

Trials@uspto.gov
571-272-7822

Paper 29
Date: May 16, 2024

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ZF NORTH AMERICA, INC. and ZF ACTIVE SAFETY US, INC.,
Petitioner,

v.

STONERIDGE CONTROL DEVICES, INC.,
Patent Owner.

IPR2023-00273
Patent 7,021,415 B2

Record of Oral Hearing
Held: March 6, 2024

Before SCOTT C. MOORE, BARRY L. GROSSMAN and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

IPR2023-00273
Patent 7,021,415 B2

APPEARANCES:

ON BEHALF OF THE PETITIONER:

JOHN R. HUTCHINS, ESQ.
PAUL T. QUALEY, ESQ.
Banner & Witcoff, Ltd.
1100 13th Street, NW
Suite 1200
Washington, DC 20005
(202) 824-3000
jhutchins@bannerwitcoff.com
pqualey@bannerwitcoff.com

ON BEHALF OF THE PATENT OWNER:

TIMOTHY J. MURPHY, ESQ.
WILLIAM GOTTSCHALK, ESQ.
Carlson, Gaskey & Olds, P.C.
400 West Maple
Suite 350 Birmingham, MI 48009
(248) 283-0732
tmurphy@cgolaw.com

ALSO PRESENT, OBSERVING:

William Cosnowski
Manuel Calderon
ZF North America, Inc. and ZF Active Safety US, Inc.
Unnamed in-house counsel for Stoneridge Control Devices, Inc.
(virtually)

The above-entitled matter came on for hearing on Wednesday, March 6, 2024, commencing at 9:00 A.M. MST, at the U.S. Patent and Trademark Office Regional Office, 1961 Stout Street, Denver, Colorado.

P R O C E E D I N G S

9:01 a.m.

JUDGE MOORE: Good morning, everyone, and welcome to the Denver Regional Office. We are convened here today for oral arguments in IPR2023-00273, which challenges U.S. Patent 7,021,415.

I'm Judge Scott Moore, and I'm joined today, remotely, by Judges Barry Grossman and George Hoskins.

Let's start with appearances for both sides before we get going. Who's going to be arguing today? And once you introduce yourself you can also introduce any guests you brought with you.

MR. HUTCHINS: Good morning, Your Honor. John Hutchins (audio interference) --

COURT REPORTER: Hold on. This is the court reporter. I can barely hear that.

MR. HUTCHINS: I apologize. I rarely have that problem.
(Laughter.)

MR. HUTCHINS: I'll start over. My name is John Hutchins with Banner Witcoff. I represent Petitioner. And I will be doing the arguing today. With me is my partner is Paul Qualey. And with me also is my clients, William Cosnowski and Manuel Calderon, both from ZF.

JUDGE MOORE: Thank you. With that --

COURT REPORTER: Your Honor, excuse me. This is the court reporter. Even with the mic on, you know, if everyone knows their names,

1 they know what he's saying, but I couldn't really make out the names he was
2 saying there. I'm just assuming there's going to be a problem going forward.
3 I'm sorry.

4 MR. HUTCHINS: I'm used to standing up when I speak, perhaps I
5 should have remained seated.

6 COURT REPORTER: Yeah, that's definitely better. I'm sorry --

7 JUDGE MOORE: And after the hearing is done today we can also
8 have a short discussion with the court reporter to spell out names and things
9 like that.

10 COURT REPORTER: Well, yeah, I appreciate that, Your Honor. I
11 just want to make sure we get it as good as we can, because you don't want a
12 ton of questions at the end. But, okay, thank you.

13 JUDGE MOORE: Okay.

14 MR. MURPHY: Good morning, Your Honor. This is Tim Murphy
15 for Patent Owner. I'll be speaking. My partner, Bill Gottschalk, is with me.
16 William Gottschalk. And our in-house counsel for Stoneridge is on the
17 virtual.

18 JUDGE MOORE: Thank you. So each side is going to be permitted
19 60 minutes of total argument time today. We will begin with Petitioner, who
20 has the burden of proof. And Petitioner can use its time to argue its case-in-
21 chief, as well as if you would like to dedicate some time to your motion to
22 exclude, you're welcome to do that as well. Totally up to you.

1 I'll also allow Petitioner to reserve time for rebuttal, if it desires to do
2 so. After Petitioner has finished making its arguments Patent Owner will
3 present its arguments for patentability. And if Petitioner argues the motion
4 to exclude, obviously you can address that as well. And we will also permit
5 Patent Owner to reserve a time for a brief sur-rebuttal if it wishes to do so.

6 My colleagues and I will be keeping the time. And if all works well,
7 it will appear behind me. I will try to also set up this clock to give you a
8 warning before the time expires, so when you see that yellow, I'll probably
9 set it up for two minutes, to give you a two-minute warning before your time
10 expires. So if I do everything correctly here, when that little yellow light
11 starts flashing behind me that means you're two minutes from the end of
12 your allotted time. So please try to keep that in mind. It also is helpful so
13 each party can kind of keep track of its own time as well because sometimes
14 I'll fat finger the clock.

15 So a little bit more information. My colleagues and I have already
16 reviewed the briefs in preparation for the hearing, so you're obviously free to
17 give us background to the extent it's relevant and you would like to do, so
18 feel free. But I would recommend that you not spend too much time on the
19 background because we are familiar with the technology and, you know,
20 we'd probably like to get to the substantive issues in dispute sooner rather
21 than later.

1 So we also have the briefs and the exhibits and the demonstratives on
2 our computer screens, so, and you'll see me staring down at my screen a lot.
3 That's what I'm looking at.

4 I can obviously see your demonstratives up here on the screen as
5 well, and our courtroom technology here will allow you to circle things and
6 highlight things if you'd like to do so, but please be aware that my
7 colleagues who are appearing remotely are not going to be able to see what
8 you put up on that screen. They have the copies of the demonstratives with
9 them, but to help them and the court reporter, whenever you change pages
10 on the demonstrative, please make sure to clearly state what page you're
11 going to. And if you're not just flipping to the next page, you may also want
12 to give us a couple of seconds to find the correct page before you begin
13 speaking.

14 If you have any objections I'd ask, like to ask you to please reserve
15 them until it is your turn to speak. So when Petitioner is speaking, I ask
16 Patent Owner please not to make any objections during Petitioner's
17 presentation. If you have any objections just make them at the beginning of
18 your time and we will consider them as well.

19 And as you know, this hearing is open to the public. I don't believe
20 we have anyone other than who has been mentioned here who's on a line
21 listening, but the transcript of this hearing is being recorded, you know,
22 transcribed by a court reporter, and the transcript will become part of the

1 public record. I don't believe any of the documents here are under seal, but I
2 just wanted to reiterate that so everyone is aware.

3 And final reminder that parties and members of the public are not
4 permitted to make audio or video recordings of the hearing. The transcript
5 itself will be the official record of the hearing today.

6 So now that I'm done with preliminaries, we'll go to Petitioner. And before
7 we get started, would you like to reserve any rebuttal time?

8 MR. HUTCHINS: Yes, Your Honor, 20 minutes should be
9 sufficient.

10 JUDGE MOORE: Okay. So here. So that will give you 40 minutes
11 of total time. And once again, that light should start flashing about two
12 minutes before your time has expired. And you can begin when you're
13 ready.

14 MR. HUTCHINS: Thank you, Your Honor. If you were to turn to
15 slide 2 for demonstrative exhibits for Petitioner, we have an over map of the
16 things that I'll be talking about here today.

17 Recognizing Your Honor's admonition, we'll do a brief introduction
18 to the patent and the prior art, with which you are well familiar. I will frame
19 the issues that are in dispute, and those that are not. And then we'll move
20 into claim construction of which there is not a lot of dispute in this case.

21 There are two terms, subframe and housing, we'll be discussing.
22 And our position on those is fairly straightforward, that they should be given

1 their ordinary meaning and there is nothing in the patent to suggest
2 otherwise.

3 But the main issue in the case, and what I'll be spending most all of
4 my time on is motivation to combine, which is the primary dispute. And
5 what we're talking about specifically here is motivation to place isolators,
6 such as taught in Boucheret, into actuators in the primary references,
7 Poertzgen and Weiler. And it's our position that the isolators are doing what
8 all isolators are known to do, namely reduce noise, vibration or harshness,
9 which I'll call NVH here today.

10 And we submit that Patent Owner's arguments against motivation to
11 combine are relying on unsupported distinctions between the references.
12 Distinctions that don't really exist. And also are relying improperly on
13 unclaimed features.

14 And then at the end I'll talk a little bit about why Poertzgen and the
15 combination they're using in Poertzgen teaches subframe and a motor
16 isolation cavity. And if you turn to slide 3, I'll also discuss why Weiler
17 teaches an actuator housing and isolation bushing.

18 Now, if you turn to slide 5, this is one of the figures from the
19 patents-in-suit. And the patent is directed to electromechanical actuator.
20 One possible use for those is with an electronic parking brake system. And
21 the basic setup is you have the motor 300, which is the red box, attached to a
22 subframe, which is shown here to the left of the motor. And then on the
23 other side of the subframe you've attach some gears, and those are the green

1 boxes, 302 and 304. And then that motor and gears and subframe are
2 basically a subassembly. And then in some of the claims it requires housing,
3 in others it does not.

4 In some of the claims, and all the claims that are now at issue
5 following the disclaimer, you can place isolators, and these are passive
6 isolators, little cushions if you will, between, for instance, the motor and the
7 housing, which is the purple box 316 there, for the motor and the subframe
8 to which it's attached, which is box 318.

9 And if you look to the primary reference, Poertzgen in Figure 7, you see a
10 similar actuator except reverse left to right. And we, this is also an
11 electromechanical actuator for a parking brake system. And you have a
12 motor, which is the red box 42 attached to the subframe, which is colored
13 gray here.

14 On the other side of the subframe you got gears which are the green
15 boxes 44 and 46. And again, we can have the housing going over the motor.
16 And you can have a housing going over the top of the gears on the far right.
17 But Poertzgen does not explicitly disclose or discuss isolators, and that's
18 why a secondary reference from Boucheret comes in.

19 If you look at slide 8, you see on the bottom right there will be a
20 little piece of rubber, a little piece of polymer. That's a passive isolator. It's
21 just a little spacer that can go between components, to dampen NVH. And
22 in Boucheret they use, in one of the embodiments, four of these. And they
23 place them between an electric motor and the housing to which the motor

1 abuts to dampen NVH coming from the motor. And that concept of using
2 isolators is the basic concept that we're applying to the primary references.

3 You turn to slide 10. We refer to Boucheret as teaching these
4 isolators. These isolators have been known for many, many decades, if not
5 over a century. And as an example, this is a textbook. A basic automotive
6 engineering textbook you see on slide 10, which refers to the types of
7 passive isolators we're talking about in the patent-in-suit as one of the
8 simpler ways to reduce NVH. So these were well known.

9 And if we turn to slide 11 --

10 JUDGE HOSKINS: Mr. Hutchins?

11 MR. HUTCHINS: Yes, sir.

12 JUDGE HOSKINS: This is Judge Hoskins. Can you return to your
13 slide 8 please? I just have a quick clarifying question.

14 MR. HUTCHINS: Yes, sir.

15 JUDGE HOSKINS: So you referred to, Figure 3 as showing that the
16 isolators are between the motor and the housing, but I think that the isolators
17 in Figure 3 are really between kind of a mounting frame for the motor,
18 which is that cross shape that we see there. And then kind of the
19 surrounding housing, which is the circular thing that we see surrounding that
20 frame element.

21 So it's indirectly between, I guess, the motor that's mounted to the
22 frame, which looks like it's 6, and then the outer frame which looks like it's a

1 3. So the bushings there are not kind of tied directly to the motor, did I have
2 that correct?

3 MR. HUTCHINS: Your description of where the isolators are in
4 Figure 3 is exactly correct. Those arms I believe are considered part of the
5 motor 6. But whether you call those arms, arms for the motor or you call
6 them the motor, I don't think it is of particular relevance as to taking the
7 teaching. But you have correctly identified exactly where those four
8 isolators are in Figure 3.

9 JUDGE HOSKINS: Okay, thank you.

10 MR. HUTCHINS: And then Weiler you see in figure, in slide 11,
11 looks very similar to Poertzgen. And you similarly have the motor attached
12 to a subframe on the other side of a subframe. You have the gearing. And
13 then the motor slides into a recess in the housing (yellow), which is part of
14 the brake caliper in Weiler. And there you do have a bushing interposed
15 physically, which is the isolator bushing, which is block 13 in Weiler
16 between the motor and the housing.

17 And if we turn to slide 12, we originally were using this art in the
18 grounds you see on our slide 12. Following the filing of the petition there
19 was a disclaimer for a series of the claims. And so a lot of the grounds fell
20 away. And if you turn to slide 13 this is the grounds that we have left.
21 There are five grounds left here today.

22 All right, if we could turn to slide 15. So as far as the disclaimer
23 goes, claims 1 through 4, 6, 9 through 13, and 20 through 23, Patent Owner

1 has given up on. There's not a lot of dispute as to whether the combination
2 contained the elements, with a couple of exceptions.

3 That portion in Boucheret, there's a dispute whether that teaches a
4 subframe. And I apologize, there's a typographical error on slide 15, in
5 which it teaches a motor isolation cavity. That should say, motor isolation
6 cavity. And there's a dispute as to whether Weiler-Boucheret teaches an
7 actuator housing.

8 There's no dispute that these passive isolators for damping NVH
9 were known in the art, and they're in Boucheret. The real dispute is whether
10 there would be a motivation to add those isolators in the way that we're
11 adding them to the primary art.

12 If we could turn to slide 19. I'd like to talk now briefly about claim
13 construction, then we can go to slide 20. So interestingly, the Patent
14 Owner's response admits that the ordinary meaning of subframe is a frame
15 for a subassembly. That's a pretty, that's pretty broad language, and it
16 doesn't help Patent Owner to distinguish the prior art.

17 We submit that the intrinsic evidence treats subframe with its
18 ordinary meaning. It provides no definition. And it simply is referring to
19 the subframe as a frame upon which other components, such as the motor
20 and gears are mounted.

21 Patent Owner's expert in deposition talks about how on its own
22 subframe doesn't have a lot of definitive meaning. More of a place holder.
23 In other words, it is a broad term. But it's okay to use broad terms in claims.

1 That doesn't mean that we have to go out of our way to attempt to limit them
2 based on the specification. And we submit that's what Patent Owner is
3 improperly doing. If we turn to slide 21.

4 JUDGE MOORE: Now one moment, Counsel. Can you go back to
5 the previous slide just a second?

6 MR. HUTCHINS: Yes, sir.

7 JUDGE MOORE: So the Patent Owner response, you say they
8 admit that the subframe is a frame for a subassembly and I just want it to be
9 clear. If we were to adopt that as our construction Petitioner would agree
10 with it?

11 MR. HUTCHINS: Yes, we would have no problem with a frame for
12 a subassembly as the construction.

13 JUDGE MOORE: Okay, thank you.

14 MR. HUTCHINS: Now, Patent Owner adds, in an attempt to
15 distinguish the prior art, that the subframe must be distinct from the actuator
16 housing because of certain of the embodiments and claims the subframe
17 cooperates with the actuator housing to enclose, for instance, the motor or
18 the gears.

19 In our view, subframe need not be distinct from or defined at all with
20 respect to the housing. In other words, to determine whether something is a
21 subframe one does not first need to determine what the actuator housing is
22 and then measure whether you have a subframe based upon its relation to the
23 housing. Nor could one because as some of the claims don't even require a

1 housing. This would be reading housing into claims that require a subframe
2 but no housing.

3 The '415 patent doesn't define subframe. The '415 patent explicitly
4 includes the disclaimer at the end saying that its embodiments are not
5 limiting. We all know that's a bit of boilerplate, but it's important boilerplate
6 that was put in that patent specifically so that accused infringers could not
7 make the type of arguments that Patent Owner is now making to try to say,
8 oh, the subframe has to be the exact subframe in the exact context in this
9 preferred embodiment because the patent says those embodiments are not
10 limiting. And that's in column 8.

11 And here, both the housing and the subframe share functionality.
12 They each make partially enclosed components. And they cooperate with
13 each other at times to encompass, for instance, the motor or gears.

14 But at times in the spec, the subframe is referred to as a housing.
15 And it partially encloses, for instance, the motor or gears. But at root, you
16 do not need to identify a housing to identify what the subframe is.
17 Similarly, the dispute with housing, if we turn to the next slide, 22, is the
18 same. The Patent Owner's response suggests that an actuator housing is an
19 outer casing of the actuator. I would say it's a structure that houses at least
20 part of the actuator. And when you look at the claims that do require a
21 housing, they say the housing at least partially encloses components.

22 Either way, any ordinary meaning we're fine with. But those
23 ordinary meanings don't avoid the prior art. And so here the Patent Owner

1 adds an additional limitation that the actuator housing also cannot be a
2 portion of a brake caliper. This is the type of gerrymandered negative
3 limitation Your Honors likely see a lot in these cases. And the Board's
4 already preliminarily rejected it as being unsupported by the spec.

5 And all I can say is, the Board remains correct. There has been
6 nothing put forth in the papers subsequent to the initial institution decision
7 that should make the Board change its mind.

8 JUDGE MOORE: Okay, before we go on, I just wanted to remind
9 everyone that the institution decision was not based on the complete record.
10 And the fact that we released a preliminary construction then doesn't
11 necessarily mean we're going to have the same construction in a final written
12 decision, which is why we have all the briefing. So, I'm sure you're aware of
13 that, I just wanted to make clear from the record that those were preliminary
14 and the claim construction was still up for debate until we issue a final
15 written decision.

16 But, just stepping back a second to your argument about the
17 subframe and the housing. What do you say about Patent Owner's
18 arguments that are based on dependent claims that identify those two
19 structures separately?

20 And I know some of the claims require that there be an isolator
21 between the subframe and the housing. How can there be an isolator
22 between the subframe and the housing if the subframe is (audio
23 interference).

1 MR. HUTCHINS: Well, for that claim you would have an isolator
2 between the subframe and the housing. Which we have in our proposed
3 combination (audio interference). In no circumstance is what we identify as
4 the various subframes in our combination coextensive with the housing.

5 In each instance you got a subframe that we've identified in our
6 combination that cooperates, if you will, with a housing, for instance on the
7 left, if you think on the left side you got a motor attached to the subframe,
8 you got a housing over that motor. That motor is going in a housing. That
9 housing cooperates with the subframe to enclose the motor.

10 Similarly on the right side, my right side, you got gears attached to
11 that subframe. And the subframe and housing cooperate to enclose those
12 gears. That's just like the patent. Now you can place an isolator between the
13 subframe and the housing when they come together to encapsulate, for
14 instance, the motor or the gears. And that's possible in all of our
15 combinations.

16 The subframes we point to are distinct from the housing.

17 JUDGE MOORE: They're distinct physical components.

18 MR. HUTCHINS: They're distinct physical components absolutely.
19 So even if you were to read -- unnecessarily, in our view -- these limitations,
20 we submit the combinations still fit the bill.

21 JUDGE MOORE: Thank you.

22 MR. HUTCHINS: Okay. So now let's turn to the main event, which
23 is motivation to combine. And if we could turn to slide 24. We've been

1 accused, I think, of not putting forth the motivation to combine in our
2 petition. And I submit that's simply not the case. As I alluded to in my
3 introduction.

4 The isolators that we're talking about are doing what isolators do.
5 They dampen NVH. That's what they've been known to do, that's the
6 predicted result.

7 The petition puts forth at least two of the classic rationales or
8 motivations for combinations, means we're straight out of the NVP. You
9 can view it as applying a known technique, which is using a passive isolator
10 to reduce NVH. To improve a similar device, and similarities. Here it's
11 Poertzgen or Weiler which has the electric motor mounted to other
12 components and you're adding the isolator.

13 And the improvement applies in the same fashion, NVH is
14 dampened. Or if you want to view them as combining prior art elements,
15 which is the actuator and the isolator. And the method of combination here
16 is extremely straightforward. You're literally just putting that little cushion
17 physically between two components where it will interfere with the
18 transmission of NVH between those components. And the result is
19 predictable that NVH is dampened.

20 Now, if we turn to the following slide, 25, it's not even asserted that
21 there is a new isolator in this claim. And it's not even asserted that the
22 isolators are doing something different in these claims than any passive
23 isolator has been doing in any other situation where you've had a passive

1 isolator where it's interfering with the transmission of NVH between the
2 components where it's placed.

3 And the claim supports this because the isolators are claimed entirely
4 generically. They can be any material, shape, size, hardness, tolerance. And
5 they need not even isolate particularly well. The claims require no particular
6 quantum of damping of NVH. No particular frequency that needs to be
7 dampened and no particular amount of dampening.

8 If we could go to slide 26. And so we submit that Boucheret is
9 teaching that isolators can be placed between components in the vehicles
10 actuator to dampen NVH from, and in Boucheret it's an electric motor that's
11 generating the NVH. And you can put it in that path of transmission to
12 dampen the NVH.

13 Poertzgen has an actuator also in a vehicle. And the isolators, when
14 put there, will interfere with the transmission of NVH from, for instance,
15 Poertzgen electric motor. Now, the concept is independent of the specific
16 context, but here the contexts are pretty darn close. Both Boucheret and
17 Poertzgen disclose electrical mechanical actuators with electric motors that
18 are being used in vehicles and you want to dampen NVH that's being
19 generated.

20 Now if we turn to the following slide, slide 27, we posit that the
21 arguments against the motivation to combine are relying either on fictitious
22 or unsupported differences between the references or unclaimed features.
23 We see at the top of slide 27 Patent Owner talks about how Poertzgen is a

1 precision. They use the term hard-mounted, I believe, as a proxy for
2 precision. Or a synonym for precision. It's a precision actuator relying on
3 the centered and operating in bursts. Then they say Boucheret is totally
4 different. It's a constant speed actuator for an AC or heating fan that is
5 driving. And it's relatively unconcerned with tolerances.

6 We believe when you look at the full teachings of either of these
7 references, these distinctions fall away. Poertzgen requires no particular
8 tolerance. It doesn't even mention hard-mounting. It states that the sensors
9 are optional.

10 Boucheret is certainly not limited to an actuator for a heating or fan
11 AC unit in a car. It mentions that's a possible use for it, but it's certainly not
12 so limited. Like Poertzgen, it provides no requirements or tolerances. And
13 Boucheret is not talking about the speed or duration of how long its motor is
14 operating or for how fast, it's simply focusing on the concept that you can
15 place that isolator in the path of transmission when the motor generating
16 NVH.

17 If we turn to the next slide, 28. If I were to boil down the
18 fundamental legal error I would submit Patent Owner is making, I would
19 suggest that they're taking specific embodiments from the art and treating
20 those as mandatory features of the art. And I suggest that that should not be
21 done.

22 Prior art is useful for all it teaches. It's not limited to the preferred
23 embodiment. We cite the *Belden* case there and note, though this is

1 principle, it's pretty well established. And all I need to do is direct Your
2 Honors to the PTO's guidance on how to properly do obviousness that it
3 issued last week on February 27th. And this exact point was made in that
4 guidance.

5 The new guidance that came out last week says, persons have
6 ordinary skill in the art also have common sense which may be used to glean
7 suggestions from the prior art that go beyond the primary purpose for which
8 that prior art was produced. They're talking about *KSR*.

9 Says, the Supreme Court taught that a proper understanding of the
10 prior art extent to all that the art reasonably suggests and is not limited to its
11 articulated teachings regarding how to solve the particular technological
12 problem with which the art was primarily concerned. So this idea that I'm
13 putting forth is certainly alive and well, but *KSR* would mandate it, in any
14 event.

15 Now if we can turn to the next slide. My second point was that the
16 distinctions we're hearing about, Poertzgen and Boucheret and why they
17 wouldn't be combined are relying entirely on unclaimed differences. *KSR*, at
18 the beginning of its analysis says, what we looked at is the objective scope
19 of the claim. What are they saying? Don't distinguish art based on
20 unclaimed features.

21 Here the claims don't require particular tolerances. Motor speeds,
22 motor durations. The actuators that are claimed can run for little bits of
23 time, for long bits of time. They can be noisy, they can be quiet. They can

1 have very tight tolerances, they can have very loose. They can be optimal,
2 they can be suboptimal. As far as the claims are concerned, they're agnostic
3 about all of these features.

4 JUDGE MOORE: That's true, Counselor. But when a person of
5 ordinary skill in the art is looking at, this hypothetical person is looking at
6 the prior art, they're not guided by the claims. That would be hindsight. So
7 what we're doing is we're trying to look for whether there would be a reason
8 to combine them in the manner that would result in the claims without
9 looking at claim limitations themselves.

10 You know, while I think your statements are true, certainly
11 unclaimed features could be relevant to that analysis, to the extent, for
12 example, those differences would demonstrate that there was no reasonable
13 expectation of success.

14 MR. HUTCHINS: And you could certainly have a teaching away in
15 the art, as the clearest example of what you're talking about, where an art
16 says -- a prior art says, you know, if you do this, it won't work. For a certain
17 reason. And, of course, the person of skill in the art would be expected to
18 take notice of that. I'm not arguing otherwise.

19 Here, the reason one would use isolators is to isolate. Is to reduce
20 the vibration. That would have benefits in Poertzgen. And the person of
21 skill would know that. The point I'm simply making here, as if they say, is
22 when they say, well, but then Poertzgen might not operate as fast. Poertzgen
23 doesn't say it needs to operate at any particular speed, but you shouldn't be

1 saying you can't combine this with that because it would make it slower
2 when the claims are completely agnostic about speed.

3 JUDGE MOORE: I think the argument they were making, unless I
4 misunderstood it, is that it would make Poertzgen less precise. They talk
5 about this half millimeter tolerance and a component that's driven by the
6 motor and make the argument that applying an isolator between the motor
7 and the structure would somehow make it, make the system less able to
8 measure the precise position of the motor, which is the approximate position
9 of this component.

10 MR. HUTCHINS: They make that argument. Again, it's
11 unsupported by Poertzgen, for which what you've described is actually not a
12 requirement. So Poertzgen would teach embodiments for which that's not a
13 requirement. It doesn't say, it doesn't require precision.

14 Further, as was explained by Dr. Lequesne at length, isolators can be
15 added without destroying the precision. And if you read the declaration of
16 Dr. Stein closely, he doesn't say that it necessarily would destroy Poertzgen
17 he comes up with this sort of parade of horrors that it could be
18 implemented in such a fashion so as to destroy the precision.

19 But if we turn to slide 34, it's the case that any component, including
20 the obvious one, can be implemented shoddily, potentially causing a system
21 to suboptimal. Almost by definition, when you're adding a component to a
22 system, there's some drawback. At a minimum, you're adding weight or cost
23 or a degree of complexity because by definition you're adding a component.

1 These are the types of tradeoffs, the balances that a person of skill in
2 the art, who is familiar with isolators, to put it mildly, is certainly able to
3 balance. And the skilled artisan is trying to succeed, not fail.

4 And when we're talking about what success means here, when you
5 look at the scope of the claims it's worth remembering that the claims don't
6 require any particular degree of dampening. And I want to say, make
7 another point about this concept that adding isolators would potentially, and
8 the word potentially carrying a lot of water for Patent Owner there, would
9 potentially make Poertzgen less precise.

10 But if we could turn to slide 33. None of the prior art, in the record,
11 teaches these drawbacks of isolators. If a person of skill in the art were
12 basing its analysis on the prior art, you will not find the parade of horrors
13 that Dr. Stein discusses in his report because the only place that exists in the
14 record is in his report.

15 Our expert, Dr. Lequesne, stated that none of the prior art, including
16 the background textbook on noise, vibration and harshness, teaches that
17 isolators should not be used in precision systems. And of course, the
18 examples given in that textbook are far more complex systems than we're
19 talking about here.

20 But Dr. Stein, when I asked him in deposition says, any of the prior
21 art in this IPR contain a discussion of these drawbacks of using vibration
22 dampers in systems with tight tolerances. And he answered, I'm not aware
23 any of those do.

1 So if either of the experts is failing to base their analysis on what the
2 art actually teaches, I submit it's Dr. Stein. Because the art does not contain
3 any discussion of these drawbacks. As I mentioned, Poertzgen doesn't even
4 discuss hard-mounting for instance. So I put that to the Board to consider.

5 But at root, if we go ahead to slide 35. The fact that it would take
6 some creativity to carry out these combinations does not defeat a finding of
7 obviousness. And when we're thinking about the skills that the skilled
8 artisan would bring to the table, it is absolutely fair to consider the
9 disclosure of the patent itself. Because the disclosure of the patent itself is
10 written to the skilled artisan. And so what it tells and what it does not tell
11 the skilled artisan is relevant. Because the patent does not have to disclose
12 things the person of skill would know in any event.

13 And so if we turn to the next slide, slide 36, all of these issues about
14 how adding an isolator to a precision system could ruin a precision or make
15 it worse, none of that is disclosed or discussed in the patent-in-suit. The
16 patent-in-suit leaves the design, the selection, et cetera, of these isolators to
17 the sound discretion of the skilled artisan. Because the inventors knew that,
18 the skilled artisan knew how to implement a passive isolator.

19 This is what the textbooks call the simpler forms of isolation. And it
20 is absolutely fair to consider that at the level of detail that the patent used in
21 discussing these issues when considering whether a person of skill in the art
22 would or would not be able to implement one of these simpler forms of
23 isolation.

1 JUDGE HOSKINS: Mr. Hutchins?

2 MR. HUTCHINS: Yes, sir.

3 JUDGE HOSKINS: This is Judge Hoskins again. We're kind of, I
4 think you've got about ten minutes left on your principal argument time, and
5 I just want to make sure, before you leave us for this argument session that
6 you address some of these claims in terms of where the isolators are required
7 to be located because you do have kind of a wide array of isolators between
8 component A and component B. And I'm hoping you can address kind of
9 obviousness with respect to all of those, at least at some level of detail, all of
10 those different combinations that are, I think, in these claims.

11 MR. HUTCHINS: Certainly. Let's turn to slide 41. Now, it's in
12 many, many places in the petition for the various claims, and in Dr.
13 Lequesne's declaration. But at root, and the process that we're talking about,
14 about where you would place isolators when you're trying to reduce the
15 transmission of NVH from a noise generating or vibration generating part, is
16 described at lengths, both in the background but also I'll direct you, you can
17 look at later, paragraphs, I think 177 through 181 of Dr. Lequesne's
18 declaration.

19 And he described that the person of skill would look to the source of
20 the vibration. And here, both experts agreed that a skilled artisan would
21 know rotating parts, such as gears and motors, generate NVH.

22 And you look at the source and then you look at the pathways
23 outward that you are attempting to block the NVH for. And so, and he

1 describes how the skilled artisan would know to use the isolators to get the
2 predicted results. Namely the dampening of the transmission of NVH.

3 So where are isolators placed in the claim? We submit they're
4 placed exactly where the skilled artisan would expect them to be placed.
5 The commonsensical location. And perhaps I could show this, if we go back
6 to slide 5. Which was where I showed, where we have a figure of the patent.

7 And if you look at slide 5, we've got two sources of NVH. The gears
8 and the motor. We'll start with the motor. What is the motor connected to?
9 Two things. The housing on the right, and the subframe on the left.

10 Boucheret, even within its context says, put the isolator between
11 what the motor is being attached to and you'll stop it. And where are the
12 isolators? Lo and behold, we have isolator 316 to the right of the motor,
13 between the motor and the housing, and we have isolator 318, which you
14 can't even tell from this figure there's so little detail, but 318 is supposed to
15 be an isolator between the motor and the subframe.

16 If you know the motor, a person of skill knows the motor is
17 generating NVH, all they've done is place isolators at the two places where
18 the motor touches something else. We submit that's exactly where you'd
19 expect.

20 Now, the pathway to the housing, the exterior is already done on the
21 right side. So let's go to the left. You've got the motor attached to the
22 subframe, and then it's a two-part subframe, and then the other part, as you
23 go to the left, that subframe goes to the housing on the other side, for what?

1 And lo and behold, there's an isolator between the subframe and the housing,
2 again.

3 Exactly where you would expect in the path of transmission. That's
4 what Dr. Lequesne's talking about when he says, the person of skill would
5 identify the source and the path and put isolators at the source or in the path
6 or both. The gears is even simpler. The gears are attached to the subframe.

7 And where do they have the isolator? Lo and behold, between the
8 gears and the subframe. And that's, again, you can't really tell how it sits in,
9 but it's 322. In that figure there's a bushing. That's the isolator between the
10 gears and the subframe. You got the gears generating NVH, they're attached
11 to the subframe, and they put the isolator exactly where Boucheret's concept
12 tells you to put it, next to the thing that's generating the noise for instance.

13 I think that covers all the bases Your Honors we're talking about.
14 And in each instance, I think we're talking about exactly where in the path of
15 transmission, from the source to the exterior of the device that you would
16 want to place an isolator. But do you have any follow-up questions?

17 JUDGE HOSKINS: No, thank you very much.

18 MR. HUTCHINS: Okay, thank you.

19 JUDGE MOORE: Counsel, can you just, I mean, you're talking
20 about the challenged patent here, can you just briefly go to the primary
21 references and point out where the isolators would go between the subframes
22 and the housing and those two references?

1 I understand your arguments about similarities with the subframe
2 and the housing, there's specific isolators.

3 MR. HUTCHINS: Certainly. So 40, if you could go to sub 47 will
4 have an image of that. Or slide 47. I apologize, I'm forgetting they're in an
5 analog fashion.

6 (Laughter.)

7 MR. HUTCHINS: I'm sorry, 46. Let's go to slide 46. So this is the
8 first subframe in our petition. That's the gray piece. And you see the
9 crosshatching for that piece. That gray piece cooperates with the actuator
10 housing on the right side and the left side.

11 So let's talk about the left side first. On the left side of the subframe
12 the motor is attached. The motor is the red box. The red box is attached to
13 the gray subframe. So to the left of the subframe is the motor. The motor
14 has a housing around it. That housing is abutting the subframe. And that's
15 the location.

16 So if you look at the right side of that red box, just above it and just
17 below it, that vertical line that's red on the right side of the red box, just
18 above it and below it is where the housing abuts, in this example, abuts the
19 subframe. And you've got isolators there.

20 But let's look on the left side, the right side, excuse me, also. You
21 have the gear box attached to the right side of that subframe. And in this
22 instance the subframe is partially enclosing the gear box. And so the
23 housing is, in this instance, just the plate. So the subframe looks like a C,

1 the housing is a plate, it's a lid if you will, that goes on top of that and they
2 cooperate to enclose the gear box.

3 And you can have isolators where the crosshatching is different in
4 the lid. You see there the crosshatching is different in the lid from the gray
5 to the white, that's where the isolators would be between the subframe and
6 the housing.

7 But in each instance, any of these instances the isolators are doing
8 exactly what one would expect an isolator to do, reduce the transmission
9 from Part A to Part B. Does that answer your question or --

10 JUDGE MOORE: No, it does but I'll just note that the, you know,
11 the type of isolator you would have to use between the gray crosshatched
12 area and the white crosshatched area on the white there, structurally that
13 would be different type of, you know, you would use something like a
14 washer, you know, a rubber washer for the motor, right? But we're talking
15 about something, something different there. It looks a little bit less like
16 Boucheret.

17 (Simultaneously speaking.)

18 MR. HUTCHINS: Certainly it could, right. If I were thinking about
19 a rectangle opening of the box looking down at the gears, having a little
20 washer like you would see at your hose at home is something that would
21 make sense. I mean, you could apply an isolator in there lots of different
22 ways, but yes. But again, the claims require no particular shape or size of
23 the isolators, much less material.

1 JUDGE MOORE: Right. What I'm wondering is, the person or
2 ordinary skill in the art, would they look at this and think, I want to apply,
3 you know, it's not exactly what you would, the first type of isolator that
4 would come to mind. Would that person think, okay, I want to put an
5 isolator there between those two? Between that plate and that C-shaped
6 structure.

7 MR. HUTCHINS: If they were concerned about the transmission of
8 NVH to the lid, and it escaping in that direction, then they would. Certainly.
9 It's for the same reason they would place an isolator anywhere.

10 Now, you know, at some point will there be diminishing returns?
11 Yes. At some point, as a design choice, would an engineer say, I don't need
12 20 isolators for heaven sakes it's quiet enough at this point, sure. But, you
13 know, my jacket has two buttons, some jackets have six buttons. Having six
14 buttons is just as obvious as two. Would I want a jacket with 30 buttons,
15 well I wouldn't. But I'm not going to say that it would be inventive if I did
16 that.

17 JUDGE MOORE: And I imagine with Weiler you would say the
18 same thing, the isolator would be a different looking structure that would be
19 between Weiler's bearing plate, the cavity within the brake caliper?

20 MR. HUTCHINS: Yes, sir. And the motivations would carry over.

21 Now, I would like to talk about the motor cavity briefly, if you could
22 turn to slide 52. There's a dispute as to whether Poertzgen teaches the motor
23 cavity, and I just want you to understand our position. So looking at slide 52

1 the motor is the red. Arrow was pointing to the motor. The cavity we're
2 pointing to is the negative space at the tip of the blue arrows, above and
3 below and surrounding the motor. And then there's a wall of the housing
4 which is the top orange arrow with a crosshatch there. It's in crosshatch
5 because that's a cut away. So you're looking at the interior of the wall.

6 And then there's the housing that we're watching the exterior of, the
7 left of the cut away line. And that purple line there is a cut away line where
8 the drawing is imaginarily cutting away the housing so you can see the
9 motor inside. And then where it's not cut away, the motor becomes a dotted
10 line underneath. So I just want you to understand that that's where the
11 petition does in fact point out.

12 JUDGE MOORE: Right. And I would like to ask Patent Owner to
13 make sure that you address that in your arguments. I, we also noticed the
14 edge of the motor going from, you know, a solid line to a dotted line when it
15 crosses that and would like that known that you've address whether or not
16 that's consistent with the targeting that this structure could be something that
17 straps.

18 MR. HUTCHINS: Now I'm going to go 30 seconds into my rebuttal
19 time just to, I'd like to pull up slide 56 if I could.

20 JUDGE MOORE: Feel free.

21 MR. HUTCHINS: And I also just wanted to touch briefly on this
22 bushing in Weiler, because the one distinction between the Weiler primary
23 reference and the Poertzgen primary reference is that Weiler actually isolates

1 the motor from the housing here by having a bushing that's basically the
2 same as that bushing you saw when you were looking at the figure of the
3 patent to the right of the motor. That's what the little purple in box 13 here.
4 And --

5 JUDGE MOORE: Weiler doesn't, itself, teach that that's noise
6 vibration --

7 (Simultaneously speaking.)

8 MR. HUTCHINS: It does not.

9 JUDGE MOORE: They just call it a bearing bush --

10 MR. HUTCHINS: Correct, sir. It could, it would be impossible for
11 it not to isolate because it's physically interposed between them. And so it
12 does isolate. And Dr. Lequesne said in the petition, and he explained that
13 even if you thought that had to be, for instance, made of rubber or polymer,
14 that would be obvious to do under the circumstances available at the time.

15 But my point is, is that they dispute -- Patent Owner disputes that
16 that's the isolation bushing that the claims are talking about, but if you look
17 at slide 58, my middle point here is all I wanted to make. The Patent Owner
18 and its expert offer no claim construction or criterion for a motor isolation
19 bushing that would exclude that bushing that you just saw in Weiler, which
20 would be just like that same bushing when we were looking at the figure of
21 the '415 patent to the right of the motor. There's no principled way to
22 distinguish it based on the claims, is what I'm saying.

1 JUDGE MOORE: So even if they were made of stainless steel, it
2 would still function in the isolator?

3 MR. HUTCHINS: It would. It would be lousy, it would be lousy at
4 the dampening vibration, but it absolutely -- it would absolutely have a
5 spring constant and a dampening constant, but we know on what end of the
6 scale those would be.

7 JUDGE MOORE: And don't pretty much all solid materials have
8 spring constants and dampening constants?

9 MR. HUTCHINS: They do. Which is why those limitations are,
10 add nothing to the claim. It's like they could have just as easily said, an
11 isolator having a density.

12 JUDGE MOORE: But the fact that a component has those two
13 constants doesn't necessarily make it an isolator? A person of ordinary skill
14 in the art wouldn't consider a diamond to be a motion isolator?

15 MR. HUTCHINS: Probably not a vibration isolator.

16 JUDGE MOORE: Vibration.

17 MR. HUTCHINS: It could isolate noise. It could certainly isolate
18 physically. Specifically for vibration dampening that's not what I would
19 pick. Just like if I were looking for, I'm an electrical engineer, if I were
20 looking for a conductor, I wouldn't choose glass.

21 (Laughter.)

22 MR. HUTCHINS: Okay.

23 JUDGE MOORE: It technically conducts.

1 MR. HUTCHINS: With that said, unless there is any other
2 questions, I'll turn, let other Counsel take over.

3 JUDGE MOORE: Okay, thank you very much. You'll have 17
4 minutes remaining for rebuttal.

5 (Pause.)

6 JUDGE MOORE: Okay, before you get started, would you like to
7 reserve any time for surrebuttal?

8 MR. MURPHY: Yes. Ten minutes, please.

9 JUDGE MOORE: Ten minutes, okay.

10 MR. MURPHY: At this time, I just have my screen black. Let me
11 see.

12 JUDGE MOORE: You can begin when you're ready.

13 MR. MURPHY: Thank you, Your Honor. I'd like to start just by
14 jumping into one of the points I heard discussed most recently. I heard
15 Petitioner say that it's obvious to place isolators anywhere there's noise and
16 vibration. And the evidence that Petitioner cites to says, well, there is noise
17 and vibration with the motor and the gear. The motor and the gear is not the
18 actuator housing and the subframe. Why are we taking a leap from a motor
19 and a gear, which is all Petitioners have said generates noise, and sticking it
20 between a subframe and an actuator housing?

21 Just more generally, Patent Owner is not arguing that isolators are
22 new. We're not arguing that isolators have never been used to dampen

1 noise, vibration, harshness in the history of time. We're arguing that it
2 would not have been obvious to use them in this context.

3 The main themes of Petitioner's arguments, first, they interpret all of
4 the evidence in the record too broadly. They accuse us of interpreting it too
5 narrowly, reading too much into what Poertzgen shows and what Weiler
6 shows. I would submit to you that we're interpreting those references the
7 way that a POSA would, a POSA with a mechanical engineer degree with
8 experience with these different types of devices.

9 Casting a blanket net, they're both actuators for the automotive
10 context. That's what Petitioners say. That's too broad. We need to focus in
11 on electric park brake actuators. That's the field of invention in this case.

12 The claims, the abstract, the title, the field of invention statement, is
13 all limited to electric park brake actuators. There is no broad, generic
14 statements in our disclosure saying, oh, while electric park brake is
15 disclosed, this could apply to all sorts of actuators.

16 Another thing --

17 JUDGE MOORE: Just a second. Before you just getting moving I
18 just have another preliminary question. I noticed that you proposed a
19 formulation for one of ordinary skill in the art that's somewhat different than
20 the formulation proposed by Petitioner. And your primary difference seems
21 to be that your formulation excludes an electrical engineering degree from
22 the scope of -- the degree to which allowed them to be a person of ordinary
23 skill in the art.

1 I just want to make sure I understand your position about Petitioner's
2 expert. So I noticed you didn't file a motion to exclude.

3 MR. MURPHY: Right.

4 JUDGE MOORE: And, you know, based on that argument, I
5 somewhat expected that maybe you would try to exclude the testimony on
6 the basis that Mr. Lequesne is not qualified, but you didn't do that. And Mr.
7 Lequesne certainly does have a lot of qualifications, and it seemed like some
8 of those were in the auto parts area.

9 So is it your position that Mr. Lequesne is not qualified to give
10 testimony from the perspective of one of ordinary skill in the art or are these
11 just arguments you want us to consider when according relative weight to
12 his testimony versus the testimony that you are offering?

13 MR. MURPHY: The latter, Your Honor. It goes to the weight, and
14 it goes to what I just said, which is, they're glossing over the details that
15 would jump off the page to a true POSA. And somebody with experience in
16 mechanical design, how mechanical devices interact, those differences are
17 stark. And Dr. Lequesne and Petitioners just gloss them.

18 JUDGE MOORE: Okay, so you're not arguing Mr. Lequesne is not
19 qualified to provide us with testimony, it's just that we should afford it less
20 weight than the testimony from your expert?

21 MR. MURPHY: That's right.

22 JUDGE MOORE: Okay, thank you.

1 MR. MURPHY: Another things Petitioners do is that use our patent
2 as a roadmap. They say, well, the prior doesn't have isolators but the patent
3 does so therefore it would make sense to add them to the prior art because
4 these horrible things that we are saying would happen, well, we've included
5 them in our patent so it's logical that you could add them to the prior art.
6 The fact is, there's no teaching in the prior art to add the specific type of
7 isolator in the specific combination of structures of claims.

8 The other main theme of Petitioner's response is that the claims are
9 lacking in detail. They make up these red herrings like, oh, they don't claim
10 the size of the isolator, what material it's made of, what performance metrics
11 it's supposed to be evaluated by. But the claims do recite a unique
12 combination of structures and they recite a unique isolator placement
13 relative to those structures.

14 If I could turn to slide 2. So slide 2 is perhaps the, one of the best
15 figures I guess to show the invention here. So slide 2 shows an actuator.
16 The actuator is mounted to a brake caliper. An actuator is not a brake
17 caliper in this disclosure. Those terms are used completely differently.

18 The brake caliper can actuate something. It can actuate a brake. But
19 in this disclosure, we have never equated an actuator with a brake caliper.
20 The actuator has an actuator housing. The actuator housing is the structure
21 that encloses the actuator. Inside the actuator housing is the core or the guts
22 of the actuator. The subframe, which is highlighted in blue on slide 2, that's
23 the core of the invention here. That's the unique structure that's not present

1 in the prior art, any of the prior arts. It is a frame for a subassembly, and it is
2 distinct from the housing of the actuator.

3 We've never said in our disclosure, we've never included a statement
4 that says, oh, the subframe can act as part of the housing, the housing could
5 potentially serve as part of the subframe. Those two structures have been
6 repeatedly discussed throughout the specification based on their distinct
7 features and functions. One skilled in the art reading our patent would not
8 have come to the conclusion that a subframe is an actuator housing.

9 JUDGE MOORE: But --

10 JUDGE HOSKINS: Attorney Murphy?

11 JUDGE MOORE: -- I mean the -- I'm sorry, go ahead, Judge
12 Hoskins.

13 JUDGE HOSKINS: Thank you, Judge Moore. Can you point us to
14 any claim language that talks about a specific interrelationship between the
15 subframe and actuator housing?

16 MR. MURPHY: So there are the claims, excuse me. So claims 8,
17 16, 17 and 25. If you have the patent in front of you. Claim 17 recites both
18 a subframe and an actuator housing in the claim. There's a presumption in
19 patent law that different terms mean different things.

20 JUDGE HOSKINS: So it's to recite a relationship between those
21 two components?

22 MR. MURPHY: Well it does recite an isolator between the two. So
23 that would be the relationship that's claimed.

1 JUDGE HOSKINS: Thank you.

2 MR. MURPHY: And I would also submit that in order to reach the
3 construction that we're proposing, which is that one skilled in the art reading
4 our patent, reading our claims, we don't need an express definition of what
5 the subframe is in the patents. All that's required is a person reading it
6 would understand that that is the correct definition that must closely aligns
7 with how the inventory is describing the invention.

8 JUDGE MOORE: So you don't need an express definition, and we
9 don't need a clear and unequivocal disclaimer of claim scope?

10 MR. MURPHY: You do not. That is precisely what *In re Smith*
11 said. *In re Smith* says that the correct definition is that one that most closely
12 aligns with what the inventor describes as the invention.

13 JUDGE MOORE: What about the open-ended, and I was going --
14 we recognize it's boilerplate, but the open-ended language at the end of your
15 specification before the claims that explicitly says that the claim should not
16 be limited to the specific embodiments described in the specification of
17 which this is one?

18 MR. MURPHY: So I would say, *In re Smith* coupled with the
19 principle in patent law that different claim terms should connote different
20 meaning, distinct meanings, overrides that boilerplate statement.

21 JUDGE MOORE: I understand your argument about different claim
22 terms having different meanings, but why, what I'm struggling with is
23 whether or not the prior art combinations that are alleged to satisfy these

1 claims, why, whether or not you could argue that that they've given these
2 claim terms that, they give those claim terms the same meaning. They
3 pointed out a physically separate structure in each of those, in Weiler and in
4 Poertzgen. They pointed out physically separate structures that they call the
5 subframes.

6 And in both cases I think you would argue that those structures form
7 part of a housing. They're not the entire housing, they're at least physically
8 separate from part of the housing. So it looks like they are pointing at
9 separate things.

10 MR. MURPHY: So I would, that's the first I've heard that they're
11 pointing at separate things was today because if you look at the petition, they
12 say the housing is 40. I'm on slide 10. And they drew these lines where the
13 housing 40 apparently goes from the plate to this gray structure to this other
14 structure.

15 And I also heard counsel say that in this example, the housing is the
16 plate. So if the housing is the plate and then the subframe is the gray
17 structure, the motor isolation cavity, the alleged motor isolation cavity,
18 what's that attached to? That's not, that just floating in space because the
19 housing is the plate. The housing is done. Move left, there's the subframe.

20 The motor isolation cavity in claim 18, it's required to be part of the
21 housing. So if the housing is the plate, they do not have a motor isolation
22 cavity.

1 JUDGE MOORE: And just before I move on, I ask counsel for
2 Petitioner to be prepared to address that in your rebuttal time. And
3 specifically the issue of whether or not the argument for today was a new
4 argument that wasn't previously addressed in the briefs.

5 MR. MURPHY: So moving on to the grounds of rejection. There
6 are two base references. Both are electric park brake actuators. Electric
7 park brake actuators are precision positioning devices. They're trying to
8 move something in space. Specifically, they're trying to move an output to
9 squeeze the brake caliper. They run for short periods of time. My vehicle
10 has an electric park brake actuator. I'm sure Your Honors' do as well. They
11 run for a split second.

12 The disclosed electric park -- the electric park brake actuators in the
13 prior art did not include isolators. Now we're moving to a teaching reference
14 which is not a precision position device; it's a fan. A fan, you flick it on, it
15 achieves a stable speed, and then it just runs. It's not trying to position
16 something in space; it's just trying to rotate, excuse me, some fan blades.

17 A POSA would appreciate the stark differences between these
18 references. And a person with no knowledge of the patent would not have
19 found it obvious to go outside the proper field of the invention, which is
20 electric park brake actuators, and look to a fan.

21 JUDGE MOORE: Can we look specifically at Figure 1 of Poertzgen
22 for a moment? So, I've got a motor and it drive gears, and the gears actuate -

1 - I forget what 26 is, is that called a piston or -- it's obviously part of the
2 device that actuates the brake itself.

3 MR. MURPHY: Right.

4 JUDGE MOORE: And what happens is, is the motor rotates, the
5 system measures the rotation with the motor. The 52, which is a hall effect
6 sensor, and it uses that information to deduce the position of, I believe it was
7 26. I apologize if I'm getting the components wrong. But deduce the
8 position of the component that moves, that you said has to be a half
9 millimeter.

10 MR. MURPHY: You're right. It's not 28 that rides along 26.

11 JUDGE MOORE: Okay. So nut 28 is moved. And what I'm
12 struggling to understand is, is how an isolator placed between motor 42 and
13 the structure they call the subframe, that little device there, that little thing
14 between the motor and the subframe, if you were to make that a rubber
15 washer how that would affect the operation of this device?

16 I mean, the hall effect sensor would still be able to count the
17 numbers of rotations of the spindle in the motor in presumably a small
18 rubber washer or similar component there would not prevent the gear at the
19 end of the motor interacting with the gear train. Certainly to understand how
20 that would make this device not work.

21 MR. MURPHY: Well, thank you for the question. Number one,
22 there is a precise relationship between motor and then all the way to the nut.
23 There is some gear ratios going on. And that's known in the ECU. If you

1 introduce an isolator that's softness. There's going to be some squishiness to
2 the system, some flexing. And the ECUs number that it had stored in it is no
3 longer going to be a precise representation of what happens with the nut.

4 JUDGE MOORE: But the flexing is not going to affect the gear
5 ratio, the nut still has the same number of, the gear on the end of the nut has
6 the same number of protrusions, whatever you call them, and the ratio
7 between those and the number of protrusions on the gear that interacts with
8 it are still the same. So the mechanical ratio is still going to be the same.
9 And the hall effect sensor there, 52, is still going to be able to measure the
10 number of rotations of the motor.

11 And I will note, the hall effect sensor doesn't measure precise
12 position of that spindle, it just measures, just on my reading of Poertzgen,
13 and tell me if I'm wrong, this measures full rotation. It sends a pulse to the
14 ECU every time a full rotation occurs.

15 So I'm struggling to understand that argument in view of the fact that
16 the gear ratio would be the same, and the ability to measure the position of
17 the motor would be the same, and the fact that, you know, while it's
18 measuring the precision mode by two degrees or something that might be
19 affected by a little bit of flex, it's measuring only complete rotations and still
20 be able to function.

21 MR. MURPHY: So, fair point. So, Poertzgen and Weiler, their
22 electric park brake actuators, they're concerned with two things: precision
23 and speed. How fast can they clamp this, this brake caliber down. And,

1 conversely, how fast can they unclamp it when the parking brake is
2 removed.

3 My understanding of what would happen if an isolator were
4 introduced in the locations where Petitioners claim, is that there would be
5 some degree of lag and softness introduced such that the speed with which
6 Poertzgen and Weiler would react would be less, and it would throw off,
7 because there would be some motion of the motor that's not translated
8 directly to the gears. Because the motor would have some softness --

9 JUDGE MOORE: Slight torque, right.

10 MR. MURPHY: That's right.

11 JUDGE MOORE: Right, I understand there could be a slight torque.
12 What I'm struggling with is the fact that, you know, especially the
13 Poertzgen, the thing that measures the position of that gear would not appear
14 to be -- the motor, obviously, could torque a little bit, but the measurement
15 device seems like it would still work, at least this hall effect sensor in Figure
16 2 which measures the position of the output of the motor, not the (audio
17 interference).

18 MR. MURPHY: So, fair point. And I think we would have a
19 different position, as Patent Owner, if the teaching reference was a precision
20 positioning device. If it was trying to locate something in space.

21 We're basically saying, take this device, which is an electric park
22 brake actuator trying to move 28. And in view of a fan, stick an isolator

1 basically wherever you want. We don't think there's motivation to look to
2 the fan prior art period.

3 Even if you are going to, even if you disagree with me and you want
4 to say, okay, Boucheret does teach isolators, we don't care Patent Owner,
5 we're going to isolator in Poertzgen, where are you going to put it?

6 Boucheret teaches, put it on the radial outside of the motor. That
7 would not meet any one of the claims at issue. Petitioners cite, in view of
8 this Boucheret reference which teaches isolators that are radial outside of a
9 motor, stick them between the plate and the motor, stick them between the
10 plate and the, what they call the subframe, stick them between the gear set
11 and the subframe. That's a bridge too far. That's not taught in any of the
12 references.

13 And even if you were going to agree with Petitioners on that point,
14 claim 19 recites two distinct isolators in distinct locations. Boucheret
15 teaches one common isolator location. Why would you break those apart
16 and stick them in multiple locations in Poertzgen. We think that's simply not
17 taught or supported by the evidence in the record.

18 JUDGE HOSKINS: Mr. Murphy?

19 MR. MURPHY: Yes.

20 JUDGE HOSKINS: This is Judge Hoskins. Before we move too far
21 away from your precision argument, so let's -- so give -- help me understand
22 why it's not simply a tradeoff because I think it's pretty clear that putting
23 dampers, in terms of how a motor is going to be mounted on a frame, a

1 damper is going to beneficially reduce noise and vibration. It seems to me
2 that's pretty clear. So there is a benefit to doing this.

3 And so help me understand, so now we're in the realm of cost
4 benefit, right? So we lose a little bit of precision for the benefit of the noise
5 and vibration dampening. Help me understand why the cost is so steep that
6 a person of ordinary skill in the art would not do this to achieve the well-
7 recognized benefits?

8 MR. MURPHY: So I think, I'm going to try to answer your
9 question, let me know if you have any follow-ups, please. So I think what I
10 would say is, we actually have a subframe in the '415 patent. There is
11 actually a subframe there.

12 This subframe allows testing independent of the actuator housing. It
13 allows a worker to assemble the guts of the electric park brake actuator
14 independent of the actuator housing. So you can assemble it outside the
15 housing and then you can test it, make sure it works before you finalize
16 completion of the housing. And then you take the subframe, the
17 subassembly together, and you insert it into the housing.

18 So there is actually a subframe here. The subframe has those
19 benefits that I just articulated. So while we disclosed including isolators, we
20 also have benefits because we have the structure of a subframe here. In the
21 prior art there is no discussion of independent assembly or testing
22 independent, independently, they're just sticking isolators there because

1 that's what the claim says. They're not doing it because they're getting some
2 other tradeoff like the '415 patent is.

3 But that's how I would answer your question, Your Honor. I --

4 JUDGE HOSKINS: Well I guess Petitioner is giving us a precise
5 location for, in the port, what is it. Poertzgen. In Poertzgen, for where they
6 would propose it would have been obvious to put one of these dampers.
7 And I understand, you know, part of your point is why put it there, but let's
8 just say for a moment that the issue is whether it would have been obvious to
9 put one there. And you're saying, no, it would not have been in part because
10 of the sloppiness that this introduces into the system.

11 And I'm hoping you can maybe help me understand why the
12 sloppiness that is thereby introduced is so much and so high that we're not
13 going to do it despite the dampening benefits that would be achieved?

14 MR. MURPHY: Well first of all, I don't know that Boucheret
15 teaches you that there will be dampening benefits, dampening benefits,
16 excuse me, in --

17 JUDGE HOSKINS: Are you saying that a person of ordinary skill in
18 the art would not appreciate that a bushing would provide dampening
19 benefits?

20 MR. MURPHY: Well, so, say that they do appreciate that. We've
21 identified drawbacks that a person skilled in the art, Dr. Stein, our expert, he
22 has identified. And there are no, no benefits other than what Your Honor
23 perhaps just said. I would submit that those benefits are not in Boucheret. I

1 understand -- I appreciate you may not agree with me on that point, Your
2 Honor, but I think if you are going to put an isolator here, where are you
3 going to put it and why would you put it in more than one location?

4 Those questions are not answered by Boucheret. And the first point
5 I said when I came to the podium, I heard petitioner say that the motor and
6 the gears are the noise generating components. I don't necessarily agree that
7 they're going to be generating noise to the level that it requires dampening.
8 That's not necessarily been proven. But what about between the housing and
9 the subframe that they've identified? Those aren't the noise generating
10 components, why are they sticking an isolator there?

11 JUDGE HOSKINS: Thank you.

12 MR. MURPHY: If I could -- so there was, before I move on from
13 Poertzgen, there was a question regarding the motor isolation cavity.

14 The claims require the actuator housing to comprise the motor
15 isolation cavity. It has to be part of the actuator housing. So if you look at
16 this, I don't know if Your Honors can see this, but between 28 and 16, I'm
17 using a laser pointer here, there's some sort of pink there.

18 JUDGE HOSKINS: What slide are you on, please? Can I --

19 MR. MURPHY: I'm sorry, slide 8.

20 JUDGE HOSKINS: Thank you.

21 MR. MURPHY: So first of all, this structure, which is presumably
22 the alleged motor isolation cavity, this structure right here has a distinct
23 crosshatching from the subframe. The alleged subframe. So it is not a

1 continuous structure here. We don't know what this is. It's not disclosed in
2 text. All we're left with is this figure.

3 Dr. Stein, who has a mechanical engineering degree looked at this
4 and said, that's not a cavity to me, I don't know what that is. This could be
5 some structure of the brake caliper, it could be some sort of strap, it could be
6 something else. We don't know what it is. There is a kink here between the
7 crosshatching, between 16 and 28. If you kind of follow the crosshatching
8 to the left it's unclear what that is.

9 There is, this structure could be something that into the page relative
10 to the motor and they're showing some sort of cutout, or it could be out of
11 the page relative to the motor. The motor could be completely unenclosed.
12 It could be a strap.

13 It's not disclosed to be a motor isolation cavity. And what I just
14 heard is it's not even part of the actuator housing at all. So there is no motor
15 isolation cavity based on this figure, which is all Petitioners are left with
16 because the text doesn't support them.

17 JUDGE MOORE: But, counselor, what do you say about the outline
18 of the motor?

19 To the right of that line, it's solid, to the left of that line, it's hashed
20 there. Crosshatched. Doesn't that indicate that there is a structure that
21 begins at that line covering the motor?

22 MR. MURPHY: So it could be, it could be out of the page in our
23 view. That could be some sort of cutout view. It could be a strap. The strap

1 could extend here and there could be some structure, it looks like there is
2 some structure projecting to the left of the motor that would interface with
3 the strap here. It's simply inconclusive.

4 The case law says that if you're alleging that a structure is disclosed
5 in a prior art reference you have to prove it with certainty. Probabilities and
6 possibilities, guess work is not enough.

7 JUDGE MOORE: Doesn't it just have the teach or suggest
8 structure? We're talking 103 obviousness here.

9 MR. MURPHY: They are not trying to modify Poertzgen to include
10 a motor isolation cavity. They are saying Poertzgen discloses it. So the
11 anticipation case law applies to that aspect of the 103 analysis.

12 JUDGE MOORE: Okay.

13 MR. MURPHY: I want to move to the grounds of rejection
14 involving Weiler. Weiler places a motor, an electric park brake actuator, in
15 a brake caliper. The brake caliper receives the motor in a recess. Consistent
16 with our disclosure, a brake caliper is not an actuator housing.

17 An actuator housing is not a brake caliper. That is not the definition
18 that most closely aligns with how the inventor described the invention in the
19 specifications.

20 Also, just like subframe and actuator housing, actuator housing and
21 brake caliper appear in the claims, they are used differently, they refer to
22 different structures, and one skilled in the art having reviewed the entirety of
23 the '415 patent, including the claims, would not have said, oh, yeah, the

1 actuator housing can be part of a brake caliper. That is not a reasonable
2 construction, not the plain and ordinary meaning, and Weiler simply lacks an
3 actuator housing.

4 I would also note that Petitioners have a problem with Element 13.
5 Element 13 is referred to as a bush bearing or a bearing bush in the
6 translated, excuse me, in the Weiler document. It has never disclosed to
7 function as an isolator.

8 So Petitioner's duplication of parts rationale and Petitioner's
9 reference to the bush bearing as an isolator falls apart. It's just simply not
10 disclosed to be an isolator. Dr. Stein evaluated Weiler and he believes it's
11 some sort of locating device for mounting the motor.

12 He believes the motor would be rigidly held in place with what's
13 called the Bearing Plate 14 on the opposite end of the motor by way of
14 applying axial pressure to the motor from the left to the right in the figure.

15 So if it's not an isolator, which we believe it's not disclosed to be an
16 isolator, then Petitioners have a problem. If it is an isolator, Petitioners have
17 a problem because they haven't addressed the redundancy.

18 If Weiler already has isolators, why are we sticking more isolators in
19 Weiler and why are we looking to a fan to do that, and, albeit, a fan
20 reference that doesn't teach putting isolators in the locations where
21 Petitioners suggest placing them?

22 I want to also pull up Petitioner's slides. I am starting on their slide
23 32. I want to talk about some of the cases that they cite in their slides and

1 these cases are readily distinguished. So *Axonics* is cited because in the
2 *Axonics* case the patent owner argued that it wouldn't be obvious to place a
3 feature for a hip implant in the structure for a face implant.

4 The Board agreed with the patent owner. This case went all the way
5 to the Federal Circuit and the Federal Circuit didn't necessarily disagree with
6 patent owner. They simply said the Board defined the field of invention, the
7 scope of the invention too narrowly in that case, because this invention
8 related to all sorts of implants, it was not limited to a hip implant.

9 The title, the abstract, the claims, the disclosure, they all included
10 statements, unlike in this case they all included statements saying, oh, yeah,
11 it could be any type of actuator. So this case, the Fed. Circuit reversed back
12 to the Board, the parties are still making the same arguments.

13 They are saying, okay, let's define the field of invention properly, we
14 still don't think you should add a feature for a hip implant into the face. The
15 Board is set to rule on this in a matter of two weeks, I believe.

16 I am on Petitioner's slide 35. They cite to this *Facebook* case for
17 some proposition that somebody could add -- They are saying by adding an
18 isolator -- excuse me. They are saying a POSA, despite having no evidence,
19 could just add the isolator and it would work just fine because a POSA, you
20 know, has some level of skill and they can implement the claimed invention.

21 First of all, they are using our claims as a roadmap. Secondly, this
22 *Facebook* case, what it was talking about was how to store a digital
23 encryption key. So a digital encryption key is basically like a series of ones

1 and zeros for gaining access to a computer system. It has to be stored
2 somewhere. That was the key in this case.

3 The Federal Circuit said, well, it has to be stored somewhere and the
4 question is, is it obvious to store it in a database? And the Federal Circuit
5 said, yes, it is obvious to store it in a database because that's where you store
6 digital things.

7 In our case you don't need to add isolators to an electric park brake
8 actuator. If you want to attenuate noise in an electric park brake actuator
9 you can do it in the way that Poertzgen says to do it, which is to add a belt.

10 Slide 36. This case cited at the bottom, *Muniauction*, is cited for the
11 principle that a person of skill if they don't have all the details that's fine
12 because the patent-in-suit doesn't really spell out the details. I would submit
13 that the patent-in-suit defines enough detail. It defines a unique arrangement
14 of structure and it places isolators in specific locations relative to those
15 structures.

16 This case, I would encourage the Board to look at this pin cite, cite
17 1327, footnote 3. It does not say what Petitioners say it does. It says if the
18 patent lacks detail that might be an enablement issue, that's what footnote 3
19 says. So it says nothing about letting a POSA just fill in gaps. *Muniauction*
20 does not support Petitioner's case.

21 Finally, on slide 37, *In re Mouttet*, this is a case about what is an
22 expressed teaching away. The patent owner in that case argued that the base

1 reference taught away from the combination. The base reference said you
2 can use Solution A or Solution B.

3 Solution A is better than B and the patent owner said that is a
4 teaching away, you would never use Solution B. The Federal Circuit in that
5 case correctly said that that's not what "teaching away" means. Teaching
6 away doesn't mean talk about one possibility versus the other and say one
7 might be slightly worse than the other.

8 If you want to argue teaching away it has to be expressed. That's all
9 that means. We are not arguing that there is an expressed teaching away in
10 Poertzgen or Weiler. We are just saying one skilled in the art that is familiar
11 with this art that's familiar with the intricacies of the references would not
12 have reached the conclusion that Petitioners have reached.

13 Unless there is any further questions, that's all I have, Your Honors.

14 JUDGE MOORE: I have none. My colleagues?

15 Okay. Thank you very much.

16 MR. MURPHY: Thank you.

17 JUDGE MOORE: You'll have it looks like an additional 15 minutes,
18 so a total of 25 minutes for that if you would like to use that at the end.

19 MR. MURPHY: Thank you.

20 MR. HUTCHINS: Thank you. With literally everybody in this
21 room I am the wrong person to be the one trusted to -- a couple of my
22 partners left. One moment, Your Honor.

23 JUDGE MOORE: Of course.

1 MR. HUTCHINS: Before we start with some of the slides, I wanted
2 to address this issue that somehow the interaction that I described between
3 the housing and the subframe, today is the first time anyone is hearing that.

4 So, in our petition when we first showed, for instance, Poertzgen
5 with the gray -- the first embodiment of Poertzgen with the gray subframe,
6 we described what the patent called a subassembly 40. That's the actuator.
7 We identified it orange was the subassembly, was the actuator. Then when
8 we talk about the housing for each of the -- and, I'm sorry, this is page 25.
9 Then we talk about various claims discuss the housing in different ways.
10 Certain claims require the housing to form a cavity that helps enclose the
11 motor in conjunction with the subframe.

12 Other claims claim the housing as cooperating with the subframe to
13 enclose the gears, for instance. By the way, there is no claim that requires
14 the housing to both incorporate the motor and incorporate the gears, but even
15 if you had a two-part housing so what, there's nothing in the claim the
16 precludes a two-part housing and the patent embodiments have a two-part
17 housing, so I don't see why that's an issue at all.

18 So in page 27, for instance, when we first talk about the housing for
19 the motor we talk about a portion of the housing, it's the subassembly is the
20 actuator and then we discuss portions of that as the housing.

21 JUDGE MOORE: You're talking about page 27 or your --

22 MR. HUTCHINS: Petition. I'm sorry, this is all the petition.

23 JUDGE MOORE: Okay.

1 MR. HUTCHINS: So if you were to take claim 13 as an example,
2 and claim 13 talks about how the motor is enclosed with the actuator
3 housing, for instance, in the subframe. And so on page 33 of the petition we
4 describe how, in Poertzgen, the housing -- and we're talking about the
5 portion of the housing that is to the left of the subframe, just how I described
6 it earlier today when we were talking about that cooperation between the
7 subframe and the housing that collectively encloses the motor. But it's not
8 just claim 13, as you go through our petition, when we are talking about the
9 claim that says the housing cooperates with the subframe to incorporate the
10 gearbox, then we describe it just how I described it here, that the subframe
11 cooperates with that housing.

12 And they could be different shapes. The subframe could be c-shaped
13 and the housing could be flat, the subframe could be flat and the housing that
14 covers the gears could be c-shaped. Either way, but that's all in our petition.
15 When we talk about for the claim that says you put the isolators between the
16 housing and the subframe, we're not running away from that.

17 Then in the reply brief on 14 and 16 in response to this distinct from
18 argument, we explicitly point out on pages 14 through 16 of our reply brief
19 that they are not co-extensive structures we're pointing to. So I am confident
20 that I am not making new arguments that anyone is hearing for the first time
21 today.

22 I also want to talk about the location of the isolators, so if we could
23 turn to PO slide 2, Patent Owner's slide 2. I believe Patent Owner's position

1 is, well, at best Boucheret says you put the isolator immediately next to the
2 component that is generating the noise and in this instance, it would be 318
3 and 316.

4 316 is not highlighted on Patent Owner's slide 2 maybe because they
5 are conceding that that's the location that has in Boucheret and they are
6 saying it's not agreed to, but Boucheret, wherever the motor is going to the
7 housing it has the multiplicity of isolators.

8 So that concept directly covers 316 and 318, that's not a leap at all.
9 The gears generating noise, the gears are attached to the subframe, so putting
10 the isolator immediately next to the gears where that green bushing 322 is,
11 that is the exact concept of Boucheret and, again, Boucheret, one is not a fan
12 reference.

13 I hope every time my brother counsel says Boucheret is a fan
14 reference we all understand that that's largely a fiction that there is one
15 embodiment where it says it can be used for an AC unit. That does not turn
16 Boucheret into a fan reference. I digress.

17 Now Dr. Lequesne explained at length and the background textbook
18 on NVH describes in far more detail than the patent-in-suit the process that
19 the skilled artisan goes through in determining where to place isolators.

20 It's throughout our petition that the person of skill would know that
21 you can place them at the source or in the path or both, and the pathways
22 here are extremely simple. The pathway from the motor to the housing to
23 the right is direct because the motor abuts the housing.

1 The pathway from the motor to the housing -- I said that backwards,
2 I apologize if I did. The pathway from the motor to the housing on the right,
3 towards the right, is direct because the motor abuts the housing and there is
4 an isolator there, just like Boucheret says.

5 The pathway from the motor to the housing towards the left goes
6 subframe, housing. So you've got two choices, the isolator between the
7 motor and the subframe, and you've got the isolator between the subframe
8 and the housing.

9 Having multiple isolators does not create a redundancy problem
10 from an obviousness point of view because each isolator is doing exactly
11 what is expected of it to achieve the expected predictable results.

12 Now it may be that it has less usefulness, and it depends on what
13 frequencies you are trying to dampen, whatever, one could be dampening
14 one set of frequencies, another could be dampening a different set, whatever.
15 It can be designed in all sorts of different ways and the patent doesn't say
16 anything about any of that, but it's not less obvious.

17 It may be less useful and that's why the *In re Mouttet* case line comes
18 up, because to the extent that they are trying to save their patent by saying
19 having these multiple isolators aren't particularly useful, that doesn't say
20 anything about whether they are obvious or that they don't fall within one of
21 those classic rationales from the MPEPs for using something exactly as
22 expected to achieve the expected results.

1 There was a discussion of the *Axonics* case. I also urge you to look
2 at it and it cannot fairly be distinguished. If you are saying that you can't
3 add an isolator from Boucheret to Poertzgen because Poertzgen is faster or if
4 Poertzgen operates at different speeds, that is *Axonics*. That's an unclaimed
5 feature. That's relying on an unclaimed feature to avoid motivation to
6 combine.

7 Immediately following the quote from *Axonics* that Mr. Murphy
8 showed you, *Axonics* continues and says "A skilled artisan may be motivated
9 to combine particular features of different references, e.g. to secure some
10 benefits at the expense of others even when bodily incorporation would be
11 impossible or inadvisable," and, of course, that is the point that Judge
12 Hoskins was making that it always involves tradeoffs whenever you are
13 adding a component to a system.

14 Now if we could turn to Patent Owner slide 10. I believe what
15 Patent Owner is arguing is that the gray cannot be a subframe because part
16 of the gray is on the exterior of the actuator and there is nothing in the patent
17 that requires the actuator housing to completely encapsulate every
18 component of the actuator.

19 The claims say the opposite. When you read the claims and they talk
20 about the housing they talk about it partially enclosing and specifically to
21 this point as a for example, for example claim 22 talks about the housing
22 partially enclosing the subframe.

1 If the housing is only partially enclosing the subframe, that means
2 part of the subframe is not enclosed by the housing. It cannot be that a
3 subframe, it cannot be that you take a plate, attach a motor to it, attach gears
4 to it, and you can hold it in your hand and do whatever you want to it as a
5 subassembly, test it if need be, I heard that subframes require testing, the
6 claims don't require it, but even if it did, you attach those to the subframe
7 and it's a subframe and then I put it in a housing but the housing doesn't
8 completely encapsulate the subframe, there is still a little piece of the
9 subframe showing on the exterior of the actuator, and we are to believe that
10 that same exact structure is now no longer a subframe, of course not, that
11 cannot be.

12 If we turn to Patent Owner slide 9, what that would mean then is that
13 if you don't have a housing, exterior housing, completely covering up the
14 portion of the subframe, that's 314, for instance, on the left, it's no longer a
15 subframe, and in deposition even Patent Owner's expert wouldn't go that far,
16 and that was at page 125 through 131.

17 JUDGE MOORE: Could you go back to slide 10 for just a moment.
18 I apologize if I am belaboring this or just misunderstanding. I mean I'm still
19 trying to understand the location with your dependent claims of the isolator
20 between the subframe and the housing.

21 I understand your argument that the subframe here is part of the
22 housing. I am trying to visually understand what this housing looks like. It's

1 just some type of -- it's obviously the subframe forms part of the cavity that
2 encloses either the motor or the motor and the gear portion of this actuator.

3 MR. HUTCHINS: Right. So, what we are looking at here, there is a
4 housing over the motor.

5 JUDGE MOORE: Yes.

6 MR. HUTCHINS: And so that's the portion of the orange that
7 surrounds the motor and then abuts the gray. So where that touches the gray
8 is the intersection where the housing touches the subframe, and that's where
9 you could have an isolator if you wanted to reduce the transmission. I
10 apologize --

11 (Off-microphone comments.)

12 COURT REPORTER: Your Honor, this is the Court Reporter. I
13 can't make out what he is saying.

14 (Off-microphone comments.)

15 JUDGE HOSKINS: Mr. Hutchins, this is Judge Hoskins. If you
16 want your comments on the record, I suggest staying closer to the mic.

17 MR. HUTCHINS: I am going to re-say what I just said. So, I
18 understand completely. So you have the motor that is the red box attached
19 to the subframe, which is gray and cross-hatched. You have a housing
20 surrounding the motor that's part of the orange and it's cross-hatched, the
21 wall of that is cross-hatched in a different way, and where they touch is
22 where you would put the isolator.

1 You would put it there because the motor is bringing vibrations into
2 the subframe and you've got an isolator there and if you want additional
3 dampening to prevent the vibration that gets through to the subframe from
4 going to the housing surrounding the motor then you put the isolator there.

5 Similarly, on the right side, if you wanted to prevent any vibration
6 that gets through to the subframe, which is the gray going to the housing lid
7 on the right that is enclosing the gears you could put, for instance, that
8 washer we talked about, but any other passive isolator could go there.

9 JUDGE MOORE: But that housing is not attached to anything else,
10 it's not a mount, it's just a lid?

11 MR. HUTCHINS: It is in fact a lid. If we go to slide 9, Patent
12 Owner slide 9, Paul, just like the lid of the housing 305, 305 housing,
13 covering the gears in this instance. That's why having a two-part housing I
14 don't think is an issue. Did I answer your question though, Your Honor?

15 JUDGE MOORE: Yes, you did.

16 MR. HUTCHINS: Okay. And could you put up slide 11, Patent
17 Owner slide 11. If you look at Figure 3 you see below the top red arrow a
18 horizontal line, that's the dividing line in the patent between the actuator and
19 the caliper.

20 The motor is extending into a recess in the caliper. Just so we're
21 clear, what we are looking at in Figure 3, now the claims do not restrict in a
22 negative way housing to not be a brake caliper. That's something that is
23 purely a litigation-driven gerrymander.

1 But to make the point even more clear, the patent discloses calipers
2 having recesses to receive that motor that sticks out farther past all the other
3 components, such as the gears and the isolator, because what you are
4 looking at in Figure 3 the bottom of the motor is residing in the brake
5 caliper.

6 JUDGE MOORE: All right. So your argument is we should
7 obviously construe the claims to at least encompass a preferred
8 embodiment?

9 MR. HUTCHINS: Yes. And I think the discussion of *In re Smith*,
10 *Smith* is not changing classic claim construction law. It is the case that an
11 inventor can write his patent specification in such a way that he consistently
12 describes the present invention -- and I use those words advisedly, the
13 present invention -- who consistently describes them in a way that requires
14 certain elements as a fundamental part of his invention, without having acted
15 as his own lexicographer and having a formal definition or otherwise making
16 an argument in the prosecution history.

17 In certain instances, that will be found to limit a claim. This is not
18 that patent. This patent when you read it has been written specifically so
19 that the embodiments are not limited. The present invention is not described
20 as requiring any of these features.

21 All of the features we are talking about are described as it may have
22 it, an aspect of the invention, an aspect consistent with the invention. This is

1 the language the patent used in addition, of course, to the explicit disclaimer
2 I have already described.

3 So make no mistake, I don't dispute that there is a theoretical way
4 this patent could have been written so that subframe or housing was
5 narrowed despite the lack of a definition narrowing it, but this patent was
6 written in the opposite way.

7 I see my time is up, so if there is any questions Your Honors have, I
8 am happy to address them, otherwise I will cede the podium.

9 JUDGE MOORE: I have nothing else. Judge Hoskins? Judge
10 Grossman?

11 MR. HUTCHINS: Thank you, Your Honor.

12 JUDGE MOORE: Okay. Thank you. Give counsel for Patent
13 Owner a moment to set up.

14 MR. MURPHY: Thank you.

15 JUDGE MOORE: And then begin whenever you are ready, and I'll
16 start the time when you begin.

17 MR. MURPHY: Thank you. Just a few short points. So regarding
18 this discussion of what is the actuator housing and what is the subframe,
19 there are two main theories in the petition.

20 One is that the subframe is the c-shape and the housing -- Again, I
21 am not playing cute or anything, until today I thought the housing was the
22 entire orange structure. They call the housing orange and they draw this big

1 box over three distinct structures in Poertzgen and they say that's the
2 housing.

3 Our position is that the subframe in this interpretation is not part of
4 the actuator housing.

5 JUDGE MOORE: And just for the clarity of the record, you are
6 referring to the figure on page 24 of the petition?

7 MR. MURPHY: That's correct. Thank you. Another theory I heard
8 today was that the housing could just be the plates, meaning just this white
9 structure off to the right.

10 I also heard today that the housing has to partially enclose the
11 subframe. If the housing is just the plate, how does the housing partially
12 enclose the subframe? The subframe receives that plate but the plate doesn't
13 enclose the alleged subframe.

14 I would also submit that there is a problem with the plate, meaning
15 that the housing has to also include the motor isolation cavity. That's in
16 claim 18.

17 The second theory is basically if you clip the c-shape, and now I am
18 on the next page of the petition, if the c-shape is the actuator housing and the
19 subframe is gray, the subframe is still part of the actuator housing in that
20 example.

21 The actuator housing was drawn as this orange structure and it's part
22 of the actuator housing. We claim two distinct things and they have found

1 one, an actuator housing and some sub-part of it with lines that were added
2 by Petitioner to do some arbitrary shading here, that's the subframe.

3 The combinations in view of Drennen and Weiler to incorporate a
4 subframe, my understanding of those combinations is that they would
5 approximate this figure. They are just saying all those teachings from those
6 references. It still has the same problem, the subframe is part of the actuator
7 housing, whereas, in our patent, it's a distinct structure.

8 I also want to say that *Axonics* is perhaps the best case that
9 Petitioners have for why the Board doesn't have to look at the context of the
10 prior art. *Axonics* is not a "sea change" in patent law. It has been cited eight
11 times. It is not a full reversal of the issues in the case. The Board in that
12 case -- excuse me, the Fed. Circuit in that case simply said that the Board
13 construed the field of invention too narrowly and from this too narrow field
14 of invention their obviousness analysis needed to be re-conducted under a
15 proper field of invention.

16 The field of invention in the present case is electric park brake
17 actuators. The facts of *Axonics* do not align at all with the '415 patent such
18 that the field of invention could be construed so broadly that we don't have
19 to look to the teachings of the prior art.

20 Contrary to what Petitioner's counsel said, *Smith* is a relatively
21 significant case in patent law. It has been cited 750 times since it issued.
22 Not once has it been negatively cited. *Axonics* has been cited eight times,
23 *Smith* has been cited 750 times.

1 I don't have anything substantive left, Your Honor, unless there are
2 any questions. I did have one question about the handling of the physical
3 exhibit which was introduced at Dr. Lequesne's deposition. I have been
4 maintaining custody of it and it is part of the record. I have it with me. I
5 don't know if the Board wants to maintain the physical exhibit or not. We
6 did submit photos of the exhibit, as well.

7 JUDGE MOORE: Understood. Before we get to that, do either of
8 my colleagues have any further questions for counsel?

9 Okay. I also don't have any further questions. Regarding the
10 physical exhibit -- and my colleagues can feel free to step in -- I did see that
11 there were pictures of the physical exhibit submitted into the record here.
12 The exhibit itself has not been submitted to us. I believe the pictures are,
13 you know, adequate for our purposes, however, I would think it would make
14 sense for counsel to retain that physical exhibit, certainly until the deadline,
15 you know, until after we have issued our decision, and until the deadline for
16 an appeal of that decision has passed. Or, if an appeal is filed, until the
17 appeal has been disposed of by the Federal Circuit.

18 Obviously, if the case is remanded to us, we would prefer that that be
19 held onto until all the proceedings are complete. So, if that's okay with my
20 colleagues, that's what I would suggest.

21 Any objection from Petitioner?

22 MR. HUTCHINS: No, Your Honor.

1 JUDGE MOORE: Okay. Well, then we'll just ask counsel for
2 Patent Owner to maintain custody of that physical exhibit until all
3 proceedings involving this patent, including any appeals and any remands,
4 are concluded.

5 MR. MURPHY: Understood. Thank you. Thank you, Your
6 Honors.

7 JUDGE MOORE: Okay. Thank you. Well, that concludes the
8 hearing. Thank you very much to both parties for your preparation today.
9 This hearing is adjourned. The matter is submitted. We are off the record.

10 (Whereupon, the above-entitled matter went off the record at 10:53
11 a.m.)

IPR2023-00273
Patent 7,021,415 B2

PETITIONER:

John Hutchins
Paul Qualey
Shambhavi Patel
BANNER & CITCOFF, LTD
jhutchins@bannerwitcoff.com
pqualey@bannerwitcoff.com
spatel@bannerwitcoff.com

PATENT OWNER:

Timothy Murphy
Jessica Fleetham
CARLSON, GASKEY & OLDS, P.C.
tmurphy@cgolaw.com
jfleetham@cgolaw.com