

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SMA SOLAR TECHNOLOGY AMERICA, LLC,
Petitioner,

v.

TIGO ENERGY, INC.,
Patent Owner.

IPR2023-00879
Patent 9,584,021 B2

Record of Oral Hearing
Held: August 6, 2024

Before: JO-ANNE M. KOKOSKI, ELIZABETH M. ROESEL, and
JULIA HEANEY, *Administrative Patent Judges*.

APPEARANCES:

ON BEHALF OF THE PETITIONER:

THOMAS ESCHWEILER, ESQUIRE
Eschweiler & Potashnik LLC
195 S. Main Street, Suite 400
Akron, Ohio 44308
(216) 502-0600

ON BEHALF OF THE PATENT OWNER:

HEATH BRIGGS, ESQUIRE
STEPHEN ULLMER, ESQUIRE
Greenberg Traurig, LLP
1144 15TH Street
Suite 3300
Denver, Colorado 80202
(303) 572-6500

The above-entitled matter came on for hearing on Tuesday August 6, 2024, commencing at 1:00 p.m., via video teleconference.

P R O C E E D I N G S

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JUDGE ROESEL: Good afternoon, everyone, we are convening by video conference to hear argument in IPR2023-00879 concerning U.S. Patent 9,584,021. The case is captioned *SMA Solar Technology America, LLC v. Tigo Energy, Inc.* I am Judge Elizabeth Roesel, and with me are Judges Heaney and Kokoski. A court reporter is here to transcribe the arguments, and the transcript of today's hearing will be entered into the record. Members of the public or the press may be listening.

As stated in our July 1 Hearing Order, each side will have 60 minutes of argument time. Petitioner will go first and may reserve time for rebuttal. Patent Owner will go second, and may reserve time for sur-rebuttal. Today's hearing is not an opportunity to introduce new arguments or evidence that are not already in the record. Each party has filed demonstrative exhibits. The Judges have those exhibits. We've not received any objections to the demonstratives. To the extent your argument refers either to a demonstrative or to an exhibit or paper, it's helpful to identify it by number.

With that, would Counsel, please introduce themselves.

MR. ESCHWEILER: Good afternoon. My name is Tom Eschweiler from Eschweiler & Potashnik. I'm representing the Petitioner, SMA Solar Technology America, in this IPR proceeding.

JUDGE ROESEL: Thank you. Patent Owner?

MR. BRIGGS: Yes. Sorry to interrupt you. Good afternoon, Your Honors. This is Heath Briggs, on behalf of Tigo Energy, Inc. In the room with me as my Co-Counsel, Steve Ullmer. He's not on camera.

1 JUDGE ROESEL: Very good. With that, Petitioner may begin. And
2 please start by telling us whether you would like to reserve rebuttal time.

3 MR. ESCHWEILER: Your Honor, yes, we would like to reserve
4 some rebuttal time in the matter. We'd like to distribute that with 45 minutes
5 for our initial arguments and 15 minutes for rebuttal.

6 JUDGE ROESEL: Very good. You may begin when you're ready.

7 MR. ESCHWEILER: Is it okay for me then to share the
8 demonstratives when I'm going through this presentation?

9 JUDGE ROESEL: You may do so. Keep in mind the Judges do have
10 the demonstratives and we are able to page through them.

11 MR. ESCHWEILER: Okay. I would like to do so just because I
12 think it helps both in the presentation, both for me and as well as for the
13 recipient.

14 JUDGE ROESEL: That's fine.

15 MR. ESCHWEILER: All right. May it please the Court, I do
16 appreciate the opportunity to present the Petitioner's position on this IPR.
17 What we're going to be doing in the next 45 minutes, we're first going to
18 briefly discuss an overview of the '021 Patent, as well as the primary
19 reference at issue, which is Exhibit 1002, the Mieth reference. And in doing
20 so, we're going to be discussing how the Mieth reference anticipates all
21 claims of the '021 Patent in Ground A of the petition under two distinct
22 theories of anticipation, the first being the genus-species standard set forth in
23 *Zenith*, as well as the second theory under the PTAB dispositive standard
24 test that was set forth by this Panel in the Institution Decision inciting the *Eli*
25 *Lilly Biomedical Research* case. And then --

1 JUDGE ROESEL: Wait just one second. I believe you said Mieth
2 anticipates all claim, all claims in Ground A, not all claims of the challenged
3 patent, is that right?

4 MR. ESCHWEILER: That's correct. Thank you. In addition, we'll
5 highlight in our anticipation discussion that, while the Patent Owner had a
6 plethora of opportunity to set forth evidence via extrinsic evidence to
7 support these, their positions in view of these standards which require the
8 view of a person of ordinary skill, they chose not to do so. We then segue
9 into the next section where we'll discuss that the anticipation/obviousness
10 arguments that we present are in some instances not new arguments at all,
11 and in other instances, if new arguments are presented specifically in
12 response to issues raised in the Patent Owner response and therefore are
13 appropriate to be considered and evaluated under the *Anacor* doctrine set
14 forth by the Federal Circuit. Lastly, we'll go into the 103 issue, under
15 Ground B, where we're going to argue the combination of Mieth and Balogh
16 references is proper, as set forth in the petition, and that we provided the
17 adequate evidence and rational underpinnings for those combinations.

18 Let's go to the '021 Patent. As you can see in Figure 4 here, the '021
19 Patent is a power supply circuit that has a first stage in yellow here and the
20 second stage in blue. This first stage receives a fluctuating input voltage.
21 So, there's a solar power input here. And due to the weather, sometimes it's
22 nighttime, sometimes it's daytime, sometimes it's cloudy, sometimes it's
23 sunny. This input voltage is fluctuating, and because of that, the conversion
24 that's performed here is going to result in a fluctuating voltage here at this
25 intermediate first output. Okay? And then this second stage is going to

1 operate in one of two modes based upon the value of this fluctuating input
2 voltage.

3 In the first state, okay, which is the deactivated state, this second stage
4 is basically disabled and it's done by this control circuit. This control circuit
5 sees this lower voltage here at this line and generates a control signal to
6 close this switch, which creates a current path in this switchable load. It
7 concurrently creates a control signal that disables this second stage so that at
8 low voltages no regulation is happening here at the output and rather all this
9 energy is being dissipated in this direction.

10 In the second state, which is called the enable state, this is when this
11 intermediate voltage is at a higher level. This second stage gets enabled by
12 this control circuit. So, the voltage gets sensed here. It ends up doing two
13 things. It ends up creating a control signal here that opens this switch, which
14 breaks the current path. So, this switchable load gets switched off and
15 concurrently the control circuit creates an enable signal that turns this
16 converter on, which then creates a conversion from this first output to a
17 second output voltage. And at this output, according to the '021 Patent, is
18 connected its load. Which, in the '021 Patent --

19 JUDGE ROESEL: Let me interrupt you just one second to ask a
20 quick question. So, in this patent, the control circuit there, is that operating
21 as a load?

22 MR. ESCHWEILER: No, Your Honor, it's not. It's actually kind of
23 operating as a sensing circuit that senses this intermediate voltage here and
24 then does something to control this thing to be on and off, and this one to be
25 on and off, so that in one state you have all this energy being dissipated in
26 this preliminary load for low voltages. And then at higher voltages, this one

1 gets disabled while this gets, I'm sorry, enabled while this gets disabled,
2 which allows all of this voltage to get regulated and converted here and then
3 get dissipated in the load that's connected to its output here. So, this will be
4 a load, and this is a load. This is a preliminary load for low voltages, and
5 this is the load for appropriate higher voltages.

6 Did I answer that to your satisfaction?

7 JUDGE ROESEL: Yes, thank you.

8 MR. ESCHWEILER: Okay, thank you. Moving on to Exhibit 1002,
9 Mieth is disclosing circuitry that provides voltage to a load. Okay. Again,
10 from energy sources that vary in performance. So, here is the input. A solar
11 generator. As I said before, due to weather conditions, the voltage and
12 energy provide, the power provided by the solar generator will vary.
13 Sometimes it'll be high, sometimes it'll be low. And consequently, this
14 circuitry ends up sensing that voltage and then operating this output in two
15 different states based upon the level of that voltage. For example, in the first
16 state, the first output voltage coming right here at this first output is a low
17 value. There's a comparator circuit here. This first comparator senses a low
18 voltage, turns this switch on, which creates a current path, a preliminary
19 switchable load, which dissipates this low voltage and the current through
20 this path, at the low voltage is, this second comparator turns this transistor
21 off, it opens the switch and no current, no signal comes to this enable pin
22 and consequently this converter is disabled in the first state. No energy gets
23 delivered to its load.

24 In the second state at higher voltages, when this sun is shining, so to
25 speak, this first comparator sees the high voltage and opens this switch that
26 basically turns off this switchable load. Concurrently, this second

1 comparator sees the higher voltage and closes this switch, which means that
2 all this signal goes all the way to the converter, enables this power converter,
3 which then performs its function of converting and regulating this voltage
4 and providing energy to its load.

5 So, moving on to anticipation. With respect to the genus-species
6 issue, the general rule is that a genus element disclosed in the prior art
7 reference does not automatically anticipate each species within genus.
8 However, a disclosed genus does anticipate each species under select
9 circumstances. And that is particularly when the genus is such a defined and
10 limited class that a person of ordinary skill can at once envisage, can readily
11 see and determine each member of that genus. And that is the *Zenith*
12 standard set forth by the Federal Circuit. Mieth applying that standard to the
13 facts of this case, Mieth discloses the load connected to a second output.
14 That's the output of this converter.

15 The term load, okay, is a well-defined term of art in the field of
16 electronics. Not only is it well defined, okay, Petitioner asserts that the load
17 20 includes a micro-controller in its petition, and the word include, just by
18 ordinary usage and plain meaning, means taken or comprised as part of a
19 whole or group. So it can comprise a set of elements. And therefore, the
20 petition set forth a clear genus-species argument that the load is a genus that
21 discloses the species micro-controller. Okay.

22 As set forth in our papers, a load is any circuit, device, or apparatus
23 that when connected to a source of electrical energy, consumes electrical
24 energy, and that definition was adopted by the district court in the concurrent
25 litigation between SMA America. It's our position that this definition of
26 load very clearly defines and limits the scope of the genus class. And what

1 that means is, is that a person of ordinary skill can evaluate any circuit, any
2 circuit element, or any electronic -- electrical device in its context, and very
3 quickly and with certainty ascertain whether that element, in fact, constitutes
4 a load.

5 JUDGE ROESEL: Let me interrupt you there, Counsel, if you can go
6 back, please, to the next.

7 MR. ESCHWEILER: Absolutely.

8 JUDGE ROESEL: Next slide. So, on slide 14, cited Exhibit 1018.
9 That exhibit was introduced with the Reply, is that right?

10 MR. ESCHWEILER: Let's see here. That is correct. I believe, if I
11 recall offhand, that is an IEEE dictionary of electrical terms.

12 JUDGE ROESEL: Yes. And you cited page 156. But that exhibit
13 actually doesn't include a page 156. I believe the correct page number is
14 593. Is that right?

15 MR. ESCHWEILER: I will have to double check with you, because I
16 do not know that offhand. While we're discussing here, I can take a look at
17 that and confirm whether, in fact, that's the case.

18 JUDGE ROESEL: Okay. And so, was there an argument from Patent
19 Owner to which this is responsive? Exhibit 1018?

20 MR. ESCHWEILER: I believe that the Patent Owner, in their POR
21 indicated that the petition did not anticipate, you know, the disclosed load
22 did not anticipate a micro-controller because it didn't expressly disclose it,
23 nor did it disclose it inherently. Okay. So, our response in our Petitioner's
24 Reply was that, in fact, that by saying that it included, we were setting forth
25 the genus-species argument, which indicates that is an express disclosure.
26 We never alluded that it was inherently disclosed. Inherency only applies

1 when an element in a reference is not there, and yet it's believed to have to
2 be there. In our situation, we explicitly said, here's a load; this load is what
3 corresponds to this micro-controller. So, we were never making an
4 inherency argument. We were making an express disclosure argument under
5 genus-species.

6 So, we ultimately responded to their POR that just says you disclosed
7 a load, and a load is not necessarily a micro-controller. And they didn't even
8 address the genus-species issue. We raised that issue in our Petitioner's
9 reply, which gave them ample opportunity to address that in their sur-reply,
10 and they chose not to do so. Do you have any questions further in that area
11 that I can help with?

12 JUDGE ROESEL: Please proceed.

13 MR. ESCHWEILER: Okay. So, it's our position that the Petitioner
14 has submitted extrinsic evidence that shows a person of ordinary skill can at
15 once envisage each member of the genus load. Okay. Furthermore, we
16 think this is highly relevant, the '021 Patent itself uses the term load as a
17 genus and lists its micro-controller as a species thereof. And this is a direct
18 quote from the patent. Their circuit 400, therefore, can be used to address
19 the false start problem. That's when the input voltage is bouncing because of
20 solar energy and variable issues with regards to the weather. This is the
21 false start problem that occurs when a solar panel is able to provide enough
22 output voltage when it's not connected to the output, but not enough to
23 sustain even the small current provided by the buck converter to its load,
24 such as a control logic, control circuit, a micro-controller. So, they indicate
25 a buck converter is providing regulated energy to its load, and that's the

1 language of the '021 Patent itself. So, they recognize that load is a genus
2 term and that a micro-controller is a well-known species of that genus.

3 JUDGE ROESEL: Counsel, let me ask again on slide 15, Petitioner
4 argues that a PHOSITA can at once envisage each member of the genus
5 load. How many members are in that genus and where in the record did
6 Petitioner list the species that are members of that genus?

7 MR. ESCHWEILER: We set forth in our expert report, Exhibit 1023,
8 the definition that a person of ordinary skill employs to ascertain, based
9 upon that definition, whether an element fits within the genus. The fact that
10 there can be a very large number of members in the genus was not an issue
11 in the *Zenith* case, but rather whether there was a clear scope and definite
12 thing that created a contour by which a -- skill could readily determine that
13 falls within or does not fall within. So, I cannot tell you that there's 115
14 members of the genus or that there's 1,015 members of the genus. But I can
15 tell you that a person of ordinary skill with the definition of load can
16 absolutely look at any element within its context and immediately tell you
17 whether that's operating as a load or not, and therefore it meets the *Zenith*
18 standard for that reason.

19 Do you have any further questions with respect to the genus issue?

20 JUDGE ROESEL: No, that's it. Go ahead, please.

21 MR. ESCHWEILER: Okay, thank you. So, Patent Owner argued
22 that *Zenith* didn't support our position because *Zenith* didn't find, the *Zenith*
23 court didn't find that the claim was anticipated by the genus under the facts
24 of that case. But that's not really relevant to the argument that we made. We
25 weren't citing *Zenith* for its holding on those particular set of facts, but rather

1 for the standard that was enunciated by the Fed Circuit as to how we, going
2 forward, apply our set of facts to this standard to ascertain whether it applies.

3 So, you know, it's our view that the Patent Owner has failed to apply
4 the *Zenith* standard to the facts in this case and rather just argues without
5 supporting evidence that it's not been shown. And yet we've -- standard the
6 definition, we've applied it to the facts. We've shown that the '021 Patent
7 uses it in the exact same way, and they've done nothing to contravene that
8 extrinsic evidence. So, it's our contention that the micro-controller recited in
9 the claims is clearly a species of the genus load, and due to the Patent Owner
10 not addressing that issue and not providing any extrinsic evidence, no expert
11 report was submitted, it's our contention that the Patent Owner's
12 argument -- shouldn't be given any weight.

13 Moving to the second theory of anticipation set forth by the Institution
14 Decision. The Panel indicated in wrestling with 102 that the dispositive
15 question is whether one skilled in the art could have reasonably understood
16 or inferred from a prior reference that every claim element is disclosed in
17 that reference. Okay? Therefore, in order to address this, it's an issue of
18 whether a person of ordinary skill can understand or infer that. Therefore,
19 extrinsic evidence is necessary in order to either support or to refute the -- of
20 the facts to that standard. Okay?

21 Patent Owners argued that our load doesn't expressly disclose a micro-
22 controller, but with our petition, and the expert report said it did, and it's
23 cited to another exhibit, Exhibit 1014, Figure 5, to support that, okay? So,
24 it's our contention that based on the teachings of Mieth and the exhibit, a
25 person of ordinary skill would readily understand or infer that Mieth, from
26 Mieth that a micro-controller was disclosed. In order to do that, going back

1 to Mieth, understand that it has fluctuating input voltage, and then it
2 regulates that voltage and provides that energy to a load. Like Mieth, this is
3 Exhibit 1014 that was submitted in conjunction with our petition and our
4 initial expert report. This also has a photovoltaic array that provides
5 unregulated energy to a regulator, a buck converter, which regulates that
6 voltage and provides it both to a battery as a first load and to a battery
7 voltage terminal micro-controller operating as a second load. So, in that
8 case --

9 JUDGE ROESEL: Counsel, let me interrupt you there, please.

10 Exhibit 1014 does not characterize the micro-controller as a load, does it?

11 MR. ESCHWEILER: No, it just shows Figure 5, that it's operating as
12 a load because the regulated voltage from the buck converter is being used
13 as the battery voltage terminal for the micro-controller. And that way, the
14 micro-controller is consuming power based upon the regulated voltage. It's
15 basically what you call, like in a data sheet, the V supply terminal. And our
16 expert report describes that. A person of ordinary --

17 JUDGE ROESEL: Because my --

18 MR. ESCHWEILER: Excuse me. Go ahead, I'm sorry.

19 JUDGE ROESEL: In Exhibit 1014, it is described as controlling the
20 operation of the power converter, right? By sensing the battery voltage, the
21 PV array voltage, and the output current, and then --

22 MR. ESCHWEILER: Absolutely.

23 JUDGE ROESEL: -- providing this current reference voltage, right?
24 Is that correct?

25 MR. ESCHWEILER: Absolutely correct. You're absolutely correct.
26 The micro-controller has a function within this application, okay. It's

1 providing control functionality for this feedback loop by which it determines
2 the manner in which this buck converter is going to do its voltage regulation,
3 okay. But the micro-controller, in addition to providing that as its function,
4 is getting powered itself by the PV array through the converter, and
5 consequently, by the definition of a load that's been accepted by the District
6 Court and well understood, by our definition that we've proffered, it's
7 operating as a load because it's consuming energy received from this
8 regulated supply and doing its work. And the work that it's doing is
9 providing control functionality for this control loop.

10 JUDGE ROESEL: So, in Mieth, there's control functionality too,
11 right? But it's not in this element 20 that's described as a load, right?

12 MR. ESCHWEILER: Well, absolutely. This load, okay, absolutely
13 would provide some functionality, but the goal of the Mieth patent, which
14 was a German patent, was describing how this control functionality here
15 operated to selectively provide a regulated voltage to some load that would
16 be providing work. But because the load and what work it was providing
17 was not pertinent to the control functionality, it just talked about a load. So,
18 it didn't go into any detail as to what types of operation functionality that
19 load was providing. But one of skill in the art knows that's what a load does.
20 It provides -- it receives electrical energy to perform a useful work function.
21 For example, sometimes you've got an electric motor, sometimes you've got
22 a lamp, sometimes you've got an electric heater. All of those are loads, but
23 they're all providing different work functions. And in the situation there, it
24 wasn't pertinent to go into a whole lot of detail because that wasn't the point
25 of the invention. So, it didn't focus a whole lot of time and energy on that.

26 Can I move forward? Or can I answer any further questions?

1 JUDGE ROESEL: Please proceed.

2 MR. ESCHWEILER: Thank you. So, here's the Petitioner's expert
3 report in talking about this exhibit. Okay, so this is extrinsic evidence that
4 was supported by our expert. Since the introduction of the Intel micro-
5 controller in 1980, okay, a micro-controller has become ubiquitous. When
6 these devices are powered, the raw power source is either the AC mains, a
7 battery, or some other unregulated source that must be reduced and
8 stabilized. Thus, it's commonplace for a micro-controller to load the output
9 of a voltage regulator. And then he cites this example.

10 So, substantial extrinsic evidence has been supported. The '021
11 Patent, like both Mieth, Exhibit 1002 and the exhibit that we proffer in our
12 initial petition, also discloses a fluctuating source that provides power to a
13 buck converter. Fluctuating input source, first partial regulation, second
14 regulation. So, regulated voltage is provided to its output, which is, as it
15 discusses in the detailed description, the load, which can include a micro-
16 controller. And here's quotes directly from the '021 Patent, calling the
17 output of the buck converter its load, and then says a micro-controller is an
18 example of its load. And then, in this other part of the patent that says the
19 buck converter's load, which is the MCU, which is a micro-controller unit.
20 So, the '021 Patent did the exact same thing that we did, understands what a
21 load is and understands that a micro-controller is a load. And one of
22 reasonable -- one of ordinary skill can reasonably infer from the details
23 readily.

24 So, lastly here, Mieth and the '021 Patent provide the same
25 functionality. Here's an example of our figure. Here's an example of their
26 figure. It provides a fluctuating power source. Here's fluctuating power.

1 Fluctuating power regulates it with a power converter in blue. Drives, it
2 delivers the regulated power to an electrical element. Regulated power to an
3 element. Regulated power to an element does these three things. Okay?
4 Energy performs the work function, it's a load.

5 Therefore, it's our position that Mieth, the '021 Patent admission, and
6 the general knowledge of a person ordinary skill provided by Exhibit 1014
7 provides a person of ordinary skill in art to understand or infer that Mieth is
8 disclosing the same element as recited in the claims of the '021 Patent.

9 JUDGE ROESEL: Counsel.

10 MR. ESCHWEILER: Yeah?

11 JUDGE ROESEL: Let me interrupt you there. On slide 26, it refers
12 to the '021 Patent admission. What admission is being referred to here and
13 where is that in the record?

14 MR. ESCHWEILER: Sure. Let's see here. I believe it's paper 19,
15 pages 10 and 11. These quotes verbatim -- I'm sorry, paper 19, page 9.
16 These quotes come straight from column 8 of the '021 Patent where it calls
17 the output of the buck inverter its load and then says an example of the load
18 is, are these various things. So, it uses load in a general sense and then gives
19 examples with a micro-controller. Here it says this buck converter's load is
20 the micro-controller unit.

21 JUDGE ROESEL: Yes, but my question is where in the briefing did
22 Petitioner characterize these statements out of the '021 Patent as
23 admissions?

24 MR. ESCHWEILER: I don't know if I used the term admission other
25 than to say in paper 19, don't just take my word for it, take their word for it,
26 where they call it the same thing. So, for them to say that a micro-controller

1 is not a load when they say that a micro-controller is a load here and a
2 micro-controller is a load here. They didn't say -- I might not have used the
3 term admission, but they are saying that one is the same as the other.

4 JUDGE ROESEL: So, if it's not an admission, is it proper for the
5 Board to refer to the teachings of the '021 Patent in analyzing whether or not
6 Mieth anticipates the claim?

7 MR. ESCHWEILER: I think it's very relevant. I think that when the
8 Patent Owner says that it's not, when their own documentation says that it is,
9 I think it's quite relevant. The dispositive issue here is whether Meith, their
10 disclosure of a load either anticipates or renders obvious the micro-controller
11 claim element, that's recited in the claims. And their patent comes right out
12 and says that's what it is. So, yeah, I think that when they say that it is and
13 then later say that it's not, I guess I'd call it an admission. Maybe I should
14 use a different word for it? Concession, acknowledgement. All those terms
15 really substantively mean the same thing as far as I'm concerned.

16 JUDGE ROESEL: What precisely are you saying that the patent
17 concedes?

18 MR. ESCHWEILER: If they're saying that its second output is a load
19 and that its load is a micro-controller, we're submitting prior art that shows a
20 load. The Patent Owner is saying that doesn't meet 102 or 103, and we're
21 saying, sure it does. In fact, we didn't just say sure it does. We actually
22 said, well, actually, let's take a look at the various standards set forth by the
23 Federal Circuit in the *Zenith* case and in the other *Eli Lilly* case, which I'm
24 calling the PTAB's dispositive standard test, because it sounds better. But in
25 both cases, I take those standards and I apply the facts of our case and the
26 proffered extrinsic evidence to those standards and show that we meet that

1 standard. Patent Owner has done nothing. They've said no, it's not. No
2 expert testimony, no expert report, no exhibits, just take their word for it.
3 So, I think that when it's all said and done, the language of the '021 Patent is
4 quite relevant.

5 JUDGE HEANEY: Mr. Eschweiler, if I can follow up. I understood
6 you to say in your answer that you just gave that the challenged patent says
7 that the load is a micro-controller. But I understood you to tell us previously
8 that what the patent says is that the microcontroller is just a species within
9 the genus of a load. So, can you tell us, can you clarify which one of those
10 things you're saying?

11 MR. ESCHWEILER: What I've said is that we're arguing that we
12 meet anticipation under two different standards. Under the *Zenith* standard,
13 genus-species, where we argued that the load includes a micro-controller.
14 That was in our language of our petition. And then we just proffered
15 evidence to apply the facts of our case to the *Zenith* standard. Okay? And
16 so, we set forth that our genus is very well defined and therefore we meet
17 that standard. Okay? And then we show in this example right here that the
18 '021 Patent uses the term load, itself, as a genus term, and then lists a couple
19 of the species in that genus. So, it's consistent with how the Patent Owner,
20 itself, characterized the term.

21 And the second theory of anticipation. We said under the dispositive
22 standard test, would a person of ordinary skill in the art, under the facts of
23 this case, reasonably understand or infer that that's what's being disclosed?
24 And then we submit this second piece of disclosure of the '021 Patent to say,
25 why yes, in fact, the '021 Patent says our load is the micro-controller. So,

1 would one of ordinary skill in the art reading that understand or infer that a
2 load and the micro-controller are the same thing? I think so.

3 So, in that case, we're setting forth both theories of anticipation,
4 applying the facts to both of those standards to show that we've met that
5 standard, and then highlighted the fact that the Patent Office, sorry, the
6 Patent Owner, hasn't provided any extrinsic evidence to rebut either of those
7 arguments.

8 Before I move forward, I just, I'm happy to answer more questions. I
9 don't want to move on if there's other things you address. I also want to
10 make sure you have an opportunity to hear all of our arguments.

11 JUDGE ROESEL: Please proceed. You have about 12 minutes left.

12 MR. ESCHWEILER: Thank you very much. Okay, our next section
13 of our discussion here is our argument that, you know, the Patent Owner has
14 argued that most of what we're trying to do can't be considered because he
15 characterizes these as new arguments that are inappropriate. And our
16 argument in response to that is that, no, we think that several of our
17 arguments are absolutely not new. And other arguments that could be
18 characterized as new are appropriate and are to be considered under the
19 *Anacor* doctrine. The Patent Office has argued the genus-species issue is
20 new. We said that the load includes the claimed micro-controller. In our
21 view, that's an explicit characterization of the genus-species issue, and it
22 should be considered, and the evidence that we've set forth be considered in
23 deciding whether that's the case; and the fact that the Patent Owner hasn't
24 done so should also be considered.

25 What is the *Anacor* doctrine? Okay. The *Anacor* doctrine states that
26 additional arguments and evidence should be considered as permissible in

1 instances when the same legal issue of anticipation is based on the same
2 prior art reference and the same inferences proposed in the petition. Okay.
3 And that applies exactly to our case. We argued anticipation by Mieth based
4 upon the load and the micro-controller. Okay? And they've argued in their
5 response that that's not met, and then we've responded to their arguments.
6 So, even if someone were to argue that what we set forth was a new
7 argument, it meets right smack dab in the middle of the *Anacor Pharms*
8 doctrine, which says, in these instances, these additional arguments are
9 permissible and should be considered. Okay.

10 *Anacor* also said the following: New evidence during *inter partes*
11 review trial proceedings is to be expected. Okay. As long as the opposing
12 party is given notice and an opportunity to respond, it's completely
13 permissible. And in this case, that's exactly what's happened. We filed our
14 Petitioner's reply to the Patent Owner response, and the Patent Owner had
15 ample opportunity in his sur-reply to address all of these issues, but instead
16 chose not to address them. Okay.

17 So, in our view, they chose instead to argue a procedural preclusion
18 with the hopes that this whole issue would go away. And instead, I think
19 they should have not. They should have taken the opportunity to provide for
20 extrinsic evidence to support their position.

21 I'm going to move forward to our obviousness arguments. For
22 example, the Patent Owner has argued in their Patent Owner response that
23 our assertion that the load was analogous was some admission that we didn't
24 think that it anticipated the claim element. We disagree with that. We don't
25 think it's true. But we also contend that, in that case, the Patent Owner is
26 opening the door, and they're arguing that we made an obviousness

1 argument. And then subsequently, they, even in their Patent Owner
2 response, in their table of contents, argue that Mieth does not disclose or
3 suggest a micro-controller. Okay? So, they raise an issue, and then when
4 we seek to respond to it, after opening the door, they want to close it and
5 say, oh, don't address that; don't consider that; you're not allowed to talk
6 about it; we're just allowed to say that it doesn't. We think that it anticipates.
7 But if they want to raise the issue of obviousness, we've provided ample
8 extrinsic evidence and arguments in these slides, as well as in our papers that
9 indicate that that's the case and that any differences between Mieth's load
10 and the claimed micro-controller are insubstantial.

11 And the conclusion of that, and I'm going to skip through here just
12 because I don't want to run out of time, but we've got three exhibits of record
13 that show prior art with the same configuration of Mieth and the '021 Patent
14 that all show evidence and use of a micro-controller. Okay. Photovoltaic
15 array, fluctuating voltage, buck converter provided regulation and a
16 regulated output voltage to a load, which is a micro-controller. This one,
17 fluctuating input voltage into a power converter that regulates that and
18 provides a regulated voltage to a load, which is a microprocessor, which is
19 the same as a micro-controller. Just a synonym. Here's a third one. All of
20 these available prior art. Unregulated voltage from --

21 JUDGE ROESEL: You keep saying this one and that one. And the
22 record won't be clear unless you name the exhibits by number.

23 MR. ESCHWEILER: Okay. The first one was Exhibit 1014. The
24 second one was Exhibit 1012, and the third one was Exhibit 1022. Thank
25 you for allowing me to clarify.

1 JUDGE ROESEL: Now, Exhibits 1012 and 1022 were not relied
2 upon in the petition for the micro-controller, isn't that right?

3 MR. ESCHWEILER: That's absolutely correct. In fact, they were
4 provided in response to the Patent Owner response that argued that it's not
5 obvious. And so, you know, under the rules in *Anacor*, we're replying to the
6 issue that they raised in their response, and therefore, we provided extrinsic
7 evidence to back up our position. And the Patent Owner had ample
8 opportunity to respond to all of this in their sur-reply.

9 JUDGE ROESEL: Aside from the table of contents in the Patent
10 Owner response, there was no substantive argument on obviousness of the
11 micro-controller in the Patent Owner response. Isn't that right?

12 MR. ESCHWEILER: Oh, you're absolutely right. The Patent Owner
13 response set all sorts of conclusory things. It provided no substantive
14 support for any of its contentions. Otherwise, there would have been an
15 expert report submitted that would have included all sorts of, you know,
16 contentions of person of ordinary skill in the art. So, they made the
17 argument, they didn't support it with anything, and they moved on. They
18 still raised the issue.

19 So, lastly, these are examples of these three exhibits that we
20 submitted. And in each case, we show how they're functionally configured
21 the exact same way as Mieth. And all of those readily substitute directly
22 right into this load thing and operate without any substitution or additional
23 elements, no technical modifications. And in those situations, okay, the Fed
24 Circuit has said there's obviousness when a prior art discloses a device that
25 differs from the claim element by the mere substitution of components, and

1 the substituted components and their function were known in the art, and the
2 substitution was predictable. Okay?

3 In addition, it shows, because these are all providing regulation,
4 there's a limited number of items that -- as loads, that fit into a regulated
5 output like that. And *KSR* indicated under these situations, when there is a
6 limited number of predictable solutions, it'd be obvious to try a micro-
7 controller. Right. And therefore, we believe that there's obviousness under
8 both those standards.

9 Lastly, we wanted to get to Ground B, where they were talking about
10 the combination of Mieth and Balogh. Now, the Patent Owner, in our
11 opinion, tries to mischaracterize this combination. Okay? They basically try
12 to say that we argued that we take all of this circuitry up in front of this
13 converter and we replace it with this converter. And that's not what we
14 argued. The petition argues that instead we actually, take this first stage
15 converter, Balogh, and we replace --

16 JUDGE ROESEL: Counsel, you're on slide 48 now, is that right?
17 And is this drawing here figure annotation of Mieth and Balogh, is that in
18 any of the papers?

19 MR. ESCHWEILER: Absolutely, it's in paper 1, the petition, page
20 51. The argument is on page 51. It's in paper one. And these figures are in
21 the petition. This figure is by itself, and this figure is by itself. But both
22 figures are in there. And we argue that -- Mieth to Balogh by putting this
23 stage in for this capacitor.

24 JUDGE ROESEL: Yes. But that particular markup where you've
25 drawn the red box around the first converter in Balogh and drawn an arrow
26 to the capacitor two in Mieth, that is not your papers, is that right?

1 MR. ESCHWEILER: That's correct. That's correct. It's just
2 illustrating the words of our petition and the argument that we made. So, it's
3 not -- it's nothing other than just an illustration of the argument that we
4 make.

5 JUDGE ROESEL: I read the petition as arguing that a PHOSITA
6 would have known to combine the cascaded power converter architecture of
7 Balogh to realize an appropriate intermediate voltage for the switchable load
8 and load 20 of Mieth. So, how does that argument, you know, how is that
9 consistent with your argument on page, I'm sorry, slide 48.

10 MR. ESCHWEILER: No, I appreciate the opportunity to answer that.
11 The reason that's the case is that, in our 102 arguments, we argue that this is
12 a first stage and that it's a power converter. Its capacitor receives a current
13 in here, a voltage gets generated across here, and this output then has an
14 output voltage. Okay. Now, Patent Owner made a big fuss about whether
15 that in fact is a power converter, and that's why we said, well, okay, we think
16 that it is under the definition that was set forth in the District Court litigation.
17 But if it's not, we're happy to substitute and understand that if we were to put
18 another power converter here, we would have one and two, and we would
19 have a cascaded architecture approach. And so that's why we said that. And
20 one of skill in the art who works in circuits all the time would see that and
21 understand that this power converter can readily go right here and operate
22 without any problems whatsoever.

23 JUDGE ROESEL: You have one minute left.

24 MR. ESCHWEILER: Thank you. So, we've made arguments, okay,
25 that it's a proper combination, okay. Mieth converts input voltages of 36
26 volts. Balogh says that we like to cascade converters when there's large

1 conversion ratios and it gives an example of 48 volts. Our petition also cites
2 to multiple data sheets that indicate that photovoltaic modules readily and
3 often exhibit voltages as high as 80 volts. Okay. And all of these things are
4 PV applications. So, a person of ordinary skill in the art would know from
5 Balogh that when you have higher voltages. And from the data sheets that
6 you can sometimes go as high as 80 volts. It is good to use this cascaded
7 architecture approach. And our expert report also cites to Exhibit 1012 as
8 the general knowledge of this component skill says cascaded converter
9 architectures actually improve the circuit efficiency. So, in our petition, we
10 set forth these four factors to show how one of ordinary skill would readily
11 have combined this thing and that it's a proper combination. Therefore, in
12 our --

13 JUDGE ROESEL: Your time has expired. So, unless you would like
14 to go into your rebuttal time?

15 MR. ESCHWEILER: No, actually, I think that we've hit our
16 information well, and I appreciate that you gave me the opportunity, giving
17 me the heads up on the time limit, as well as the opportunity to respond to
18 questions. So, I'll reserve the rest of my time and I can save that for rebuttal.

19 JUDGE ROESEL: Thank you very much.

20 MR. ESCHWEILER: Thank you.

21 JUDGE ROESEL: Mr. Briggs, are you ready?

22 MR. BRIGGS: I'm ready if you are.

23 JUDGE ROESEL: We are. How much time would you like to
24 reserve for, srr-rebuttal?

25 MR. BRIGGS: Twenty minutes, please. I'm going to just go for my
26 paper copies and just cite for the record. So, if Your Honors would just want

1 to follow along at home, that'd be great. So, if Your Honors could please go
2 to slide 2. Just briefly, I want to point out that our client is a U.S.A.
3 company located in California. They design and manufacture electronics
4 and solar systems. They believe they solved an issue in the field, as
5 Mr. Eschweiler kind of pointed out with the brown out, so I'm not going to
6 delve into detail with that.

7 But there are three independent claims that we have to deal with here,
8 and all of them require a micro-controller. And I think it's very clear to this
9 Panel why that's important. If Your Honors could please go to slide 3.
10 What we have here is Petitioner's grounds. As we can see, they all rely on
11 the Mieth reference as the primary reference, with Ground A being based on
12 anticipation.

13 And if Your Honors could please go to slide 4. The top issue here is
14 whether Mieth expressly or inherently discloses a micro-controller. It's just
15 as simple as that. Patent -- excuse me, Petitioner puts forth a bunch of
16 arguments in reply, realizing that it doesn't and does a lot of gymnastics to
17 try to prove its case. But none of those arguments are persuasive.

18 If Your Honors could please go to slide 5. As we pointed out in our
19 briefing, there was two other IPRs related to this Patent family. We filed
20 Patent Owner preliminary responses in each of those pointing out the issue
21 with the micro-controller limitation and Mieth's failure to disclose that
22 limitation. Your Honors found the reasoning persuasive and declined to
23 institute each of those IPRs. Undeterred, Petitioner still moved forward,
24 filed rehearing requests, and Your Honors heard those rehearing requests,
25 and Petitioner lost on those rehearing requests. And many of the same
26 arguments that they make here were made in those rehearing requests. So,

1 we are going over some old ground here. There's nothing in the record that
2 should concern Your Honors in staying with the decisions that were issued
3 in those rehearing requests.

4 If Your Honors could please go to slide 7. What I'm going to go
5 through is why Mieth does not disclose a micro-controller. So, what we
6 have here is just the claims with the micro-controller limitation, it's
7 undisputed that each independent claim requires a micro-controller. If we
8 go to slide 8, first ground Petitioner presents is an anticipation argument
9 based on Mieth. And as it relates to limitation 1D of claim 1, which requires
10 a micro-controller, the entirety of their argument as to why Mieth discloses a
11 micro-controller is on this slide. It's a one-sentence argument that says a
12 PHOSITA would understand that a load in a circuit can be or include micro-
13 controller, or is analogous to the claimed micro-controller. That is the entire
14 evidentiary basis that they have through all four grounds to show that Mieth
15 discloses a micro-controller.

16 If we go to slide 9. As we pointed out in our briefing, they do not
17 change course in Ground B. They continue to rely on the same disclosure in
18 Mieth for Ground B. And as we can see at the top of the page, they said
19 independent claim 1, feature 1D is taught by Mieth as discussed above.
20 Claim 10, limitation 10E, for at least the same reason Mieth discloses 1D, so
21 on and so forth. It is very clear on the record that they made no change
22 when they move to Ground B as it relates to their obviousness argument.

23 If Your Honors could please go to slide 10. If that was not enough,
24 they show in their argument rationale for Ground B that they did not change
25 their argument. Specifically, they continue to assert that Balogh discloses a
26 cascaded power converter structure, and you would supplement that with the

1 switchable load feature of Mieth. They continue to rely on the switchable
2 load feature of Mieth throughout their Ground B in their petition.

3 If Your Honors could please go to slide 11. They double down in the
4 reply. They say, no, no, no, we're not taking anything away from these.
5 We're continuing to rely on the switchable load in Mieth, and we're going to
6 place that with the first power converter of Balogh. And we can see that
7 that's in the first block quote there in the second block quote there. From the
8 reply, we can say, again, we're keeping all the teachings of Mieth regarding
9 the switchable load.

10 JUDGE ROESEL: But I'm a little confused there, Counsel. Why are
11 you putting emphasis on switchable load?

12 MR. BRIGGS: I believe --

13 JUDGE ROESEL: Load 20, right, is what Petitioner relies on to teach
14 the micro-controller?

15 MR. BRIGGS: Sure. But it's part of the load structure that they're
16 talking about. I'm not putting the emphasis on it.

17 So, if Your Honors could please go to slide 12. Lastly, we can see in
18 ground C and D that they're not challenging any of the independent claims.
19 They cannot possibly be changing their analysis for the independent claims
20 for ground C and D. So, that leaves us with only one conclusion. And that
21 conclusion is that they have relied on Mieth's disclosure in their one
22 sentence argument throughout their petition for all grounds, as Your Honors
23 recognized.

24 Could we please look at slide 13. Anticipation standard's very clear.
25 The reference must expressly or inherently disclose the limitation at issue.
26 We heard from Counsel, if Your Honors could please go to slide 15, we

1 heard from Counsel during his opening argument that they're not even
2 making inherency arguments, so that's off the table. The sole issue is
3 whether they have shown that Mieth expressly discloses a micro-controller.
4 And we believe the plain language of their argument shows that they haven't
5 shown that a micro-controller is expressly disclosed in Mieth. The words,
6 "can be," "include" or "analogous to." They never say it's actually disclosed
7 in Mieth. And that's for good reason. As we pointed out in our Patent
8 Owner response, Mieth uses the word "load" eight times and never, ever in
9 the context of discussing anything to do with a micro-controller. It's very
10 clear that Mieth does not expressly disclose a micro-controller.

11 If Your Honors could please go to slide 16. So, in reply, they figure
12 out they have an issue, and they say, no, no, no, what we meant was
13 genus-species, or what we meant is reasonably infer. I'd like to point out
14 that neither of those theories were in the petition. It's not Patent Owner's job
15 to try to figure out what you're arguing in the petition. It's Petitioner's job
16 under *Intelligent Bio-Systems* and many other cases, to make your case
17 initially with particularity. There is nothing with particularity as it relates to
18 a genus-species argument or reasonably infer argument.

19 JUDGE ROESEL: Counsel, let me interrupt you there. You're on
20 slide 16. The heading says Patent Owner's incorrect new theories.
21 What -- is that right? Or it should be Petitioner's incorrect new theories?

22 MR. BRIGGS: That's correct, Your Honor, thank you for catching
23 that. Petitioner's incorrect new theories. We don't have any incorrect new
24 theories because we don't offer incorrect new theories. So, Petitioner's
25 incorrect new theories, there. Sorry about that.

1 So, if Your Honors could please go to slide 17. It's very clear on
2 Patent Owner's on the record here that, you know -- that should probably
3 say Petitioner, too. Excuse me. So, I have another one I said Patent Owner.
4 I do, to Petitioner versus Patent Owner. I apologize.

5 So, slide 17 says Patent Owner, colon. It should say Petitioner, colon.
6 A load is any circuit, device, or apparatus that when connected to a source of
7 electrical energy. And it goes on. This argument was already considered by
8 Your Honors in the rehearing decision. It was already rejected by Your
9 Honors in the rehearing decision. As we know in the next slide on 18, that
10 this is no such thing as a limited class. In fact, when Judge Roesel, you
11 asked Counsel if he could give you a number, he can't. He can't tell you
12 whether it's 100. He can't tell you whether it's 1,000. All he can tell you is
13 that a PHOSITA, when looking at it, would know. That's not the standard.

14 So, I'd like to also point Your Honors to a case that we cited in our
15 sur-reply at page 5, which is the *Wasica v. Continental Auto Systems* case.
16 In reviewing that case, I think Your Honors will find that the factual
17 similarities there are really aligned with what's going on here. And in that
18 case, Continental raised a theory that they said this thing met the genus. The
19 Fed Circuit came back and said that's not met enough with particularity.
20 And if you look at my Patent Owner Sur-reply at page 5, I'll just read from
21 it. Continental's petition failed to set forth the necessary factual components
22 needed to advance the legal theory. Continental's petition did not identify
23 any modulating scheme genus, did not establish its size, did not name any of
24 its modulation scheme species. In fact, the petition relied solely on Oselin's
25 common working frequency. So, it's very similar to what we've got going
26 on here. And the Fed Circuit said that's not enough for anticipation. It's also

1 not enough to put Petitioner or, excuse me, Patent Owner on notice of
2 arguments, but certainly also not enough to show anticipation. That case
3 also has a situation where the Petitioner is effectively changing theories
4 midstream, as what is exactly going on here. And that -- the changing
5 theories midstream was also rejected by the Fed Circuit in that case.

6 And while we're on the subject of case law, Patent Owner, excuse me,
7 Petitioner cited *Zenith*, the *Eli Lilly v. Zenith* case, which I'll call *Zenith*, and
8 the *Eli Lilly v. L.A. Biomedical* case, which I'll call *L.A. Biomedical*. Neither
9 of those cases support Petitioner. In all of those cases, and I will go through
10 *L.A. Biomedical* here in a little bit, the theories offered by Petitioner on
11 anticipation were rejected. In fact, there's not one case in Petitioner's
12 briefing that supports their position that they should be entitled to a genus-
13 species under the facts that we have here.

14 If Your Honors could please go to slide 20, the second argument
15 Petitioner makes anew in their reply is this reasonably infer argument, and
16 this is the *L.A. Biomedical* case I was just speaking of. And as we can see,
17 the limitation at issue there was a requirement that the dosage is for not less
18 than 45 days. And in examining whether a Whitaker reference anticipated
19 that limitation, the Board found that it did not, even though a significant
20 portion of that reference hinted that 45 days might be useful. But there was
21 no express disclosure of 45 days and therefore the Board rejected
22 Petitioner's anticipation arguments.

23 Well, that case was appealed, and if Your Honors could please go to
24 slide 21. The Fed Circuit upheld the board there and found that Eli Lilly's
25 argument was essentially an obviousness argument. And to anticipate a
26 reference, at the bottom of the slide, a reference must do more than suggest

1 the claimed subject matter. I would suggest to you that they've not made an
2 obviousness argument based on Mieth's micro-controller in their petition,
3 and the arguments they are making now show that at best it suggests that
4 they cannot possibly win on anticipation with that type of analysis.

5 If Your Honors could please go to slide 22 of our demonstratives. As
6 we pointed out in our briefing, the facts are even more definitive here.

7 Unlike at least 45 days where the reference was talking about a number of
8 days in suggested 45 days, all they have is load. Which Patent Owner,
9 excuse me, Petitioner admits they don't even know the size of the genus of
10 that load.

11 If Your Honors could please go to slide 23. We saw a bunch, not only
12 in the briefing, but from Counsel for Petitioner in his opening, that Mieth's
13 disclosure anticipates because the '021 Patent micro-controller operates as a
14 load. This is flipping the anticipation analysis on its head. Again, this
15 argument was raised in the rehearing request and denied because it is
16 flipping the anticipation argument on its head. What matters here is, does
17 Mieth expressly or inherently disclose a micro-controller? They admit it's
18 not inherent, so that only leaves them with express. And as we've all seen,
19 they don't have anything that they can point to showing that it's expressly
20 disclosed in Mieth. As we pointed out in our sur-reply, the possibility that
21 micro-controllers, like basically any other circuit element, consumes power
22 does not mean that Mieth discloses a micro-controller.

23 If Your Honors could please go to slide 24. As we went through a
24 little bit ago, they did not change course from Ground A to Ground B. It
25 was very clear in the petition that they relied on Mieth's disclosure as
26 showing the micro-controller limitation. There's no analysis of why that

1 limitation in Mieth, the load in Mieth, would be obvious in the petition at all.
2 That is an entirely new theory that's continuously rejected by the Federal
3 Circuit, including for the reason cited in the *Yita LLC v. MacNeil* case,
4 which is in our briefing, which is also very similar to the factual situation
5 here, where the Petitioner cites a limitation, changes course midstream, and
6 then expects their obviousness arguments to be accepted.

7 So, I have a few remaining things as it relates to the Mieth grounds.
8 I'd actually like to go to Petitioner's slide now, specifically slide 17. I have
9 two things that I want to deal with. So, in slide 17, this is the epitome of
10 Petitioner's argument. They're saying we didn't provide any extrinsic
11 evidence to support the contention that load does not meet the *Zenith*
12 standard. That is flipping the burden in an *inter partes* proceeding on its
13 head.

14 As we know from cases like *Intelligent Bio-systems*, *In re Magnum*
15 *Oil Tools*, *Dynamic Drinkware*, and then also from the *FanDuel* case, which
16 we cite in our briefing, it is always Petitioner's burden to put forward their
17 case in full, both on the burden of persuasion and the burden of production.
18 We had no obligation to even respond to these arguments if we didn't want
19 to.

20 But we did respond, and we simply pointed out that their own
21 evidence, their own definition of load, their own expert's testimony, what the
22 references show, show that there is no reasonable basis to conclude that the
23 genus of load is readily, one can reasonably, excuse me, one can readily
24 envisage a micro-controller from the genus-species that's disclosed by
25 Mieth. That is just not the case. So, we're entitled to put arguments in fact
26 on that. There's no requirement that we have to put any extrinsic evidence in

1 on it. So, this is one theme that goes throughout Petitioner's briefing, is that
2 they're continuously flipping either the burden on us or trying to use our own
3 patent against us. But both of those things are improper.

4 And if Your Honors could please, for the record, please know that
5 page 15 of our Patent Owner's sur-reply, we did cite the *FanDuel v.*
6 *Interactive Games* case, and that's 966 F.3d 1334. And again, those
7 arguments that are presented in that case are very similar to what's going on
8 here. In that case, claim 6 was at issue. And in that claim 6, the only thing
9 that Patent Owner argued during the whole briefing cycle, that one of the
10 references wasn't prior art. The Board instituted on claim 6, but then in the
11 final written decision, ultimately held that the combination of references was
12 not combinable. There's no motivation to combine. Petitioner complained
13 with the Fed Circuit and said they should have been put notice of that issue.
14 The Fed Circuit rejected and said, you are again misunderstanding how *inter*
15 *partes* review proceedings work. Petitioner, and this is the case that cites in
16 the *Magnum Oil Tools* and *Dynamic Drinkware*. And what they say even is
17 that in *Magnum Oil Tools*, we soundly rejected the idea of shifting even the
18 burden of production from the Petitioner to Patent Owner. So, again, this
19 shows that they're improperly shifting the burden to us when they don't need
20 to -- or when they can't, excuse me.

21 The last thing I want to address is if you look at Petitioner slide 33
22 and then 34. There's some argument in here that because we said -- we
23 made arguments that they didn't change their course in obviousness, that we
24 somehow opened the door for them to start arguing obviousness. There's no
25 opening the door here. What you can do is you can put new evidence in
26 reply. Of course, that's okay. But what you can't do is put completely new

1 theories in, which is what they tried to do in their reply. They've added three
2 new theories. They've got a new genus-species theory, they've got a new
3 reasonably infer theory, and they've got a new obviousness theory. New
4 evidence, yes; new theories, no. And that's supported by many cases,
5 including the *Intelligent Biosystems* case. And I do want to hit on that again,
6 it is with particularity that they need to present their grounds. And we saw
7 on our slide 8 that they have a one sentence argument on why that Mieth
8 reference allegedly discloses the micro-controller limitation.

9 So, if Your Honors have nothing on this issue, I will briefly hit on a
10 couple things in the other (inaudible). So --

11 JUDGE ROESEL: Are you moving away from anticipation?

12 MR. BRIGGS: If that's okay with you.

13 JUDGE ROESEL: Yes.

14 MR. BRIGGS: Otherwise, I can answer some questions.

15 JUDGE ROESEL: Yes, please. Can you respond, please, to
16 Petitioner's slide 18, where they say that the dispositive question is whether
17 one skilled in the art could have reasonably understood or inferred from the
18 prior art that every claim element is disclosed in the reference? Is that the
19 right standard?

20 MR. BRIGGS: That's what the case lists as a standard for
21 anticipation. But if you look at the facts of that case, we realize that that's a
22 very tough road to hoe. Even in that case, where there was a limitation, at
23 least 45 days. This is our slide 19, I'm going to say. Let me just go back to
24 that. That's slide 20. I apologize. So, this is our slide 20, where we go
25 through what this actually means in the context of the facts, is they do have
26 to show every claim element is disclosed in the reference, and they've not

1 shown that every claim element is disclosed in the reference. No, there's no
2 way one of ordinary skill in the art could reasonably understand or infer
3 from that reference that a micro-controller's disclosed. And that's shown by
4 the facts of the case itself. The *L.A. Biomedical* case, with a limitation at
5 dosage of at least 45 days, and the prior art reference is like suggesting all of
6 these extended dosage times, none of which expressly disclose 45 days. We
7 are so far removed from that fact scenario that it's clearly inappropriate to
8 find anticipation in this context.

9 If there's no other questions, I'll go ahead and move to the second
10 issue, Your Honor. So, what I just went through is the dispositive issue.
11 What I'm about to go through doesn't even matter if Your Honors agree with
12 us that Mieth does not expressly or inherently disclose a micro-controller.
13 So, Your Honors could please go to slide 27. I'll just briefly point out that
14 all claims also require a first stage power converter.

15 And if Your Honors could then go to please slide 28. They argue that
16 the capacitor 2 of Mieth is a power converter. We don't think that's true for
17 the reasons enumerated in our briefing, including that, if you go to slide 29
18 of our slides, please, our own specification considers capacitors different
19 from power converters. Their own testimony confirms that capacitors are
20 different than power converters. They implicitly admit via Balogh in the
21 second ground that a capacitor is not a power converter. Slide 30, as we
22 showed in our briefing claim, our own claims show that a capacitor is not a
23 power converter, so on and so forth. So, we don't believe they carried the
24 burden to show that Ground A, in Mieth, discloses the first stage power
25 converter.

1 And the last thing I'll address is their other ground, which is Mieth
2 plus Balogh. If Your Honors could please go to slide 33. What we've got
3 here is an illustration of what they're arguing in Ground B as it relates to
4 each limitation. And what they have argued is that we're going to keep, as
5 we saw, we're going to keep limitations 1A, 1E through 1G from Mieth
6 alone, and then 1B through 1D is Mieth plus Balogh.

7 If we go to the next slide, slide 34. Judge Roesel asked a very keen
8 question, which I have the same question. I don't know whether they're
9 taking only the yellow part of Balogh and putting it into Mieth, or both the
10 yellow and the blue part of Balogh and putting it into Mieth. They have not,
11 again, made their arguments clear or particular on the record. And the last
12 thing I'll say on this, if Your Honors go to slide 37. Even if we accept that
13 they're taking both the yellow and the blue parts from Balogh and moving it
14 into Mieth, it's unclear how that combination even works, given the
15 difference in circuitry between Mieth and Balogh. And they left that
16 unexplained in the petition.

17 So, unless Your Honors have any further questions, I'm happy to cede
18 the rest of my time.

19 JUDGE ROESEL: Okay, seeing no questions from my colleagues,
20 we will move back to Petitioner, and you have reserved 15 minutes.

21 MR. ESCHWEILER: Thank you, Your Honor. I appreciate the
22 opportunity to respond. The first thing I'd like to address is the other two
23 IPRs, because I think it would be unfortunate just to let that kind of sit. The
24 other two IPRs were not instituted, and there was a rehearing request that
25 was denied under a very different standard of review, and that is an abuse of
26 discretion. Okay? That's not the standard that we're looking at these 102

1 and 103 arguments. This IPR has been instituted. Okay? This Panel has
2 indicated that the Petitioner has satisfied its initial burden of showing a
3 reasonable likelihood that each of these elements and each of these claims
4 are taught in the prior art. Okay? And in doing so, this Institution Decision
5 indicated that in anticipation, the Panel believed that the dispositive issue
6 was the standard set forth in the *L.A. Biomedical* case, not the fact pattern of
7 the *L.A. Biomedical* case, the standard of anticipation. That was the
8 dispositive issue. And the Panel said that, in its view, that initially was met.

9 Now, the Patent Owner, as he is want to do, filed the Patent Owner
10 response to refute that characterization. And then responded to the argument
11 set forth with both the genus-species and the PTAB dispositive standard
12 analysis with extrinsic evidence. We, at no time, ever argued that the burden
13 of persuasion had ever shifted from one person to the other. It just invited
14 the Patent Owner to actually respond by applying the facts of the present
15 case to the standards that we believe are appropriate in this instance. When
16 we argued that the load included a micro-controller, I think a very
17 reasonable response. That's a genus-species argument. So, then we then
18 responded to that and applied the facts to the standard with extrinsic
19 evidence. And in the same way that we replied to the dispositive standard
20 that this Panel indicated was the key, they had the opportunity to do that, and
21 they chose not to do that.

22 All these case citations that my opposing Counsel highlights go into
23 the facts that are not relevant. The facts before us, whether the court held
24 that one side won or not, honestly, I'm not really that interested in, unless
25 those facts are analogous to the facts at issue here, and they're not. Okay?
26 They're absolutely not. And, in fact, we take painful steps to walk you

1 through our facts and apply them. And also let it be understood that in the
2 electrical and mechanical arts, which are predictable and very repeatable,
3 that's very different than in the chemical arts, where it's not unusual for
4 someone to see that you've got some groups of species that might not all
5 behave the same, and yet all of these species groups reside within a technical
6 genus. Totally understand that. That's not the case in this situation.

7 You know, Kirchhoff's Voltage Law and Kirchhoff's Current Law
8 always apply. There's never times when they don't apply. And people of
9 ordinary skill in the art of electronics, based upon the definition of load will
10 absolutely, positively, every single time be able to take a look at a circuit
11 element in its environmental context and tell you this is absolutely operating
12 as a load. And because of that, the term load does provide a very definite
13 and limited class, not by number, but by definition and function and in the
14 predictability of the electrical arts. So, in this case, it's our contention this is
15 a slam dunk with respect to genus-species. And with respect to the
16 dispositive standard, we walk through the analysis, and I think we've shown
17 that a person of ordinary skill in the art would come to that reasonable
18 inference.

19 The Patent Owner had opportunities to address the facts, but they're
20 not doing that. They want us to not address those; please make this go away,
21 just like the other IPRs. You know, the other IPRs were under different
22 standards. This one's been instituted. We've got extrinsic evidence in place,
23 and it's our responsibility to take a look at the evidence proffered by both
24 sides, and do our analysis as to whether 102 and 103 has been met. And it's
25 our contention that it has been met. For example, a couple times, opposing
26 Counsel makes the assertion that somehow our petition is deficient because

1 it only has a single sentence arguing a certain point of view. There's no
2 single-sentence rule for what constitutes sufficiency of a petition. We argue
3 that the load includes a micro-controller. We cite to a paragraph on our
4 expert report, and we cite to another piece of extrinsic evidence. That, by no
5 means, is cursory to one of ordinary skill in the art who's going to review
6 that. And in fact, when we went over those things, it shows that, in fact,
7 that's very much the case.

8 So, in my opinion, I think that, you know, by no means should the
9 brevity of the initial statement be somehow taken as some kind of
10 substantive analysis. It's not. We've done the substantive analysis. Patent
11 Owner is choosing to not do that. So, again, we don't wish to flip burdens.
12 We're not doing that. New evidence, yes. New theories, no. I think that's a
13 very good characterization, and I would agree with opposing Counsel on
14 that. Okay. We understand exactly what he's saying. The anticipation issue
15 was being addressed. The *Anacor* doctrine that's set forth by the Federal
16 Circuit is followed in this case, and our evidence and arguments are
17 admissible and should be considered. Right.

18 And the only time a reasonably argued new theory was being
19 presented was presented by Patent Owner. He's the one who said, and oh,
20 by the way, it's not, it's not obvious either. And the rules specifically say I'm
21 permitted to respond to an argument set forth by the Patent Owner in this
22 POR, so I did. So, you know, and in my slides, I cite to the section of the
23 CFR that sets forth that it's appropriate for us to make that reply. So,
24 opening the door, yeah, they opened the door and then we responded. And I
25 think it's appropriate. I think that *Mieth* meets under the anticipation
26 standard anyway. And I think that the combination of *Mieth* and *Balogh* is

1 very clear. As we set forth in our slides, we make a very compelling case
2 that art that's in the same field, addressing the same type of problem, a
3 suggestion to go to multiple cascaded converters under certain circumstances
4 that are met reliably and regularly in the PV application world. And then
5 another piece of prior art that says, don't do it just for the high voltage
6 conversion ratios, do it for circuit efficiency.

7 So, we've proffered all sorts of evidence that supports the fact that one
8 of ordinary skill in the art would readily be motivated to make this type of
9 modification. So, it's our belief that Mieth is relevant under 102. And in
10 those situations where a power converter, if the PTAB thinks that the
11 capacitor is not a power converter, even though we argue that it is, we've
12 also submitted Balogh in that context in Ground B for the alternative
13 grounds, which Petitioners regularly do in a petition. So, we feel that we
14 made a compelling case that all the claims are invalid under 102 and 103.

15 If you have any further questions, I'm happy to answer them. I really
16 appreciate you giving us the opportunity to discuss today.

17 JUDGE ROESEL: Thank you very much. Seeing no questions from
18 the other Panel members, let's move back to Patent Owner. You have
19 reserved 20 minutes.

20 MR. BRIGGS: I'll be quick. I have four points. Petitioner talked
21 about the rehearing decisions. I just want to point out we didn't file a Patent
22 Owner preliminary response in this case. We did file a Patent Owner
23 preliminary response in the other cases. That's why they were not instituted,
24 because then we showed why Mieth does not expressly disclose or
25 inherently disclose a micro-controller. You agreed. The same thing should
26 happen here.

1 Petitioner again argues we didn't apply the facts here to this case. We
2 certainly did. We point to things that they say that are factually related in
3 the record, including the District Court's construction of load, which is huge.
4 We point to their own expert's testimony, who points out that he can't even
5 pin down how big a power converter class is, which directly reads on how
6 big a load class is. So, there's plenty of evidence in the record where we
7 point to their own admissions or evidence showing that they can't carry their
8 burden on this genus-species or reasonable inference record.

9 I heard Counsel say that these cases are from the chemical field.
10 That's just not true. A few might be from the chemical field, but *Wasica*
11 certainly isn't. That's about frequency in electronics. *FanDuel* is also about
12 electronics. *Yita* is about vehicle floor panels. I mean, these are not
13 complicated technologies, and neither is electronics. But the three cases that
14 we cite support our position. And he says it doesn't want to look at the facts.
15 But we all look at the facts. We look at the facts of one case versus this
16 case, and we see how similar they are to see if our opinions, as lawyers or
17 judicial advocates or Judges, is supported by the facts of those cases in view
18 of the law.

19 The last thing I will, I'd like to address is he seems to imply that we
20 said it wasn't obvious. We never made an argument about it wouldn't be
21 obvious. What we said in our POR and in reply is that their theory as it
22 relates to Ground B is unchanged on the micro-controller limitation from
23 Ground A. We're entitled to do that. That doesn't open any doors. And
24 even if we inadvertently said something about that, they're still not allowed
25 to put in a whole new theory of obviousness under well-known Federal
26 Circuit case law.

1 Unless there's any other questions, I will rest.

2 JUDGE ROESEL: Thank you very much for your arguments today.

3 That concludes this hearing. We will issue a final decision in due course,
4 and the hearing is adjourned. Oh, I would remind Counsel to please stay on
5 the line in case the court reporter has any questions for you.

6 MR. BRIGGS: Will do. Thank you.

7 MR. ESCHWEILER: Thank you very much.

8 COURT REPORTER: Yeah, if I could just go through my notes with
9 you gentlemen real quick, please.

10 (Whereupon, the proceedings at 10:38 a.m. were concluded.)

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PETITIONER:

Thomas Eschweiler
James Potashnik
ESCHWEILER & POTASHNIK LLC
docketing@eschweilerlaw.com
jpotashnik@eschweilerlaw.com

Nathanael Smith
Ningjiao Zhang
njsmith@epiplaw.com
nzhang@epiplaw.com

Philip Marsh
ARNOLD & PORTER KAYE SCHOLER LLP
philip.marsh@apks.com

PATENT OWNER:

Heath Briggs
Leif Olson
GREENBERG TRAURIG, LLP
briggsh@gtlaw.com
olsonl@gtlaw.com