Para- -- Column 15,
6 I think that's where we were before. Where -- where
7 it talks about alerts. Let's see. Yes.

8 It was -- started on Line 52 of 15. It
9 talks about a lot of different alerts, yeah. I
10 think that was your question.

11 BY MS. RAW:

12 Q. Can you, please, go to Column 9 of the
13 '338 Patent. It would be --

14 A. I might point out the issue of alerts, as
15 I responded to them, relate to the claims of the
16 patent; okay? So I just want to point out that, for
17 example, I think it -- the patent actually -- I
18 don't think it labels it in Claim 1; so it's the
19 last limitation. The one that you've been talking
20 about with the predefined threshold, talks about
21 sending an alert. I think a person of ordinary
22 skill in the art reading Claim 1, would have a
23 context for that alert. You didn't ask me that
24 question. I just want to point out that although
25 the specification talks about a number of alerts,

1 the claims are the claims, and that's what I believe
2 the -- the Petitioner was addressing when talking
3 about the -- you know, when bringing those prior
4 art -- pieces of prior art to bear on the
5 anticipation or -- or obviousness of the claim.

6 So I just want to point out, yes, in the
7 spec, but the -- the term "alert" has to be used in
8 the context of the patent and the limitations, and
9 that's how I interpreted it. So I'll just stop.

10 Q. Okay. I am in the '338 Patent, very end
11 of Column 9, that very last sentence that goes onto
12 Column 10. Let me know when you're there.

13 A. I'm there.

14 Q. Okay. Do you see that says, In some
15 embodiments, the vehicle sensor, 454, may comprise a
16 communication device, such as a Bluetooth and or
17 passive inductive vice -- device that is operable to
18 detect the presence of the vehicle for 60 utilizing
19 wireless interrogation methodologies.

20 Do you see that?

21 A. I do.

22 Q. Okay. Are you familiar with Bluetooth?

23 A. I am.

24 Q. Are you familiar with the range of
25 Bluetooth?

1 A. Well, I'm familiar with the communications
2 technologies that relate -- Bluetooth in itself
3 doesn't have a range. Bluetooth is a modulation
4 and -- and a -- and a communications technology.
5 It -- the -- the range would have -- would have --
6 the range is a variable, depending on the type of
7 antenna, the actual power that's used, the actual
8 location, the presence of other objects. There's
9 a -- a litany of -- of considerations that need to
10 be made to determine what the range of Bluetooth is.

11 Q. Okay. Are some -- at the time of the
12 patent, were some Bluetooth systems -- would they
13 have a range of 30 feet or greater? Was that
14 possible to do technologically at the time?

15 A. I think, generally speaking, Bluetooth was
16 always kind of in that zone. It- -- it's defined as
17 a -- somewhere between a personal area network
18 technology and a local area network technology. So
19 I think, generally speaking, that number that you
20 gave of 30 feet is in the zone.

21 And let me just clarify, it's in the zone
22 of what might be reasonable. It's -- it doesn't
23 define the limits, yeah.

24 Q. In your report, do you recall providing
25 certain opinions on -- about properly aligning a

1 vehicle with a charger so that it's capable of
2 charging?

3 A. I do recall that.

4 Q. Okay.

5 A. I -- I think I was also referencing
6 Mr. Andrews' discussion, but I think there was some
7 language in my report that discusses that.

8 Q. Okay. Do you also recall in Ferro that
9 one of the options for providing an indication to
10 charge was telling an attendant that you're there to
11 charge?

12 (Reporter clarification.)

13 THE COURT REPORTER: I didn't understand
14 the end of that question.

15 "Telling an attendant" ...

16 MS. RAW: Yeah.

17 BY MS. RAW:

18 Q. That you're there to charge? We can go to
19 it, if that's easier.

20 A. Yeah. I -- I --

21 Q. Do you have Ferro?

22 A. I mean, I understand your question. It's
23 a reasonable question. I think you'd have to show
24 it to me if you wanted me to respond.

25 Q. Yeah. Do you -- do you have a copy of

1 Ferro with you?

2 A. I do. I do.

3 Q. Okay.

4 MS. RAW: For the record, that's
5 Exhibit 1004, and will be in Paragraph 109.

6 (Deposition Exhibit No. 1004 was marked
7 for identification.)

8 A. Okay. I'm on my way there now.
9 I'm there.

10 BY MS. RAW:

11 Q. Okay. Do you see that in -- hang on, let
12 me make sure I have the line -- there we go -- do
13 you see that in Paragraph 109, about halfway
14 through, there's a sentence that begins, Electric
15 Vehicle 400 may indicate an intention to begin a
16 charging transaction?

17 A. I do see that, where you're reading, yes.

18 Q. Okay. And, then, if you go down a few
19 lines, one of the examples is: Informering --
20 excuse me -- informing an operator or attendant of
21 Charging Station 403?

22 A. I do.

23 Q. If I inform the operator of the charging
24 station that I intend to charge my vehicle, does
25 that necessarily say anything about whether my

1 vehicle is positioned properly to use a charger?

2 A. I understood your question. I'm thinking
3 about my answer.

4 I think -- so just reading Ferro, again,
5 this is not the patent. This is what Ferro is
6 saying, and I'll point out that Ferro is being used
7 as a prior art reference to address obviousness
8 or -- or anticipation claims in the -- in the
9 patent.

10 The first 10 words of that same sentence,
11 "Electric Vehicle 400 may indicate an intention to
12 begin a charging transaction."

13 So I have to think about this again. It's
14 kind of a -- it's not a hypothetical question; it's
15 a question about what does this paragraph mean. I
16 probably want to read the two or three paragraphs
17 before and the two or three paragraphs after, but in
18 the interest of time, it does say, "May indicate an
19 intention to begin a charge." That seems to imply
20 that you're ready to go. Just reading that right
21 there and in an answer to your question. Reading
22 that sentence, that's how I first look at it.

23 Q. Okay. So you -- you're reading "intention
24 to charge" as saying the vehicle's properly
25 positioned to charge?

1 A. I think that adds language there that
2 isn't there. So I -- I can't respond to that. I --
3 I'd have to look at the context -- a person of
4 ordinary skill reading Ferro, there's a lot in here
5 about this transaction planner and about the intent.

6 I know that Mr. Andrews and Petitioner
7 have also talked, you know, specifically, about
8 this, and I responded to that in my opinions
9 taking -- if this is something that I referred to in
10 my report, if you take me there I can discuss my
11 position but, otherwise, I'm not sure I'm prepared
12 to organize a new opinion based on just looking at
13 one sentence.

14 Q. Okay. Can you go back to Claim 1 of the
15 '338 Patent, please?

16 A. Yes. I'm there.

17 Q. Okay. I'm looking at Limitation 1M, so
18 that's the one in Column 30 that begins with,
19 "Operate the temperature control system." It's at
20 line 9.

21 A. I see it.

22 Q. Okay. So Limitation 1M is, "Operate the
23 temperature control system of the electric vehicle
24 in accordance with the selected mode of operation
25 for a duration of time."

1 Do you see that?

2 A. I do.

3 Q. Are you aware of any limitations on how
4 long or how short that duration of time must be?

5 A. I understood your question. Let me ...
6 I'm going back to my report for a moment.
7 I'm now looking at Mr. Andrews'
8 declaration.

9 Q. Okay.

10 (Witness is reviewing document.)

11 A. And Mr. Andrews doesn't seem to take issue
12 with duration of time; so I -- I didn't -- I
13 addressed it as he used it.

14 BY MS. RAW:

15 Q. Okay. Can you please go back to Claim 1
16 of the '338 Patent.

17 A. Yes.

18 Q. Okay. The very last limitation, which is,
19 "Send an alert to an operator of the electric
20 vehicle indicative of the charge residing in the
21 battery having reached the predefined threshold."

22 Do you see that?

23 A. I do.

24 Q. Is it your view that sending a text
25 message to the phone of the operator of the electric

1 vehicle could count as sending an alert in the
2 context of this limitation?

3 A. Give me one moment, please.

4 (Witness is reviewing document.)

5 A. Well, there is a -- there is a claim
6 wherein the alert is sent to a smartphone. It
7 doesn't say what format the alert is in that claim,
8 in Claim 26, for example.

9 BY MS. RAW:

10 Q. Okay. So Claim 8, for example, would be
11 the dependent claim -- depending from Claim 1, which
12 says, "The electrical charging system of Claim 1
13 wherein the alert is sent to a smartphone."

14 Is that what you mean?

15 A. I'm just simply saying -- I'm not an
16 attorney. My understanding is that all of the
17 claims are part of the patent.

18 I -- I just understand that you read this
19 specification and you read all the claims, and all
20 of that information is important to an expert in
21 terms of understanding the patent.

22 Q. Okay.

23 A. So I was just pointing out that sending an
24 alert to the smartphone implies to me that the
25 inventors understood that smartphones can get

1 alerts -- I'm assuming it would be in the form of a
2 notification, a text, an email, something.

3 And given the word "alert," that's also --
4 I know can be construed in different ways. And so
5 I'm assuming in this particular case would be to get
6 someone's attention, given that it's the pet in the
7 car embodiment, that it would probably be a text or
8 some sort of notification rather than an email,
9 which is not particularly timely.

10 Q. Okay.

11 A. Let me just point out also, I'm looking
12 through the patent. I didn't provide an opinion
13 about texts or emails. There's a lot there, and I
14 do understand that there's a lot of construction
15 related to those things.

16 And I would just point out I don't
17 recall -- in this case, I don't think alert is
18 defined any more than what a person of ordinary
19 skill would read in the patent.

20 And so I'm just looking through to see
21 if -- if the term "alert" is defined the way you did
22 with the texts. And I -- I don't recall, but I'd
23 have to look again.

24 Q. Okay. But your opinion would be at least
25 that sending an alert to the operator of the

1 electric vehicle could include sending an alert to
2 the smartphone of the operator; is that fair?

3 A. Well, it's in one of the limitations.
4 It's in one of the claims.

5 Q. So, then, the answer's, yes?

6 MR. TECCE: Object to form.

7 A. I guess I'll -- I'll repeat.

8 I didn't study what format the alert would
9 be. You asked me could it be sent to someone
10 holding a smartphone? I'm not sure I -- could you
11 repeat the question --

12 BY MS. RAW:

13 Q. Yes.

14 A. -- again.

15 Q. Your opinion would be, at least, that
16 sending an alert to an operator of the electric
17 vehicle could include sending an alert to the
18 smartphone of the operator; is that fair?

19 A. And I answered by saying Claim 8 actually
20 says, "The electrical charging system of Claim 1,
21 wherein the alert is sent to a smartphone." That's
22 claimed in the patent.

23 Q. Okay. So is there any reason why you're
24 unable to just say the answer to my question is yes?

25 MR. TECCE: Object to the form.

1 A. I just don't know what context your
2 question is. I'm just saying, in the patent, it's
3 stated as a claim.

4 BY MS. RAW:

5 Q. Okay. If an alert is sent to a smartphone
6 but the smartphone's battery died, would that still
7 count as sending an alert to an operator of the
8 electric vehicle?

9 A. Well, let me be clear, if I understand the
10 question.

11 There's a very big difference in
12 communications between the transmitter and the
13 receiver. The transmitter has no knowledge of
14 whether there's a receiver there or not. So this is
15 in an -- it's a hypothetical question, and I'm just
16 telling you the way physics work is that if you're
17 not in eyesight of the person with the receiver, and
18 you don't know what format -- you -- you can --
19 well, I'll give an example -- well, I'll use the
20 example.

21 You can -- you can send a text if the
22 person -- you -- it's sent. The system may not
23 acknowledge it. Or if it's dead or broken or
24 whatever, you might get a message back that says
25 "undeliverable." But you certainly can send it.

1 If you're asking about how does that play
2 in the context of the patent, that's completely
3 different, and I -- I don't think I have an opinion
4 about that, about whether a smartphone is dead or
5 not.

6 Q. Okay. What's your understanding of what a
7 graphical user interface is in the context of the
8 '338 Patent?

9 A. I actually brought a reference to bear.
10 It's -- I think it's Exhibit 2004.

11 Q. One second.

12 (Deposition Exhibit No. 2004 was marked
13 for identification.)

14 BY MS. RAW:

15 Q. Okay.

16 A. And it's basically a paper that just talks
17 about -- well, the title of the paper is "A source
18 code-based model to generate graphical user
19 interfaces."

20 I did not come today -- nowhere in my
21 report do I have a claim -- a construction of
22 graphical user interface. That wasn't part of the
23 work that I did.

24 A person of ordinary -- so I -- I couldn't
25 provide you with a definition, per se.

1 Do I know what -- do I know it when I see
2 it? I do. It's graphical. It's something a user
3 would use.

4 And interface, it's something a user would
5 interact with. And so that's how I see it. I think
6 it's fairly intuitive, graphical user interface.
7 And there are pictures as examples of graphical user
8 interfaces in this paper, Figure 2 of this paper.

9 Let's see if there's others.

10 Figure 5 of the patent. Figure 6 of the
11 patent. Figure 9 of the patent.

12 I think we all know them when we see them.

13 BY MS. RAW:

14 Q. Can you go back to Claim 1 of the '338
15 Patent, please.

16 A. Yes. I'm there.

17 Q. Okay. I'm looking at Limitation K.
18 That's at the top of Column 30, and it starts with,
19 "Display via."

20 Do you see that limitation?

21 A. I do.

22 Q. Okay. Do you see that the beginning of
23 Limitation K says, "Display via the graphical user
24 interface, an indication of a status of the selected
25 mode of operation of the electric vehicle"?

1 A. I -- I see that, yes.

2 Q. Okay. When it refers to a status of the
3 selected mode of operation, could that status be on
4 or off?

5 A. You're asking me a hypothetical question.
6 Could a -- a GUI button be on or off, the
7 answer is yes. And I would call that the status of
8 the button, in a hypothetical case.

9 Q. Okay.

10 A. I just want to be clear, though, that --
11 because we've been talking about alerts, the
12 patent -- and I -- I talked about this in my report.
13 I'd be glad to call out the section and paragraph --
14 display is discussed separately from sending an
15 alert.

16 And I actually do have opinions in my
17 report related to the distinction between a display
18 and an alert. So I just want to make that clear,
19 that you have been talking about alerts, and now
20 we're talking about displaying.

21 Those are, in the patent, in the
22 limitations, two separate things.

23 MS. RAW: Let's take a quick break. When
24 we come back, I'll probably be wrapping up, Fred,
25 for your context.

1 MR. TECCE: Great. Thank you.

2 (A recess was taken from 11:48 a.m. to
3 11:59 a.m.)

4 MS. RAW: All right. I have no further
5 questions.

6 THE COURT REPORTER: Doctor, would you
7 like to read and sign?

8 MR. TECCE: We'll -- let me talk to
9 counsel. My inclination is to waive it, but let me
10 talk to lead counsel.

11 MS. RAW: Yep.

12 THE COURT REPORTER: Mr. Tecce, how would
13 you like your transcript?

14 MR. TECCE: Regular turn around is fine.

15 THE COURT REPORTER: Would you also like a
16 rough draft?

17 MR. TECCE: No thanks.

18 (The deposition concluded at 12:02 p.m.)
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CERTIFICATE OF REPORTER

I, Kara D. Ince, a Certified Court Reporter for the State of Missouri, do hereby certify that the witness whose testimony appears in the foregoing deposition was duly sworn by me; the testimony of said witness was taken by me to the best of my ability and thereafter reduced to typewriting under my direction; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this deposition was taken; and further that I am not a relative or employee of any attorney or counsel employed by the parties thereto nor financially or otherwise interested in the outcome of the action.



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Missouri Supreme Court
Certified Court Reporter

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