

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

THERMALTAKE TECHNOLOGY CO., LTD.
and THERMALTAKE INC.,
Petitioner,

v.

CHIEN-HAO CHEN,
Patent Owner.

IPR2024-01230
Patent 10,690,336 B1

Record of Oral Hearing
Held: December 11, 2025

Before MONICA S. ULLAGADDI, SHARON FENICK, and
ANDREAS BALTATZIS, *Administrative Patent Judges*.

IPR2024-01230
Patent 10,690,336 B1

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The above-entitled matter came on for hearing on Thursday, December 11, 2025, commencing at 9:00 a.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P R O C E E D I N G S

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JUDGE BALTATZIS: Good morning. Today, we'll hear arguments in IPR2024-01230, concerning U.S. Patent Number 10,690,336. I'm Judge Baltatzis. I'm joined today by Judge Ullagaddi and Judge Fenick. And Judge Fenick is joining remotely. There have been reported delays in the audio coming in from the remote judges, so please be mindful of questions when they come in remotely. Let's go ahead and start with appearances, beginning with Petitioner.

MR. WEBER: Good afternoon, Your Honors. Brock Weber of Pillsbury Winthrop Shaw Pittman in behalf of the Petitioner.

JUDGE BALTATZIS: Welcome. And Patent Owner?

MR. CHEN: Kyle Chen from Greenberg Traurig. With me is Mr. Heath Briggs.

JUDGE BALTATZIS: Welcome. Okay. Before we begin, I would like to remind the parties that we each have a copy of the demonstrative exhibits you provided. So during your argument, please identify clearly and specifically the demonstrative referenced by slide or screen number so we can follow along and to ensure clarity and accuracy of the court reporter's transcript. If you've noticed, the court reporter is joining us remotely today. So it's going to be especially important for clarity.

As set forth in the hearing order, each party has 60 minutes to present their arguments. The Petitioner will proceed first and may reserve time for rebuttal. Petitioner, how much time would you like to reserve for rebuttal?

MR. WEBER: I'd like to reserve 20 minutes, please.

1 JUDGE BALTATZIS: Twenty minutes. Okay. And then Patent
2 Owner, you'll have 60 minutes to present your case and may reserve time for
3 surrebuttal. How much time would you like to reserve?

4 MR. CHEN: About 15 minutes.

5 JUDGE BALTATZIS: Fifteen minutes. All right. Let's set the
6 clock, 15 minutes. All right. Petitioner, whenever you're ready.

7 MR. WEBER: Thank you. All right. Good morning, Your
8 Honors. Thank you for taking the time to hear us today. I'm Brock Weber,
9 as I said, of Pillsbury Winthrop Shaw Pittman, here on behalf of the
10 Petitioner. We appreciate your time and effort in this case up to this point.
11 As Your Honors are aware, we're here on our IPR petition regarding the '336
12 Patent. I think we're all aware of where we are. But here on Slide 3, to set
13 the stage we have, as Petitioner's established, that all Claims 1 through 5 of
14 the '336 Patent would have been obvious to a person of ordinary skill in the
15 art based on the preponderance of the evidence that has been presented.

16 The petition presented invalidity grounds under two primary
17 references, the Lai reference, which is Exhibit 1012, those are Grounds 4
18 through 7. And then the Tsuji-based grounds, Tsuji is Exhibits 1006 and
19 1007, 1007 being the certified translation. And those are Grounds 1 through
20 3. If it pleases the Board, I'll proceed with the grounds in this order, as was
21 addressed in the Board's institution decision, addressing Lai first.

22 Here we are on Slide 4. In general, Patent Owner has responded to
23 our petition with embedded, unduly narrow claim constructions that we have
24 shown are contrary to the plain meaning of these claimed terms and are not
25 supported by the facts or law in this case, especially the intrinsic evidence.
26 They did not include a claim construction section in their Patent Owner

1 response. But it became clear by the response that they were eliminating
2 certain claim terms, especially to maybe specific embodiments in the patent
3 or according to their expert's testimony.

4 Second, apart from the claim construction issues, Patent Owner's
5 allegations in this case do not refute the record evidence showing that the
6 claims are invalid, especially as the Board preliminarily found in its
7 institution decision. I'll address what appears to be each issue in contention
8 at this point.

9 So a brief primer on the '336 Patent, it is fairly basic. It's directed
10 to an illumination fan for a computer that has a body and a fan in the center
11 of that body. There's an illumination area at the top of the body, a power
12 socket in the first connector on one side, and a second connector on another
13 side. The point being is that this design was supposed to allow for daisy-
14 chaining of computer fans, in which fans are electrically and mechanically
15 connected together in a chain.

16 This patent, at best, has a priority date in December of 2018. By
17 this time, the record evidence has shown that a person of ordinary skill in the
18 art would have found the arrangement of connectors and light fixtures to
19 daisy-chain a fan to be well understood and well within their ability and
20 knowledge. There's not much dispute that this was within the ability of a
21 person of ordinary skill in the art. The specific complaints that I would say
22 that Patent Owner has don't jive with the record evidence, as I'll show.

23 As I mentioned, we had challenged all Claims 1 through 5 of this
24 patent. This patent is pretty sparse. It has three columns of text and five
25 figures, not explaining much more than what the claims themselves say. So
26 Claim 1 here is represented on Slide 9, with some key language annotated

1 that we'll be discussing today. So Claim 1 claims an illumination fan that
2 has a body provided with a fan in the center of the body; an illumination area
3 on at least two sides of the fan at the top of the body; and as I mentioned, the
4 power socket and the first connector on one side of the body and a second
5 connector on the other side of the body.

6 The idea being that when power socket is connected with the first
7 connector, the second connector and the fan and the illumination area, when
8 the power socket on that one side of the body is supplied with power, the fan
9 and illumination area of the body are respectively driven into rotation and
10 illumination. And when the first connector of the body is connected with a
11 second connector of a body of another illumination fan, a fan and an
12 illumination area of the body of that other illumination fan are respectively
13 driven into rotation and illumination.

14 Using similarly colored highlighting here on Slide 10, we can see
15 Figure 1 of the '336 Patent where there's an illumination area 3 that's
16 highlighted in orange. It kind of slopes down from the top of the fan and
17 also recesses inward toward the center of the fan. Top of the body is 1,
18 indicating that area of the fan, power socket 4 and first connector 5 are on
19 one side of the body here as we can see. And then on the other side, there's
20 the green connector 6. That's the second connector.

21 Okay. First, I'll address what appear to be some claim construction
22 disputes here. Petitioner in the petition said that the claim should be
23 afforded their plain and ordinary meaning, and that's how we have applied
24 them consistently throughout this proceeding. The plain and ordinary
25 meaning should be the -- is the appropriate construction. We provide further
26 clarification on what a plain and ordinary meaning could be or what it is for

1 these terms that are not technical in nature and are not defined in the
2 specification. The Board in its institution decision relied on plain and
3 ordinary meaning, and those meanings should continue to govern.

4 So it appears that a dispute has arisen regarding what the plain and
5 ordinary meaning of an illumination area is. Patent Owner has attempted to
6 distinguish some prior art on this basis, claiming that illumination area in the
7 '336 Patent is physically located at the top of the body and actually generates
8 light. It's a generative light source. This is Slide 13 for clarity.

9 The Petitioner submits that the plain and ordinary meaning is not
10 so limited. The '336 Patent simply explains that when the fan body is
11 supplied with power, the illumination area can be illuminated or driven into
12 illumination. So therefore, the '336 Patent allows for an illumination area lit
13 up by a separate light source. It doesn't -- it's not described as generative.
14 That's not how it's been limited. Therefore, an illumination area in the '336
15 Patent is simply an area that is illuminated.

16 Here on Slide 14, I will point out, as we've argued, that Patent
17 Owner in the parallel District Court case agreed that the illumination area
18 -- that illumination area is simply a region that is lit up. It does not have to
19 be generative itself. And how that could work is you would have buried
20 LEDs in a diffuser. And a diffuser is a passive element, it's not generative,
21 and so that could be an illumination area. It's just an area that receives and
22 is illuminated by light.

23 This is consistent with how they've accused the allegedly
24 infringing products. This image is fairly small here. But the image of the
25 actual fan on the right shows that they've identified the illumination area as
26 internal LEDs that are kind of recessed below the uppermost area of the fan

1 body. But they've also alleged that the translucent or diffusive cap is an
2 illumination area. Those elements are not generative themselves, the
3 translucent element.

4 Okay. So in sum, the plain and ordinary meaning of illumination
5 area should be not so limited as the Patent Owner alleges it. It has to be a
6 separate structure that generates light that actually illuminates. It's just an
7 area that can be illuminated.

8 JUDGE BALTATZIS: Mr. Weber, just to confirm. It's an area at
9 the top that can be illuminated, right?

10 MR. WEBER: Yeah. The claim language specifies that it's at the
11 top.

12 JUDGE BALTATZIS: Great. Thank you.

13 MR. WEBER: Which brings us to what top could mean. Here
14 again, they've attempted to distinguish, for instance, the Lai reference on the
15 basis of top and illumination area. Patent Owner has argued in its papers,
16 though not in a claim construction portion, that top really means the
17 uppermost surface of the fan body. In other words, the top of body does not
18 include a position beneath the top of body or beneath the top. And it's the
19 face of a body, so it's an uppermost surface.

20 Again, there's no support to so limit that term in the specification at
21 all. And it's also inconsistent, actually, with embodiments in the patent.
22 Top is not a technical term. It's a common English term that we can all
23 understand. It just means the upper part of something, as explained by
24 Petitioner's expert Dr. Wolfe.

25 In its institution decision, the Board recognized that the fan 2 is
26 disposed in the center of the top of the body. However, fan 2 is not disposed

1 on the topmost surface of that body. It does recess downward. Patent
2 Owner's expert conceded that the fan is actually recessed below the topmost
3 surface of the fan body. Therefore, if top meant just the uppermost, topmost
4 surface, the Patent Owner's construction would appear to exclude a depicted
5 embodiment in the '336 Patent, which is contrary to claim construction law.

6 JUDGE BALTATZIS: Mr. Weber, just to confirm here. The
7 claim doesn't necessarily say that the fan is disposed at the center of the top
8 of the body. The claim itself, looking at it, just as a fan at the center of the
9 body, and then we have the illumination area on at least two sides of the fan
10 at the top of the body. So is there an argument that just the illumination area
11 needs to be on the top, while the fan does not necessarily have to be?

12 MR. WEBER: So the illumination area is on the top, and that's
13 kind of where this ties in. But there again, we have shown in the papers
14 -- and you can see in the figures -- that that illumination area extends
15 downward from the uppermost surface. And so all portions of that that
16 would fall below that uppermost surface line would be excluded under the
17 Patent Owner's construction. And again, it would be excluding a depicted
18 embodiment of the '336 Patent. So that would be an additional reason why
19 their construction should not be adopted.

20 Side is an important one. This one, they're I guess confusing
21 attempts to distinguish the references Lai and Tsuji on the basis of whether
22 certain connectors and power sockets are on one side and on another side. It
23 boils down to an attempt to unduly limit the term "side." However, they've
24 -- it appears that they contend that the term "side" should mean different
25 things in the same Claim 1, depending on whether it's talking about the side
26 of the fan or the side of the body. But there's no support in the spec at all for

1 limiting it in this fashion that the patent has depicted embodiments but does
2 not define a side in any way other than this plain and ordinary meaning.

3 So Patent Owner's construction kind of runs against a number of
4 claim construction principles. Number one, alleging that side would mean
5 different things in the same claim and saying that it wouldn't have a plain
6 meaning without context. That would kind of write that term out of the
7 claim. So basically, what they've attempted to distinguish prior art on is
8 saying that side is just this outermost surface, lateral surface, that somehow
9 wouldn't be the face or the rear, depending how the device is oriented.

10 However, that construction -- implicit construction should be
11 rejected because "side" has a plain and ordinary English meaning, which can
12 be a lateral side but also a lateral area or region of the body, either with
13 respect to a central line through the body or with respect to the central fan
14 access that's depicted here on Slide 17.

15 Here on Slide 18, there's some legal authority saying that the two
16 interpretations of "side" in the same claim should be rejected. That
17 presumption against such a construction has not been overcome here. I
18 would also point out, as we did in the papers here on Slide 18, that I believe
19 right before the Board's institution decision, Patent Owner's narrative
20 -- excuse me, narrow construction of side was rejected in the parallel ex
21 parte. The examiner in that -- in the parallel ex parte reexamination said side
22 refers to, as Petitioners have said, either to lateral sides or to lateral areas or
23 region of the body, either with respect to a central line through the body or
24 with respect to the essential fan access.

25 JUDGE BALTAZIS: Mr. Weber, on this issue, how much
26 should we consider the examiner's interpretation, considering it's under a

1 different standard, BRI as opposed to plain and ordinary meaning?

2 MR. WEBER: Right. As we've explained in the papers, the
3 construction would be the same under the Philips standard that we're using
4 here. As the examiner pointed out, there is no definition in the sparse
5 specification of the '336 Patent to limit that term beyond its plain and
6 ordinary meaning, which can be found in a number of dictionaries that is
7 similar to what the examiner found and what we're proposing here.

8 So the point is that even under Philips, there's no support in the
9 spec and intrinsic evidence, prosecution history, et cetera, to limit this term
10 to a preferred embodiment, which would just be the external sides of a
11 lateral portion of this body. So we would submit that the Board should give
12 weight to the examiner's finding because the same finding would be made
13 under Phillips.

14 JUDGE BALTATZIS: And just to follow up, so in our institution
15 decision-- looking at "side" in context of the claim, the way it's used, we
16 preliminarily looked at and said that the claim lists a top of the body and that
17 -- and two different sides, one side and another side. Or should we read
18 those as separate faces -- let's say, if we're going to use a different term just
19 to separate -- of the fan body? To say that again, the claim says there's a top,
20 there's a one side, and another side, and those should be each distinct faces
21 of the fan, not to introduce a new word but just to distinguish.

22 MR. WEBER: Right. I don't think that the plain and ordinary
23 meaning of those terms would support a construction in which the top and
24 sides must be different actual face surfaces. Again, top is just the upper part
25 of something. And so a person of ordinary -- as our expert has explained, in
26 an orientation that's depicted in some reference, a person of ordinary skill in

1 the art would be able to understand what could be the top based on where the
2 fan is, but also that the side would be defined based on a center line of
3 division. So the top and side are not mutually exclusive is the point.

4 JUDGE BALTATZIS: Okay. And the last question on this, is can
5 we even look at "side" separately from the way it's used in the claim, in a
6 way that it can be used differently sides of the fan but then also we have two
7 sides of the fan at the top for the illumination areas being separate from the
8 sides of the body? I know you're saying that we should interpret that the
9 same as, let's say, there's a center line. Is that basically the idea that if there's
10 a center line, we're interpreting it the same, both ways, right, two sides of the
11 fan, two sides of the body, same center line?

12 MR. WEBER: Yes, that's right. So on here, I'm on Slide 10, that
13 just shows Figure 1 of the '336 Patent. Their illumination area 3, according
14 to -- basically, however you want to chop up the quadrants with a center line
15 of division would be on different sides of the fan body. And similarly, so
16 would connectors 4 and 5 be on a different side in Claim 6. It's just the
17 division line is how you define side. And then the context of, well, what are
18 you talking -- which element is on what side is provided by the context of
19 the rest of the claim. So side is consistent. But yes, there is context
20 provided about what element you're talking about.

21 JUDGE BALTATZIS: Thank you.

22 MR. WEBER: Well, that Figure 1 is relevant to -- here on Slide
23 19. Their interpretation of side as being a lateral face defined in some way
24 based on another face, the top or the rear or the bottom, is also inconsistent
25 with intrinsic evidence. For instance, the patent figure is to pick power
26 socket 4 on one side of the body, but it's recessed and interior to the fan

1 body. It's not just on the outermost surface. So it wouldn't be consistent to
2 say that power socket would be on one side of the body because it extends
3 inward from that outermost face. It's another reason why their construction
4 doesn't make sense. Again, in this regard, it would be appearing to exclude
5 a depicted embodiment.

6 Here on Slide 18, we also show that the Patent Owner's expert
7 agrees, as you must, that that power socket 4 recesses inward into the
8 interior of the body, away from the outermost surface.

9 JUDGE BALTATZIS: Mr. Weber, one last question before I let
10 you go on the "side." I believe Patent Owner makes the argument that this
11 -- let's say the center line argument is a new argument that came in on the
12 reply. Dispute that.

13 MR. WEBER: Okay. Yes. We would dispute that. So for
14 instance, in the Lai grounds, there was a reference to -- well, the -- I can just
15 get there to show you an example. Okay. So I'm on Slide 28. So we have
16 shaded the external surfaces. But our shading in the petition was not meant
17 to be limiting. Because a side surface is part of the side, but a side is not
18 limited to the side surface. And so we were discussing the figures of Lai in
19 regards to the depicted embodiment. But in no way did we limit this to
20 meaning just the lateral surfaces. In both the Lai and Tsuji grounds, we said
21 that Lai and Tsuji disclose this element. Not just, you know, render it
22 obvious, they disclose it.

23 And so while there could be an interpretation, for instance, of
24 Figure 2, shown here on 28 of Lai, in which one connector -- input 111 and
25 output 112 are on the same side, there's also -- under the plain and ordinary
26 meaning of side, those could be considered on different sides. The fact that

1 we've interpreted this broader, than just the external outmost surfaces of a
2 lateral face is also shown in the Tsuji grounds, where we specifically say
3 that -- let me get over there.

4 Here we are on Slide 63. Again, we've annotated with red and
5 green to show sides, though, you know, the shading stops on the side. It
6 doesn't go all the way to the center, as it -- you know, this wasn't supposed to
7 be limiting. But here again, we've said that Tsuji discloses this element with
8 -- and that the power socket CNA and CNB are on the same side as
9 connector CNC.

10 And that shows that we are interpreting this claim language, the
11 side claim language, to be broader than just the external face. Because as we
12 can see in the figures of Tsuji, such as Figure 7, that CNA and CNB extend
13 inward and have openings on different faces of the body. But they're on the
14 same side, the right side of the fan as CNC.

15 JUDGE BALTAZIS: Thank you.

16 MR. WEBER: Okay. The time goes fast. So I guess I'll go
17 quickly through the Ground 4 that the challenged claims are obvious over
18 Lai in view of Hasegawa. Here, the disputes seem to center on Limitations
19 1[b], 1[c] and 1[d]. 1[b] is the illumination area on two sides of the fan at
20 the top of the body. 1[c] is this same side issue. We have a power connector
21 -- excuse me, power socket and the first connector on one side and the
22 second connector on another side of the body. And 1[d] is talking about
23 kind of the daisy-chaining operation, where you connect the first connector
24 of one fan to the second connector of another fan. And this drives the fan
25 into rotation and the illumination area into illumination.

26 So starting with Claim 1[b] in illumination area, at least two sides

1 of the fan at the top of the body, here we've shown that Lai discloses this. In
2 Figure 2, there's four LEDs on different sides of the fan at the top of the
3 body. Again, top is just an upper part of something. Those extend into the
4 upper portion of the fan body. In addition, it's undisputed between the
5 parties' experts that those LEDs would illuminate the upper part of the fan
6 body, the fan blades, and the housing walls of the fan cavity. Therefore,
7 illuminating even that uppermost top surface under Patent Owner's unduly
8 narrow construction on top.

9 Patent Owner's positions here again are based on its unduly
10 limiting construction of illumination area as a particular source of
11 illumination, and that it must be on the completely on the upper surface.
12 Again, their construction of illumination area should be rejected. And even
13 under their view of top as the uppermost surface, again, the expert has
14 acknowledged that Lai's LEDs would illuminate the fan blades and that all
15 of this would be visible from the very top surface of the fan body.

16 As the Petitioner also pointed out, to the extent that they would be
17 required to be on this uppermost surface, which again is not even consistent
18 with what's shown in the '336 Patent which slopes down, that would have
19 been obvious to do. Moving these around to provide greater or more
20 expressive lighting effects would have been obvious, as shown in the
21 petition. This is Slide 26.

22 Okay. Claim 1[c] for Lai, that's the power socket and first
23 connector on one side and the second connector on another side. The
24 petition has shown that Lai disclosed this. So the Board agreed that Figure 3
25 shows this. We have input 111, which is the power and signal connections.
26 And then output 112 are on different sides of the fan body that's depicted in

1 Figure 3, even under the narrow construction of side as being just lateral
2 surfaces of the fan body. It also obviously discloses it under the appropriate
3 meaning of side.

4 I'd like to address the Patent Owner's contention that there's an
5 error in the mapping here. So in Figure 3, we've shown that under Claim 1,
6 like, the illumination fan could be this middle fan here where the first
7 connector that's on the red surface is connected to the second connector of
8 another illumination fan, the one to the left is on that green surface.

9 On that point, I would just note that the Board recognized that that
10 was our mapping in its institution decision, such as at pages 25 to 26 and
11 page 34. And the contention that somehow that mapping wasn't made
12 because we had labeled that first connector on the middle fan as just a first
13 connector, it doesn't make sense because we've explained that that connector
14 is also the power socket.

15 Okay. On the issue of whether the power socket and the first
16 connector must be separate structures -- separate housings, there's nothing to
17 refute the Board's finding that that's not what the '336 requires. '336 doesn't
18 discuss the structure of these at all, really, and just says that all that's
19 required is an electively conductive terminal. So the fact that Lai's input 111
20 has both power and signal connectors still validates -- is covered by the
21 claim language, and that finding should remain.

22 But even if separate structures were required, Petitioner showed
23 that it would have been obvious to put them into two different housings that
24 was very well known in this art and obvious to do because it was a known
25 solution that a person of ordinary skill in the art would know would work.
26 Here again, in Slide 32, we're showing that the second connector on another

1 side of the body is the output 112, which is on another side of the body, than
2 input 111, as shown in Figure 3 and also shown in Figure 2, depending on
3 the way that you define the dividing line.

4 So Patent Owner's contention that there's a mis-mapping here
5 should also be rejected for the reason that Lai's fans 10 are all described
6 identically with the same elements. These are the same fans connected in
7 the daisy-chain. So as they've done in their revised motion to amend, you
8 can pick one in that chain, and it will show the connectors as claimed.

9 I would note that, you know, to the extent it was found somehow
10 that Lai doesn't have a power socket in a first connector on one side and the
11 second connector on another side, there's also the position in the petition that
12 it would have been obvious to do to arrange it that way in view of
13 Hasegawa. This showed a common configuration for daisy-chain and
14 computer fans that a person of ordinary skill in the art would have been
15 motivated to try with success because it was a known solution for daisy-
16 chaining, and both references are directed to that issue.

17 I think if Patent Owner has a rebuttal on this point, I think it's
18 based on a misstatement of what the Petitioner is alleging the combination
19 would result in. And so in the combination of Lai and Hasegawa, Lai would
20 still have its, you know, input 111, which is the power socket in the first
21 connector. Hasegawa shows the teaching of the second connector on the
22 other side as a way to daisy-chain.

23 Claim 1[d], this is the daisy-chaining limitation of how the fan is
24 driven into rotation and the illumination area is illuminated. I don't think
25 there's any dispute that these daisy-chained fans in Lai will operate to rotate
26 the fan and illuminate the LEDs when they're connected to power. I think

1 the main point here, again -- so on Slide 39 -- that Patent Owner presented
2 was that there's a mis-mapping of the elements. But again, I addressed that
3 the middle fan here on Slide 39 in Lai's Figure 3 would be the first claimed
4 fan, and the one to the left would be the claimed -- another fan.

5 I'll jump over Claims 2 and 3, as Patent Owner's rebuttals seem to
6 hinge on the same positions it's presenting for Claim 1. The result being that
7 if the Board were to find, as it should, that Claim 1 is unpatentable in light of
8 the prior art presented in the petition, that would bring into play Patent
9 Owner's revised motion to amend, which seeks to have substitute Claims for
10 2 and 3.

11 Let's see, I suppose in the time remaining I'll touch briefly on that
12 revised motion to amend. Okay. So here, we are on Slide 84. And after the
13 Board's preliminary guidance on the original motion to amend, the Patent
14 Owner made a couple modifications. And first, we'll start with Limitations
15 B and C, as discussed in the Board's preliminary guidance.

16 And so B is that the power socket is electrically connected with the
17 first connector, second connector, the center fan, and illumination fan, such
18 when the power socket on the first side of the body is supplied with power
19 via the power socket's electrical connection with the second connector.
20 Now, that's the added language, as highlighted on Slide 84. The center fan
21 and illumination area of the body, the first illumination fan, are respectively
22 driven into rotation and illumination.

23 And then C is when the first connector of the body of the first
24 illumination fan is connected with the second connector of a body of the
25 second illumination fan, the center fan illumination area of the body of that
26 second illumination fan are respectively driven into rotation and

1 illumination. And here, we -- the Patent Owner has not fixed the problem
2 that the Board found in the preliminary guidance. These limitations are not
3 supported in the specification and will also render the claims indefinite.

4 So what Patent Owner has attempted to say here is that the -- we're
5 on Slide 86, they say that the first illumination fan here is the yellow shaded
6 fan. The second illumination fan in the claim is the blue shaded. And that
7 first illumination fan gets power through a preceding or third illumination
8 fan that has direct power supplied to that preceding fan's second connector.

9 Now, it is undisputed that this orientation is not depicted or
10 described in '336 Patent. Patent Owner's position is that the spec can support
11 such language, simply because it does not exclude this possibility or that it
12 would have been obvious a person of ordinary skill in the art. And as
13 explained in our opposition to this motion, that's contrary to well-established
14 law on written description, the Lockwood and Anascape cases for the
15 Federal Circuit. I'll note that as depicted here, they still run into the problem
16 of the fact that the power socket 4 on all these fans is covered and
17 inaccessible in this arrangement.

18 JUDGE BALTATZIS: So what about their argument that the
19 power socket is electrically connected inside the fan, what's missing there?
20 The fact that the power socket is covered, can it still get this connection
21 through the interior connections?

22 MR. WEBER: While that might be possible, the problem is that
23 getting power to that power socket through the second connector -- through
24 some type of external power source -- of the preceding fan is nowhere
25 described in the specification or depicted. And so they just simply do not
26 have written description support for that, even if it was obvious, which is a

1 different standard.

2 JUDGE BALTATZIS: And we are into your rebuttal time, so
3 you're welcome to use it, but just to give you the warning.

4 MR. WEBER: I think I'll reserve the remainder for rebuttal and
5 see if there's any issues of contention that remain after Patent Owner's
6 presentation.

7 JUDGE BALTATZIS: Very good.

8 MR. WEBER: Thank you, Your Honors.

9 MR. CHEN: Good morning, Your Honors. My name is Kyle
10 Chen. I represent Patent Owner. With me today is Mr. Heath Briggs. So
11 today, I'm first going to do an overview of the '336 Patent, and then I will go
12 over the disputes based on the petition. And then I'll go over the disputes
13 based on the Patent Owner's revised motion to amend.

14 So the '336 Patent claims an illumination fan connectable with at
15 least one other illumination fan. And Figure 1 shows an embodiment, and
16 the patent claim -- both the claim and the specification explain that the
17 power socket 4 is electrically connected with first and second connectors 5
18 and 6, as well as rotating fan 2 and illumination area 3. And Figure 2 shows
19 connections between any two adjacent illumination fans. Slide 3 -- so what
20 was just described was on Slide 2, for clarity.

21 And on Slide 3, it shows that the illumination fan can actually be
22 supplied with power from a prior illumination fan through its second
23 connector, as shown in the relationship between two adjacent illumination
24 fans in Figure 2. Slide 4 puts Figure 2 and Figure 3 together in the context
25 of Claim 1, where the embodiment shows that the first illumination fan or
26 -- it is actually recited the illumination fan in Claim 1.

1 So in this embodiment, the yellow fan is in the middle. And then
2 another illumination fan is actually the blue one in this embodiment, and that
3 will be the second illumination fan. And so these limitations are actually in
4 the claims, and it is Petitioner's burden to specify which -- where each
5 element of the claim is found in the prior art -- patents or publications. So
6 this is discussed on Slide 4.

7 Slide 5 just shows the claim language of Claim 1, but it does label
8 the limitations as B, C, and D. So Limitation B is about the illumination
9 area. Limitation C is about the power socket and first connector on one side
10 of the body and the second conductor on the other side. And Limitation D,
11 in combination with Limitation C, provides what later we'll call the same
12 side limitation to require the power socket to be on the same one side of the
13 body as the first connector.

14 And Limitation 1[d] also provides the connection between the first
15 or just illumination fan and the second or the -- another illumination fan,
16 such that the first connector of the body is connected with the second
17 connector of the body of another illumination fan, to give power to the other
18 illumination fan for it to go into action. So Slide 6 just shows the grounds of
19 the petition. We're going to go through the disputes involved in these
20 grounds. Slide 7 just summarizes the various disputes, but we will just
21 directly go into the details of the disputes in the following slides.

22 So the first dispute we would like to address is the illumination
23 area. On Slide 8, we show that Claim 1 requires Limitation 1[b] which
24 recites that an illumination area at top of the body, which requires the
25 illumination area to be located at the top of body, not just visible from the
26 top of body. So on Slide 8, the citation should have said PO sur-reply, Paper

1 35. So there's a couple of corrections on that. So that's on Slide 8.

2 And so on Slide 9, we show the difference between the '336 Patent
3 and the primary prior art, Lai, in which the LEDs are actually not located at
4 the top of the fan body. Because in Lai, they are actually on a different
5 surface, which we call the inward-facing circular wall that is actually
6 colored in yellow in Lai on the left-hand side of Slide 9.

7 On the right-hand side, we annotated Figure 1 of the '336 Patent.
8 But we also drew in the equivalent locations of the Lai LEDs, which as Your
9 Honors can see, they are at a different location that is on the inner-facing
10 circular wall beneath the top of the body surrounding the rotating fan. And
11 in contrast, in a '336 Patent, the illumination area is actually on the top of the
12 body.

13 And so on that, I would like to make a clarification. So earlier,
14 Petitioner kept saying that our position was that top of the body is just the
15 topmost surface or something. But actually, we never said that. We simply
16 said that it's a top surface, but it doesn't have to be flat. The top surface,
17 there's no need for it to be even and therefore -- and as shown in
18 embodiment, there are some features on the top, but you know, it's
19 nonetheless the top surface. So that's Slide number 9. And again, the
20 citation should have been PO sur-reply, Paper 35.

21 JUDGE BALTATZIS: Mr. Chen, for the --

22 MR. CHEN: Yes.

23 JUDGE BALTATZIS: Does your interpretation require the
24 illumination area to be a structural feature, as opposed to what I believe
25 Petitioner's argument is that an area that you could see that the light is
26 visible?

1 MR. CHEN: It needs to be a structural feature located at the top.
2 And it's not just a visibility issue.

3 JUDGE BALTATZIS: And is there any support in the
4 specification for it to be a separate structural feature?

5 MR. CHEN: So as Your Honors can see on the right-hand side in
6 Figure 1, the figure does show the structural -- the structure of the
7 illumination area 3 that is located at the top of the fan body.

8 JUDGE BALTATZIS: So would that require reading Figure 1 into
9 the claims?

10 MR. CHEN: That does not require reading Figure 1 into the claim.
11 However, it does provide the context for the embodiment of that structure,
12 which is illumination area 3. It does not require a reading of that figure into
13 the claim.

14 So the Petitioner also tried to argue that moving the light LEDs to
15 the top will be obvious. So what's being shown on the screen is page 15 of
16 Patent Owner's sur-reply. And we just wanted to note that that is not the
17 correct standard. What have been obvious is a circular argument that is
18 insufficient. What is required is for the Petitioner to show that the POSITA
19 would have been motivated to actually move the LEDs to the top.

20 But they basically haven't done that. They just basically said that,
21 oh, you know, the POSITA could have done that because there's no -- as
22 argued on page 16 of Patent Owner's sur-reply, they just argued that there
23 are no physical limitations that prevent or discourage moving them to the top
24 surface. That is a "could have," that is not showing POSITA would have
25 moved the LEDs to the top of the fan body in Lai. And also, we argued that
26 because the Lai LED positions show that the purpose of Lai is to illuminate

1 the rotating fans. Therefore, there's no point -- and actually the POSITA
2 would not have been motivated to move the LEDs to the top, because then it
3 defeats the original purpose of Lai.

4 So now, we go into another limitation, what we call the same side
5 limitation. So this limitation is actually in Limitation 1[d], as in David. But
6 in order to reach this particular limitation, we need to also look at 1[c]. So
7 1[c] requires a power socket and a first connector on one side of the body.
8 But 1[d] uses 1[c]'s one side of the body as antecedent basis to require that
9 the power socket to be on the same one side of the body. So right now,
10 we're on Slide 10, and it is showing that the power socket and the first
11 connector are both on the same one side of the body that is colored in red.

12 So here, we are on Slide number 11. And I guess counsel from
13 -- for Petitioner mentioned, you know, this particular issue about whether the
14 power socket and the first connector are discussed in the petition to be on the
15 same side. So we would like to explain that the -- even though the petition
16 did map the single input 111 as both the power socket and the first
17 connector, but there are multiple ones of instances of that input 111.

18 So what happened is that it appeared that the petition ignored the
19 same side limitation altogether throughout the entire petition. Because
20 there's no place where this particular limitation and requirement that the
21 power socket and first connector to be on the same side of the illumination
22 fan body. There's simply no such discussion at all.

23 And the way the petition mapped Limitation 1[d] just -- is
24 basically just a symptom of the neglect of this particular limitation, which
25 shows that they actually map the power socket to one instance of the input
26 111 in the first fan. But they map the first connector in the second instance

1 of the input 111 on the second fan to show that they basically just ignored
2 that limitation. So that was what was just discussed was on Slide 11.

3 So now, we go into a different requirement on Slide 16. So on
4 Slide 16, Limitation 1[d] also recites that when the first connector of the
5 body of the illumination fan is connected with a second connector of a body
6 of another illumination fan, a fan and illumination area of the body of
7 another illumination fan are respectively driven into rotation and
8 illumination.

9 So on Slide 17, we explained that such language has a clear
10 implication that the power actually goes from the illumination fan, which is
11 the first illumination fan, to another illumination fan which is the second
12 one. So this is shown on Slide 17. But again, on Slide 16, we showed that
13 that's the result of the claim language when the first connector of the body of
14 the illumination frame is connected with the second connector of a body of
15 another illumination fan, the another illumination fan is driven into action.
16 So that shows the power flow direction.

17 And on Slide 18, we showed that the petition actually map it
18 backwards. Because, as admitted earlier by counsel for Petitioner, they
19 indeed mapped what they labeled as second LED fan 10 in Lai as the
20 purported illumination fan. So this is actually shown on Slide 18. And the
21 reason for that is because, as I mentioned, they actually map the first
22 connector belonging to that illumination fan to the single input 111 on the
23 second LED fan 10.

24 And therefore, given that the whole mapping is backward and
25 causing the illumination fan -- which is the first one, supposedly, in the
26 claim -- to be receiving power as opposed to being given power to another

1 fan. So that is backward.

2 JUDGE BALTATZIS: Mr. Chen?

3 MR. CHEN: Yes.

4 JUDGE BALTATZIS: Does that power flow require us to read a
5 method into these structural claims?

6 MR. CHEN: No. It does not require a method into the structural
7 claim. However, it does provide context as to how the combination of fans
8 operates. Meaning that the second or the -- another illumination fan is
9 driven into action when the first connector of the first illumination fan is
10 connected with the second illumination fan.

11 JUDGE BALTATZIS: To follow up on that -- I don't think the
12 claim recites a first and second fan. It recites a fan and another fan.

13 MR. CHEN: Yeah.

14 JUDGE BALTATZIS: Are you importing some sort of sequence
15 into the claim by labeling things first and second?

16 MR. CHEN: I'm not importing a sequence. However, the claim
17 language does say the illumination fan and another illumination fan. So
18 they're -- I guess it's more of a convenience when I try to present it. I'm not
19 importing a particular sequence. I'm just saying that there is an illumination
20 fan and there is another illumination fan. And the claim specifies that when
21 the first -- apologies, when the illumination fan's first connector is connected
22 with the second connector of another illumination fan, another illumination
23 fan's rotating fan and illumination area will be driven into action. So that's
24 what the claim language states. That's all I'm trying to do.

25 JUDGE BALTATZIS: And the last question -- is it not the same
26 fan that's in the series, the same structural fan that's simply oriented in a

1 different way? Again, putting this label on first and second; but at the end,
2 it's the same fan, just the way you orient it is what determines the first
3 connector connecting to the second connector.

4 MR. CHEN: The orientation, Your Honors, are correct. The
5 orientation does specify the structural kind of relative positions between the
6 two fans. But the claim language does require the first connector of the
7 illumination fan and the power socket of the illumination fan to be on the
8 same side. So that is actually making a distinction in terms of a structure
9 that is required and recited in the claim for the illumination fan and for
10 another illumination fan. Because there's no particular requirement about
11 power socket or first connector being on the same side for another
12 illumination fan. So that is making the difference.

13 JUDGE BALTATZIS: Thank you.

14 MR. CHEN: So now, on Slide 19, we're going into, again, the
15 same side limitation but for the referenced Tsuji. So this was already
16 discussed in the institution decision to have been preliminary found that
17 because the red side of Tsuji as shown on Slide 19 has the CNC, which is
18 purportedly the first connector, but the CNA or CNB, as shown in the
19 petition, they're mapped to the power socket, purportedly.

20 And in Tsuji, it is clear that they're on different -- at different
21 locations. Because in Tsuji, the power socket CNA and CNB are on the
22 front or on the rear, they're equivalently the '336 Patent's top and bottom.
23 And therefore, they're not on the same side -- same one side of the body as a
24 first connector, as required in Limitations 1[c] and 1[d]. And again, this is
25 just a symptom, again, that the petition simply ignore the same side
26 limitation altogether, and they never discuss that with respect to Tsuji either

1 in the petition.

2 So it seems that upon reading our papers, Patent Owner response,
3 they realized this deficiency. So they attempted to fix it for the first time in
4 their reply by changing their theory, which can be seen on Slide 20. So at
5 first, they map only the side surfaces as the size of the body. And now
6 they're trying to say, oh, this is, like, the left and right side. Left side in red
7 is a place, and the right side in blue is another place. And then they try to
8 cut it in the center of the fan body to say that's the right and the left in this
9 cutting orientation.

10 And then they try to apply that theory, as shown on Slide 21, such
11 that Tsuji's fan body is now cut in half. And then they're using this new
12 theory, which is belated and should be afforded no weight. But we will
13 actually explain -- oh, before I do that, I would like to mention that on Slide
14 21, it shows that they belatedly divided Tsuji's body -- fan body into two
15 halves. But as explained on Slide 22, their expert admitted during
16 deposition that he actually never provided that figure.

17 But now, we're going to explain on the merits that new theory is
18 wrong. So not just because they're belated, they should not be considered.
19 It's also wrong, first of all, because it will cause the top of body and another
20 side -- one side of the body and another side of body to overlap. As Your
21 Honors earlier pointed out, these are three separate locations, separately
22 recited under the case law -- as shown on Patent Owner's sur-reply, page 5,
23 separately recited claim elements are supposed to be separate. And so that is
24 one issue.

25 Another issue is that on Slide 23, we showed that the cutting in
26 halves, you know, it has like an arbitrary orientation. Because in their

1 argument, they're trying to say, oh, it's just left and right, you know, halves.
2 But you can also cut it, like, not east-west. You can also cut it, like, north-
3 south. And so in their brief, which is in their reply; as well as in Dr. Wolfe's
4 declaration, which is Exhibit 1031, in paragraph 15; and in their reply on
5 page 10, they both show that the red to be the left side, the blue to be the
6 right side.

7 But during deposition, as shown on Slide 24, Dr. Wolfe also said,
8 oh, in Figure 1, illumination area is not part of fan 2. It is to the left and to
9 the right of the fan 2, which shows that -- he also called the left and right, as
10 if you can cut the fan body, as shown on Slide 24 on the left-hand side,
11 where it is actually going to cause the first and second connectors to be on
12 the same side of the body while the power socket 4 to be on another side of
13 the body. And that is actually excluding the preferred embodiment from the
14 claim language, which is I believe the case law's language, which is rarely,
15 if ever, correct. And that is actually under case law Kaufman v. Microsoft,
16 34 F.4th 1360, 1372 Federal Circuit 2022, as shown on Slide 23.

17 So in summary, in terms of the size, the dispute on size, the issue is
18 that the two sides of a fan and the sides of the body, they're different.
19 Admittedly, by Dr. Wolfe, the two sides of the fans are not part of the fan,
20 and they are also not on the rotating fan. But the two sides of a body are on
21 the body and they're part of body, and therefore the two sides of the fan
22 should have a different meaning in its context. So that was discussed on
23 Slide 25.

24 So on Slide 26, we explained that moving on to the Huang
25 combination with Tsuji, it shows that for the Tsuji part that is for server
26 room maintenance of the fans, there's no reason for the POSITA to add the

1 fancy lighting such as Huang. Because in a server room, nobody, you know,
2 will go there. And the Huang fan, it's like whole body translucent, very
3 fancy, beautiful lighting. You add that in the server room, you add cost, you
4 add heat, you add a power consumption with basically no benefit, because
5 this is not the situation where a POSITA would have done that. So that is
6 discussed on Slide 26.

7 So moving on to Claim 4, Slide 27 just shows the claim language
8 in Claim 4. And Slide 28 shows how Claim 4 is intended to work.

9 Basically, you have two fans that will slide together with -- engaging block
10 on one illumination fan and also the groove on another one.

11 So now, we move on to Slide 30. Slide 30 shows that the
12 purported prior art cannot be combined with the primary reference. So Slide
13 30 shows that Echazarreta is actually combining fans in a vertical or, like,
14 you know, up and down direction, while the prior art is actually at a
15 horizontal direction. And therefore, it is not combinable. Similarly, for --

16 JUDGE BALTATZIS: Counsel -- Mr. Chen?

17 MR. CHEN: Yes.

18 JUDGE BALTATZIS: Before you move on, does obviousness
19 require that the structures be physically combinable for it to be obvious?

20 MR. CHEN: It needs to be combinable without undue
21 experimentation in order to find it obvious. Meaning that the POSITA, it
22 will need to be shown that the POSITA would have found this, would have
23 changed the orientation, and go through the trouble to do the combination,
24 which was not done in petition. But we're not arguing body incorporation
25 argument. That is not what we're arguing.

26 We're simply saying that if the primary reference, as shown on

1 Slide 30, to be modified, as Petitioner is proposing, it is actually going to
2 cause the primary function of the primary reference to be impeded because
3 the sliding of the blocks and the slots will actually cut the lines off. And
4 therefore, it will cause undue experimentation for the POSITA in order to
5 even make this work. That is the main point we're trying to convey.

6 JUDGE BALTATZIS: And is there anything in -- from your
7 expert that explains this undue experimentation?

8 MR. CHEN: Yes. So it is discussed in our Patent Owner
9 response, on -- at pages 52 to 55. Those pages actually cite the expert
10 declaration.

11 JUDGE BALTATZIS: Okay.

12 MR. CHEN: So similarly, for Claim 5, Slide 31 shows Claim 5's
13 claim language. And Slide 32 shows Claim 5's -- the embodiment
14 explaining Claim 5. So on Slide 33, we're showing that in the case of a
15 Claim 5, the prior art cited is actually doing the top and bottom connections
16 of the fan bodies both in Chou and in Liu. But in Claim 5, it is supposed to
17 combine the grooves and the engaging blocks on the sides of a body. So it is
18 a different orientation.

19 So similarly, this is not going to be combinable as shown on Slide
20 34 where in the case of a Chou, in order to do the Chou's sliding engaging
21 block, the POSITA will have to change the grooves to be the top -- to be on
22 the top and bottom of the Lai fan body in order to do that. But that is not
23 what the claim language in Claim 5 requires. Claim language in Claim 5
24 requires the grooves to be on the sides, not on the top and the bottom of the
25 fan body.

26 So Slide 34 shows the same thing will happen to Tsuji. In the case

1 of Tsuji, the petition didn't even try to say there are two grooves. They just
2 basically just show, you know, there's like one groove. But the claim
3 language in 5 does require the grooves to be on two sides, not just one. So
4 similarly, as shown on Slide 35, the Liu reference will cut off the line
5 connections in Lai. And then the connectors in Tsuji will be in the way of
6 the Liu engaging block, which will need to be inserted between every two
7 fans. So in either way, Liu is not combinable.

8 And again, there's this orientation issue. Because as shown on
9 Slide 36, the fans in Tsuji need to be connected, and the connectors need to
10 be insert into one -- into each other horizontally, but Liu is doing it
11 vertically. And that is incompatible. And the key point here is that -- so that
12 was what was discussed was on Slide 36.

13 And here, I'm showing Slide 82 of Petitioner's demonstratives.
14 And it shows that they -- Petitioner just said that POSITA would have been
15 capable of rotating. So this is, again, just showing "could have." This is not
16 showing "would have." Like, you know, the POSITA could have done this,
17 but it never said that the POSITA would have rotated that by 90 degrees.

18 So again, they argue that in their Petitioner's reply on page 30, you
19 know, POSITA would have fully capable of rotating it by 90 degrees. But
20 as we argued in Patent Owner's sur-replies on pages 31 through 33, the
21 requirement is not "could have." The requirement is would have.

22 JUDGE BALTATZIS: Mr. Chen, one question on Claim 5.

23 MR. CHEN: Mm-hm.

24 JUDGE BALTATZIS: You mentioned orientation.

25 MR. CHEN: Yes.

26 JUDGE BALTATZIS: Where do we get orientation from the

1 claim language?

2 MR. CHEN: The claim language requires the grooves to be
3 provided on two sides of the fan body. And then you also require the
4 engaging block to engage with one groove on one side of body and then
5 another groove on another side of body, as shown in Figures 4 and 5.

6 JUDGE BALTATZIS: But for this claim, the two sides that are
7 referred to in Claim 5, they don't have to be the same two sides that we were
8 looking at in Claim 1.

9 MR. CHEN: That is correct. They didn't use the side. They just
10 said two sides.

11 JUDGE BALTATZIS: So it could be any two sides?

12 MR. CHEN: It can be any two sides, yes. So now, we move on to
13 the motion to amend -- revised motion to amend. So in the revised motion
14 to amend, the -- we're on Slide 37, which summarizes the disputes in the
15 revised motion to amend. And Slide 38, we first talk about Limitation (B),
16 capital B, and it is actually supported and definite.

17 So 38, we pointed out that we added a limitation to require the
18 power sockets to receive power or to be supplied with power via the power
19 socket's electrical connection with the second connector. And in this
20 arrangement, as shown on Slide 39, the first illumination fan in the
21 arrangement, the three-fan arrangement, the yellow fan in the middle is the
22 first illumination fan. But it can receive power from a preceding
23 illumination fan's first connector as shown in arrangement in Figure 2, where
24 the connections between any two illumination fans is shown.

25 So this is actually explained in Exhibit 1001, which is the pattern,
26 and it's column 3, line 7 through 16. And this is actually also explained in

1 our revised motion to amend and what was just discussed was on Slide 39.

2 JUDGE BALTATZIS: Mr. Chen.

3 MR. CHEN: Yes.

4 JUDGE BALTATZIS: What is the purpose of the power socket
5 for that? At some point, is this connected to power these fans in a series?

6 MR. CHEN: I'm glad Your Honor has asked. So there are
7 different ways of supplying power to the set of different fans. So it can -- so
8 actually, let me just use -- okay. Let me use this figure. So in Figure 3,
9 there is actually -- you know, there is a power socket at the end of the series
10 of fans. Our expert also explained that there is actually a gap between every
11 two adjacent fans where you can actually insert a power cable.

12 But then on the other end in -- on Slide 40, the white illumination
13 fan, which we label as the preceding illumination fan, the power can be
14 supplied there. So the power socket -- the purpose of a power socket can be
15 that it is used to be supplied with power, but it can be supplied with power
16 through the opening. But it can also be supplied with power through the
17 back.

18 It's kind of like our outlets. The outlets are supplied with power
19 through the back; and in the front, you can get power from. So that is one
20 way. But obviously, we can also do it another way. But in any event, in the
21 revised substitute Claim 6 and 7, we claimed one of those different
22 arrangement which is that the power socket is actually supplied with power
23 through its connection -- electrical connection with a second connector.

24 So earlier, the Petitioner complained about the power socket not
25 present on the white fan. But we just wanted to point out in our motion, we
26 cited a particular location in the pattern, column 3, lines 4 through 16. And

1 in that section, the pattern -- it's a little small. Let me try to enlarge it. So it
2 says once the power socket 4 at a side of the body is supplied with power,
3 fan 2 and the body 1 can be driven into rotation and illumination.

4 This also teaches that the power socket 4 can be on any side. It
5 doesn't have to be only on the side of the -- where there's a first connector.
6 And I can show in, like, say for example, in Figure 4, as we recall, 6 actually
7 means the second connector. So Figure 4 actually shows a scenario where
8 the power socket 4 is actually on the side where there's a second connector.
9 So therefore, it is actually possible to do that.

10 And then in Figure 5, it also shows the same arrangement where
11 there is a second connector; but on that side, there is a power socket as well.
12 So that's different arrangements that are also taught in the patent.

13 JUDGE FENICK: Mr. Chen, this is Judge Fenick.

14 MR. CHEN: Yes.

15 JUDGE FENICK: The part of the specification that you just
16 pointed to that says a side of a body --

17 MR. CHEN: Yes.

18 JUDGE FENICK: -- doesn't that follow the paragraph before it
19 talks about the power socket and a first connector on one side of the body,
20 and the second connector is disposed on another side of the body? So you're
21 saying -- are you saying that the portion of the specification that you just
22 cited kind of expands on that or gives additional flexibility that was not in
23 that previous paragraph?

24 MR. CHEN: Yes, Your Honor. You're absolutely right. That is
25 actually what we're trying to convey, because it does not use the side. It
26 says a side. And therefore that suggests that -- actually, that teaches that it is

1 starting a new description of a side, so a power socket on a side.

2 And again, in Figures 4 and 5, it does show the possibility that a
3 power socket to be on the side where it's the second connector, labeled as 6,
4 to be on that side. Therefore, our position is that the specification does not
5 absolutely require the power socket to be only on the side where there is first
6 connector.

7 JUDGE FENICK: Okay. Thank you.

8 MR. CHEN: Yes, thank you.

9 JUDGE BALTATZIS: Mr. Chen --

10 MR. CHEN: Yes.

11 JUDGE BALTATZIS: -- we've taken you into your rebuttal time.
12 You're welcome to keep going, but just to give you the warning.

13 MR. CHEN: Oh, sure. Thank you, Your Honor. Okay. Let me
14 actually finish this. So on Slide 41, we put everything together. It shows
15 that Limitations (B) and (C) can occur at the same time. That was actually
16 an issue in the preliminary guidance that we believe is solved by adding the
17 limitations, saying that the power socket is supplied with power through its
18 electrical connection with the second connector, such that you put
19 everything together, both Limitations (B) and (C) can occur at the same
20 time. So that was discussed on Slide 41.

21 And Slide 42 just shows that Figure 1 provides the support for the
22 illumination area and very clearly -- and in terms of the -- so that is -- that
23 was on Slide 42. And then on Slide 43, it shows that Figure 1 provides the
24 support for the flat surface.

25 And on Slide 44, we wanted to mention that in Petitioner's
26 opposition to our motion, they failed to go through the substitute Claim 6

1 and 7, limitation-by-limitation, and that is failing the burden under 37 C.F.R.
2 § 42.104(b)(4). So that is discussed on Slide 44. And as also recognizing
3 the preliminary guidance, Slide 45, we showed that the first connector and
4 the power socket are required to be distinct and separable, structurally, and
5 that is not anywhere in the prior art.

6 On Slide 46, we're showing that in the case of a Tsuji, the
7 requirement that the power socket be supplied with power via the second
8 connector cannot be done in Tsuji because there is a -- there are a pair of
9 diodes that will prevent the current to flow from the purported second
10 connector, CND, to the purported power socket, CNA and CNB. And so,
11 that was on Slide 46.

12 On Slide 48, we show that under Petitioner's mapping, the input,
13 the single input 111 is actually giving power to the single output 112. The
14 single input 111 is mapped as a power socket and -- in part. And single
15 output 112 is mapped as the second connector. So the power cannot be
16 supplied for single input 111 via its electrical connection with the purported
17 second connector, which is the single output 112, because the direction of
18 power is in the opposite.

19 So that concludes our -- my primary presentation. Thank you.

20 JUDGE ULLAGADDI: Mr. Weber, I understand that I did not
21 start the clock on time for Patent Owner, and I'm going to restore your full
22 time.

23 MR. WEBER: Okay. Thank you, Your Honors. I'll try to be
24 brief. I don't think I'll need all 20 minutes because we covered some of my
25 rebuttal in my opening presentation. But I wanted to start off with
26 something that Patent Owner was arguing here about column 3 of the '336

1 Patent. And I think Your Honor rightfully pointed out the orientation of
2 power socket 4 is only described in the '336 Patent as being on the same side
3 as the first connector.

4 The fact that they use the indefinite article "A" doesn't change that
5 because the sentence begins -- column 3, line 4 -- with as such; therefore,
6 referring back to the previous discussion which specifically describes power
7 socket 4 as being on the same side as the first connector. This is also the
8 only thing that's depicted in the figures. There's simply no support for this
9 new position that I'm hearing that the patent can support an orientation in
10 which the power socket 4 is on their same side as the second connector 6.
11 That's not disclosed.

12 JUDGE FENICK: Sorry. Mr. Weber, can you address Figures 4
13 and 5 as --

14 MR. WEBER: Yes. So I would say that the way that the Patent
15 Owner has annotated the figures to support its revised Claims 6 and 7 would
16 indicate that the power, as specifically claimed, must come directly into the
17 second connector. And that's the main problem here, that that's not disclosed
18 or depicted. Though I can recognize that Claim 5 -- or excuse me, Figure 5
19 shows a connector 4 next to a connector 6.

20 What this also brings up is that Patent Owner, as previewed in my
21 opening presentation, argues that we have a backwards orientation in Lai
22 and that the power could not flow in the direction that we mapped. And
23 that's incorrect under how Lai describes these daisy-chained fans is
24 operating, that -- for instance, on Slide 39 depicted on here, this is Figure 3
25 from Lai, power source is on the left and will flow from that first fan 10 into
26 the second fan 10. That's described very, very clearly in Lai.

1 Also, their complaint that it would be inconsistent with the claim
2 language for the power to be supplied from the second connector of another
3 fan to that first connector of the claimed fan can't be indirect is contradicted
4 by their own expert's testimony and the claim language. So here I'm on
5 Slide 41 where we represent the PO's expert acknowledged during a cross-
6 examination that the claimed illumination fan, which they sometimes call
7 first illumination fan in the revised motion to amend, can source power
8 indirectly, including via another illumination fan.

9 There is no requirement in the claims that the power socket of the
10 illumination fan be connected to the power supply of another illumination
11 power's - illumination fan's power socket can be the one that is connected to
12 the power supply. So their allegation that somehow Lai does not teach
13 Claim 1 because of the way that the power flows is contradicted by their
14 expert and is not supported in the claim language.

15 I'll also point out that it is the way that they are alleging power
16 flows in their revised motion to amend in which power flows indirectly
17 -- here we're on Slide 86 - from a preceding or third illumination fan,
18 indirectly into the first illumination fan that's shaded blue, and then
19 subsequently into the second illumination fan that's shaded blue -- excuse
20 me, the first illumination fan that's shaded yellow, the second illumination
21 fan shaded blue.

22 I'd also like to address Patent Owner's contention that the petition
23 somehow ignored the same side limitation for Lai in Tsuji, and this is
24 incorrect. This was explained and depicted clearly at the -- in the petition,
25 on pages 58 through 63. Here I'm showing page 63 of the petition in which
26 we have explained that the input 111 is on a different side than the output

1 112.

2 And then in the daisy-chained orientation depicted in Figure 3, for
3 example, the first connector, boxed in blue of that middle fan, is connected
4 to the second connector of the preceding fan and has consistently shown
5 throughout the petition, though not limiting, the red and green are showing
6 different sides of the fan. So this is clearly depicted for Lai. And then for
7 Tsuji, we have that depicted, for instance, at page 34 of the petition in which
8 the same shading is used to indicate that the power sockets CNA or CNB are
9 on the same side, the right side shaded in red, as the first connector CNC.

10 The Board had a good question when it asked whether the Patent
11 Owner's position was trying to import a timing sequence into this claim.
12 And I think that they are, regardless the -- with respect to Lai, which I think
13 this argument is directed to. When those fans are daisy-chained, it is the
14 case that another illumination fan -- so for instance, the one -- let me show it
15 again so we can look at it.

16 Here we go, we're on Slide 33, that second -- another illumination
17 fan in the mapping, which would be that first one to the right of the power
18 source, will be powered for rotation and illumination when it is connected to
19 that middle fan, which is the claimed illumination fan. That is met, that's
20 what happens.

21 I'd like to now address the Patent Owner's position that Tsuji
22 doesn't show -- can connect power socket 4 -- or power socket on the same
23 side as the first connector. Again, that's based on the unduly limiting
24 construction of side. It was depicted in the petition. Again, this was not, as
25 explained in my opening presentation, a change in position. We clearly
26 stated in the petition that Tsuji met this limitation, recognizing that -- or

1 depicting those structures, the power socket and the first connector on the
2 right side in red and the said connector, CND, on the left side in green. The
3 shading just showing one side is not meant to be limiting, and it was the
4 -- Patent Owner then injected this issue into the proceeding to which we
5 responded in the reply.

6 On the issue of whether the construction or plain meaning of side
7 is arbitrary or presents a problem with respect to how a device is oriented,
8 this is a problem of the '336 Patent's making, but it's really the way that you
9 can chop it up either way. And when we're looking at the illumination area
10 of the '336 Patent -- so for instance, depicted on Slide 16 -- yes, you can
11 create a dividing line that travels roughly south to north, in which power
12 socket 4 and first connector 5 would be on different sides.

13 But a person of ordinary skill in the art looking at this would also
14 obviously understand that the other perpendicular east to west line would be
15 consistent with the claim language requiring the illumination area to be on
16 two sides of the fan. There'd be one side on the north, one side on the south,
17 and then that -- in that dividing line, power socket 4 and connector 5 would
18 be on the same side.

19 Okay. The Patent Owner in a couple areas has alleged that the
20 petition argues that something could have been done as opposed to
21 something would have been done. And that's not accurate. So for instance,
22 the -- for the illumination area on two sides of the fan at the top of the body,
23 with respect to Lai, we said a person of ordinary skill in the art would have
24 mounted LEDs on a different surface if that was a claim requirement. It's
25 not.

26 But if the Board found otherwise, that would have been obvious

1 because of Lai's expressed purpose of providing complex and expressed
2 lighting effects. And what that would mean is that putting them on the top
3 or pointing them towards the top, either way, would provide more expressive
4 lighting. A person of ordinary skill in the art would have been motivated to
5 do that.

6 It's also an obvious design choice of where to move these lighting
7 elements or these connectors, for that matter. That's kind of an overarching
8 theme here is that they're trying to raise these distinctions by slight
9 movements of components, which our experts explained -- it's not rebutted
10 -- is entirely trivial and is not a patentable thing in 2018 for computer fans or
11 really for anything else, but in this context, for computer fans.

12 So similarly, I heard the Patent Owner make similar arguments for
13 Claims 4 and 5. Let me go to this section that addresses this for Lai. Here,
14 again, it's a misstatement of the Petitioner's point that we're only saying a
15 person of ordinary skill in the art could have done this.

16 What we're saying is that the person of ordinary skill in the art
17 would have been motivated to use the engagement blocks and grooves in the
18 prior art of Echazaretta, Chou, and Liu, those concepts in its daisy-chain
19 arrangement to provide the benefits of additional alignment and security.
20 And so that's why the person of ordinary skill in the art would have been
21 motivated to do it. They would have done it.

22 It is not the requirement in the obviousness analysis that the exact
23 structures be imported into that combination. A person of ordinary skill in
24 the art, as our expert explained, was perfectly capable of making the trivial
25 adjustments of taking those engagement blocks and grooves from the prior
26 art and adapting it for its structure so as not to destroy the operability of that

1 device. It's a simple -- for instance, realignment of 90 degrees or a little bit
2 of spacing, this stuff is completely obvious, and that testimony is unrebutted.

3 I suppose the final point I'd like to make is on the revised motion
4 to amend. Patent Owner said that we didn't meet our burden by addressing
5 every single limitation in Claim 6 or 7. That's not accurate. The only way
6 we get to Claim 6 or 7 is if we have shown that Claim 1, 2, and 3 are
7 unpatentable in view of the prior art, and the only -- therefore, those
8 limitations are already addressed.

9 The only ones that they've alleged are not met in that prior art are
10 the ones that we did address in our opposition to the revised motion to
11 amend. So that argument misstates the record and is -- should be rejected.
12 So with that, that's my rebuttal. I'm happy to answer any further questions
13 from the Board.

14 JUDGE BALTATZIS: Thank you. Any questions?

15 JUDGE FENICK: Yes. I just wanted to return for a second to the
16 question of the design choice that you're arguing about, where the LEDs or
17 where the illumination would be. Is that an argument that you made in the
18 petition or somewhere in the papers? I'm trying to find it.

19 MR. WEBER: Yes. That was in the petition. So I believe on that
20 one, I was specifically referencing the placement of LEDs in Lai. And we
21 addressed that, for instance, on page 58 of the petition; for instance, saying if
22 it's found that Lai doesn't disclose illumination at the top of the body, it does.
23 As I've explained, their position is based on unduly narrow, limited
24 construction of illumination area. We explained why it would have been
25 obvious to move them around or point in different directions, such that that
26 actual structure would be on the very top of the fan.

1 JUDGE FENICK: Okay. I was just looking for the teaching of
2 Lai that you just talked about, about -- I can't remember -- making it more
3 expressive or something like that. And I wasn't seeing that.

4 MR. WEBER: I believe that would be subsumed within the
5 discussion here in citation to Dr. Wolfe's expert declaration, paragraph 115.

6 JUDGE FENICK: Okay. Thank you.

7 MR. WEBER: Okay. Thank you, Your Honors. I appreciate
8 your time.

9 JUDGE BALTATZIS: Thank you.

10 MR. WEBER: And yes, we rest on our papers now.

11 MR. CHEN: Your Honors, so since it was just discussed, I would
12 (INDISCERNIBLE) the argument by Petitioner that they argued, you know
13 -- argue obviousness about the moving lights, LEDs to the top. They
14 actually didn't argue that. All they said was that it would have been obvious.
15 But the case law is very clear, the actual support and argument is a POSITA
16 would have been motivated to make modification, not just it would have
17 been obvious.

18 Because as the case law shows that the -- let me see. What the
19 case law requires is that the POSITA would have made modification
20 -- would have been motivated to make modification, not just that it is -- it
21 would have been obvious, because that's a circular argument as shown in the
22 case law. And then it does need to -- it's not in this paper.

23 So the illumination area is not -- in Lai is not obvious to be moved
24 to the top because Petitioner fails to show that -- with any evidence to
25 support the argument that it would have been obvious. They only stated that
26 concludes -- in a conclusory manner, and they never actually provided

1 evidence to support that a POSITA would have made that change.

2 JUDGE BALTATZIS: Mr. Chen, what if the motivation to do it is
3 intrinsic to the Lai reference itself?

4 MR. CHEN: Oh, so the Lai reference actually does not do that.
5 Let me see. They mentioned that the Lai reference -- my apologies, I need
6 to find it. They mentioned that the Lai reference was talking about the
7 complexity of lighting. But as we argued in our brief, the Lai reference was
8 talking about complex lighting with respect to the control signals, definitely
9 not the complex lighting with respect to locations. And therefore, Lai does
10 not provide such motivation to make the modification.

11 So let me see if I can find the particular citation. It is actually
12 argued in our Patent Owner's sur-reply that we explained that the complex
13 lighting is definitely not about location. It's about control signals. And
14 therefore, Lai does not provide that motivation to make the modification. So
15 that is one point I wanted to make.

16 With respect to our revised motion to amend, it is not true that
17 there is any claim requirement that will require the illumination fan, the first
18 or the second one - actually, the first one to be directly powered by the
19 power supply. There's no such requirement.

20 Actually, as shown in Figure 2, it is very clear that the claimed first
21 illumination fan can be powered by a preceding illumination fan. That
22 preceding illumination then will provide power. But that preceding
23 illumination fan is not claimed. What is being claimed -- what is actually
24 being claimed is actually yellow fan in the middle, as shown.

25 JUDGE BALTATZIS: So Mr. Chen, in that scenario, does that
26 require a reverse flow of the electricity or the power to go from the second

1 connector to the first connector? My mistake. So it's the first connector, the
2 second fan, to the second connector of the first fan. But, going back to the
3 original purpose of the power socket, does that require the fans to be
4 capable of a reverse flow of power?

5 MR. CHEN: Well, with respect to Claim 1, it does allow either
6 way. The power flow can go either way. But in the substitute Claim 6, we
7 claim only one of those two directions, which is that the power can only be
8 supplied to the first illumination fan's power socket via the first illumination
9 fan's second connector that will receive power from a preceding illumination
10 fan.

11 JUDGE BALTATZIS: In that scenario, -- is there some other
12 limitation? Is it just a capability of the fan of accepting power from both
13 directions? Is there some other structural limitation that would prevent it
14 from doing so?

15 MR. CHEN: There is not a structural limitation that will prevent it
16 from doing so. However, that limitation -- that new limitations addresses the
17 issue that Limitations (B) and (C) can occur together. Because before, the
18 idea is that -- and as Petitioner argued incorrectly -- the power socket can
19 only receive power through its front opening.

20 But here, we have shown that because the power socket actually is
21 electrically connected with the second connector of the first illumination fan
22 and because the first illumination fan can receive power from the previous
23 illumination fan, and therefore power socket can be supplied with power via
24 the power socket's electrical connection with the first illumination fan's
25 second connector. So that is the whole point.

26 So Petitioner also argued about the side construction again. Our

1 position is that -- as shown in the institution decision, both on page 4 and
2 also on page 17, the Board's construction under plain and ordinary meaning
3 of side and top, there's no reason to deviate from that. The top and the two
4 sides, they are separate elements in the claim, and they can be easily
5 understood by a POSITA. And there's no reason to deviate from that
6 construction.

7 That will conclude my surrebuttal.

8 JUDGE BALTATZIS: Thank you.

9 MR. CHEN: Thank you.

10 JUDGE BALTATZIS: Any questions from the panel? Okay.

11 Well, thank you very much.

12 MR. CHEN: Thank you, Your Honors.

13 JUDGE BALTATZIS: This case is now submitted to the panel for
14 determination and preparation of the final written decision. We are
15 adjourned.

16 (Whereupon, the above-entitled matter went off the record at 11:05
17 a.m.)

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Patent 10,690,336 B1

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