

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

IQAR INC.,
Patent Owner

IPR2024-00630
Patent 10,850,616 B2

Record of Oral Hearing
Held: July 1, 2025

Before JASON W. MELVIN, SEAN P. O'HANLON, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

IPR2024-00630
Patent 10,850,616 B2

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

P R O C E E D I N G S

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JUDGE O'HANLON: Good afternoon, everyone. I am Judge O'Hanlon and I am joined by Judge Melvin and Judge Dougal. This is a hearing in proceeding number IPR -- as I was saying, this is a hearing in proceeding number IPR2024-00630, *Tesla, Incorporated.. versus iQar, Incorporated*, and this concerns U.S. Patent Number 10,850,616.

I'd like to start by having counsel for the parties introduce yourselves for the record, beginning with Petitioner, please.

MR. RENNER: Good afternoon, Your Honors. Karl Renner from Fish & Richardson, joined by Ryan Chowdhury, and on the line is Ashraf Fawzy from Tesla.

JUDGE O'HANLON: Thank you, Mr. Renner. And who will be presenting for Patent Owner, please?

MR. DE BLANK: Good afternoon, Your Honor. My name is Bas de Blank with Orrick, Herrington & Sutcliffe on behalf of Patent Owner, and I believe on the line is Greg Mathis, who is the CEO of Patent Owner.

JUDGE O'HANLON: Thank you, Mr. de Blank. Did I pronounce that correct -- de Blank?

MR. DE BLANK: Yes, Your Honor. Thank you.

JUDGE O'HANLON: Thank you. I have a few housekeeping items to go through before we get started today. First of all, our primary goal is to allow you to make arguments and to be heard. If at any time during the proceeding, you encounter technical or other difficulties that undermine your ability to do so, please let us know immediately by

1 contacting the personnel that provided you with the information for today's
2 hearing.

3 Recording of any PTAB hearing is prohibited. The court reporter
4 will provide a transcript of the hearing that will become a part of the record
5 in this proceeding. To ensure that the transcript of this hearing is clear, we
6 ask that you ensure your microphone is positioned close to you when
7 speaking, and when not speaking, please mute your microphone.

8 When referencing your demonstratives, papers or exhibits, please
9 state the slide or page number so we can follow along more easily and for
10 clarity of the record. Each side will have 60 minutes of total time to argue.
11 Petitioner will argue first, followed by Patent Owner, and each side may
12 reserve time for rebuttal.

13 The hearing room that we're in -- this Alexandria hearing room --
14 has a timer that we'll be using today. We'll set the timer so that the light
15 changes to yellow when you start to use your time reserved for rebuttal, and
16 when the light turns red, you have used all of your time.

17 Please remember that your arguments should be limited to only
18 those arguments previously presented in your briefs. Please make it clear
19 which challenges and claims you are addressing at all times, and we ask that
20 the parties hold any objections until it is your time to speak at the podium.

21 Finally, please note that there is a public line for this hearing. I
22 believe this will not be an issue, as there is not a protective order in this case,
23 but I wanted you to know that there may be members of the public listening
24 or viewing the hearing today.

25 Does anybody have any questions before we begin?

26 MR. RENNER: Not here, Your Honor.

1 MR. DE BLANK: No, Your Honor. Thank you.

2 JUDGE O'HANLON: Okay. With that, I invite Mr. Renner to
3 begin. Mr. Renner, would you like to reserve any time for rebuttal?

4 MR. RENNER: Yes, Your Honor. We'll reserve 20 minutes,
5 please.

6 JUDGE O'HANLON: Okay, 20 minutes. Let me set the clock.
7 Okay, you may begin when you're ready, Mr. Renner.

8 MR. RENNER: Thank you, Your Honor. May it please the
9 Board, Karl Renner on behalf of Petitioner, Tesla. At the outset of today's
10 hearing, before I ask my colleague, Ryan Chowdhury, to get into greater
11 detail by highlighting several implicated claim limitations and a few pieces
12 of evidence we wanted to focus on, I want to offer a few remarks to frame
13 issues that we think are central to the dispute.

14 At a high level, you can see the case hinges really on a single
15 dispositive issue and that is whether the Patent Owner is entitled to its claim
16 of priority for the claim elements that it added by amendment during
17 prosecution. The issue is said to be dispositive by me because it singularly
18 defines the outcome of the dispute. If priority is, in fact, justified, we know
19 that the Koebler 650 reference is disqualified as prior art and grounds would
20 fail, but if priority is not justified, and we believe the evidence of this record
21 shows it is not, Koebler 650 is not disqualified. And more, the challenged
22 claims should and would be deemed unpatentable over Koebler 650. Patent
23 Owner doesn't dispute its applicability. In fact, it's prior art to the claims.

24 So the dispute turns on this question of priority, and on priority,
25 Patent Owner fails to show adequate support for ten, we believe, different
26 recited conditions added by amendment to the limitations. We note that the

1 Patent Owner must establish a basis of priority for every one of the ten
2 conditions to prevail, and failing any one of them would resolve the case in
3 favor of the Petitioner.

4 And consistent with record briefing, we plan to focus the bulk of
5 our presentation today on really three of those ten unsupported conditions --
6 traction, amount of vibration, and moisture. Now, with respect to those
7 conditions, Patent Owner fails to show adequate support for priority in each
8 of two different ways. First, we look at the conditions themselves and we
9 find a lack of priority for them. Koebler 650 does not offer express
10 disclosure of the conditions, but Patent Owner is not contending otherwise.

11 It's really focusing on a claim of priority through their contention
12 that it should be found through a more holistic view of that Koebler 650
13 reference disclosure, which it characterizes as offering, and I'll quote, a
14 variety of different conditions using a panoply of different sensor data, just
15 as the claims require. You'll find that we think differently. We think the
16 claims require quite a bit more than that level of detail.

17 And more relevantly, Patent Owner attempts to support this
18 position by referencing disclosure within the Koebler 650 to various
19 particular parameters. This is in response to our broad contentions of
20 lacking support. They identify particular parameters they thought were
21 useful and sensors, for that matter.

22 Again, as noted, these parameters do not disclose the conditions
23 that were added by amendment to the claims, but the Patent Owner contends
24 the disclosure of these other parameters by Koebler 650, the ones that are
25 not expressed disclosure of those recited, that they would've led a POSITA
26 to the claimed conditions, and yet in its contention, Patent Owner merely

1 proclaims that a POSITA would know that the enumerated sensors sense
2 things that could be used to resolve the integrated conditions. And in this
3 way, the proof is legally, we believe, irrelevant to the inquiry.

4 Recall that for priority, Koebler 650 must reflect possession of the
5 claimed invention and the claims that are amended to indicate that the
6 enumerated conditions, for instance, traction, must be resolved through an
7 analysis of data from one of the thirteen sensors specifically enumerated by
8 Patent Owner when it amended its claims. And in fact, Patent Owner and its
9 witness, they really fail to establish a basis of this priority.

10 You're going to hear a lot from Ryan about how they confirmed
11 the opposite, when explaining that analysis of data from the sensors they've
12 identified, that that analysis, that resolution, would get you to something that
13 is materially different, that is merely related to, close to, essentially the same
14 as, but necessarily different than, for instance, traction. We'll see that again
15 and again as we go through those elements.

16 The second point of failure, it relates to a disregarding -- even if
17 you disregard the failure of Koebler 650 to demonstrate the possession by
18 the inventors of the specific conditions themselves amended into the claims,
19 the claims still fail differently because the claims were amended in a way
20 that requires more than the mere disclosure of the conditions themselves.
21 The claims require that the cited conditions -- they're determined in a
22 particular way -- through the analysis of sensor data samples. Not just any
23 sensor data samples. The claimant here demanded that the determination of
24 the conditions be based on an analysis of data samples collected by one of
25 specifically the thirteen sensors that were listed in the claim. That's the
26 element 1C1 that we referenced in our brief.

1 So even if Patent Owner was somehow able to establish that a
2 condition like traction or the others was disclosed in some general way, it
3 still needed to show more to demonstrate priority for the claims, reciting the
4 amended traction condition, and the same holds true for those other
5 amendments, and that is the Patent Owner would need to additionally
6 establish evidence reflecting that the inventor possessed an analysis, as
7 claimed, of the data from one of those thirteen recited sensors to resolve
8 traction among the other recited conditions.

9 Now, to be clear, the claim doesn't call for resolving something
10 that could be used to resolve traction or amount of vibration, or moisture
11 among the conditions. The claims instead express in reciting that traction
12 itself, amount of vibration itself, moisture itself, the other conditions, each
13 one of them be the result of the analysis performed using the enumerated
14 sensors. And on this additional limitation, the records without evidence, a
15 disclosure within Koebler 650 to demonstrate possession by the inventor of
16 the specific analysis of data from the enumerated sensors to arrive at those
17 claimed conditions, as required by the amendments.

18 Now here again on this point, we look no further than to what
19 Patent Owner and its witness said about the sensors to see that they're
20 deficient because they identified as supposed support for the analysis
21 yielding traction as they identified things that would result in things related
22 to or close to traction. That was at sur-reply, page 8, referencing the Exhibit
23 1055, 50, 10 to 13, or something that includes information about traction in
24 sur-reply at again, this time looking at the Exhibit 1055, page 45 at lines 3 to
25 7, and 48, 11 to 19. Or even things that are said to be essentially the same as

1 traction, but each instance, we can clearly see that they're not the same as
2 traction.

3 One last point. The record affirmatively demonstrates the
4 speculation would've been required for a POSITA to have resolved the
5 claimed conditions based on the parameters disclosed by Koebler 650. Now,
6 specifically, the record includes unrebutted evidence, establishing that the
7 disclosed parameters were known to POSITAs to be associated with the
8 various conditions, other than the claimed condition.

9 And yet the record is without any explanation or evidence
10 regarding how a POSITA, seeing these multiple possibilities associated with
11 a single disclosed parameter of each instance, which somehow have been led
12 from this generic disclosure to conclude that the inventor possessed
13 resolution through the data of the particular condition, that is traction, for
14 instance, that a Patent Owner had mentioned in later amendments of the
15 claims.

16 And to this point, if we ask ourselves, by seeing disclosure by
17 Koebler 650 parameters and knowing that those parameters are sometimes
18 associated with the conditions other than that, which is later added by
19 amendment, why would a POSITA conclude that the inventor had intended
20 to convey possession of that claimed condition. The record does not answer
21 this important question, nor does it otherwise demonstrate that a POSITA
22 would somehow have been to disclosure and thus possession of the claimed
23 condition in each instance. Rather, it leaves us to know that the POSITA
24 would be left to speculate, which is plainly insufficient per *Lockwood* and
25 other authority.

1 Now, without priority for each of the limitations as mentioned, we
2 know that Koebler qualifies as prior art and we know that it invalidates.
3 And with that, I'd like to ask Ryan to come up and maybe talk through some
4 of the specifics of particular elements. Are there any questions I can answer
5 before I allow him to do so? Okay.

6 JUDGE O'HANLON: I don't believe we have any questions at this
7 time. Thank you.

8 MR. RENNER: Thank you, Your Honor.

9 MR. CHOWDHURY: Good afternoon, Your Honors, and may it
10 please the Board. Slide 7, please. As my colleague just indicated, this
11 proceeding turns on a dispute on whether or not priority is warranted for the
12 challenged claims. This implicates written description support, which
13 imposes two distinct requirements. First, Koebler 650 has to disclose
14 determination of every one of the twenty-one current conditions.

15 Second, for each current condition, its disclosure has to further
16 demonstrate that the determination involves analysis of samples from one of
17 the thirteen sensors. This backdrop sets the stage for evaluating whether
18 Koebler 650 contains the necessary support and that's exactly what the
19 petition did. It set forth a prima facie case of a lack of entitlement to
20 priority. As a result, the burden of production now shifts to the Patent
21 Owner to demonstrate written description support for the amendment, and as
22 a result, entitlement to priority. The shift makes sense because as Mr.
23 Renner had mentioned, if the Patent Owner wanted different scope, it could
24 have and should have claimed the invention differently, but they didn't, so
25 we are now left with the claim language left on this slide.

1 Slide 16, please. As we'll see, Patent Owner fails to carry its
2 burden. Its evidence has gaps that ultimately do not resolve key questions
3 raised in the petition with respect to ten of the twenty-one current conditions.
4 Before we discuss those questions, I'll quickly touch upon some relevant
5 legal principles. The balance of the presentation will walk through the three
6 current conditions previously identified and in the gaps in Patent Owner's
7 evidence.

8 Slide 18, please. One observation up front. The key dispute in this
9 proceeding is not the law itself, but the application of the law to the
10 particular facts. Specifically, the dispute is whether Koebler 650 provides
11 disclosure that is sufficient or per requirements of the challenged claims. As
12 noted, Koebler 650's disclosure falls short for 10 enumerated current
13 conditions. In contrast, Patent Owner points to what a person of ordinary
14 skill would have been led to believe based on the Koebler 650 disclosure.
15 Notice that this necessarily requires combining that which is within the four
16 corners of the document with know how that exists outside of it. Slide 20,
17 please.

18 JUDGE O'HANLON: Mr. Chowdhury, we have to look to the
19 four corners of the specification, but don't we do that from perspective of an
20 ordinary skilled artisan?

21 MR. CHOWDHURY: Your Honors, thank you for --

22 JUDGE O'HANLON: Would the Patent Owner's arguments that
23 an ordinary skilled artisan would know how to use, for example, position
24 sensor, optical sensor in a certain way, isn't that just from the perspective of
25 an ordinary skilled artisan?

1 MR. CHOWDHURY: Your Honors, thank you for the question.
2 We agree that the specification is to be read from the perspective of a person
3 of ordinary skill in the art. We also don't dispute that the features that are
4 recited in the claims and disclosed and discussed by the parties that those
5 features are not conventional. We agreed that they are conventional.

6 Our view is that the written description inquiry is not about what
7 modifications would have been available without speculations. Our point is
8 that even if these configurations or functionality was well known, the
9 specification is required to disclose, and so this draws a line between
10 disclosure and obviousness. And we view Patent Owner's view as
11 interpretation of the specification as essentially conflating implicit disclosure
12 and obviousness. I hope that answered your question.

13 JUDGE O'HANLON: If you have anything else to add, go ahead,
14 otherwise, you may proceed with your --

15 MR. CHOWDHURY: Thank you, Your Honor.

16 JUDGE O'HANLON: -- presentation.

17 MR. CHOWDHURY: Federal Circuit precedent is well
18 established in how entitlement to priority and written description fit together.
19 *Lockwood* tells us every link in a priority chain must meet Section 112A.
20 *Research Corporation* further reminds us that obvious variants don't count.
21 It's only that which is disclosed that may be used for establishing written
22 description support.

23 Slide 22, please. As to written description, *Lockwood* further
24 observes that general industry know how can't patch a silent specification. If
25 such silence forces speculation, the written description is insufficient. This

1 is because such speculation involves modifications to the disclosure that are
2 not within possession by the inventors.

3 Slide 23, please. *Knowles* further demonstrates the importance of
4 specificity in establishing written description support. Here, the Federal
5 Circuit found that the generic disclosure of soldering techniques was
6 insufficient to support claims describing a particular type of soldering
7 involving reflow attachments.

8 Our papers explain the factual relevance of these findings to this
9 proceeding. In both *Knowles* and this proceeding, the specification provides
10 a broad disclosure regarding functionality, whereas the claims recite specific
11 types of that broad functionality, thereby demanding specificity. Of further
12 relevance is that the claims at issue in *Knowles*, like the challenged claims
13 here, are within the predictable arts.

14 Slide 15, please. Recall that the dispute is factual. It involves the
15 adequacy of Koebler 650's disclosure. We've already discussed how the
16 three limitations shown on this slide implicate two distinct requirements.
17 Further consideration is also given to the recitation of disjunctive elements
18 in 1D and 1E. The Federal Circuit has made clear that where a claim
19 enumerates elements disjunctively, the claim recites the elements as species,
20 such that the specification is required to disclose the entire genus.

21 The same principle applies here. The claims recite twenty-one
22 current conditions disjunctively, and yet Koebler 650 only discloses eleven
23 of them. That is ten current conditions lack written description support, and
24 among them, three lack disclosure entirely.

25 Before we move on to the three conditions, I wanted to make a
26 quick observation about Patent Owner's characterization of the dispute.

1 You'll hear them say today that we've somehow cherrypicked the
2 specification or ignored the context. Respectfully, we've looked at every
3 part of the disclosure, and in doing so, the petition at pages 13 through 20
4 explain that the specification as a whole fails to provide written description
5 support.

6 While the reply zoomed in on particular passages, that's because
7 those are the ones that Patent Owner chose to highlight in its response. So
8 for the remainder of this presentation, we focus on responding to what Patent
9 Owner argues provides written description support.

10 Slide 40, please. So how did the Patent Owner attempt to
11 demonstrate written description support? This table shows you the
12 parameters that they identified -- parameters that are literally not the current
13 conditions recited in the claims -- but these parameters also do not inherently
14 reflect the current condition information and Patent Owner hasn't alleged
15 that they do.

16 So what we're left with is arguably what Patent Owner considers is
17 implicit disclosure, but even with this type of disclosure, Patent Owner's
18 positions fail because even if you give full credit to the evidence, their
19 evidences, at best, shows that the identified parameters can sometimes,
20 under some circumstances, relate to the three current conditions. But the
21 balance of the evidentiary record indicates that the parameters can also more
22 broadly relate to other distinct information unrelated to the current
23 conditions, and we'll provide examples shortly. This makes their position
24 speculative, which is not the type of evidence required to demonstrate
25 written description support.

1 Let's now walk through each, starting with traction. Slide 37,
2 please. In response to the petition, Patent Owner identified three parameters
3 it believes corresponds to traction. This includes operational status, tire
4 pressure, and rolling pressure. Patent Owner also identified these
5 parameters with two enumerated sensors, including the RPM sensor and the
6 tire pressure sensor, which are shown in the middle part of the slide. I'll
7 address each in turn.

8 Slide 41, please. To start, none of the three identified parameters
9 are synonymous in a traction. Our papers and evidence make that clear, but
10 more importantly, so does Patent Owner's own briefing. To see this, I'll
11 direct you to page 8 of the sur-reply and give you a moment to get there.

12 Here in the middle paragraph about halfway through, Patent Owner
13 attempts to clarify deposition testimony of its expert and noted that, and I
14 quote, he also explained, consistent with his declaration, that real speed and
15 RPM sensors together are essentially a measure of traction. Importantly,
16 "essentially" is not "is," and that qualifier concedes that the sensors measure
17 something short of traction.

18 Let's now look at the record evidence. Slide 42, please. The
19 record includes examples of Patent Owner's three identified parameters as
20 having nothing to do with traction. As one example, near the top right, in
21 paragraph 32 of the supplemental declaration, which is Exhibit 1054, Dr.
22 Morales explains that operational status in Koebler 650 represents a generic
23 category of status information. In this paragraph, he further identified
24 examples, such as battery information and the amount of air going into the
25 engine. These examples are discussed in Column 4, lines 1 through 18 of
26 Koebler 650 in relation to operational status information.

1 Then in paragraph 33, he also explained that the tire resistance may
2 reflect rolling resistance due to tire stiffness or inflation pressure, but then
3 further notes that they provide no meaningful information about traction on a
4 specific road surface. Further, in paragraph 36, he also explains that with a
5 highly inflated tire functioning on a smooth road, the rolling resistance
6 would have provided no direct indication of traction.

7 Each of these examples are those identified by the Patent Owner
8 and yet do not directly specify traction information. Now, Patent Owner
9 will tell you that the record also includes other examples of parameters that
10 its expert opined to reflect traction information. For instance, they would
11 point you to paragraphs 128 to 130 of Exhibit 2001, which is the declaration
12 of their expert, Dr. Bevly.

13 While true, Dr. Bevly's testimony does not help resolve how the
14 identified parameters predominately reflect traction information. And these
15 parameters, as we've just discussed, include the examples that were
16 identified by Dr. Morales. Patent Owner also had two options to address this
17 gap within the evidentiary record. They could've cross-examined Dr.
18 Morales about testimony regarding additional examples referenced in at least
19 paragraphs 32, 33, and 36 of the supplemental declaration.

20 They could've also addressed the additional examples in their sur-
21 reply. Tellingly, they pursued neither option. Instead, as noted above, the
22 sur-reply primarily references Dr. Bevly's deposition testimony. And they
23 specifically chose not to confront the examples of the parameters that call
24 their theory into question.

25 The record now before Your Honors includes examples of three
26 parameters used in different ways, some of which do not directly indicate

1 traction information. Not apparent from the record, however, is how Patent
2 Owner proposes resolving the question of whether Koebler 650's description
3 of the three parameters would've led a POSITA to traction without
4 speculation, and yet this gap is critically important to the theory for written
5 description support. That gap now puts Your Honors in the position of
6 having to guess.

7 By the way, this is exactly how Patent Owner has failed to meet its
8 burden of production, by failing to resolve the gap within the evidentiary
9 record. At best, their expert says disclosed parameters are essentially
10 traction, but ignores other examples. At worst, they leave Your Honors with
11 no clear answer.

12 Slide 47, please. As to the second requirement, Patent Owner
13 relies on wheel speed and RPM sensors, but its position is similarly flawed.
14 As explained in the reply, the Patent Owner response failed to identify
15 disclosure within Koebler 650, explaining how the data collected by the
16 enumerated sensors is analyzed to determine traction. Supporting testimony
17 from Dr. Morales is summarized in Slides 48 to 51.

18 Slide 55, please. In a sur-reply, Patent Owner tried to reframe the
19 issue through efficiency determinations, but again, its expert only speculated
20 that traction might be a key part of efficiency. But this presumes the
21 relevance of traction, but does not identify the disclosure of specific analysis
22 techniques. Again, Your Honors are left with speculation as a result. Unless
23 there are any other questions, I'll now move on to the amount of vibration.

24 JUDGE O'HANLON: I do have one question, Mr. Chowdhury. I
25 noticed that both you and Patent Owner proffered definitions for traction. I

1 wonder, for the analysis here, does it -- will we come to the same result no
2 matter which interpretation we adopt?

3 MR. CHOWDHURY: Your Honors, that's an excellent
4 observation and I think illustrative of the point. We think that the ultimate
5 disposition doesn't matter which definition you adopt. In fact, it actually
6 demonstrates that the record shows that traction may have been understood
7 by different individuals, different persons of ordinary skills, and different
8 ways. And yet that -- Koebler 650 disclosure provides no definition of
9 traction. I don't think that's in dispute. So the different definitions that were
10 offered by the parties only shows you that the record does not reflect how
11 the parameters that Patent Owner has identified would get you to either
12 definition of traction that are proposed by the parties.

13 JUDGE O'HANLON: So if we were to adopt Patent Owner's
14 interpretation of traction, your position is you would still win -- Petitioner
15 would still win, even if we use that definition; is that correct?

16 MR. CHOWDHURY: We agree because the disclosure doesn't
17 explain how the parameters satisfy either definition of traction that's
18 proposed within this proceeding, and nor is there any disclosure of how the
19 sensor data from the enumerated sensors are analyzed specifically to get to
20 whichever the two definitions you ultimately adopt. So we're on the view
21 that even if you are to adopt Patent Owner's definition of traction, that the
22 ultimate disposition is the same. The Koebler 650 disclosure doesn't get you
23 to that definition without some level of speculation.

24 JUDGE O'HANLON: Okay, thank you.

25 MR. CHOWDHURY: Thank you, Your Honor.

26 JUDGE MELVIN: How specific does that analysis have to be?

1 MR. CHOWDHURY: As noted in our papers, we believe the
2 analysis has to involve sensor data samples from at least one enumerated
3 sensor. So the claim tells us that the determination of traction is based on
4 analysis of sets in our data samples. The use of that article said then refers
5 back to the sensors that are recited in limitation 1D, so we're of the view that
6 some level of analysis is required. We don't see any level of analysis in the
7 Koebler 650 disclosure, and we'll touch upon that in more detail and as it
8 relates to RPM sensor data that's identified by Patent Owner. We don't see
9 any analysis or disclosure of analysis of RPM sensor data within the Koebler
10 650 disclosure.

11 JUDGE MELVIN: So what if it's a compare wheel rotational
12 speed to motor rotational speed, or compare wheel rotational speeds to each
13 other? Would that be enough?

14 MR. CHOWDHURY: We certainly think that that's analysis, but
15 we don't see that disclosure within Koebler 650 in any level of detail.

16 JUDGE MELVIN: Well, that's a pretty broad -- a pretty generic
17 level of detail. So you're saying even that generic level of detail would be
18 sufficient?

19 MR. CHOWDHURY: I think what we're trying to say is that level
20 reflects an analysis of the enumerated sensors, but it doesn't actually get you
21 to traction or doesn't provide written description support because that
22 analysis is not within the disclosure itself. It's something that they have
23 supplemented with expert testimony.

24 JUDGE MELVIN: Okay.

25 MR. CHOWDHURY: Moving on with the amount of vibration.
26 Here again, in response to our initial allegations, Patent Owner identifies two

1 parameters it believes corresponds to this condition. These two conditions --
2 these two parameters are terrain and condition of a road. They also
3 associated these parameters with three enumerated sensors, including a
4 position sensor, a gyroscopic sensor, and a tire pressure sensor.

5 As we've noted before, Koebler 650 never expressly uses the
6 phrase "amount of vibration," so Patent Owner attempts to rely on two proxy
7 parameters. But as with the failure for traction, the problem starts with the
8 substitution itself. Neither terrain nor road condition is the same as the
9 amount of vibration.

10 Slide 61, please. Testimony from Petitioner's expert makes clear
11 that the two parameters identified by Patent Owner do not specifically reflect
12 vibration information. Slide 63, please. In page 9 of the sur-reply, Patent
13 Owner concedes that the two parameters just discussed, at best, only result
14 in vibration. This represents the same hedging language that it chose to use
15 for parameters identified for traction. Again, a parameter that results in
16 vibration is not the same thing as vibration. Much like the detection of
17 sunlight, it's not the same thing as detection of heat resulting from sunlight.

18 Worse, the claim doesn't just require vibration. It recites an
19 amount of vibration. That is a road condition results in vibration may be
20 detected, but that detection does not itself reflect the amount of vibration. It
21 only indicates vibration was produced as a result of the road condition.

22 Dr. Morales addressed this point in paragraph 48 of his
23 supplemental declaration. There he explained that the information
24 describing a road as wet or icy indicates road conditions without conveying
25 any vibration related information, let alone an amount of vibration.

1 Let's now turn to the second type of failure relating to the analysis.
2 Slide 65, please. Here, we see the Patent Owner's position is that data
3 collected by three enumerated sensors may be used to determine parameters,
4 identified as corresponding to amount of vibration. There's no dispute, as
5 we've mentioned earlier, that certain of these sensors, such as gyroscopic
6 sensors, would have the capability to detect vibration information, but that's
7 not the inquiry for determining written description support.

8 Even if a sensor configuration is well known, the law demands
9 possession of that well known configuration, but as the record of evidence
10 confirms, Koebler 650 fails to provide any specific example indicating the
11 analysis of samples collected by Patent Owner's identified sensors
12 individually or in combination to determine an amount of vibration.

13 Evidence supporting this point is shown in Slide 66 to 71 and
14 explained in our papers. To address how Patent -- to see how Patent Owner
15 responded to this testimony, let's turn to Slide 72. Patent Owner fails to
16 show any processing of enumerated sensor data to derive an amount of
17 vibration. The best they've done is point to nearby concepts and argue those
18 are forces and conditions that act on the vehicle, but again, even if this
19 reflects vibration, detection of these forces and conditions are not themselves
20 an amount of vibration.

21 Near the bottom cited portion on the last line, we see that even
22 Patent Owner's theory regarding how a skilled artisan would have
23 understood Koebler 650's expressed teachings is inadequate. They claim
24 that a skilled artisan would have known that Koebler 650 contemplates how
25 a road condition bears on a vehicle's operation, but again, vehicle operation

1 is not limited to vibration information. It also does not reflect an amount of
2 vibration, as recited.

3 The Patent Owner simply -- Patent drafter simply could have
4 recited vibration, but the drafter was express in requiring a different
5 condition -- an amount of vibration. The amounts cannot be simply ignored
6 as Patent Owner seems to have encouraged. With that, I will now discuss
7 the current condition of moisture, unless there are any questions.

8 Hearing none, please turn to Slide 74. As previously noted,
9 Koebler 650 fails to disclose determining moisture. Patent Owner responded
10 by identifying one parameter that it believes corresponds to moisture, and
11 that's weather around a vehicle, and specifically, rain. They also associated
12 this parameter with two enumerated sensors -- an optical sensor and a
13 position sensor.

14 Slide 77, please. Here again, Koebler does not reference moisture,
15 so the Patent Owner is forced to identify a different parameter -- rain. And
16 as our papers in evidence make clear, rain is not moisture. Unless Your
17 Honors have any questions on this point, and with limited time remaining,
18 I'll discuss the second requirement relating to the analysis of sensor data
19 samples required to determine moisture.

20 Slide 82, please. Again, while Patent Owner identifies the optical
21 sensor and the position sensor, it fails to identify disclosure within Koebler
22 showing possession of techniques for analyzing data collected by the
23 sensors. Evidence supporting this point is shown in Slides 83 to 87 of our
24 demonstratives and explained in our papers.

25 Slide 87, please. Patent Owner only devotes a half a page in its
26 sur-reply to address the moisture condition. This is shown in page 11 of

1 their sur-reply. This limited discussion, again, leaves key questions
2 unanswered. Most notably, Patent Owner makes no attempt to explain how
3 Koebler 650 describes using position sensor data in combination with
4 information from an external weather service to determine, for instance,
5 location-specific moisture. That emission is significant because Koebler 650
6 itself never explains how position data is used to process or contextualize the
7 information received from a weather service.

8 Patent Owner, instead, falls back on its other argument that rain is
9 a type of moisture. Setting this aside, the argument lacks written description
10 support in Koebler 650. Patent Owner seems to point generally to Koebler
11 650's mention of a weather service and asserts that this information is
12 processed alongside a vehicle location to determine rain near the vehicle, but
13 this stretches the extent of its disclosure.

14 To be clear, Koebler 650 refers a weather service only once at
15 Column 8, lines 12 through 24. That reference merely notes the existence of
16 the communication interface. It says nothing about the contents of weather
17 data received, let alone how that data relates to moisture. Similarly, Koebler
18 650's mention of whether around the vehicle is in Column 7, lines 45 to 62,
19 but this description isn't tied to any analysis of sensor data, and particularly
20 not from an enumerated position sensor. With that, I'd ask Your Honors if
21 you have any questions before I provide a few concluding remarks.

22 JUDGE O'HANLON: Just regarding that last point, the fact that
23 there's a disclosure in Column 7 of Koebler and other -- and Column 8 of
24 Koebler, you know, when we consider, as we talked about before, the four
25 corners of the disclosure, or the specification, wouldn't an ordinarily skilled
26 artisan know to put those together and understand that to get weather from

1 around the vehicle when going to talk to -- use a telemetry sensor with the
2 weather service to get that weather around the vehicle?

3 MR. CHOWDHURY: Thank you, Your Honors. We agree that
4 those features are conventional. I don't believe it's in dispute that those
5 features -- that a person of ordinary skill in the art would have not known
6 how to do that. The relevant inquiry for written description support,
7 however, is possession of the configuration that's required to demonstrate
8 written description support. And to that point, if Patent Owner's position is
9 that the disclosure suggests analyzing position sensor data to get to location-
10 specific moisture, we don't see disclosure of that specific configuration in
11 Koebler 650.

12 Notably, as Dr. Morales noted in his supplemental declaration,
13 there are multiple different configurations and options for how weather
14 services would have functioned around the relevant timeframe. So we think
15 that even if it was conventional, to get to that configuration involves some
16 level of speculation, which is where written description support fails.

17 JUDGE O'HANLON: Are your arguments based on the finding --
18 or the definition of rain is not moisture? In other words, if we said rain is
19 moisture, would Patent Owner win on this issue?

20 MR. CHOWDHURY: No, we disagree. I think the same principle
21 applies because it fails on the second requirement. Even if rain is
22 determined to be the same thing as moisture, we don't see analysis of
23 position sensor data or optical sensor data, which are the two enumerated
24 sensors that the Patent Owner has identified, to get to the current condition
25 of rain.

26 JUDGE O'HANLON: Okay, thank you.

1 JUDGE DOUGAL: Counsel --

2 MR. CHOWDHURY: Thank you.

3 JUDGE DOUGAL: -- this is Judge Dougal. So one question I
4 have on your analysis is what role the knowledge of one in the skill of the art
5 plays. So we have this difficult situation where the description is determined
6 based on what one of skill in the art would understand, based on the reading
7 on this patent or the priority document, whether they were in possession.
8 And so is this requirement that there be an analysis of the particular sensor --
9 is that actually required?

10 Is that going too far is, you know, we're -- you've admitted
11 multiple times that, you know, one of skill in the art understands how these
12 basic sensors are used, how this information is obtained, the advanced
13 disclosure of obtaining, you know, whether information from a service --
14 isn't that -- one of skill in the art understands that that's based on position
15 sensor of where the car is located, and so this analysis of what actual sensor
16 is using -- why is that required when one of skill in the art already kind of
17 understands how it works and, you know, the teaching is there as to what,
18 you know -- obviously, there's a difference -- and I'm not talking about the
19 different between moisture and rain, but you know, with having weather
20 information in the server, in that instance, isn't that enough? Why do we
21 need an extra step of analysis of particular sensors?

22 MR. CHOWDHURY: Your Honors, thank you for the question
23 and we understand your frustration. It's something that we've been
24 struggling with, too, as we were analyzing the disclosure materials. We
25 think the case law is pretty instructive. *Lockwood*, for instance, noted that
26 it's not sufficient for purposes of written description support, that the

1 disclosure, when combined with the knowledge in the art would lead one to
2 speculate as to the modifications of the inventor might have envisioned, but
3 failed to disclose.

4 So *Lockwood* makes clear that what the written description inquiry
5 is about is what did the inventors have specifically demonstrate to the public
6 that they had possession over. And time and time again, when we look at
7 the passages of Koebler 650 that the Patent Owner identifies for written
8 description support, they reflect broad and generic disclosures of sensor
9 functionality.

10 These functions that are recited in the claims, sure, they are, you
11 know -- we're talking about well known features, but the claims are very
12 specific in how they recite their relationships between 1C1, 1D, and 1E. I
13 think in page 14 of your institution decision, Your Honors noted that and
14 explained that the claims require analysis of one enumerated sensor to
15 determine each of the current conditions, and that's because that's what the
16 claims say. If the Patent Owner wanted a different scope, they could've
17 amended the claims to be -- to say something different, and yet they didn't
18 do that.

19 The other case that I think is fairly instructive here is the *Knowles*
20 decision that's cited in our Petitioner's reply. There, you see a disclosure of
21 generalized soldering techniques in the specification, and yet the claims
22 were focused on soldering that involved a particular type of soldering. So in
23 *Knowles*, you had both, a disclosure of similar concepts between the
24 specification and the claims, and yet, the Federal Circuit found that written
25 description support was inadequate, despite the claimed feature ultimately

1 being conventional. And I think that's applicable here and it relates to one of
2 specificity.

3 The claims are very specific as to the language that they use and
4 how the current conditions are determined, and yet that disclosure that's
5 purportedly used -- is supposed to support it, lacks that specificity. And so
6 we think that because of that lack of specificity, a person of ordinary skill in
7 the art, looking at all of the disclosures that are present in Koebler 650,
8 would have to speculate as to how to get to the claimed conditions, and that's
9 where we see that there is a lack of written description support. I hope that
10 answered your question.

11 JUDGE DOUGAL: Yes.

12 Thank you, Your Honor. Just to close -- and I know we're into our
13 rebuttal time at this point -- one observation that I would leave Your Honors
14 with today is I'd like to briefly summarize why each of the three current
15 conditions we just discussed lack written description support. For traction,
16 it's, you know, an RPM sensor can detect an RPM, but Koebler 650
17 described contains no disclosure of analyzing RPM data, as we've
18 mentioned, and that absence is both with respect to the RPM sensor or in
19 combination with other sensors.

20 This remains true, even if RPM and wheel speed data could in
21 theory be used to infer something related to or close to traction, but again,
22 the claim does not require related conditions. It requires determination of
23 traction itself. The same is true for the amount of vibration and for moisture.
24 Unless Your Honors have any other questions, Petitioner will reserve the
25 remainder of its time for rebuttal.

1 JUDGE O'HANLON: Thank you, Mr. Chowdhury. We'll now
2 hear from Patent Owner. Mr. de Blank, would you like to reserve any time
3 for rebuttal?

4 MR. DE BLANK: Yes, Your Honor. I would like to reserve 15
5 minutes, if I could.

6 JUDGE O'HANLON: Okay. Let me set the clock. Okay. Thank
7 you, Mr. de Blank. You may begin when ready.

8 MR. DE BLANK: Thank you. And Your Honor, do you see the
9 Patent Owner demonstratives?

10 JUDGE O'HANLON: We do.

11 MR. DE BLANK: Thank you. May it please the Board.
12 Petitioner started with the suggestion that the current conditions added
13 during amendment were somehow improper, that there was a lack of written
14 description for those. What Petitioner glossed over and what Petitioners
15 ignored throughout the investigation is the history of that -- how we got
16 here.

17 And Patent Owner identified this both in its response to the
18 petition and then in its later briefing, but it is, I think, instructive to
19 remember that these amendments that Petitioner now says lack written
20 description, were added by the examiner during prosecution as an examiner
21 amendment, and this is on Slide 4 of the demonstratives, showing the Office
22 action, adding the amendment -- adding the current conditions as the
23 examiner amendment.

24 And particularly, this was done while the examiner was
25 considering the issue of written description. There was an Office action --
26 sorry -- a telephone interview, as shown on page 35 of Exhibit 1002, where

1 the examiner discussed the 112 written description issues with the applicant,
2 and in fact, the examiner found that then pending Claims 15 and 16 lacked
3 written description support.

4 So while the examiner was considering the written description, the
5 examiner proposed amending the claims to add these limitations and the
6 applicant agreed, because these are, as we'll get to, part of the applicant's
7 invention. But Petitioner is now asking the Board to assume that the
8 examiner was wrong and that the examiner was so wrong that they added
9 limitations that were unsupported by the specification in a way that would
10 lead to the invalidation of all of the claims in the patent, and that's
11 respectfully, not a reasonable assumption. And as the evidence will show,
12 there is written description support for all of the challenged issues.

13 Now, the Petitioner also invites the Board to commit error in a
14 couple ways. I want to kind of make sure that we address this. First off, in
15 the Petitioner's reply at 1, and again, during this oral argument, the Petitioner
16 tries to shift the burden to the Patent Owner to prove the claims are valid. At
17 the reply at 1, Petitioner wrote, the burden therefore falls to iQar to produce
18 supporting evidence. And during the oral argument, the Petitioner says the
19 burden has shifted to Patent Owner.

20 And as the Board knows, that is simply not a correct statement of
21 the law. The burden not shift to Patent Owner. The burden remains with the
22 Petitioner to show unpatentability, and the Board in fact acknowledges this
23 in the order on the hearing, where the entire reason that the Petitioner goes
24 first is because Petitioner has the burden to prove unpatentability. Now --

25 JUDGE O'HANLON: Mr. de Blank, wouldn't you agree with me
26 that there are a couple of burdens? The ultimate burden to prove

1 unpatentability rests with Petitioner and doesn't shift, but the burden of
2 production may shift, depending on the issue, once, you know, certain
3 arguments have been made, that burden shifts to the other party to rebut
4 those arguments?

5 MR. DE BLANK: Of course, Your Honor. And the Patent Owner
6 does rebut those arguments and it does it through the testimony from its
7 witness, Dr. Bevly, and through the prior art and contemporaneous
8 documents Dr. Bevly cites, and through the admissions of Patent Owner's
9 own expert -- Petitioner's own expert, Dr. Morales, that are cited throughout
10 the briefs. We're not saying -- we're not resting without presenting our own
11 evidence. We have done that. I just want to make sure that it's clear, that
12 the ultimate burden of proving unpatentability remains with the Petitioner.

13 And in addressing that burden, Petitioner respectfully misapplies
14 the legal standard for what is required by written description. Petitioner tries
15 to suggest that there is a requirement that the prior art use -- sorry -- that the
16 specification use the exact same words as the claim or that it inherently
17 describes the claim, and the Petitioner tries to say to the extent that the
18 person of ordinary skill in the art would understand multiple things, multiple
19 teachings from this specification. That somehow means that the
20 specification doesn't support the claim, and again, that is -- as the Board
21 observed in its institution decision -- not the law.

22 In the institution decision at page 8, the Board recognized that
23 whether the disclosure of the application relied upon reasonably conveys
24 those skilled in the art, that the inventor had possession of the claimed
25 subject matter at the time of the filing date, is the critical issue. And then the
26 Board goes on to say -- correctly -- this analysis requires, "an objective

1 inquiry into the four corners of the specification from the perspective of a
2 person with ordinary skill in the art" and that the level of detail required in
3 the written description is a function. It varies based on that level of ordinary
4 skill.

5 So let's look at the standard that the Board adopted for the level of
6 ordinary skill. And again, this is something that Petitioner largely ignores.
7 In its petition, Petitioner did not address what the level of ordinary skill was,
8 and throughout its presentation, it did not address the level of ordinary skill.
9 Petitioner, however, submitted an expert declaration with its petition where
10 Dr. Morales identified who a person of ordinary skill would be, and in that
11 declaration, which is Exhibit 1003 at paragraph 28, Dr. Morales identified a
12 high level of ordinary skill.

13 Dr. Morales said that a person of ordinary skill at the time of the
14 invention "would have had a bachelor's degrees in electrical engineering,
15 computer engineering, mechanical engineering, civil engineering,
16 transportation systems, physics, or a related field, and at least four years of
17 experience or the academic equivalent in the field of transportation
18 systems." And the Board adopted that level of ordinary skill in its institution
19 decision at page 25. So that is who the specification is written for. This
20 specification is written for somebody who not only has a degree in
21 engineering or the equivalent, but also four years of experience in the field
22 of transportation systems.

23 So when Petitioner says that the word "traction" is not used in the
24 specification, that is misapplying the text because a person of ordinary skill
25 in the art reading the specification, understanding the background and the

1 prior art, would have understood what the inventor was in possession of, and
2 would have understood they are in possession of the full scope of the claim.

3 Now, if I could turn to Slide 6, Petitioner makes a number of other
4 errors in its application of the standard for written description because when
5 properly applied, the specification would inform one of ordinary skill, a
6 person with that high level of education and experience, that the inventors
7 were in possession of the invention.

8 So for example, the Petitioner's fault, and continue to fault, and
9 even in the hearing fault Koebler 650 for not including a verbatim recitation
10 of the claims. They say it doesn't use the word "traction," it doesn't use the
11 word "moisture," but again, that's not the law. The law is what a person of
12 ordinary skill in the art would understand is easily conveyed, and the
13 Petitioners ignore that, as well.

14 Petitioners also fault Koebler 650 for not describing every
15 conceivable way to determine the claim conditions, but again, that's not
16 required. It's sufficient for Koebler 650 to inform a person of ordinary skill
17 in the art that the inventor was in possession of one way of using data from
18 the enumerated sensors to determine each of the enumerated conditions.

19 Now, as I mentioned, Petitioners assume that the mere fact of the
20 claim sensors also measure other conditions somehow negates the written
21 description. So they say that there's no teaching -- that the position sensor --
22 sorry, the gyroscope, for example, they agree and they concede can be used
23 to determine vibration, but they say could also be used for other purposes.
24 Well, the concession, by Petitioners, that these are conventional features,
25 these are conventional elements, and that a person of ordinary skill in the art
26 would understand that the gyroscope sensor -- one of the enumerated

1 sensors -- can be used to determine vibration, is written description support
2 for these conditions.

3 And again, the fatal flaw is that the Petitioners attempt to take, in
4 isolation, individual sentences out of context from Koebler 650, when as the
5 Board noted, a person of ordinary skill in the art would look at the full scope
6 of the teachings of Koebler 650, the four corners of the document, and use
7 their information, their knowledge of the state of the art because that is who
8 the specification is written for.

9 And the Board already addressed this and rejected Petitioner's
10 approach to the specification. In the institution decision, the Board wrote on
11 page 17, for completeness, we note that we find Petitioner's argument that
12 Koebler does not provide verbatim or synonymous disclosure of the words
13 "moisture," "vibration," or "traction" (*see, e.g.*, petition at 15 through 16)
14 unavailing, as there is no requirement for verbatim or synonymous
15 disclosure in the prior application.

16 So when Mr. -- sorry, when Petitioner says that the words are
17 missing from the -- from Koebler 650, the Board has already addressed that
18 and advised Petitioner going into this proceeding that that was not a
19 requirement for written decision. The Board also addressed and rejected
20 Petitioner's argument that there must be an inherent disclosure, and again,
21 during the discussion today, the Petitioner sought to fault the Koebler 650
22 and Dr. Bevly -- Patent Owner's expert -- saying that there is -- that they did
23 not suggest that there was an inherent disclosure in the specification. That's
24 simply not required.

25 As the Board noted, "Similarly, there is no requirement for
26 'inherent disclosure' of the recited conditions." That's at page 17 of the

1 institution decision. So Petitioners are seeking to apply a test that doesn't
2 properly address the written description requirements, by requiring things
3 like identical words or an inherent disclosure, by ignoring how a person of
4 ordinary skill in the art's high level of education and experience would have
5 understood the reference -- the Koebler 650 as a whole. And instead,
6 focusing on individual sentences taken out of context in a way that does not
7 support their argument.

8 Finally, one last preliminary issue. The Petitioners continue to
9 misrepresent Patent Owner's argument and I just want to make sure that this
10 is clear what our position is. So for example, on page 7 of Petitioner's reply,
11 they wrote, "iQar's interpretation also encompasses configurations in which
12 *only* sensor data samples from unenumerated sensors are analyzed to
13 determine the enumerated current conditions," and they cite Patent Owner
14 response at 13.

15 And if you look at Patent Owner's response, that is not and has
16 never been our position. We are not suggesting that the enumerated current
17 conditions could be determined only using sensor data that was not from one
18 of the enumerated sensors. What we have consistently argued and what
19 Petitioners ignore is that these are broad, comprising, open-ended claims.
20 So that while the claims require that there be analysis from at least one of the
21 enumerated sensors, they don't preclude also using information from other
22 sources because these are comprising claims. And the Board, again, in its
23 institution decision, recognizes that.

24 The Board wrote on page 14, although Claim 1 uses the open-
25 ended comprising transitional phrase, which allows for the presence of
26 additional, non-recited sensors, such sensors are not required by the claim.

1 Rather, Claim 1 only requires one of the enumerated sensors to be present
2 and one of the enumerated current conditions to be determined, and that is
3 exactly what Patent Owner's position is and has been, that the claim requires
4 at least data from one enumerated sensor to be used, at least in part, to
5 determine one of the enumerated current conditions.

6 But it does not, because it is a comprising claim, eliminate or
7 preclude the possibility that in addition to using the data from the
8 enumerated sensor, as Koebler 650 teaches, a person of ordinary skill in the
9 art would understand that it also uses information from other sources to
10 determine these enumerated conditions.

11 JUDGE O'HANLON: Mr. de Blank --

12 MR. DE BLANK: Yes.

13 JUDGE O'HANLON: -- is it your position that written -- let me
14 figure out how to ask this question. You seem to be arguing that you don't
15 have to show written description support for what is actually in the claim.
16 You can point to other elements -- unrecited elements -- to show -- somehow
17 to show written description support; is that what you're saying? Is that your
18 position?

19 MR. DE BLANK: I don't believe that's quite our position, as I
20 understand Your Honor's question, and maybe I understand. Let me try to
21 explain, again, and hopefully that addresses it. We agree, for example, that
22 the claims -- looking at Slide 5, which shows Claim 1, the claim requires
23 analyzing said sensor data samples to determine said current conditions. So
24 the claim does require analyzing one -- at least one sensor data sample from
25 one of the thirteen enumerated sensors in order to determine at least one of
26 the twenty-one enumerated current conditions.

1 So for example, you could use an optical sensor and use that to
2 determine the position of the sun or whether there's moisture, or whether
3 there's a location of a stoplight. That's using sensor data, one of the
4 enumerated sensors, to determine one of the current conditions, but the
5 claim, because it is a comprising claim, because it's open-ended, doesn't
6 preclude you from using something in addition to the enumerated sensor
7 data.

8 So for example, the specification in Koebler 650 describes using
9 the position sensor, the GPS sensor data to determine the location of the
10 vehicle, and also describes using information from a weather service to
11 determine information about the weather around the vehicle. It's therefore
12 using two pieces of information in that example -- the position data from the
13 enumerated sensor and the unclaimed weather service information, and it's
14 using that to determine variety of the enumerated current conditions like the
15 wind velocity, wind direction, temperature, and so on.

16 So our position is and has always been that the claim requires data
17 from at least one enumerated sensor, but it doesn't say that it has to be only
18 from that enumerated sensor, and because it's a comprising claim, you can
19 also use data in addition to that from other sources. Does that answer Your
20 Honor's question?

21 JUDGE O'HANLON: If you have anything else to add, please do
22 so. I'll point you to page 16 of the institution decision where we, again,
23 noted that the claims do use an open-ended, comprising transitional phrase,
24 but then starting on, I think the third sentence we said, to support the full
25 scope of the claims, Koebler, or Koebler 650, as the parties have referred to

1 the reference, must disclose that each of the enumerated current conditions
2 be determined by analyzing data from one of the enumerated sensors.

3 So it's a little confusing to me where you're -- you seem perhaps to
4 be conflating infringement with written description, whereas under
5 infringement, the comprising term doesn't preclude other elements from
6 being present, but written description is for the claims, the actual recitations.

7 MR. DE BLANK: Yes. No, I agree, Your Honor, and I see the
8 statement on the middle of page 16 that you're referring to, and I don't
9 disagree with what's written, that to support the full scope of the claims,
10 Koebler must disclose that each of the enumerated current conditions is
11 determined by analyzing data from at least one of the enumerated sensors.

12 The data from the enumerated sensors is an input into the analysis
13 for the enumerated current conditions, but what I don't believe the Board
14 said there or meant, and I don't believe what the claim requires is that the
15 only information that can be used is the data from the enumerated sensors.
16 And Koebler 650 describes and teaches a person of ordinary skill -- and
17 we'll get to this as we address the individual conditions -- how to use data
18 from the enumerated sensors, such as position data, and other information to
19 determine the enumerated current conditions.

20 But the claim is not written to say that, for example, a processor
21 configured to analyze only said sensor data samples, stored in memory to
22 determine current conditions. Rather, it's a comprising claim, so as long as
23 one of the inputs to the processor that is being analyzed is sensor data from
24 the enumerated sensors, and the output of that analysis is the -- one or more
25 of the enumerated current conditions, that would meet the claims. So when
26 Koebler 650 describes to a person of ordinary skill in the art using, for

1 example, the position sensors in combination with weather information and
2 so on, that is within the scope of the claim and shows the inventor was in
3 possession of that claim.

4 Now, there is no dispute that the enumerated sensors, shown in
5 green on Slide 5, are all within the scope of the written description.
6 Petitioner concedes that at page 14 to 15 of the petition, and there's no
7 dispute that the majority of the enumerated current conditions -- those shown
8 in blue on Slide 5 -- are within the written description. The petition
9 concedes that at page 11. There are -- according to Petitioner, however, ten
10 allegedly missing current conditions, and those that are not supported by the
11 specification, and they fall into four broad groups.

12 First, there are seven -- what the parties have been referring to -- as
13 weather and traffic conditions. Those are things like weather, wind
14 direction, wind velocity, temperature, and air pressure. And three traffic
15 conditions -- the location of stoplights -- sorry, two traffic conditions -- the
16 location and timing of stoplights. And as the Board noted, the Petitioner
17 does not really focus on those, but we will address them, just to show that
18 everything is satisfied, there's written description support for all of them.
19 And then the Petitioner focuses on three particular current conditions --
20 traction, amount of vibration, and moisture -- and we'll address each of
21 those.

22 So looking at Slide 7, a person of ordinary skill in the art, that
23 person with that degree in physics or engineering and four years of
24 experience with transportation -- in the transportation field -- would read
25 Koebler 650 and understand it to be broadly disclosing use of a variety of
26 sensors. Any appropriate sensors, detectors, or data inputs may be used.

1 That's at Column 21, 29 through 31, and then using that sensor data to
2 determine a large variety of different operational status information or
3 operational parameters, or current conditions.

4 And again, it provides non-limiting examples, but it gives
5 examples at Column 8, line 65 through 94. But it makes clear to that person
6 of ordinary skill in the art that any appropriate information about the optical
7 state of the vehicle may be provided to the power management device or
8 used by the power management device.

9 So, consistent with that broad teaching, we look to see whether a
10 person of ordinary skill would understand that data from at least one of the
11 enumerated sensors can be used to determine each of the challenged
12 enumerated conditions. Now, we'll start with the seven conditions that --
13 because I think we can go through those quickly -- the weather and traffic
14 conditions that we talked about in the comprising claim.

15 So going to Slide 11, what the Board sees, for example, is on the
16 left side, a description in Koebler 650 of using a position sensor. In this
17 case, the global positioning system or GPS information, e.g. giving
18 information on the vehicle's current location. That is one of the enumerated
19 sensors. That is a position sensor, and then Koebler 650 describes how
20 information about the external environment of the vehicle -- in other words,
21 the traffic surrounding the vehicle or the weather around the vehicle -- can
22 be determined.

23 So to determine the traffic or the weather around the vehicle, one
24 necessary input into that analysis is the data from the enumerated position
25 sensor. So Koebler 650 is teaching one. It's disclosing to a person of
26 ordinary skill in the art the idea of using the enumerated position sensor,

1 getting the position, and then using that position to determine the traffic
2 surrounding the vehicle, which includes the specific conditions that
3 Petitioner says lack written description -- the location and timing of
4 stoplights -- and also, the weather around the vehicle, which include the
5 specific conditions that the Petitioners say lack written description.
6 Specifically, weather, wind direction, temperature, and air pressure, and
7 those are all actually listed in Koebler 650 at the citations on Slide 11.

8 Now, in addition, the Patent Owner provided expert testimony
9 from its expert, Dr. Bevly, explaining that a person of ordinary skill in the
10 art -- that person with that high level of education and experience -- what
11 they would understand when they read Koebler 650, because again, this
12 specification was written for them.

13 And Dr. Bevly explains that a person of ordinary skill in the art, a
14 POSITA, would have readily appreciated that in Koebler 650, one of the
15 ways that weather information, such as the temperature, wind, and air
16 pressure, and traffic information is obtained is by using the determined
17 vehicle's location and position to query a weather service, a map service, a
18 traffic service, et cetera.

19 And those are quotes from Koebler 650 that Dr. Bevly has
20 identified to show that a person of ordinary skill in the art, reading the
21 disclosure of Koebler 650, would understand the inventors were in
22 possession of the idea of using the vehicle's position from a position sensor,
23 from the GPS, to identify the weather and traffic current conditions around
24 the vehicle. And that as Dr. Bevly says, this was well known at the filing
25 date of this Koebler 650 patent. So unless there's additional questions about

1 the weather and traffic conditions, I would turn to the first of the three
2 specifically challenge conditions, which is traction.

3 So in its reply, Petitioner premises its argument on a new and
4 extremely narrow construction of traction where they say traction is "defined
5 as a physical process in which a tangential force is transmitted across the
6 interface between two bodies through dry friction or an intervening fluid
7 film resulting in motion, stoppage, or the transmission of power." But in
8 response to Your Honors questions, Patent Owner conceded that their
9 argument doesn't depend on that construction and that if the Board were to
10 adopt the construction, the plain understanding, the common use of the word
11 traction propounded by Patent Owner and its expert, it doesn't alter the
12 analysis of the issue. So on Slide 15 --

13 JUDGE O'HANLON: Mr. de Blank, I would ask you the same
14 question. In your mind, does the outcome depend on which of those two
15 interpretations we adopt?

16 MR. DE BLANK: I think it's a little difficult for me to answer
17 because the Petitioner doesn't really explain how they're using or applying
18 their interpretation. If they're simply saying traction is defined and it gives
19 this definition, but it includes, for example, is there a transmission of power,
20 then that's exactly -- that's the same as what Dr. Bevely has said. It's whether
21 the wheels spin or they don't spin, and then that wouldn't change anything.

22 If Petitioners are trying to suggest that the determination of traction
23 requires the calculation of the specific tangential force that's transmitted
24 across this interface, then I think that that is unsupported by the
25 specification. I think it's a construction that was not advanced at the

1 appropriate time, but there is no description of the calculation of tangential
2 force.

3 And the question would then shift to whether a person of ordinary
4 skill in the art, given their degree in physics or engineering and their years of
5 experience, would understand how to calculate that tangential force. I would
6 think the answer is still yes, but because this is not something that was really
7 addressed or raised by Petitioner, it's not something that is -- where there's a
8 fulsome record on it.

9 But I would note that Dr. Bevly explains that traction simply
10 means whether the wheels have traction. The wheels lose -- when they lose
11 traction, they spin, and when they're no longer able to propel the vehicle and
12 when they have traction, they move the vehicle along forward. And we
13 asked Petitioner's expert, Dr. Morales, about what a person of ordinary skill
14 in the art would understand traction to mean in his deposition.

15 This is Exhibit 2031 at page 36, lines 8 through 17, and he was
16 asked, question, what would a person having ordinary skill in the art
17 understand the word traction to mean? Answer, it would mean the grip that
18 the tire has with the road. Question, so when the tire is gripping the road,
19 the vehicle will have traction, correct? Answer, correct. Question, but if the
20 wheels are spinning freely and not gripping the road, the vehicle has no
21 traction, correct? And Petitioner's expert, Dr. Morales, answered, correct.

22 And that's consistent with what Dr. Bevly is saying what traction is
23 and it's consistent with the -- how a person of ordinary skill in the art would
24 understand traction. If your wheel is spinning and the car is not going
25 anywhere, then there is no traction. If the wheel is spinning and it's moving
26 the car forward, there's traction with the road.

1 So continuing on to Slide 16, Patent Owner provided
2 comprehensive expert testimony on how a person of ordinary skill in the art
3 would interpret -- would understand the teaches of Koebler 650. And Dr.
4 Bevly explains in Exhibit 2001, and we cite here paragraphs 130 through
5 132, that a person of ordinary skill in the art would see these references to --
6 the frictional interactions between the tires and the roadway, see the patent's
7 description of tire resistance and rolling resistance, and understand that is
8 referring to traction. That if there is tire resistance, then there is traction
9 moving the vehicle forward, and if there's no resistance between the tire and
10 the road, the wheel is simply spinning and there's no -- there would be no
11 traction.

12 And Dr. Bevly explains, and I don't believe it's disputed, that when
13 Koebler 650 was filed, it was well known and common to measure traction
14 for these purposes, for example, in antilock braking systems, and that you
15 would do so using an RPM sensor. RPM sensors, of course, one of the
16 enumerated sensors, and you would use the data from that enumerated
17 sensor, from the rotation sensor, and use it to determine whether the wheel is
18 spinning, whether there is traction.

19 And Your Honor, I believe, had raised the examples of comparing
20 the wheel rotational speed to the motor rotational speed, or to compare the
21 wheel rotation speeds to each other as ways of measuring traction, and that's
22 exactly what Koebler 650 is talking about and exactly what a person of
23 ordinary skill in the art would understand.

24 A person of ordinary skill in the art would understand that if you
25 have wheel speed sensors on the different wheels, and that one wheel is
26 spinning very quickly, and the other wheel is either not spinning or spinning

1 much more slowly, then one wheel has lost traction. Or if the engine
2 speed -- the engine rotation sensor is saying that the engine is spinning
3 quickly or the -- or slowly and the wheels are spinning quickly, or vice
4 versa, he would inform a person of ordinary skill in the art whether or not
5 there is traction. Turning to Slide 17, addressing the next current condition,
6 which is vibration.

7 JUDGE O'HANLON: Before we do that, Mr. de Blank, you
8 mentioned use of an automatic braking system a minute or two ago. I don't
9 see any disclosure in Koebler of braking at all, let alone an automatic
10 braking system. So wouldn't that be an argument about what you could use
11 as a sensor in an automatic brake system? Wouldn't that be basically
12 arguing what would be obvious in view of the specification, rather than
13 showing written description support in the specification?

14 MR. DE BLANK: No, Your Honor. We're not making -- and I'll
15 get to this argument. I understand the law is not a question of what's
16 obvious, it's a question of what a person of ordinary skill in the art would
17 have understand from their background, their experience, their knowledge,
18 and their reading of the specification. So we're not suggesting that it's
19 obvious and therefore, there's written description.

20 What we're saying is that antilock braking systems is a well known
21 example of using RPM sensors, one of the enumerated sensors, to determine
22 traction, and we are using that to support the fact that -- as Dr. Bevely
23 explains -- that a person of ordinary skill in the art, looking at the Koebler
24 650, looking at the disclosure of the RPM sensors, looking at that being one
25 of the enumerated sensors, would understand that that enumerated sensor
26 can be used to determine traction, and thus, the inventor was in possession of

1 the idea of using data from an RPM sensor in order to determine a traction or
2 current condition.

3 JUDGE O'HANLON: And it's your position that that is in the
4 specification itself?

5 MR. DE BLANK: That the specification certainly describes using
6 things like the tire resistance, the rolling resistance. There are citations to
7 the specification in Dr. Bevly's declaration, and it talks about -- and we've
8 also provided a number of contemporaneous references, showing what a
9 person of ordinary skill in the art would understand from those teachings.
10 As Dr. Bevly addresses in paragraph 132, for example, Exhibit 1015 makes
11 clear that a person of ordinary skill in the art would understand that this type
12 of sensor, the primary part that's of this type of sensor, it determines
13 differences in the wheel's rotation, indicative of losses of traction.

14 So I agree that the specification does not literally say an RPM
15 sensor can be used to determine loss of traction, but a person of ordinary
16 skill, somebody with a degree in engineering, and four years of experience
17 with transportation, would understand when they see the description of the
18 RPM sensor as one of the enumerated sensors and they see the idea that you
19 would use that to determine traction, would understand that the inventors
20 were in possession of the idea of comparing the speed of the tires to each
21 other or to the speed of the engine, or to other -- any of the other ways they
22 could have to determine traction.

23 JUDGE O'HANLON: And it's your position that it doesn't matter
24 at all that the Koebler reference doesn't mention that? There's absolutely no
25 mention of that? It's just how a person of ordinary skill in the art would
26 understand that whatever sensors are disclosed could possibly be used?

1 MR. DE BLANK: I would -- my position would be that there's no
2 requirement that the Koebler reference use the word traction in the
3 specification, or that it use -- describe the claim verbatim, and I believe we
4 cite the case law on that point, that the question or the test for written
5 description is that looking at the four corners of the specification and reading
6 it as one of ordinary skill in the art would have, it doesn't convey to that
7 person that the inventor was in possession of the idea of using the
8 enumerated RPM sensor to determine the enumerated traction current
9 conditions. And that -- we believe that the answer as set forth in the
10 evidence from Dr. Bevly, is that clearly, they would be.

11 JUDGE O'HANLON: And again, that's based on disclosure of a
12 wheel speed sensor, and a person of ordinary skill in the art understanding
13 how that sensor could be used?

14 MR. DE BLANK: Yes, Your Honor. I mean, the specification is,
15 again, written for that person of ordinary skill in the art, so it doesn't need to
16 spell out every detail or every level of granularity, where the person of
17 ordinary skill in the art would clearly be aware of doing this, and I don't
18 believe that Tesla even disputes that a person of ordinary skill in the art
19 would be aware of using the RPM sensors to determine traction. And
20 Petitioner, in their presentation, described these as conventional elements,
21 that they were well known to a person of ordinary skill in the art.

22 Petitioner's argument seems to be that because the RPM sensors
23 could be used for purposes in addition to or other than simply determining
24 traction, therefore that somehow means that the inventor wasn't in
25 possession of the idea of using the term traction, but I believe that's
26 incorrect. That a person of ordinary skill in the art, reading the specification

1 would understand that the inventor was aware of and in possession of the
2 invention of using the enumerated RPM sensor to determine whether there's
3 traction for the wheels.

4 JUDGE O'HANLON: Okay, thank you.

5 MR. DE BLANK: Thank you. The next condition to address is
6 vibration. And there, the Koebler 650 describes information about the
7 "terrain" or the condition of the road, and this is on Slide 18, citing to Dr.
8 Bevly's declaration Exhibit 2001, paragraphs 106, 107, 108, where he goes
9 through the citations to the Koebler 650 specification about how there are
10 determining -- the vehicle is moving across different terrains. It talks about
11 the current conditions of the vehicle, the forces that are acting on the vehicle,
12 and specifically talks about present road conditions in Column 77, line 60.
13 So the Koebler 650 specification is teaching or disclosing to a person of
14 ordinary skill in the art that the inventor was in possession of determining
15 the terrain or the condition of the road as part of their invention.

16 And for example, on Slide 19, the Koebler 650 talks about rolling
17 resistance. And Dr. Bevly on paragraphs 109 through 111 explains that a
18 person of ordinary skill in the art would understand rolling resistance is the
19 force resisting the motion of a rolling body, so there is some resistance
20 between the vehicle's wheels and the road that is slowing the vehicle, and
21 that's the rolling resistance. And that there are multiple factors that impact
22 the rolling resistance, including tire deformation and the interaction of the
23 tire in the roadway, and that it was known that smoother roads create less
24 rolling resistance than rough roads.

25 So if you're on a smooth highway where there's going to be little
26 vibration and very -- good connection between the tires and the pavement

1 and it's smooth. There is less resistance. It's more efficient, but if you're on
2 a dirt road where there's going to be a lot of vibration, that will impact the
3 rolling resistance.

4 So what does Koebler 650 talk about? On Slide 20, Dr. Bevly,
5 again, explains that Koebler 650 calculates the rolling resistance and thus
6 also determines the amount of the vibration. And Dr. Bevly cites to portions
7 of Koebler 650 in paragraphs 113, 114, 115 of that Exhibit 2001, where he
8 talks about -- where Koebler 650 -- pardon me -- Koebler 650 talks about the
9 rolling resistance coefficients and that they can be measured values. They
10 could be supply or they could be measured, and Koebler 650 explains that
11 it's just that the rolling resistance can vary for different road surfaces.

12 So again, the rolling resistance on a smooth highway will be much
13 lower than the rolling resistance on a rough dirt road. And Dr. Bevly
14 explains that picking together, a person of ordinary skill in the art would
15 have understood that one of the conditions, Koebler 650, intended the
16 system to detect, is whether a vehicle is traveling over a smooth, road, or
17 terrain, that's not subject to substantial vibration, leading to lower rolling
18 resistance, or traveling over a rough road of terrain, and thus is subject to
19 more substantial rolling resistance. This is the condition that Koebler 650 is
20 describing and a person of ordinary skill in the art would understand the
21 inventors in position of. In Koebler 650 --

22 JUDGE O'HANLON: How does relate to an amount of vibration?

23 MR. DE BLANK: Sure. So an amount of vibration, it can simply
24 be high or low, for example. It doesn't need to be 17.6 versus 18.2.

25 Determining an amount of vibration can simply be is there a high amount of
26 vibration, is this going to adversely impact the efficiency of the vehicle, are

1 we traveling on a bumpy dirt road, or is there a low amount of vibration. Is
2 this going to be beneficial to the fuel efficiency, which again is what
3 Koebler 650 is focused on. Are we traveling on a smooth highway? But
4 there is no requirement that it quantify a numerical value for that vibration.

5 JUDGE O'HANLON: Do you discuss determining a high amount
6 of vibration in your briefs anywhere? I don't recall reading that.

7 MR. DE BLANK: I do believe that we discussed talking about the
8 vibration caused by the different types of roadway -- kind of the highway
9 versus the dirt roads, and that's also in Dr. Bevly's declaration, where he
10 talks about the smooth road terrain versus the rough road terrain. And that
11 we then turn to describing how the enumerated sensor data is used to
12 determine that rolling resistance -- specifically, the tire sensor data. And
13 that's on Slide 21 with Dr. Bevly's declaration, where he explains that when
14 measuring the rolling resistance, one of the ways you do that is by using the
15 tire pressure sensors measurements can be deployed.

16 And that this is, again, well known to a person of ordinary skill in
17 the art when Koebler 650 was filed, that the tire pressure sensors can be
18 deployed to detect tire pressure changes caused by ground vibration
19 excitations from the interaction between the tire and the pavement. And
20 there, we provided some contemporaneous exhibits supporting that exhibit.
21 That's a quote from Exhibit 2012. We also cite Exhibit 2013.

22 So a person of ordinary skill in the art with the degree in
23 engineering and four years of transportation would understand that
24 determining rolling resistance, which Koebler describes, is done using the
25 enumerated tire pressure sensor, which is part of the claim, and that it is
26 important to do to achieve Koebler's goal of coming up with an efficient

1 speed to travel this, to be able to know that this is going to be a high or low
2 rolling resistance. So correspondingly, there's going to be a large or small
3 amount of vibration, and that this is -- could be done using the tire pressure
4 sensors that are described in Claim 1.

5 And Dr. Bevly, again, we go on and cite to paragraphs 122 and 123
6 on Slide 22, explaining that. That in addition to the tire pressure sensor, a
7 person of ordinary skill in the art would also understand that you could use a
8 gyroscope sensor, and that's another one of the enumerated sensors, in order
9 to determine vibration. And during the oral argument, Petitioner conceded
10 that the gyroscope sensors have the capability to detect vibration
11 information. And Petitioner conceded that these are conventional, well
12 known sensors.

13 A person of ordinary skill in the art would understand exactly what
14 Petitioner is now agreeing, that this conventional gyroscopic sensor can be
15 used in its intended way to determine the vibration of the vehicle and the
16 amount of vibration. And we give an example of that, and again, it's not a
17 limiting example, but the IMUs, the used gyroscopes and the used
18 accelerometers precisely for that purpose and can detect vibrations.

19 And I don't believe Petitioner is disagreeing with any of that.
20 Petitioner is not saying a person of ordinary skill in the art would have not
21 known this. They're not saying there's anything unconventional or inventive
22 here. They are agreeing that a person of ordinary skill in the art would
23 understand from Koebler 650 that the gyroscope sensors can be used to
24 determine vibration, which is the written description support that meets this
25 claim limitation.

1 In the interest of time, Slide 23 also shows additional support from
2 Dr. Bevly in paragraph 124 that would talk about how the position sensor
3 could also determine vibration and that there are known -- the person of
4 ordinary skill in the art would understand the position sensor determines
5 movement along the axis that it's oriented, which would be a form of
6 vibration, or that it can be other examples of position sensors, such as
7 potentiometer displacement sensors can be used to measure the suspension
8 displacement, which is a type of vibration. There are multiple different
9 ways that the enumerated sensor data can be used to determine vibration,
10 and a person of ordinary skill in the art would have understood that from the
11 specification and would thus have known that the inventors were in
12 possession of that invention.

13 The last condition is determining moisture, and this seems to come
14 down to a question of whether rain is wet. Rain is a form of moisture.
15 Determining rain is determining moisture. Rain will cause moisture to be on
16 the car, on the windshield. Rain will cause moisture to be on the road that
17 you're driving on. These are the conditions that Koebler 650 would care
18 about and these are the conditions that support the specification.

19 And it's unambiguous that Koebler 650 describes determining rain
20 using, for example, the position data from the GPS, and this is shown in
21 the -- described in words in the specification on Slide 25, where it says any
22 appropriate sensors can be used, including the GPS sensors, and that it
23 would be using that information to determine whether e.g., rain, and that
24 again, it's shown actually in Figure 9, and we've highlighted this.

25 On the left side, it talks about the external data, e.g., GPS, so it's
26 getting data from the position sensor -- the GPS data -- and it is using that to

1 determine the weather, and it shows literally in that figure, an example of it
2 raining, of the moisture falling from the sky onto the vehicle, showing that
3 the inventor was in possession of the idea of using data from the enumerated
4 sensors to determine moisture -- in this example, rain.

5 Now, Dr. Bevly, again, agrees and provided in his declaration that
6 a person of ordinary skill in the art would have understood that determining
7 that it is precipitating, e.g. raining or snowing, is a moisture determination.
8 That is in paragraph 92 of Exhibit 2001. And Dr. Morales, Petitioner's
9 expert, doesn't seem to dispute that -- sorry -- Dr. Morales, Petitioner's
10 expert's opinion that the moisture limitation current condition is not
11 disclosed, that there's not a written description, seems to be based on a
12 particular and undisclosed claim construction condition that moisture is
13 limited to essentially humidity -- moisture in the air.

14 In his deposition, Exhibit 2031, at page 28, lines 14 through 16 --
15 and we cited this on page 22 of the Patent Owner response -- Dr. Morales
16 was asked, question, so in your opinion, moisture in Claim 1 is limited to
17 just the moisture in the air, correct? Answer, correct. So Dr. Morales is
18 discounting and ignoring the description in the patent of determining -- using
19 the enumerated sensors to determine rain and arguing that rain is not
20 moisture.

21 Respectfully, rain is a form of moisture. A person of ordinary skill
22 in the art would understand that rain is a form of moisture. A person of
23 ordinary skill in the art would understand that the inventors were in
24 possession of using the data from the enumerated sensors exactly as
25 described in the patent and as shown in Figure 9 to determine the moisture
26 current condition, and thus were in possession of the invention. So that's the

1 end of the initial presentation. I would reserve the remaining time for
2 rebuttal, unless there's further questions from the Board.

3 JUDGE O'HANLON: Thank you, Mr. de Blank. We'll now hear
4 from Petitioners rebuttal. I believe it's going to be Mr. Chowdhury.

5 MR. RENNER: Actually, Your Honor, I'm going to start with a
6 few remarks. This is Mr. Renner, Karl Renner. Just a couple of remarks
7 before I turn it over. You spoke at the end of the original stanza with my
8 colleague about the challenge of misalignment between claim elements and
9 the disclosure, and he indicated some frustration on our part. I wanted to
10 follow-up on that at the outset of our rebuttal and just talk about that, you
11 know -- just to make sure, number one, clear on the record, we've never
12 contended that a patent applicant is somehow bound formulaically to the
13 specific word itself that's in the specification. That's not the point.

14 The point that we've tried to make and we hope that the papers
15 have made is that -- and we think the jurisprudence makes is that the -- is
16 that when you diverge from the words that are in that specification, the law
17 seems to draw a pretty distinct line between where patent applicants in that
18 divergence introduce limitation when they actually go into a more narrowed
19 stance. And this is the *Knowles* case. It's a great example of this. We
20 haven't heard much about that and didn't see much about that in the record
21 either from the Patent Owner.

22 In that instance, it was just a soldering that was disclosed, and then
23 there was a form of how you apply that solder. This is not a wide gap in
24 what is necessary from the perspective of can a person of ordinary skill do
25 what's there or do they know what different means of soldering exist. It's
26 instead the case that the Court there looked upon it and saw the lack of a

1 more detailed disclosure of the kind of soldering that was being put into the
2 claim. And in observation of that detail missing recognized that the
3 applicant just didn't demonstrate possession of the knowledge, the
4 innovation, if that's what it was, of that level of specificity -- that additional
5 detail. And even in a circumstance so slim as that, we saw the Court take
6 umbrage with the additional detail that was added.

7 Wanting just to go back to that, point that out, and then reflect on
8 the various different conditions that we have here before us. The various
9 distinctions between those and the parameters that we see disclosed in the
10 *Knowles* specification that are said to correspond to them in some instances
11 or some sensors that are said to result in data that would be drawn either
12 directly or in combination of other things to go to get things that are related
13 to, close to, approximating or include, those kinds of things.

14 These are details that do matter. They're details that were added by
15 amendment and they're details that were not demonstrated to have been in
16 the possession of the inventor at the time of the filing, and I just wanted to
17 follow-up on that before I ask my colleague to state some more comments.
18 Any questions about that particular point? I'd be happy to field.

19 JUDGE O'HANLON: I don't believe we have any questions at this
20 time. Thank you.

21 MR. RENNER: Thank you.

22 JUDGE O'HANLON: And before Mr. Chowdhury speaks, I
23 believe -- Mr. de Blank, I believe you're still sharing your screen. If you
24 could take that off, it would help the display on our end. Thank you.

25 MR. DE BLANK: I apologize, Your Honor. Let me do that.

1 MR. CHOWDHURY: Thank you, Your Honors, and good to see
2 you again. I wanted to take a few moments to address Patent Owner's
3 argument regarding the level of ordinary skill or some suggestion that that
4 standard is somehow too high. The issue before us isn't the precise level of
5 skill. It's about whether a person of ordinary skill, whatever the level,
6 would've found written description support for the claimed conditions in
7 Koebler 650. And on that point, we think the Federal Circuit's guidance is
8 pretty clear. Mr. Renner, just a few moments ago, referred to the *Knowles*
9 decision, and we really do think that decision is reflective and instructive.

10 Both the claims in the specification were both directed to the
11 concept of soldering, as Mr. Renner had mentioned. The art was predictable
12 and the techniques were known, and still, the Federal Circuit found that the
13 broad disclosure of soldering was insufficient to support a more specific
14 recitation of reflow soldering. That, I think, tells us something important.
15 Written description doesn't turn only what a skilled artisan might know. It
16 turns on what the specification actually discloses.

17 As the Court held to *Knowles*, even in the predictable arts, the
18 specifications clearly describe these claim specification subject matter. You
19 can't rely on general know how to just patch over silent or vague disclosure,
20 and yet silence and vague disclosures is what we see in Koebler 650.

21 As to traction, the Patent Owner's best answer is they can point to
22 parameters like operational status or rolling resistance, but as we've
23 previously discussed and as their expert concedes, those parameters are not
24 traction. They are essentially or related to traction. That's not written
25 description support and the level of skill in the art doesn't change that.

1 I'll also address Patent Owner's suggestion that the amendments at
2 issue must be supported by the original disclosure because the examiner
3 somehow helped draft the amendments. We just disagree on this point. The
4 file history doesn't support that conclusion. All we know from the file
5 history is that an examiner interview took place and then afterwards, the
6 examiner entered the amendment via examiner's amendment. Nothing in the
7 file history tell us how those amendments were developed or who proposed
8 which portions. So there's no way to tell where the ideas came from,
9 whether from Patent Owner or the examiner, or some form of combination.

10 More importantly, even if the examiner proposed language, Patent
11 Owner fails to demonstrate why that matters for written description support.
12 The law doesn't seem to give importance to how the amendment was
13 drafted. It asks instead whether the amended claim is supported by written
14 description in the original disclosure. We're also not aware of any authority,
15 nor has Patent Owner cited any suggesting that examiner involvement
16 somehow relaxes the written description standard.

17 That would seem to make little sense to us as it would suggest that
18 an examiner could simply introduce language that's unsupported or
19 erroneous. So the inquiry doesn't change. The amendments added new
20 claim scope, and for that, the specification must show that the inventors had
21 possession at the time of filing. That's what the law demands and here, as
22 we've shown, the support simply isn't there.

23 I'll now turn to Patent Owner's contention that Koebler 650
24 supports moisture through some mention about weather around a vehicle.
25 We think that argument sidesteps the actual requirement of the claim. As
26 previously explained, the claim doesn't just call for determining moisture. It

1 requires determining the current condition of moisture through analysis of
2 sensor data collected by at least one enumerated sensor.

3 In this case, Patent Owner seems to rely on the position sensor.

4 Well, the record evidence makes clear that weather around a vehicle doesn't
5 necessarily require or involve analysis of position sensor data. Dr. Morales
6 addressed this directly in paragraph 70 of his supplemental declaration.

7 There, he explained that a person of ordinary skill in the art would have
8 known of weather systems, like those described in, for instance, Exhibit
9 1058, that deliver location-specific weather information without needing any
10 position sensor at all. These systems filter in broadcast weather alerts, based
11 on subscriber location before transmission. So the vehicle simply receives
12 pre-filtered data. No analysis of position sensor data is necessary in these
13 systems.

14 So when Koebler 650 refers to information received from a
15 weather service, as it does in Column 8, lines 19 through 24, it's conceivable
16 from the record evidence that a person of ordinary skill in the art could have
17 recognized examples of weather systems that do not analyze samples
18 collected by a position sensor.

19 JUDGE O'HANLON: Mr. Chowdhury, wouldn't that same artisan
20 know of systems that do take the vehicle position into account?

21 MR. CHOWDHURY: That's true and we don't dispute that. In
22 fact, I think there is record evidence that's cited in the petition demonstrating
23 the conventional, well known weather systems that do use position sensors.
24 I think the point is that the disclosure in the Koebler 650 document lacks the
25 specificity that would've allowed the person of ordinary skill in the art to
26 determine which of the contemplated configurations are -- were within the

1 possession of the inventor and differentiating between the two would've
2 involved some level of speculation.

3 Patent Owner also spent a lot of time talking about the definition of
4 traction and we think it's a red herring. More importantly, what matters is
5 that Koebler 650 didn't define it. And as we heard today, Patent Owner's
6 counsel acknowledged this point. So what are we left with? We're left with
7 competing expert reviews on how a POSITA, a person of ordinary skill in
8 the art, might understand the term "traction." But the parties haven't briefed
9 a claim construction issue. The dispositive issue, as Mr. Renner had
10 mentioned earlier, is entitlement to priority, based on sufficient written
11 description.

12 The question we don't think is how a person of ordinary skill in the
13 art would have defined traction. The question instead is does the
14 specification show that the inventors were in possession of traction,
15 whatever it is understood to mean. And when we look at the intrinsic
16 record, all we see is silence. The term, "traction," isn't there. There was no
17 discussion or elaboration of that term through examination.

18 The intrinsic record also fails to describe concepts that both parties
19 seem to agree are somewhat tied to traction, whether it be road grip, tire
20 slippage, or friction conditions. Neither of those elements are described with
21 significant detail in Koebler 650. A person of ordinary skill in the art is
22 allowed to be skilled, but they're not supposed to be imaginative and yet,
23 Koebler 650 seems to demand creativity because disclosure, that would
24 remove out and therefore show possession, doesn't seem to be there.

25 I'll close by returning to a thoughtful question raised earlier today
26 by Judge O'Hanlon. If I understood it correctly, the question was whether

1 mere disclosure of a sensor on its own supports every conceivable use of that
2 sensor. You know, that question really does go to the heart of the dispute
3 before Your Honors, and our answer is no, not for the purposes of written
4 description.

5 The fact that a sensor, for instance, an RPM sensor or a position
6 sensor, is disclosed in the specification, does not itself mean that the
7 inventor has possessed every possible condition that could be inferred from
8 its data. Written description, as we've explained, requires more. It requires
9 that the specification show the inventors were in possession of the specific
10 claimed use, mainly determining a particular current condition based on the
11 analysis of sensor data collected by that enumerated sensor. That's what's
12 missing from Koebler 650 and that's why Patent Owner's claimed priority
13 ultimately fails. Any questions Your Honors have at this time?

14 JUDGE O'HANLON: No, I don't believe we have any further
15 questions for you. Thank you, Mr. Chowdhury.

16 MR. CHOWDHURY: Thank you, Your Honors. The Petitioner
17 will now rest its case.

18 JUDGE O'HANLON: Thank you. Mr. de Blank, we'll now hear
19 from you on surrebuttal. You may begin when you're ready.

20 MR. DE BLANK: Thank you, Your Honors. Just to address
21 briefly the points that Petitioner made. First, Mr. Renner began by saying
22 that they agree that no particular words are required in the specification and
23 I'm heartened to hear that because that is not what they said in their petition.
24 In their petition say, on page 15, that there's no written description because
25 "the word moisture is absent." On page 17, they say, the word vibration is
26 absent. On page 18, they say the word traction is absent, but I understand

1 this to be a recognition that as we have discussed, the question is not -- is the
2 word literally there, but what would a person of ordinary skill in the art have
3 understood from the teachings of the specification.

4 However, when you apply that test, it's clear that the inventors
5 were in possession of their invention, which is why during the rebuttal, Mr.
6 Chowdhury went back to the idea that the term traction is not there. They
7 are once again retreating back to trying to say that a particular word needs to
8 be there, when in fact, it's the teachings of the Koebler 650 as a whole, as
9 understood by a person of ordinary skill in the art.

10 Next, they address the *Knowles* case, and we respond in our
11 briefing, including at the sur-reply at pages 14 through 15, but that case is
12 not (INDISCERNIBLE) here. In that case, there was a general description
13 of soldering techniques, and then the claim was directed to a very specific
14 and undisclosed soldering technique, known as reflow soldering. That
15 reflow soldering was not disclosed by the broader -- that species of claim,
16 the reflow solder, was not disclosed by the broader description of soldering.
17 And therefore, those claims lacked written description support.

18 Here, however, the claims are not directed to anything more
19 specific than what's described in the specification, and in fact, Petitioners
20 have conceded that -- or taken the position that all of the elements in the
21 claims are conventional items. So unlike *Knowles*, where there was an
22 unconventional novel technique being claimed that was not disclosed in the
23 specification, here, there are broad descriptions of using data from any of the
24 enumerated sensors to determine any of the enumerated current conditions,
25 and that's disclosed, as we've gone through, throughout the specification.

1 Next, they turned, I believe, to moisture, specifically, and they said
2 that there must be a determination of the moisture condition based on data
3 from the enumerated sensors. And again, we don't disagree with that, but
4 there is the -- Koebler 650 describes using, for example, GPS data, or I think
5 we also discussed in our presentation and papers the optical sensors -- both
6 are enumerated sensors -- to determine whether it's raining.

7 And when Petitioner says that there could be other ways of doing
8 this, where they discount the teachings and the takeaway that a person of
9 ordinary skill in the art would have by saying, well maybe there could be
10 weather systems that don't use position data, that is retreating to the
11 inherency argument that the Board rejected in the institution decisions.
12 Petitioner is suggesting that unless the only way to do something is in the
13 claim, that there is no written description support and that's not the test.

14 The test is whether a person of ordinary skill in the art, looking at
15 Koebler 650, would understand that the inventors were in possession of one
16 way of doing it, using GPS data, for example, to determine whether it's
17 raining. And that's not even something that we need to speculate about.
18 Again, on Slide 25, Figure 9 of Koebler 650, literally shows using GPS data,
19 data from the position sensor, to get weather information showing that it's
20 raining at the current condition of the car.

21 Finally, the Petitioner turned to traction and again, here, they
22 retreated to their argument that the term traction is not there. That
23 respectfully is not the test. And then they say that while they agree that a
24 person of ordinary skill in the art would understand and would know that
25 you could use the RPM sensors to determine traction, they say that requires
26 some sort of creativity. And again, that's respectfully not consistent with the

1 evidence or the teachings of the patent, or what a person of ordinary skill in
2 the art would have known and understood.

3 And as Dr. Bevly explained and as we cite in our response and our
4 sur-reply, and as was shown on the slides, a person of ordinary skill in the
5 art would have known that they could use that conventional RPM sensor in
6 its intended fashion, without any sort of creativity, to determine traction.

7 And again, I don't even believe that Petitioner is disagreeing that a person of
8 ordinary skill in the art would've known exactly that, that in reading Koebler
9 650, they would've understood this.

10 And if that's true, if that's correct, as I believe it is, as Koebler 650
11 describes and as Dr. Bevly testified through his declaration, then a person of
12 ordinary skill in the art would have understood that the inventors were in
13 possession of that idea. They were in possession of using the RPM sensor,
14 one of the enumerated sensors to supply data that would be used to
15 determine whether or not there was traction with the wheels. So with that,
16 unless the Board has additional questions, I would thank you very much for
17 your time and attention, and end my presentation.

18 JUDGE O'HANLON: Thank you, Mr. de Blank. Thank you to all
19 Counsel for the presentations today. They were informative. A final written
20 decision will be issued in due course, and the hearing is now concluded.
21 Let's go off the record, please.

22 (Whereupon, the above-entitled matter went off the record at 2:56
23 p.m.)

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