

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BIOFRONTERA INC., BIOFRONTERA BIOSCIENCE GMBH,
BIOFRONTERA PHARMA GMBH, AND BIOFRONTERA AG,
Petitioner,

v.

SUN PHARMACEUTICAL INDUSTRIES, INC.,
Patent Owner

IPR2024-01312
Patent 11,697,028 B2

Record of Oral Hearing
Held: December 3, 2025

Before MITCHELL G. WEATHERLY, ZHENYU YANG, and MARY C.
HOFFMAN, *Administrative Patent Judges*.

APPEARANCES:

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The above-entitled matter came on for hearing on December 3, 2025, commencing at 1:32 p.m., via video teleconference.

P R O C E E D I N G S

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JUDGE HOFFMAN: Good afternoon, all. This is the hearing in IPR2024-01312, involving U.S. Patent Number 11,697,028. I am Judge HOFFMAN, with Judges Yang and Weatherly. I'd like to welcome both the Petitioner and the Patent Owner. Starting with appearances for both parties, who is arguing on behalf of Petitioner today?

MR. LANDMON: Good afternoon, Your Honor. Chad Landmon from Polsinelli. And with me arguing as well will be Kendall Gurule.

JUDGE HOFFMAN: I'm sorry, I didn't catch your last name.

MR. LANDMON: Landmon.

JUDGE HOFFMAN: Landmon, okay. Thank you, Mr. Landmon.

MR. LANDMON: Thank you.

JUDGE HOFFMAN: And who do we have for Patent Owner?

MR. HA: Hello, Your Honors. This is Yung-Hoon Ha, LEAP counsel. And also arguing with me will be Bridget Belcher under the LEAP program.

JUDGE HOFFMAN: Thank you, Mr. Ha. Again, welcome to the USPTO's Alexandria headquarters. A few housekeeping items before we begin. Recording of this hearing is prohibited. The court reporter will provide a transcript of the hearing that will become part of the record in the proceeding at a later date. To ensure that the transcript of this hearing is clear, we ask you to speak directly into the microphone when talking and to identify specific slide numbers, numbering in the figures, and any other pertinent identifying information when referring to the demonstratives.

1 We have allotted 60 minutes per side in our oral argument. We've
2 received Petitioner's request for Ms. Gurule. Am I saying that correctly?

3 MS. GURULE: Close enough. It's a difficult name.

4 JUDGE HOFFMAN: Okay, I'll try. And also, Patent Owner's
5 request for Ms. Belcher to participate in the oral hearing under the Legal
6 Experience and Advancement Program, also known as LEAP. As such, both
7 Petitioner and Patent Owner will receive an additional 15 minutes of
8 argument time during this hearing, bringing the total argument time to 75
9 minutes per side. We remind the parties that the LEAP practitioners must
10 have a meaningful and substantive opportunity to argue during today's
11 hearing.

12 Petitioner will open the argument and may reserve rebuttal time.
13 Patent Owner will then respond to Petitioner's arguments and may reserve
14 surrebuttal time. When you are arguing, please speak slowly. And if you
15 hear another voice, particularly one of the judges, please stop speaking so
16 that we do not talk over each other.

17 I will maintain a clock. Our hearing room has a timer that I will
18 set up for each party. With the requested time allotment, the light on the
19 clock changes to yellow when you're nearing the end of your time. When
20 the light is red, you have run out of time. With that, I'll ask counsel for
21 Petitioner and Patent Owner whether there are any other preliminary matters
22 you'd like to discuss before we go into arguments.

23 MR. LANDMON: Nothing from Petitioner, Your Honor.

24 MR. HA: Nothing from us either.

25 JUDGE HOFFMAN: All right, thank you very much.

26 JUDGE WEATHERLY: For the record, does either party have

1 other counsel here attending? And if so, who are they?

2 MR. LANDMON: We do, Your Honor. So with me behind me is
3 Corey Casey, James Murphy, Brian Larivee, and then in-house counsel for
4 Petitioner, Dan Hakansson.

5 JUDGE WEATHERLY: Thank you.

6 MR. HA: And with me is Tuhin Ganguly, as well as our corporate
7 representative director IP, Jennifer Dereka.

8 JUDGE WEATHERLY: Thanks very much.

9 JUDGE HOFFMAN: Mr. Landmon, do you wish to reserve any
10 rebuttal time?

11 MR. LANDMON: Yes, Your Honor. 15 minutes.

12 JUDGE HOFFMAN: Okay, we got there. And with that,
13 Petitioner, when you're ready, let me know and I'll start the clock.

14 MR. LANDMON: Your Honors, we do have paper copies of the
15 slides. Does anyone need them?

16 JUDGE WEATHERLY: We've all got electronic versions.

17 MR. LANDMON: I figured. Thank you.

18 JUDGE WEATHERLY: It would be helpful, though, to keep the
19 record as clear as possible. Just let us know which slide you're on --

20 MR. LANDMON: Understood.

21 JUDGE WEATHERLY: -- during the discussion. That makes the
22 transcript more useful for us.

23 MR. LANDMON: Sure.

24 JUDGE WEATHERLY: Thanks.

25 MR. LANDMON: That makes a lot of sense. May I proceed?

26 JUDGE HOFFMAN: You may.

1 MR. LANDMON: Thank you, Your Honors. So if we could turn
2 to Slide 2, just to set the stage of what I plan to talk about this afternoon. I'm
3 going to start by talking about the combination of Lundahl and Larsen, and
4 explain just really briefly why a POSITA would have been both motivated
5 and had a reasonable expectation of success. The bulk of my time I plan to
6 spend -- we plan to spend on the contested issues, which we have before you
7 up on the slide, on Slide 2. I'll discuss the majority of them. Ms. Gurule
8 will discuss the individually configurable limitation, and she'll also address
9 secondary considerations.

10 So if we could turn to Slide 3. As Your Honors are aware, the '028
11 Patent is directed to a system and method for treating PDT.

12 JUDGE WEATHERLY: We're having a feedback issue. Can you
13 get this mic on --

14 MR. LANDMON: Feedback, thank you. I was trying to be
15 discreet. Keep my mic on.

16 JUDGE WEATHERLY: Discreet is not my specialty. You'll all
17 know that very well by the end of this hearing.

18 MR. LANDMON: Is that better? Okay, great. Thank you, Your
19 Honors. And if we can turn to Slide 4, the '028 has five independent claims.
20 The IPR was instituted with respect to Claims 1, 2, 4 through 6, 16, 17, 19 to
21 21 of the '028 Patent. If we could turn to Slide 5, the problem for the Patent
22 Owner here is that the '028 Patent is merely an obvious modification of its
23 earlier, already expired PDT Patent, the '071 Patent of Lundahl.

24 And if we turn to Slide 6, the Lundahl Patent discloses a fixed U-
25 shaped device that uses fluorescent bulbs, and it disclosed that it did two
26 important things. One, it provided uniformity of illumination on a treatment

1 surface by bunching the light sources near the top and bottom of the panel
2 near the patient's forehead and chin. And two, it provided for the ability to
3 treat AK lesions around a patient's face by virtue of the U-shape. But if we
4 go to Slide 8, as we can see, the Lundahl device was useful for treating AK
5 lesions generally, but by 2015, it became readily apparent to practitioners,
6 and Dr. Ehrenreich sets this forth in his declaration, that there were
7 drawbacks.

8 First, with respect to the fixed U-shaped design, there were
9 drawbacks in treating both different-sized heads for patients, but also more
10 importantly, as he explains, different parts of the body. So the fixed U-
11 shape had difficulty when treating chest, back, and other parts of the body,
12 because he needed to keep a 2- to 4-inch distance between the light and the
13 treatment surface. So as recognized in the institution decision, the
14 inflexibility of the U-shape presented a clear and readily apparent known
15 problem that POSITAs would be motivated to fix.

16 But if we go to Slide 9, there was a second problem with the
17 device, and that was its use of fluorescent bulbs. Those had issues relating
18 to uniformity. They had issues relating to temperature issues that would
19 interrupt the uniformity. They were sensitive, basically, to temperature, and
20 the industry was moving away from fluorescents and towards LEDs at that
21 time. So the two problems of Lundahl that would motivate a --

22 JUDGE WEATHERLY: What do you mean by the industry?

23 MR. LANDMON: Well, by the industry, both the PDT industry,
24 generally, was moving away from fluorescents, and frankly, the entire world
25 by that time was moving away from fluorescents due to a bunch of different
26 issues, environmental and cost issues as well. But certainly, as we have here

1 in the record, Dr. Grove and Ehrenreich, or Dr. Grove in particular, explains
2 how the industry was moving away from them due to their finicky nature,
3 essentially.

4 JUDGE WEATHERLY: And by the industry -- when he refers to
5 the industry, he's talking about the PDT industry?

6 MR. LANDMON: He is, yes.

7 JUDGE WEATHERLY: Okay.

8 MR. LANDMON: Thank you, Your Honor.

9 JUDGE WEATHERLY: Thank you.

10 MR. LANDMON: If we turn to Slide 10, so to address the
11 inflexibility of the U-shape, it would have been obvious to a POSITA to
12 look to the art and to look to Larsen in particular. As we see, Larsen has a
13 five-panel design, flexible with hinges between to flex the panels. That
14 achieves the flexibility that a POSITA would have looked to solve from
15 Lundahl. It also uses LEDs, again, to address the issues of the fluorescent
16 bulbs that I just mentioned. For these reasons, it would have been natural
17 and obvious to modify Lundahl's PDT device to incorporate Larsen's
18 flexibility in the LED technology. And throughout our petition, we lay out
19 how the prior art discloses and renders obvious the various claim limitations.

20 As I mentioned before, and if we turn to Slide 13, the parties are
21 essentially disputing five issues, and I'll walk through those in turn. But as
22 you're probably aware, if we go to Slide 11, starting there, in the institution
23 stage, the panel recognized that the Petitioner was reasonably likely to
24 prevail on each of those issues. And if we go to Slide 12, also reasonably
25 likely to prevail on motivation and reasonable expectation.

26 But before I get to those five different issues, I did want to address

1 one other issue, and that's the International Trade Commission's initial
2 determination by the ALJ there. As you are aware, the ALJ determined that
3 the '028 Patent was not invalid for obvious. But I wanted to address a
4 couple of issues, and let's turn to Slide 14.

5 As we explained in our papers on November 14th, the law is clear,
6 the Board is not required to follow the initial determination. In fact, the
7 Supreme Court and the Federal Circuit have both recognized that Congress
8 established this system, the IPR system, with the recognition that there could
9 be inconsistent results between decisions by the Board and decisions by
10 courts and other tribunals. But perhaps more importantly, the initial
11 determination is filled with fundamental errors of law and fact.

12 We filed a petition for review with the Commission. That petition
13 is pending, but we are confident the Commission will grant it. And the
14 Commission will then issue and render a final decision. It's currently
15 scheduled for February 2nd, although the government shutdown may have
16 delayed that yet. We don't know yet whether it will or not.

17 JUDGE WEATHERLY: What, if anything, does the PTO director
18 say about what we are supposed to do with the ITC decision?

19 MR. LANDMON: Yeah, so as Your Honor is probably referring
20 to, the more recent guidance trying to get consistency between decisions.
21 But I think there are two things to keep in mind. One, obviously, courts, the
22 Supreme Court and Federal Circuit, have recognized that you aren't bound to
23 follow that and you may have inconsistent decisions. Two, this is an initial
24 determination. We are fully confident the Commission will come out
25 differently. And I think you can only give so much credence and weight to
26 the initial determination by the administrative law judge.

1 JUDGE WEATHERLY: You said February is when -- what's
2 scheduled to happen in the ITC in February again?

3 MR. LANDMON: Yeah, so currently the Commission will need
4 to render a final determination.

5 JUDGE WEATHERLY: Right.

6 MR. LANDMON: It's currently scheduled for February 2nd, but
7 they were actually closed for the duration of the government shutdown.
8 They have not yet issued any order in our case to say that date might be
9 pushed, so we're not sure if it will or not.

10 JUDGE WEATHERLY: Okay.

11 JUDGE YANG: Is the record before the ITC the same as it is
12 here?

13 MR. LANDMON: So they're not, Your Honor. And I think that's
14 an important thing. And they're not in some fundamental ways. And I'll
15 address just a couple of them really quickly, especially when you look at the
16 uniform illumination, which is kind of one of the key terms, one of the first
17 terms that's in dispute here. There are a couple of critical ways where the
18 record is not clear.

19 First, Dr. Grove submitted, as you know, a second declaration
20 here, a supplemental declaration. In it, he was able to address and respond
21 to issues raised by Dr. Jokerst and the Patent Owner relating to divergence
22 of light from LEDs. None of that evidence was before the ITC for
23 procedural reasons. That evidence did not get before the ITC Administrative
24 Law Judge. Secondly, in another key area, Dr. Jokerst, before in this
25 proceeding, submitted a declaration talking about various aspects of Lundahl
26 that she says were required for uniform illumination, things like reflectors

1 and such that I might get into more detail in a little bit.

2 Before the ITC, we didn't have the opportunity to depose her on
3 those issues, because those issues weren't clearly presented at the time.
4 They were obviously in her declaration here. We did depose her here. And
5 as we set forth in our papers, she made some critical admissions with respect
6 to those. She admitted that LEDs just shine light forward. They don't shine
7 light backwards like fluorescents, so you don't need a reflector.

8 She admitted that LEDs have a different electrical system. They're
9 not as finicky as fluorescent bulbs, so you wouldn't need the same electrical
10 system. She admitted that fluorescents are very sensitive to temperature and
11 have a specific cooling system in Lundahl. Again, you don't need those for
12 LEDs. So, the record here is different as well as, obviously, the legal
13 standard.

14 And I did want to just point out really quickly, on Slide 15, one of
15 the fundamental errors that the initial determination made. Now, this issue
16 is not even disputed before you. Patent Owner apparently didn't feel it was a
17 strong enough argument to bring before you, but it was disputed before the
18 ITC. And this is whether Larsen discloses a center panel that's configured to
19 face the treatment surface and also with panels around it that are angled with
20 respect to it.

21 So I don't want to state the obvious here, but we can see on the
22 screen that Larsen has five panels. Five panels means there's a center panel.
23 The panels are used --

24 JUDGE WEATHERLY: So if this issue isn't before us, why are
25 you putting it in front of us?

26 MR. LANDMON: Because I think it's emblematic of the errors in

1 the ALJ's decision.

2 JUDGE WEATHERLY: I shouldn't believe Judge Moore?

3 MR. LANDMON: I'm sorry?

4 JUDGE WEATHERLY: That I shouldn't believe Judge Moore's --

5 MR. LANDMON: Well, I think it's that you should question the
6 findings in his opinion, as we believe the Commission will -- the ITC, the
7 full ITC will, as they review our petition.

8 JUDGE WEATHERLY: All right. He's a former colleague, by
9 the way.

10 MR. LANDMON: I do understand that. I do understand that. So
11 why don't I turn to the uniform illumination disputed term? That's on Slide
12 16. We've got the term on that slide. Patent Owner has thrown out multiple
13 arguments relating to uniform illumination. But I wanted to first start by just
14 walking through quickly why Lundahl and Larsen render that claim
15 limitation obvious.

16 And let's go back, actually, to Slide 7. I skipped over that a little
17 bit in my introduction. One thing to keep in mind here, uniformity of light
18 for treating PDT is not new. In fact, in 1998, Lundahl discussed that. He
19 discussed that he achieved both -- well, he discussed generally the
20 importance of uniform illumination, and that his device achieved uniform
21 illumination within 70 percent.

22 And what Dr. Grove says is, looking at the prior art, a POSITA
23 would have had a reasonable expectation of success in achieving Lundahl's
24 uniformity when moving the LEDs. And he says this for three reasons. The
25 first of which he says, Lundahl teaches the light source distribution pattern
26 that's necessary for uniformity. And a POSITA would know how to

1 incorporate LEDs to do that as well.

2 And if we go to Slide 17, it's important to note here, because it is
3 disputed, that Lundahl does in fact provide a disclosure that states that the
4 light source spacing is key to providing the desired uniformity. I got it up on
5 the screen here; it's really the center callout there. Larsen talks about the
6 number of tubes used and the spacing between them being chosen to achieve
7 the desired uniformity.

8 But perhaps more importantly than that, if we go to Slide 18,
9 Lundahl also explains why that spacing, why the spacing and greater
10 intensity of light at top and bottom is so important. If we look at the bottom
11 callout here, he says it's important because it's necessary to compensate for
12 the fact that the output from a flat plane emitting light source drops near the
13 edges. So Lundahl teaches a POSITA, one, how to achieve uniformity, and
14 two, why it's important and why one would want to achieve that.

15 So if we go to Slide 19, Dr. Grove explains that a POSITA then
16 would have applied the teachings of Lundahl, the teachings that you should
17 have a greater intensity of light at the top and bottom, and use that in
18 combination with Larsen's five-panel device to group the lighting to have a
19 greater intensity at the top and bottom, which is the very factor that Lundahl
20 discloses was used, the spacing of light to achieve uniformity. And Dr.
21 Grove, this is an illustration from his declaration that he actually put
22 forward.

23 Now, the second reason Dr. Grove says there would be a
24 reasonable expectation of success is that the conversion from fluorescents to
25 LEDs was common knowledge and routine practice by 2015. He explains
26 this in his declaration. Dr. Jokerst admitted during her deposition that a

1 POSITA would know how to set up LED electronics prior to 2015. She says
2 that on page 40, lines 12 to 42 and 3.

3 And if we go to Slide 25, the '028 Patent itself confirms that this is
4 the case. And why do I say that? So the '028 Patent has disclosures about it
5 achieving uniformity. You're going to see Patent Owner put a Figure 8,
6 which is, it's actually tasked to demonstrate that it achieves uniformity that
7 we have here. But here's the key thing about it. What the '028 Patent
8 doesn't do, it doesn't provide any details on the dimensions for arranging
9 LEDs, how close or far apart they should be to achieve the claimed
10 uniformity. The only thing it actually does, it incorporates by reference the
11 Lundahl reference.

12 JUDGE WEATHERLY: And why? What's the significance of
13 that?

14 MR. LANDMON: Yeah, thank you. So we need to assume that
15 the claims of the '028 Patent are enabled to treat uniformity. They don't
16 disclose -- the '028 Patent doesn't disclose on its face the distances between
17 LEDs or even the arrangement of LEDs.

18 JUDGE WEATHERLY: And so, I'm guessing your argument is
19 that it is enabled, even though it doesn't say anything, because everybody
20 knows about that issue.

21 MR. LANDMON: Precisely, Your Honor.

22 JUDGE WEATHERLY: Okay.

23 MR. LANDMON: And they cite Lundahl. They actually
24 incorporate Lundahl by reference. And Lundahl, we know, has the teaching.

25 JUDGE WEATHERLY: In connection with fluorescent tubes.

26 MR. LANDMON: Correct. But it has the teaching about the

1 spacing of a light.

2 JUDGE WEATHERLY: Yeah.

3 MR. LANDMON: The other last interesting thing about the '028
4 Patent, while it claims uniformity without talking about spacing between
5 LEDs, it also says that you can achieve this uniformity using fluorescence.
6 But again, it doesn't provide any details about the spacing between LEDs or
7 the fluorescence. So again, the '028 Patent is assuming and enabled.

8 JUDGE WEATHERLY: Which claims, if any, require LEDs as
9 the light source? Are there any dependent claims that do that? My
10 understanding is none of the independent claims require LEDs, correct?

11 MR. LANDMON: Yeah. No, that's correct, Your Honor.

12 JUDGE WEATHERLY: So do any of the dependent claims? I
13 apologize for not knowing this answer off the top of my head.

14 MR. LANDMON: I mean, not the ones we're challenging.

15 JUDGE WEATHERLY: Okay. Are there -- I'm curious. Well, I
16 can figure out whether there are any unchallenged claims that do.

17 MR. LANDMON: And one of the terms -- if we can turn to Slide
18 21, there's a third reason Dr. Grove puts forth for a reasonable expectation of
19 success in achieving uniform illumination. And that's that a POSITA would
20 reasonably expect that uniformity would only be improved by switching
21 from fluorescence to LEDs. And we know this because Lundahl discloses
22 the problems with uniformity in fluorescence. And we've got it on the
23 screen here, Lundahl talking about the problems with fluorescence in
24 achieving uniformity. So if you remove these inconsistency issues with
25 fluorescence, Dr. Grove explains it would have been reasonable to expect a
26 greater uniformity with LEDs.

1 Now, I do want to address on uniformity just a couple of Sun's
2 arguments. If we turn to Slide 22. So, Sun has two primary arguments
3 against uniformity. First, it says that using LEDs would create gaps in
4 illumination, and then second, that Lundahl required a variety of these
5 different things in the device to lead to uniformity. But let's focus on the
6 first one, the LEDs and the gaps.

7 So if you turn to Slide 23, one thing to keep in mind here first,
8 when Patent Owner talks about gaps, and it talks about gaps between LEDs,
9 it talks about gaps between panels, Patent Owner is focused on the surface of
10 the light device. They are focused on the emitter, but the claims are focused
11 on the treatment surface, so uniformity along the treatment surface. But
12 Patent Owner goes further, and we see this on the top left here. Dr. Jokerst
13 makes an argument that LEDs basically have narrow divergence angles, and
14 we see she draws here the LEDs narrowly shining down light on a treatment
15 surface, and then she obviously, she's showing gaps.

16 But here's the problem with it, that's contrary to the evidence. If
17 you look to the right, there's an article, it's Exhibit 2013.

18 JUDGE WEATHERLY: So I have a problem with actually both
19 the experts' characterization of these LEDs. I mean, none of them -- both of
20 them seem simplistic in the sense, unless it's sort of a stylized kind of
21 representation that includes some sort of threshold for intensity. I mean, my
22 understanding of LEDs is that they do emit more light perpendicular to their
23 surface, more energy perpendicular to their surface than they do to an
24 extremely oblique angle, but they illuminate a 180-degree field.

25 So does the declaration testimony or any of the cross-examination
26 testimony -- in other words, I understand LED light emission to be more like

1 what's shown on the right-hand side of your slide here --

2 MR. LANDMON: Correct.

3 JUDGE WEATHERLY: -- where it's a kind of a smooth function
4 of intensity with a hotspot in the center. Does that matter? And are both
5 experts wrong in this sort of simplistic kind of cartoonish depiction, or is
6 that even important?

7 MR. LANDMON: So I guess I'd say I think it's important.

8 JUDGE WEATHERLY: And thank you for not objecting to my
9 compound question.

10 MR. LANDMON: Yeah, no, I think it's important. I think
11 obviously they're just representations. I think you were totally correct that
12 the Lambertian distribution shown on the right in Exhibit 2013 is what
13 happens with LEDs.

14 JUDGE WEATHERLY: But even that's a characterization, a kind
15 of a schematic characterization, right?

16 MR. LANDMON: Yeah. So what Dr. Grove testified to when
17 asked about this in deposition, he did testify to the fact that, as you stated,
18 there would be stronger energy emitted directly below the LED if it's shining
19 down or directly out, as you described. But that a POSITA would be able to
20 calculate all this, that a POSITA would know exactly -- I mean, two things.
21 A POSITA would know that his drawing is at least more accurate in
22 showing that there is a distribution of light and then its overlap between the
23 LEDs. But then a POSITA would be able to calculate to find, calculate to --

24 JUDGE WEATHERLY: Kind of a map of intensity, essentially.

25 MR. LANDMON: Yeah, and put the LEDs in the right space to
26 make sure that there was uniformity. You know, what he says is there's a

1 key. You need to know the distance to the treatment surface, and we know
2 from one to all that's 2 to 4 inches. And once you know that, you then need
3 to look at, you know, the LEDs. And he says, it'd be within the person of
4 ordinary skill in the art to adjust the spacing between the individual rows and
5 within the rows to provide that uniformity.

6 JUDGE WEATHERLY: Don't the prior art and the patent at issue
7 both -- they virtually overlap in the way that they discuss this issue of
8 uniformity, don't they? I mean, there at least is some overlap.

9 MR. LANDMON: In terms of the percentage --

10 JUDGE WEATHERLY: Right.

11 MR. LANDMON: Yeah, so Lundahl discloses that the goal was
12 60 percent. Lundahl discloses that due to his spacing, he achieved 70
13 percent in the patent here.

14 JUDGE WEATHERLY: And the patent at issue also says that 60
15 percent is the goal and that more is better.

16 MR. LANDMON: Correct, yes.

17 JUDGE WEATHERLY: Okay.

18 MR. LANDMON: Yeah. And the prior art, certainly in Lundahl,
19 would have motivated and directed a POSITA to achieve uniformity.

20 JUDGE WEATHERLY: Of at least 60 percent.

21 MR. LANDMON: Yes. So I briefly already mentioned the
22 fluorescent component argument that Patent Owner is making here. I don't
23 need to really belabor that. I do want to just quickly address. So they've got
24 four factors, they say, that Lundahl is using. They started with the U-shaped
25 fluorescent bulbs, as they say, being critical to achieve uniformity.

26 Obviously, and we can see on Slide 27, it's obvious to everyone, I think, that

1 the Larsen device can be shaped into a U. Certainly Dr. Jokerst doesn't
2 dispute that.

3 JUDGE WEATHERLY: What's the best text in Larsen to support
4 that contention?

5 MR. LANDMON: So as far as a line and column I can point you
6 to, Larsen does talk about how it is adjustable. And no one frankly is --

7 JUDGE WEATHERLY: Well, except that I think the language
8 that you focus on for adjustability seems to be talking about a different kind
9 of adjustability, like an adjustability in the driver circuit to control the light
10 output of the LEDs, not an adjustability like a physical configuration sort of
11 adjustability. Am I misunderstanding?

12 MR. LANDMON: Yeah. So there's two issues. One is there's an
13 issue on individually configurable that Ms. Gurule actually will be
14 addressing on the adjustability of, like you said, the configurability.

15 JUDGE WEATHERLY: How hard am I driving the LED.

16 MR. LANDMON: Correct.

17 JUDGE WEATHERLY: But then there's also this adjustability or
18 configurability about how do I physically position the panels.

19 MR. LANDMON: Yes.

20 JUDGE WEATHERLY: And I didn't see anything in Larsen that
21 talked about that specifically.

22 MR. LANDMON: Larsen does talk about the adjustability of its
23 panels. And I don't think anybody --

24 JUDGE WEATHERLY: Physically, the physical adjustability.

25 MR. LANDMON: Yeah, because it talks about being able to use it
26 for both small and large surfaces.

1 JUDGE WEATHERLY: Physical is the wrong word. The
2 positional adjustability is what I really mean to be saying.

3 MR. LANDMON: Yeah. And --

4 JUDGE WEATHERLY: The spatial arrangement of the panels.

5 MR. LANDMON: Right.

6 JUDGE WEATHERLY: Okay.

7 MR. LANDMON: And it talks about the hinges connecting the
8 panels. The hinges would allow the movement --

9 JUDGE WEATHERLY: Not very much.

10 MR. LANDMON: -- to run. And I'll get to that in a bit, but it does
11 talk about the hinges connecting the panels and the movability of the panels.
12 So why don't I turn to the higher intensity limitation? We want to turn over
13 to Slide 36. This has the limitation that a higher intensity of light is emitted
14 proximate the second edges compared to the intensity not proximate the
15 second edges.

16 We've already covered some of this ground. But if we go to Slide
17 37, Lundahl teaches that uniformity is important for PDT. And that varying
18 the lateral spacing, as I mentioned before, can improve that uniformity. And
19 I just wanted to walk through in the next few slides.

20 JUDGE WEATHERLY: When you say lateral spacing, do you
21 mean the spacing up and down as your altered Figure 2 shows?

22 MR. LANDMON: The spacing -- exactly, the spacing between the
23 light tubes --

24 JUDGE WEATHERLY: Okay. I know that Figure 2, as it appears
25 in the prior art, it would be correct to talk about that spacing as lateral in
26 terms of side to side. But that figure, as I understand it, is a rotated

1 representation of the light panel, correct?

2 MR. LANDMON: So, it's --

3 JUDGE WEATHERLY: That's why you make that adjustment in
4 your modified version on this slide.

5 MR. LANDMON: So it's rotated to show you what it would look
6 like when a patient is --

7 JUDGE WEATHERLY: Is sitting in front of it, yeah.

8 MR. LANDMON: Correct.

9 JUDGE WEATHERLY: So lateral doesn't seem to apply
10 anymore. I'm a big stickler for frames of reference, because oftentimes
11 parties talk past each other because they're talking from a different frame of
12 reference.

13 MR. LANDMON: Yeah. So I don't think we're talking past each
14 other. I might be using the wrong word. I think what the key is here is that
15 Lundahl discloses that there should be a higher intensity of light near the top
16 and bottom, near a patient's forehead and chin than there is in other places --

17 JUDGE WEATHERLY: Yeah.

18 MR. LANDMON: -- and that that's how he achieves -- well, that's
19 how he achieves uniformity. But this is talking about the approximate light
20 limitation, and that's how Lundahl discloses it. And if we actually go to the
21 next slide, we have a couple of slides to kind of walk through how this
22 would physically happen. Larsen on the left, Lundahl on the right.
23 Obviously, we've annotated these to show how a POSITA would go from
24 the Lundahl fixed U-shape into five panels. If we go to the next slide. So
25 this is now, as you mentioned, kind of rotating it. This is from the patient's
26 view when the patient's head is being treated.

1 At the top, we see the -- top and bottom, we see the lights, we see
2 the higher intensity of lights. And if we go to the next slide.

3 JUDGE WEATHERLY: I don't know if any of you have had the
4 pleasure of having one of these treatments, but it's quite an experience, I'll
5 tell you.

6 MR. LANDMON: Thankfully, I have not.

7 JUDGE WEATHERLY: Yes, you are thankful.

8 MR. LANDMON: Yes.

9 JUDGE WEATHERLY: Yes.

10 MR. LANDMON: And here, we're showing how there's a higher
11 intensity of light along the short edges once you divide that up. And if we
12 go to Slide 41, Dr. Grove explains this. So when you combine the teachings
13 of Lundahl and Larsen, utilize the light source distribution of Lundahl with
14 the LED panels in Larsen, it results in a higher intensity of light along the
15 second shorter edges, along the top and the bottom. Dr. Grove explains this.
16 The Board rightly agreed with this interpretation during the institution
17 decision.

18 And Dr. Jokerst also made some key admissions here. If we turn
19 to Slide 42, she admitted that the Lundahl device would have a higher
20 intensity of light near the forehead and the chin of a patient. And if we go to
21 Slide 43, she also admitted that if a POSITA divided up the U-shape of
22 Lundahl on the five panels, the short edges would be on the top and bottom
23 where the patient's forehead and chin is.

24 Now, one of the arguments Sun makes, and if we can turn to Slide
25 44. Sun argues that Lundahl's light sources have low output areas along the
26 edges. And therefore, they argue that Lundahl doesn't necessarily meet the

1 higher intensity near the edges where those areas are. What they're talking
2 about here are what's known as Faraday dark spaces. Kind of a lot of people
3 realize when you look at the fluorescent tubes, which you can even see
4 actually above my head, near the edges where the cathodes are, you can see
5 that they're not as bright. There's a dark area there.

6 The problem with this is LEDs don't have those dark spaces. If
7 you created a panel or multiple panels with LEDs across them, they're not
8 going to have those dark spaces at the edge. So they would continue to have
9 the higher intensity of light near the edges as well. And Patent Owner
10 grossly exaggerates those dark spaces of Lundahl.

11 If we turn to Slide 45, we have on the left, we have Patent Owner's
12 depiction there, where you see Patent Owner draws those red oval shapes
13 that, you know, come along the ears and come in front of the ears of a
14 patient. Well, problem with that is the disclosure in Lundahl to the right
15 says that the dark areas are effectively behind the patient's ears. And that's
16 obviously different than what's drawn and depicted there.

17 JUDGE WEATHERLY: And you just make the tubes long
18 enough.

19 MR. LANDMON: I'm sorry?

20 JUDGE WEATHERLY: You just make the tubes long enough so
21 the dark area isn't next to the patient.

22 MR. LANDMON: That is also something a POSITA would have
23 figured out. The problem also with their argument, if you go to the next
24 slide, is it's contrary to the testimony of their own expert, Dr. Heather
25 Roberts. She says that she uses Lundahl's fixed-shape device to treat chests
26 and backs of patients by turning them sideways within the device. If you

1 turn them sideways, essentially their chest or back would be right where
2 those ovals are drawn.

3 So if she's treating patients that way, obviously they have to keep
4 producing the intensity of light that's needed. I want to address one other of
5 Patent Owner's arguments --

6 JUDGE WEATHERLY: I don't love that argument, by the way.
7 And I don't know if you even need it. But I like to try to give people who
8 come in front of us some window into how the things you say strikes us.

9 MR. LANDMON: Yes.

10 JUDGE WEATHERLY: That strikes me as maybe not even
11 relevant. But are you trying to discredit her testimony essentially overall by
12 saying something like that?

13 MR. LANDMON: I guess I'm trying to say one of the experts is
14 right and one of the experts is wrong. If Dr. Roberts actually treats patients
15 that way, then there can't be these large, dark areas along that straight end of
16 the view.

17 JUDGE WEATHERLY: Except you just said that there are and
18 told me to look at the ceiling and notice them.

19 MR. LANDMON: No, no. So I didn't say they were large. I
20 mean, I --

21 JUDGE WEATHERLY: This is a boondoggle. Mostly, I'm
22 questioning you because -- to give you a sense of --

23 MR. LANDMON: Yeah, I appreciate the question --

24 JUDGE WEATHERLY: -- when to take a position on something
25 that matters and when to leave something that doesn't alone.

26 MR. LANDMON: I will leave that alone and move. To get to

1 your point, I wasn't saying there were large areas in the ceiling. They're
2 actually really small --

3 JUDGE WEATHERLY: No, I see that.

4 MR. LANDMON: -- which is my point. If we turn to Slide 47, so
5 Patent Owner also argues that Larsen's scan engine would move the light
6 sources as a way to place higher intensity of light, not along the short edges,
7 but along the long edges. But here's the problem with this. This is
8 completely made up by Patent Owner and Dr. Jokerst. If you look to the left
9 there, the arrows pointing up and down in the whole schematic in the
10 bottom, those were added by Dr. Jokerst and Patent Owner here. Larsen
11 doesn't disclose that. This is simply a red herring argument.

12 Dr. Jokerst actually admits, when I asked her during her
13 deposition, that there is nothing in Larsen that says that the scan engine
14 moves the light sources up and down or whether it moves them side to side.
15 She admits there's nothing about the pattern of movement of the scan engine.
16 There's nothing about the range of movement, the rate of movement, or even
17 the time points. So again, this is just something that Patent Owner has come
18 up with to try and undermine our arguments about the higher intensity of
19 light, and it should be rejected by this Board.

20 So turning to the hinges limitation, if we could turn to Slide 52.
21 There are two basically types of hinges limitations. The first one is five
22 panels connected by a hinge structure on inner side surfaces of adjacent
23 panels. The second one just says, five panels connected by hinge structures.
24 That's Claim 16. I note that because Patent Owner does not seem to contest
25 it. The prior art in Larsen discloses the hinge structure limitation of Claim
26 16, that there's five panels connected by hinge structures.

1 But turning more broadly to the hinges limitation and the broader
2 one, if we want to look at that, I guess the narrow one actually. But if we
3 want to look to Slide 53, Larsen here teaches hinges respectively connecting
4 one edge with the other. We see that in the top there. Frankly, this
5 disclosure is clear on its face that the hinges are located on inner side
6 surfaces between the panels, given that one edge is connected with the other.
7 What you don't say is Larsen saying --

8 JUDGE WEATHERLY: Wait, wait. Say that again.

9 MR. LANDMON: Yeah. This disclosure, we believe is
10 demonstrating, is a disclosure of the hinges being on inner side surface
11 because it says the hinges are respectively connecting one edge with the
12 other. So the hinges are connecting one edge with the other. It does not say
13 hinges on the bottom of the panels.

14 JUDGE WEATHERLY: That's unpacking a lot out of those. How
15 many words is that, eight? Yeah, so I agree with you.

16 MR. LANDMON: Okay. I do believe it's a straightforward
17 reading, but maybe we can get to a couple other issues here. You know,
18 Patent Owner looks over to the figure of Larsen, as we know, and Patent
19 Owner points to number 10 as being in the bottom of the figures. But here's
20 what's key here, and no one really disputes: There's a typo in Larsen. We
21 see the top callout. It says, hinges 10, respectively connecting one edge with
22 the other. On the bottom, it says Figure 1 has the invented device 10.

23 So everyone recognizes that Larsen uses 10 twice. It's more than
24 twice, but he uses it with respect to two different things. There needs to be a
25 -- so it's recognized there's a typo. And really the question is, how would a
26 POSITA interpret that typo, and what would a POSITA take from that? Dr.

1 Grove says that a POSITA would reasonably understand Larsen as
2 disclosing hinges between the panels, as indicated by number 20 here. And
3 if we look on slide --

4 JUDGE WEATHERLY: Is that what 20 indicates, hinges between
5 the panels?

6 MR. LANDMON: That's what Dr. Grove believes, and that's what
7 the patent examiner --

8 JUDGE WEATHERLY: By between, help me understand what
9 you mean by between. I mean, that's a kind of very, very rough drawing,
10 and I think Larsen, frankly, isn't paying very much attention to hinges,
11 because hinges are well-known. A lot of different kinds of hinges are well-
12 known. But that almost looks like panels that overlap each other on the top
13 and bottom edges of that assembly with, like, a pin in them. I'm guessing,
14 just like all of the experts are guessing, about what that is. Is it your position
15 that Larsen clearly or indisputably describes hinges that are actually
16 physically located on the, like, the opposing edges of those panels? Like in
17 the gap between the panels?

18 MR. LANDMON: So, to your broader point, it's obvious that
19 there are only a few places to put hinges. And Dr. Grove takes the position,
20 when looking at this, that that's how a POSITA would understand it. The
21 POSITA would understand that that's what 20 refers to. Also, the patent
22 examiner of the '028 Patent took that same --

23 JUDGE WEATHERLY: I mean, I know the claim requires that
24 the hinges be on the inner side surfaces, which is these surfaces that are
25 between the panels. I don't think that's what Larsen shows directly.

26 MR. LANDMON: Sure.

1 JUDGE WEATHERLY: Whether a person of skill looking at it
2 would say, yeah, hinges, hinges, hinges, hinges. I think you sort of say that
3 in your reply, don't you?

4 MR. LANDMON: Yeah. I mean, actually we say that in a number
5 of places, even in our petition. I mean, I do think it's obvious there are a few
6 places you can put the hinges on.

7 JUDGE WEATHERLY: And different kinds of hinges that you
8 can use.

9 MR. LANDMON: Yeah. You can put it between the panels, you
10 can put it on the top and bottom, you can put them in the back. You know,
11 picking one of three is not inventive. I think courts have been very clear
12 about that when there are only a few options. But I also think the patent
13 examiner here, if you go to Slide 54 --

14 JUDGE WEATHERLY: But other than the location physically of
15 the hinges, the claim doesn't really say anything at all about what kind of
16 hinges. None of the claims say anything at all about what kind of hinges,
17 correct?

18 MR. LANDMON: That's right.

19 JUDGE WEATHERLY: Just that they be on the inner side
20 surfaces of panels.

21 MR. LANDMON: That's correct, Your Honor.

22 JUDGE WEATHERLY: Okay.

23 MR. LANDMON: And the patent examiner here in a related
24 application, same disclosures, came to the conclusion that there was a typo.
25 That Larsen does disclose hinges on inner side surfaces and that Larsen
26 referred them as 20. So I think it's not just Dr. Grove as a POSITA. It's not

1 just us as the Petitioners. It was also the patent examiner.

2 Obviously, Dr. Grove explains that would be the most logical
3 location as well, if you go to Slide 55. You know, as you noted, for
4 generations, that's where people have put hinges. So, you know, he says it'd
5 be the most obvious place. And as I mentioned, just picking one of three
6 certainly is not inventive stuff. It's not inventive.

7 JUDGE HOFFMAN: What do you say in response to Patent
8 Owner's expert who said that a POSITA would be discouraged from putting
9 them on inner side surfaces?

10 MR. LANDMON: Yeah. So, you know, us and Dr. Grove
11 disagree with that. You know, one, it's the most logical place. Two, the
12 basis they say that is because of gaps between panels. But as you noted, the
13 patent doesn't say anything about the type of hinge you use. So you can use
14 the most narrow hinge. Obviously, hinges --

15 JUDGE WEATHERLY: Or whether gaps are excluded.

16 MR. LANDMON: Yeah. Well, gaps certainly aren't excluded as
17 long as you continue to have the uniformity of light and the continuous
18 illumination. So, Dr. Grove takes the position, we take the position that it
19 would be within the scale of the POSITA to both, you know, choose the
20 right hinge, also choose the right configuration of the edges of your panels.
21 I mean, there's nothing here either about what the edges of panels need to
22 look like. So can you embed a hinge within a panel to narrow the gap to
23 continue to do uniformity and continuous illumination? That's our point.
24 That's what Dr. Grove says.

25 JUDGE HOFFMAN: Thank you.

26 JUDGE WEATHERLY: Is there anything important about the

1 way the Claims actually -- the words that the Claims actually use describing
2 these hinges as hinged structures?

3 MR. LANDMON: I don't believe so, Your Honor. Just that it --

4 JUDGE WEATHERLY: And I apologize for some of the
5 questions I'm asking. All three of us are actually somewhat new to the case.
6 You've probably recognized that the original panel members aren't on the
7 case any longer.

8 MR. LANDMON: Yeah.

9 JUDGE WEATHERLY: So I apologize for asking. I'm not afraid
10 of appearing to be wrong.

11 MR. LANDMON: There's been no dispute between the parties of
12 giving any special meaning to hinge structures.

13 JUDGE WEATHERLY: Okay, all right. Everybody's been
14 arguing it as if it just says hinges.

15 MR. LANDMON: Correct, Your Honor.

16 JUDGE WEATHERLY: Okay. Patent Owner will correct you if
17 necessary.

18 MR. LANDMON: Yes. So just very briefly in my next few
19 minutes, I just want to hit the last contested issue that I'm going to deal with
20 and then Ms. Gurule will come up to deal with individually configurable and
21 secondary considerations. That's the continuous illumination claim term.
22 And if we can turn to Slide 65, we see that the '028 Patent recites, five
23 panels connected by hinged structures to allow continuous illumination
24 across the five panels.

25 And if we turn to Slide 66, Larsen discloses five panels connected
26 by hinges and Patent Owner doesn't appear to dispute this. Patent Owner's

1 dispute is simply whether Larsen's hinges allow continuous illumination
2 across the five panels. But Larsen discloses this, because what Larsen says
3 is it's adjustable. It's adjustable to treat different areas, including large areas
4 such as the human back. And it discloses that it has even and gap-free
5 radiation. So Larsen discloses that even when its panels are extended to
6 treat a back or, you know, could be a chest, it's a back here, that there is
7 continuous illumination with its device.

8 Now, Patent Owner tries to rely, if we go to Slide 67, on Dr.
9 Bretschneider's declaration. As you may know, Dr. Bretschneider submitted
10 a declaration in a different IPR proceeding. They quote him as saying there
11 are lower irradiance regions at the junction of two of Larsen's panels. We've
12 got their statement up there. But here's the problem, they take that out of
13 context. What Dr. Bretschneider fully says, if you can see his full quote
14 there, is that Larsen's applicators are designed to provide an even and gap-
15 free radiation. So Dr. Bretschneider doesn't undermine the concept that
16 Larsen teaches the continuous illumination.

17 And as I mentioned before, certainly a POSITA is aware of
18 divergence angles, the Lambertian distribution of LEDs, and a POSITA
19 would have been able to make those changes and position the LEDs as I
20 talked about before.

21 JUDGE HOFFMAN: Question.

22 MR. LANDMON: Yes.

23 JUDGE HOFFMAN: Patent Owner says that a POSITA would
24 understand that those gaps would provide areas, regions of lower irradiance,
25 and that is why there's no continuous illumination. So help me understand,
26 what exactly is continuous illumination? Would lower irradiance regions

1 not be included in illumination -- continuous illumination?

2 MR. LANDMON: It would still be included within continuous
3 illumination. It is not the same, at least I don't believe the party has taken
4 that position. We certainly haven't. It is not the same as uniform
5 illumination. It just means it needs to be continuously illuminated. So even
6 if there's an area of lower radiance, as long as that area is still irradiated by
7 the light, it's our position that that claim term is met by the prior art.

8 JUDGE HOFFMAN: Thank you.

9 MR. LANDMON: So unless you have any other questions about
10 those terms, I will let Ms. Gurule address the last term in secondary
11 considerations.

12 MS. GURULE: So good afternoon, Your Honors. It's Kendall
13 Gurule for Petitioner. I'll plan to take us through two issues today. First,
14 what we've been calling the individually configurable claim limitation,
15 followed by a brief mention of secondary considerations as time permits.
16 Turning the first of those issues into Slide 59 here, Independent Claims 16
17 and 21 in the '028 Patent recite, wherein the five panels are individually
18 configurable to control illumination from each of the five panels.

19 Now, Larsen teaches this limitation and has three key disclosures
20 on this issue. So if we move over to Slide 60 here, we can see the first of
21 those where Larsen discloses that it has a control mechanism 16 connected
22 to each of its panels, such that the invented device is adjustable within a
23 relatively large range with reference to duration, amplitude, and frequency
24 of certain current to its light sources.

25 And flipping down to Slide 63, we can see the second of Larsen's
26 key disclosures on this issue, where Larsen talks about doing feedback

1 control of the light emission from its device based on input from sensors to
2 those on each of the five panels. So taking these two things in combination,
3 first, that radiation is adjustable by a controller, and second, that the device
4 is doing feedback control of radiation using sensors placed on individual
5 panels, these would normally suggest to a POSITA that what Larsen's
6 teaching here is control of light emission at a panel-by-panel level, or at an
7 individual panel level.

8 Dr. Groves opined on this in paragraphs 229-231 of his initial
9 declaration in this case, Exhibit 1015. Now, Patent Owner here argues that
10 Larsen's disclosure can only be interpreted in a very limited fashion, and that
11 is specifically that Larsen's disclosure can only be interpreted as disclosing
12 one single controller that is only operable to do one thing, and that is adjust
13 the entire light output of the device at one time. So essentially, one
14 controller that's operating like an on-off switch, switching the whole device
15 on or the whole device off.

16 But the issue here is that both of those assumptions are incorrect.
17 Initially, although Larsen does refer to its controller in the singular, as we all
18 know here in the patent, part of the singular form encompasses both the
19 singular meaning and the plural meaning, so Larsen's disclosure is
20 necessarily just limited to the one controller. However, even if Larsen did
21 only disclose one controller, a single controller could do more than just a
22 simple on-off switch can.

23 JUDGE WEATHERLY: When you say controller, and since you
24 brought up the singular, Larsen talks about control mechanism 16. Is that
25 the singular, quote-unquote singular, that you're referring to?

26 MS. GURULE: Yes, Larsen talks about a controller or a control

1 mechanism and refers to it as element number 16.

2 JUDGE WEATHERLY: And then controls later. Okay.

3 MS. GURULE: Mm-hm. And so turning over to Slide 61, there's
4 an excerpt from an article here, a 2008 article by Bourget that Dr. Jokerst
5 actually cited, which states what was common knowledge for a POSITA at
6 the time, and that's that LED control systems allowed a brightness of
7 individual LEDs to be set. So that illustrates that a POSITA would have
8 understood that a controller, an LED controller, can do a more granular level
9 of control than flipping an entire device on or off.

10 And while that background information is helpful, if we want some
11 more clarity as to what Larsen's controller can do, we actually need to look
12 within Larsen itself. As you can see up on the slide here, Larsen's claim five
13 is clear that the light sources are individually selected to switch on or off.
14 So via that disclosure, Larsen teaches illuminating or darkening individual
15 light sources on LED panels, which would necessarily change or configure
16 the light intensity emitted from that panel. Now, similarly here --

17 JUDGE WEATHERLY: So the Claim, in your view, doesn't
18 require any sort of granularity, any particular granularity in the adjustability
19 or configurability of illumination? Just on and off, turning individual LEDs
20 on and off is configurable enough to meet the claim limitation?

21 MS. GURULE: So the claim limitation of the '028 Patent, I think,
22 refers to illumination from panels.

23 JUDGE WEATHERLY: Yes.

24 MS. GURULE: And so if you have panels with multiple LEDs
25 and multiple light sources on the panels.

26 JUDGE WEATHERLY: Like Larsen does have.

1 MS. GURULE: Like Larsen does have.

2 JUDGE WEATHERLY: Right.

3 MS. GURULE: And you're able to turn off individual light
4 sources among that multi-LED or multi-light source array within the panel,
5 that would alter the illumination from that panel.

6 JUDGE WEATHERLY: It would alter it.

7 MS. GURULE: Yeah.

8 JUDGE WEATHERLY: And my question is whether any type of
9 alteration is sufficient to meet the limitation. And I think your argument is
10 that, yes, that's --

11 MS. GURULE: Our understanding is that, yes, I don't think there's
12 been any argument by either of the parties that some particular level of
13 alteration --

14 JUDGE WEATHERLY: Well, separate and apart from whether
15 there's been an argument, I'm asking you, what does the claim limitation
16 mean?

17 MS. GURULE: The claim limitation doesn't require any particular
18 level of alteration.

19 JUDGE WEATHERLY: So just turning one LED on a panel off is
20 enough change in illumination to constitute a configurable control of the
21 illumination?

22 MS. GURULE: It should be because the claim doesn't require
23 anything more narrow than just --

24 JUDGE WEATHERLY: Should be?

25 MS. GURULE: It is, because the claim limitation doesn't require
26 anything more narrow or more granular than that.

1 JUDGE WEATHERLY: Okay, that's what I'm asking. Thank
2 you.

3 JUDGE HOFFMAN: Claim 5, which you mentioned, is talking
4 about the light sources being individually selected, switching on or off, what
5 is your response to Patent Owner's argument that that is in reference to
6 activating either the semiconductor diodes or the laser diodes across all the
7 panels, not individually?

8 MS. GURULE: Sure. So there's sort of two parts to Patent
9 Owner's argument there. The first part of it is with reference to Claim 1. As
10 you seem to be aware, Claim 5 depends on Claim 1. And so Patent Owner
11 has argued that because Claim 1 recites the light sources consist of at least
12 one semiconductor diode and or at least one laser diode, then Claim 5 could
13 only refer to switching between the two. However, if you look at the Claim
14 1 closely, I don't think that's supported.

15 JUDGE WEATHERLY: I agree.

16 MS. GURULE: Yeah. The Claim 1 recites and or, which means
17 that Claim 1 would include essentially three types of device.

18 JUDGE WEATHERLY: Right. Both, one or the other.

19 MS. GURULE: Right. One or the other. And if only one or the
20 other light source is included, then it would make sense that Claim 5 would
21 mean switching between the two light source types. I think that's further
22 supported by the fact that Claim 5 doesn't further limit that and or language
23 in Claim 1. So Claim 5 isn't saying wherein the light sources consist of the
24 semiconductor diode and the laser diode.

25 JUDGE WEATHERLY: Right. Or wherein the semiconductor
26 diode or the laser diode can be individually selected. Something like that.

1 MS. GURULE: Right.

2 JUDGE WEATHERLY: Right, I agree with you.

3 MS. GURULE: Yeah. And so, just to fully address the previous
4 question, Patent Owner's argument also encompassed paragraph 74 of
5 Larsen. Paragraph 74 of Larsen discusses a switch select system and the
6 language there is very similar. It says a switch select system for operating
7 different types of semiconductor diodes 17 and or with laser diodes.

8 And so, two points with respect to that. First of all, there's nothing
9 in paragraph 74 that limits the switch select system to only switching
10 between the two light source types for a similar reason that that and or
11 language means the switch select system could be used and presumably
12 would be operable in a device just for the semiconductor diodes. And then
13 just moving to Claim 5 itself again, there's nothing in Claim 5 that limits
14 Claim 5 to only the disclosure in paragraph 74. For instance, Claim 5
15 doesn't recite a switch select system, so there's nothing in Claim 5 that would
16 mean that it's completely limited to the disclosure in paragraph 74.

17 So I think our conclusion here is that basically the easiest reading
18 and what makes the most sense is just simply read Claim 5 to mean what it
19 says, which is that the light sources are individually selected and switch on
20 and off, which as we discussed earlier, would allow for a level of control
21 down to the individual LED, which would include panel level control, which
22 would read on the individually configurable claim limitation. Unless Your
23 Honors have any questions, I'll move over to a brief mention of secondary
24 considerations.

25 JUDGE HOFFMAN: Thank you.

26 MS. GURULE: So as Your Honors may notice, just to start out,

1 we don't have any slides on this issue. We'd initially intended to rely chiefly
2 on our briefing for this issue, and I think we'll continue to do that, but after
3 the LEAP request was approved, decided to make a brief mention here, and
4 so we'll just give a brief overview. So, as we've been discussing for all the
5 reasons in our papers and as we've discussed here, the claims of the '028
6 Patent are obvious, so they're a combination of Lundahl and Larsen.

7 Patent Owner has sort of made a superficial attempt here to argue
8 secondary considerations, but really hasn't done enough with respect to
9 nexus in particular to save it from the obviousness conclusion. As a brief
10 summary, Patent Owner's secondary considerations arguments are based on
11 alleged commercial success and industry praise of two devices, primarily the
12 RhodoLED XL, which is Petitioner's device, and more tangentially, the
13 BLU-U 4170E, which is Patent Owner's device.

14 But regardless of the device they're relying on, it's Patent Owner's
15 burden to establish nexus here, and they just haven't done enough to carry
16 that burden. To briefly mention the BLU-U 4170E, Patent Owner's entire
17 discussion of that device is limited to just a single sentence in its response.
18 In that sentence, Patent Owner asserts the BLU-U 4170E embodies the '028
19 Patent, but doesn't make any attempt to provide any analysis in support of
20 that assertion beyond that single sentence. Accordingly, Patent Owner has
21 fail to carry its burden with respect to its arguments about the device.

22 And arguments with respect to the RhodoLED XL are similar. The
23 bulk of Patent Owner's argument on nexus with respect to RhodoLED XL is,
24 in its response, is just a single paragraph. It incorporated by reference 50
25 paragraphs of expert declaration without any analysis whatsoever, which
26 isn't proper under 37 CFR 42.6(a)(3), which prohibits argumentation by

1 incorporation by reference.

2 Just to touch briefly on the remainder of Patent Owner's arguments
3 there, they rely heavily on features that were well known in the art prior to
4 the '028 Patent, for instance, uniformity and then flexibility provided by five
5 panels which, as we've discussed, although there's debate over how these
6 would be combined, there's really no debate that Lundahl disclosed
7 uniformity in 1998 and Larsen disclosed a five-panel device in 2005.

8 JUDGE WEATHERLY: I'm not sure I know why your mic is
9 cutting on and off --

10 MS. GURULE: Yeah, I'm sorry. I don't know why I did.

11 JUDGE WEATHERLY: I didn't know if you were -- it's a touch-
12 sensitive switch on the base. I don't know if you're touching it inadvertently
13 or not. (CROSSTALK) But the green light is on when it's on.

14 MS. GURULE: Okay. Thank you.

15 JUDGE WEATHERLY: Sure.

16 MS. GURULE: But in sum, for all the reasons discussed here
17 today and in Petitioner's papers, Claims 1, 2, 4-6, 16-17, and 19-21 of the
18 '028 Patent are invalid for obviousness of Lundahl in combination with
19 Larsen. And unless Your Honors have any other questions, we'll reserve the
20 remainder of our time for rebuttal.

21 JUDGE WEATHERLY: No questions from me, believe it or not.

22 JUDGE HOFFMAN: Thank you.

23 MS. GURULE: Thank you.

24 MR. HA: So, Your Honors, we were having a little bit of technical
25 difficulty in terms of getting the PowerPoint up, so we'll try to do this while
26 I continue on with our slides. Hopefully you guys have all of the

1 demonstratives in front of you.

2 JUDGE HOFFMAN: Yes, we will pull them up.

3 MR. HA: Thank you so much.

4 JUDGE HOFFMAN: Okay. Mr. Ha, how much would you like to
5 reserve for rebuttal?

6 MR. HA: So we'll reserve about 15 minutes, Your Honor.

7 JUDGE HOFFMAN: Okay. There's probably an easier way to do
8 this. You may begin your arguments when ready.

9 MR. HA: Thank you very much. Good afternoon, Your Honors.
10 Let me just jump right to Slide 3. So I want to begin by talking about the
11 two related matters that are periodically mentioned throughout the
12 presentation today. The first one is on the top right of the slide. It has to do
13 with IPR2024-874, which was an earlier IPR petition that was denied
14 institution challenging the same '028 Patent.

15 The second related matter is the 1411 ITC investigation where
16 Administrative Law Judge Moore issued his initial determination on
17 September 30, 2025, after hearing essentially the same identical arguments
18 to conclude that the '028 Patent is valid. And I know Petitioner's Counsel
19 just walked through two differences, which was Dr. Grove's discussion
20 about the divergence angles and Dr. Jokerst's discussion regarding
21 fluorescent versus LED. That all has to do with a single limitation, uniform
22 limitation. It does not have anything to do with any of the other disputed
23 issues. I want to make that clear.

24 The other argument that I think the Petitioner is making in terms of
25 their briefing paper is that the ITC applies a different standard, a clear and
26 convincing standard, whereas we're applying -- we're working under the

1 preponderance of the evidence standard. So what I'll try to do here is
2 throughout the presentation only focus on the factual determinations by the
3 ALJ regarding the disputed issues which should be persuasive evidence
4 about what these references teach and how the factual determinations should
5 come out. So with that, let me just jump to a short overview of the '028
6 Patent.

7 JUDGE WEATHERLY: When you say they should be persuasive,
8 what do you mean exactly by that?

9 MR. HA: Well, ALJ Moore heard essentially the identical
10 arguments and very similar evidence throughout the ITC proceeding as those
11 arguments that are presented here. And the factual determinations findings
12 by ALJ --

13 JUDGE WEATHERLY: So let me clarify my question. Should be
14 persuasive could mean that this panel is bound by them, like in a
15 precedential sense. Should be persuasive could mean Judge Moore should
16 have been doing a good job, and you know Judge Moore and you should
17 trust Judge Moore. Should be persuasive could mean you believe they are in
18 fact persuasive. I think Petitioner is arguing that at least in some important
19 ways Judge Moore's findings are well founded and they are arguing that in
20 the ITC currently. When you say should be persuasive, what do you mean?

21 MR. HA: So I do not mean to say that Judge Moore's findings
22 should be binding upon this panel. I also disagree with Petitioner's
23 viewpoint that Judge Moore had inaccuracies or incorrectness in his
24 decision.

25 JUDGE WEATHERLY: Okay.

26 MR. HA: What I mean to say is he looked at the same evidence,

1 the same set of arguments, he made factual determinations before arriving at
2 the final ultimate conclusion of obviousness, and your panel is presented
3 with essentially the same arguments and evidence. And our position here is
4 that it should come out the same way.

5 JUDGE WEATHERLY: Because he got it right?

6 MR. HA: Yes, Your Honor.

7 JUDGE WEATHERLY: Okay.

8 MR. HA: So with that, let me jump to Slide 4 and begin with a
9 short overview of the '028 Patent. The '028 Patent is directed to a
10 photodynamic therapy device, a PDT device, that has adjustable illuminators
11 that provides a uniform distribution of visible light to treat various skin
12 conditions. And you see a picture of that device here on Figure 4 of the '028
13 Patent here on the right.

14 And Slide 5, we also highlighted in the patent itself some of the
15 very important characteristics of the device. At the outset, the overall goal
16 of this device is to provide uniform light distribution where the measured
17 output over the entire active emitting areas within 60 percent of the
18 measured maximum. And that's highlighted on the left side of the slide.
19 Well, how do we achieve that? It's not simply by placing various different
20 LEDs in certain locations. It's about a combination of one or more of the
21 various characteristics that have been claimed in the claims themselves.

22 So let me highlight three of them. First one is, as you see here, sort
23 of in the middle of Slide 5, we've colored in brown the areas where you see
24 emission of higher intensity of light. And those regions are near the shorter
25 edges of each of those panels. Turning to Slide 6, these panels are also
26 configured with hinges on the inner side surfaces of the adjacent panels, and

1 we colored those in light blue. And one of the examples that the patent
2 gives is nested hinges. And those hinges allow the panels to reduce or
3 eliminate optical dead spaces. And that's an important characteristic that I'll
4 talk about later today.

5 And third is the fact that each of these individual panels are
6 individually configurable to provide a specific power output as needed to
7 achieve that overall uniform illumination. So it's not just simply some
8 placement of LEDs, it's the combination of one or more of these
9 characteristics that come together to give you this uniform light distribution
10 as claimed. Turning to Slide 7, and this patented device now appears in
11 Petitioner's RhodoLED XL in remarkably the same fashion.

12 JUDGE WEATHERLY: Counsel?

13 MR. HA: Yes, Your Honor?

14 JUDGE WEATHERLY: Let me ask you a question about this
15 concept of shorter edges and higher intensity. The part of the specification
16 you just went over seemed to indicate that the intensity could be controlled
17 by the current that's being delivered to the light source which is near the
18 shorter edges, probably adjacent to the shorter edges. But the claim says that
19 light sources are arranged such that a higher intensity of light is emitted
20 approximate to the second edges. Until just now, I thought that we were
21 talking about essentially kind of like a spatial density of light sources where
22 the LEDs were closer together essentially at the top and bottom of these
23 panels.

24 MR. HA: Yes. So as with everything, everything can be
25 manipulated or adjusted as needed. So let's say you're applying the same
26 amount of current to all of the LEDs at once that have the same output --

1 JUDGE WEATHERLY: I'm really trying to focus on the Claim
2 language, what does the Claim language mean. I don't need to talk about
3 like what could be done or what might be done. I'd rather focus on what is
4 claimed so that I can do a better job of trying to figure out whether the Claim
5 reads on the prior art.

6 MR. HA: So, just to make sure I understand the question, is your
7 question that the claim requires a specific placement of the LEDs, or is --

8 JUDGE WEATHERLY: Is the claim directed to the physical
9 spacing between LED sources even though the claim doesn't recite LED
10 sources? Or is it -- or is any mechanism of achieving higher intensity light
11 including sending more current to the LEDs near that?

12 MR. HA: It would be the latter, Your Honor.

13 JUDGE WEATHERLY: That's included within the scope of the
14 claim?

15 MR. HA: Yes, Your Honor. And that's included as part of the
16 example in the specification --

17 JUDGE WEATHERLY: Okay. And do the shorter edges of these
18 individual five panels, do they need to be at the top and bottom of the panels
19 as they are presented to a patient, or can they be -- in other words, it seems
20 to me that the Claims require that the panels be rectangular rather than
21 square, and that the shorter edges be at the top and bottom of the rectangle.
22 And by top and bottom, the frame of reference I'm talking about is as the
23 panel is presented to the patient, to the treatment area.

24 MR. HA: Well, I'm not -- so I agree with the first portion.

25 JUDGE WEATHERLY: But not the second part?

26 MR. HA: But the second part, I'm not sure that the claim has any

1 sort of that explicit part.

2 JUDGE WEATHERLY: About the orientation. Just that one of
3 the edges be shorter than the other?

4 MR. HA: Yes, Your Honor.

5 JUDGE WEATHERLY: So the panels do have to be rectangular.

6 MR. HA: I wouldn't say rectangular, but rectangular may -- so it
7 wouldn't be square, right? But it could be rectangular-ish, for example. It's
8 sort of a shorter edge versus a longer edge. It would not be a perfect --

9 JUDGE WEATHERLY: I think that's a rectangle, but --

10 MR. HA: Let's say oval-ish, rectangle-ish. So a rectangle with
11 rounded corners.

12 JUDGE WEATHERLY: With rounded corners?

13 MR. HA: Yeah. Would also work, right?

14 JUDGE WEATHERLY: Well, now we're arguing about where do
15 the edges begin and end.

16 MR. HA: Sure.

17 JUDGE WEATHERLY: This is my favorite and my least favorite
18 thing about what we all do here in this room.

19 MR. HA: Yes, Your Honor. Okay. So continuing on with sort of
20 the important characteristics about the device, I'm on Slide 6 again. We just
21 talked about the hinges and we also talked about the fact that each of the
22 panels are individually configurable to provide a specific power output as
23 needed to achieve uniform illumination.

24 And turning to Slide 7 now, the patented device now appears in
25 Petitioner's RhodoLED XL. And you can see the remarkable similarities
26 between the two by looking at the picture of the RhodoLED XL on the left

1 and then the inset, we have Figure 4 of the '028 panel. And how do we
2 know they're similar? Well, they placed hinges right on the inner side
3 surfaces and we highlighted that using blue arrows. They placed more LEDs
4 near the shorter edges --

5 JUDGE WEATHERLY: Wait a minute. I'm not going to let you
6 get away with that. You can't complain about Larsen's description of hinges
7 and then tell me that just because you put blue arrows on this cartoon that
8 that means that the hinges are on the inner side surfaces of those panels. I'm
9 not going to let you do that.

10 MR. HA: Sure. I can give you additional cites and we'll get these
11 cites ready. These are, for example, at Exhibit 2050. I'll give you the cites
12 where we specifically pointed out what the hinge structure looks like in
13 RhodoLED XL.

14 JUDGE WEATHERLY: Okay. Well, there's a difference between
15 what the hinge structure looks like in an accused device and what the Claims
16 require and what the patent describes. So I'd rather that you focus on the
17 latter. And I don't really care that much unless you're going to give me some
18 really specific reason for me to care, other than the secondary
19 considerations, maybe a copying kind of thing.

20 MR. HA: So this is just to set up the secondary considerations to
21 give some background.

22 JUDGE WEATHERLY: All right. Okay.

23 MR. HA: We do have hinges in the RhodoLED XL. And in fact
24 --

25 JUDGE WEATHERLY: And that's Petitioner's device, correct?

26 MR. HA: Petitioner's device. And in fact, Judge Moore found

1 infringement at the ITC of the RhodoLED XL.

2 JUDGE WEATHERLY: Again, we don't deal with infringement
3 here necessarily.

4 MR. HA: Sure.

5 JUDGE WEATHERLY: Sometimes we care when it comes to
6 things like copying, but even copying is really not copying a Claim. It's
7 copying your commercial device. From a secondary considerations
8 perspective, that's slightly different from an infringement analysis.

9 MR. HA: Understood. So the point here is that, you know, we
10 have in our segmentation --

11 JUDGE WEATHERLY: Also, we're not going to get mad about
12 behavior.

13 MR. HA: Absolutely.

14 JUDGE WEATHERLY: You know, that's not going to be part of
15 our decision-making process, whether we should be mad or, like, somebody
16 stole something.

17 MR. HA: Right, right.

18 JUDGE WEATHERLY: You know what I'm saying?

19 MR. HA: And our whole point here is not about whether they
20 stole anything. We're just trying to set up the fact that all of the claimed
21 features are found in the RhodoLED XL, which has received industry praise
22 and commercial success.

23 JUDGE WEATHERLY: Okay.

24 MR. HA: And that's the real link that I'm trying to draw here.

25 JUDGE WEATHERLY: But Petitioner implied that, and I should
26 know the record better than I do and I apologize for not knowing it better

1 already. But Petitioner implied that you just said that that's true and that you
2 didn't -- like normally, a Patent Owner will present some sort of a claim
3 chart analysis where they point out where all the limitations are shown. Is
4 that in the record?

5 MR. HA: Yes, it is. Well, we don't have a claim chart. We do
6 have a claim chart, sorry. We do have a claim chart, and Ms. Belcher will
7 walk through all of the secondary considerations, including the nexus
8 argument.

9 JUDGE WEATHERLY: And is the claim chart part of what
10 Petitioner's complaining about being incorporated by reference?

11 MR. HA: Yes.

12 JUDGE WEATHERLY: Okay.

13 MR. HA: So it is in the declaration.

14 JUDGE WEATHERLY: Okay.

15 MR. HA: Yes.

16 JUDGE WEATHERLY: Okay. By the way, I think the
17 incorporation by reference argument is often overwrought, relied upon by
18 parties too hard.

19 MR. HA: Yes. And I just want to note that all of the underlying
20 evidence were cited in our briefing papers, except the form of the claim
21 chart was not included.

22 JUDGE WEATHERLY: Well, it couldn't be incorporated by
23 reference if it weren't cited. But at the same time, if it's in the record and it's
24 argued in front of us, on my behalf. I'm just speaking as an individual here.
25 That's usually good enough for me.

26 MR. HA: Great. Then I think we should be good, from Your

1 Honor's perspective. So not to belabor the point here on Slide 7, we're just
2 trying to set up the fact that RhodoLED XL has all of the claim features that
3 are found in the Claims, and it has received industry praise and commercial
4 success. So turning to Slide 8 and 9, we've highlighted in the five
5 independent claims all of the claim terms that are at dispute. In red, we've
6 colored the uniformly illuminating treatment surface limitation. As you can
7 see, that appears in all of the five Claims.

8 Colored in brown are all of the Claims that recite each of the five
9 panels, emitting higher intensity of light near the shorter edges of the panel.
10 That appears in all the claims. Like blue, four out of the five Claims recite
11 pin structures on the inner side surfaces of adjacent panels. In orange, we've
12 colored the two Independent Claims that recite that the five panels are
13 individually configurable to control illumination from each of the five
14 panels. And then finally, one of the Claims we have colored in green, the
15 continuous illumination requirement.

16 And so that's the short overview of the patent. And I wanted to
17 now move on to sort of the disputed issues and the grounds covered by the
18 Petitioner, unless Your Honors have further questions on this.

19 JUDGE WEATHERLY: Not yet.

20 MR. HA: Okay. So, turning to Slide 11, Petitioner initially
21 presented two grounds. And then as shown in Slide 12, they dropped
22 Ground 2. And so I'll focus only on Ground 1, which has to do with
23 Lundahl and Larsen. And so let me give a short, hopefully a short overview
24 of Lundahl and Larsen and their proposed combination before diving into
25 the disputed issues. Slide 13, let's begin with Lundahl. Lundahl is directed
26 to an illuminator that is a single panel made up of U-shaped fluorescent

1 tubes.

2 Those are unevenly spaced apart from each other in the manner
3 shown there on the top right. And because these fluorescent tubes inherently
4 do not output uniform light, there are dark regions near the cathode. And
5 you see that here on the bottom right as we've schematically illustrated. But
6 Lundahl is clearly missing a bunch of features that's reciting their claims.

7 JUDGE WEATHERLY: Let me make sure I understand this
8 device.

9 MR. HA: Yes, Your Honor.

10 JUDGE WEATHERLY: Because I think you just said that those
11 tubes don't emit uniform light because they don't emit uniform light,
12 effectively, which is pretty circular. So there is a portion of those tubes
13 that's relatively dark. I don't think anybody's arguing that that's not true.
14 But otherwise, the rest of -- the great majority of the length of those tubes
15 does emit uniform light, right?

16 MR. HA: Actually, that's not true.

17 JUDGE WEATHERLY: No?

18 MR. HA: So the fluorescent tubes are inherently not uniform.

19 JUDGE WEATHERLY: Okay.

20 MR. HA: So that's why Lundahl has to employ their specific --

21 JUDGE WEATHERLY: And by inherently not uniform, what do
22 you mean?

23 MR. HA: It's just that the way you have fluorescent light emitting
24 it is you have to have fluorescent materials that are coating certain things.

25 JUDGE WEATHERLY: Right.

26 MR. HA: And you get gas injection in there, and you start to emit

1 out light. And depending on, say, the coating thicknesses or how evenly
2 things are done, you actually have a non-uniform light. It is diffuse, and it
3 actually emits out very diffusely, pretty uniformly. Sorry, not uniformly, but
4 sort of in all directions unlike an LED. But if you look at the entirety of the
5 tube, you will have regions of hot and cold spots, and that's why Lundahl
6 needed to employ all of these various cooling systems, heating systems,
7 circuitry, reflectors, and whatnot, to make the overall output light of the
8 fluorescent tube uniform.

9 JUDGE WEATHERLY: Okay. But it did achieve that, right?

10 MR. HA: It did achieve that --

11 JUDGE WEATHERLY: Even by the standards set forth in the
12 challenged patents?

13 MR. HA: Correct. Yes, Your Honor.

14 JUDGE WEATHERLY: Okay.

15 MR. HA: Okay. So Lundahl is missing a bunch of features from
16 the claims, such as five panels, the five panels that are individually
17 configurable, and hinges on the inner side surfaces, right?

18 JUDGE WEATHERLY: Why isn't this case as simple as you all
19 developed a system with Levulan as the drug and a light that depended on
20 fluorescent tubes, and then when LEDs became available, you adapted the
21 light source to just an LED panel, a set of LED panels? I have to tell you
22 that my first impression of this case is that I can't think of something more
23 obvious.

24 MR. HA: So two points on that. We have real-world life
25 examples of inventor testimony that's in the record that specifically talked
26 about how difficult it was to go from fluorescent tubes to LEDs with five

1 panels, et cetera. We also have their own expert submission talking about,
2 in trying to invalidate the claims under enablement at the ITC, how the
3 Claims would require undue experimentation to get enablement, right? And
4 so the fact that they're now relying on a hindsight --

5 JUDGE WEATHERLY: To enable the uniform -- I'm guessing to
6 enable the uniform elimination characteristic, right?

7 MR. HA: Yes, that's right.

8 JUDGE WEATHERLY: Because the rest of it is just screwing
9 panels together and putting LEDs on them --

10 MR. HA: Well, I'd like to push back on that as well as covering
11 the hinge structure on the inner side surfaces.

12 JUDGE WEATHERLY: Okay.

13 MR. HA: We have testimony in the record where people were
14 saying once you start breaking up the single panel of Lundahl into five by
15 introducing gaps between the panels, you're going to have dark regions
16 between them.

17 JUDGE WEATHERLY: But there are gaps between the LEDs --

18 MR. HA: Sure.

19 JUDGE WEATHERLY: -- on every panel. I mean, it's just a
20 simple design, mechanical design of what's the gap. I mean, just because
21 there's a gap between the panel doesn't mean the space between adjacent
22 rows on adjacent panels wouldn't be the same as the gap between adjacent
23 rows intra-panel. Do you follow what I'm saying?

24 MR. HA: I think I do. But I --

25 JUDGE WEATHERLY: I mean, there are columns, more accurate
26 maybe is a better way to describe it, columns of LED sources on each panel,

1 and there's a spacing between them.

2 MR. HA: But I think the --

3 JUDGE WEATHERLY: On one panel, the lateral edge of the
4 panel is going to have the last column of LEDs on that panel, and there's
5 going to be another panel next to it that has a column on an adjacent edge.
6 And it would seem to me to be trivial to design a hinge so that that gap
7 between adjacent rows on different panels is the same as the gap between
8 adjacent -- I said rows, adjacent columns on different panels and adjacent
9 columns on the same panel. So I'm trying to understand, like that doesn't
10 sound like a very big leap or I don't find anything inventive about that unless
11 I'm completely misunderstanding what you're trying to say.

12 MR. HA: So I think what matters is that within a panel, you have
13 degree of control of where you can place the LEDs and where you can
14 actually how to power things up.

15 JUDGE WEATHERLY: You have the same control in terms of
16 the spatial relationship between adjacent columns of LED sources in
17 adjacent panels.

18 MR. HA: And I think that's where I differ with you because, for
19 example, if you look at certain TVs, right? You're going to have boundaries
20 around the TVs, correct?

21 JUDGE WEATHERLY: Yeah. Yeah.

22 MR. HA: And when you're trying to put two different panels
23 together next to one another, depending on how big those boundaries are and
24 how you can change your relative orientation of the hinges, if you've got
25 hinges, let's say, on the top and the bottom that causes too much of a gap,
26 you may never be able to achieve uniform illumination --

1 JUDGE WEATHERLY: You may not. And it depends on the
2 device. I mean, the display devices you're talking about. I mean, micro-
3 LED televisions often, at times, are constructed out of individual sub-panels,
4 and they're physically joined, especially the really large ones. And the gap
5 has to be microns, and they still figure out how to do it. But that's almost
6 irrelevant to this context from my perspective. I don't see anything here that
7 indicates that you need to control these gaps down to a micron kind of
8 accuracy.

9 MR. HA: Right. And we're not saying that we have to --

10 JUDGE WEATHERLY: Or even a millimeter accuracy.

11 MR. HA: Right. And we're not arguing about the distance
12 between the gaps. What I'm saying is when you have these physical
13 dimensions of the applicators that have to be hinged together to give you this
14 control of panel application, such that as a plane construction requires, the
15 treatment surface area achieves an intensity that exceeds -- that is at least
16 within 60 percent of the measured maximum across the entire treatment
17 surface, then those hinged structures matter, right?

18 JUDGE WEATHERLY: I mean, in a lot of ways, this almost
19 seems like -- I mean, those curved fluorescent tubes have a very sort of
20 analog sort of behavior in the way that they present light and how
21 continuous they are around someone's face. It's almost as if these panels are
22 just kind of like a very rough kind of digital representation, if you'll pardon
23 my use of that word, where you've got to figure out how many panels do I
24 need so that the curve is close enough to the curve that we used to have. We
25 got settled on five.

26 It looks like the width of these individual panels in the commercial

1 devices varies a little bit. But to me, that's just all -- it looks like it's all
2 -- none of that's claimed, as far as I can tell. I'm not saying you didn't have
3 to work on it to get it to be uniform, but --

4 MR. HA: And I think that's the point, right? Which is, the
5 evidence in the record is inventor testimony discussing how difficult it was
6 to break up that single panel of a fluorescent tube into five different panels
7 and continue to achieve that continuous -- sorry, uniform --

8 JUDGE WEATHERLY: Well, now I understand why the
9 Petitioner made an enablement argument, or maybe even thought about a
10 written description argument, if the inventors talk about how hard it was but
11 they don't describe in the patent how they solved all these difficult problems
12 or claim the things that they overcame, but instead they just say, put five
13 panels together with hinges.

14 MR. HA: But that's our point. It's not just any hinges. It's hinges
15 on the inner side surfaces, right? So Claim 16, we have a claim that says
16 hinge structures between adjacent panels. We don't talk about on the inner
17 side surfaces. So we are not challenging that. We are pointing out the fact
18 that all the remaining four Independent Claims recite hinge structures on the
19 inner side surfaces, and that was a critical overhaul --

20 JUDGE WEATHERLY: So there's magic about the hinges being
21 on the inner side surfaces?

22 MR. HA: Yes. That's absolutely right, Your Honor.

23 JUDGE WEATHERLY: That is the reason that your client should
24 keep this Claim.

25 MR. HA: That is one of the reasons why the prior arts
26 combination of what Petitioner put together fails to meet it, because this was

1 something that was not --

2 JUDGE WEATHERLY: What did Judge Moore say about that
3 issue specifically?

4 MR. HA: Sure. Let me turn to that. In fact, let me just jump to
5 that no hinge structures on the inner side surfaces issue first, if you don't
6 mind.

7 JUDGE WEATHERLY: Sure.

8 MR. HA: Let's turn to Slide 58. As I just alluded to, we have four
9 independent claims that recite the on the inner side surfaces, right?

10 JUDGE WEATHERLY: Yeah.

11 MR. HA: And the issue here was, well, just to address your --

12 JUDGE WEATHERLY: I'm just curious how he came out on that
13 issue and the basis for his decision. But ultimately, I can find that in the
14 record if -- and I don't want to consume your time.

15 MR. HA: No, I'll turn your attention to Slide 66, Patent Owner
16 Demonstrative 66 --

17 JUDGE WEATHERLY: Sure.

18 MR. HA: -- where Judge Moore said the following. Before 2015,
19 persons of ordinary skill designing PDT illuminators to output uniform light
20 were discouraged from placing hinges between the LED panels because the
21 arrangement was thought to negatively impact the illuminator's uniformity
22 by creating gaps between the panels, interfering with the panel's wiring, and
23 causing panel line issues. So he specifically heard our argument about what
24 the state of the art was before 2015 and said, yeah. People would have been
25 discouraged from doing this.

26 JUDGE WEATHERLY: So help me decode the citation to

1 evidence after that, because I'm not familiar with the conventions used at the
2 ITC. Jokerst is your expert here, and was your expert there at the ITC.

3 MR. HA: Yes, Your Honor. And Luebbert is Petitioner's CEO.

4 JUDGE WEATHERLY: Okay.

5 MR. HA: And in fact, if we want to decode that, I will turn your --

6 JUDGE WEATHERLY: So the first citation is to some sort of
7 declaration? And the second citation to Jokerst is to a deposition transcript
8 or trial transcript, I'm guessing?

9 MR. HA: I will get all of those specific --

10 JUDGE WEATHERLY: If you don't know off the top of your
11 head, that's okay.

12 MR. HA: I do not know, but I will get those to you.

13 JUDGE WEATHERLY: And Luebbert is the CEO of Petitioner?

14 MR. HA: Correct, Your Honor.

15 JUDGE WEATHERLY: Okay.

16 MR. HA: Yes. And we have testimony from the inventors also
17 that talks about how difficult that was. We have Dr. Jokerst testifying how
18 this would be our concept.

19 JUDGE WEATHERLY: By the way, in these LED panel
20 arrangements that are being discussed here and the challenge associated with
21 hinges, are those LED panels -- are those arrangements of multiple panels in
22 a kind of, for lack of a better word, a sort of arc configuration that would
23 surround someone's head, but without hinges? Or is that just --

24 MR. HA: -- Your Honor.

25 JUDGE WEATHERLY: So it says before 2015, persons of
26 ordinary skill designing PDT illuminators to output uniform light were

1 discouraged from placing hinge between the LED panels because that
2 arrangement was thought to negatively impact the illuminator's uniformity.
3 Well, for example, my imagination immediately runs to an LED panel that's
4 3 feet wide 6 inches high, if my face is sitting in front of that and I have
5 Levulan in front of me, well, the front of my face is going to get illuminated,
6 but the side isn't going to be illuminated. That's not uniform on my face.

7 But I can't -- for the life of me, I can't remember what kind of light
8 source I sat in front of because of my experience of what that felt like. But
9 the light source wrapped around my head. You could make LED panels that
10 wrap around someone's head without any hinges.

11 MR. HA: I have not thought of that specific configuration.

12 JUDGE WEATHERLY: And so I'm trying to understand what
13 Judge Moore is saying with his finding here about placing hinges between
14 LED panels. Well, if you don't place hinges between LED panels, they have
15 a fixed relationship.

16 MR. HA: He's actually talking about the proposed combination
17 that the Petitioner has tried to make.

18 JUDGE WEATHERLY: Okay.

19 MR. HA: Which is when you try to make -- break up Lundahl's
20 single panel into five, where would you place hinges? He's saying the --

21 JUDGE WEATHERLY: Well, the Larsen has individual panels,
22 five panels, right?

23 MR. HA: And I think that's the other point --

24 JUDGE WEATHERLY: And they are connected by hinges, yes?

25 MR. HA: But it's not on the inner side surfaces, and that's the
26 point, right? Which is --

1 JUDGE WEATHERLY: Okay. Isn't it the physical arrangement
2 in space of the panels that leads to the uniformity, not the nature of the
3 hinges?

4 MR. HA: Absolutely not, Your Honor. That's one of our claimed
5 features.

6 JUDGE WEATHERLY: I'm having a hard time believing that
7 that's -- that it's hinges on the inner side surface that make the magic for how
8 you get this arrangement of panels around someone's face.

9 MR. HA: And I think you're demonstrating sort of the unexpected
10 nature of this invention. If you look at column 4 in line 48 of our '028 Patent
11 itself, we're actually talking about how the hinges allow uniformity of light.
12 And that's what's kind of novel --

13 JUDGE WEATHERLY: Say that, where? Column where?

14 MR. HA: Column 4 in line 48.

15 JUDGE WEATHERLY: Hinges may take the form of nested
16 hinges, which may include hinges that substantially reduce or eliminate
17 optical dead spaces.

18 MR. HA: Optical dead spaces, right?

19 JUDGE WEATHERLY: May. Again, that doesn't sound like it's
20 all about nested hinges.

21 MR. HA: I'm not saying it's all about nested hinges. That's one of
22 the characteristics that's claimed that overall contribute to the uniform
23 illumination.

24 JUDGE WEATHERLY: What is a nested hinge, by the way? Is
25 that like a hinge that sits inside of a carved out?

26 MR. HA: It's basically a specific type of a hinge that's on the inner

1 surface.

2 JUDGE WEATHERLY: And one that's not claimed because the
3 claim just says a hinge on the inner surface.

4 MR. HA: Correct, yeah. Honestly, I don't actually know exactly
5 what a nested hinge looks like, but it is one of the types --

6 JUDGE WEATHERLY: Is there any other place in your spec that
7 focuses on the magic of the hinges?

8 MR. HA: I'll find that for you and circle back.

9 JUDGE WEATHERLY: Okay.

10 MR. HA: And so -- yes, Your Honor.

11 JUDGE HOFFMAN: Let me jump in. So I was going to say
12 Figure 3A of the patent illustrates the hinge 50.

13 MR. HA: Yes, Your Honor.

14 JUDGE HOFFMAN: But my question is back to the ITC
15 determination. Does putting hinges on the inner side surfaces necessarily
16 create these gaps?

17 MR. HA: So it's the breakup of the panel into five that's causing
18 the gap, and we're ameliorating the gaps that are caused by placing the
19 hinges on the inner side surfaces. Does that make sense?

20 JUDGE HOFFMAN: Not particularly. If we accept your expert's
21 testimony that a POSITA would have been discouraged from placing hinges
22 between the LED panels because that arrangement created gaps, where -- it
23 seems like your position is that putting hinges between LED panels creates
24 gaps.

25 MR. HA: No, Your Honor. I think what Judge Moore is saying
26 here, which is consistent with that argument, is before 2015, what people

1 thought was if you place hinges between the panels, it's going to further
2 create gaps. What we said is, no. We actually did all of the required testing
3 and the experimentation and realized that if you place them on the inner side
4 surfaces, that can actually ameliorate the gaps. So it's really a point of
5 reference of before the invention with after the invention.

6 So what Judge Moore here is saying is before the invention, that's
7 what people thought. But once you came up with the invention, that is the
8 invented feature. And that's the statement here.

9 JUDGE HOFFMAN: Yes, I understand. Thank you.

10 MR. HA: And I think that's the point about Larsen, right? Which
11 is -- and I'm now turning to Slide 60, which is, Petitioner argues that the
12 hinges are shown as element 20 in Figure 1. But if you look at paragraph
13 72, it specifically says the applicators are connected to each other through
14 hinges 10. And Figure 1 already has hinges 10 labeled.

15 JUDGE WEATHERLY: So you're not buying that that's a
16 misprint argument from Petitioner?

17 MR. HA: No, Your Honor.

18 JUDGE WEATHERLY: I am, just so you know --

19 MR. HA: So here's the reason why, right? It has --

20 JUDGE WEATHERLY: So assume that it is a typo. Now what?

21 MR. HA: So if that is a typo, then that's introducing two additional
22 typos to Larsen, which is the discussion of --

23 JUDGE WEATHERLY: You're misunderstanding my
24 hypothetical. Assume that the hinges are located at 20, just like Larsen
25 -- just like Petitioner says, how does that affect your position?

26 MR. HA: So you're saying I have to assume that hinges are

1 located exactly at 20?

2 JUDGE WEATHERLY: At 20, yes.

3 MR. HA: Okay. I do not know where 20 is. 20 is referring to this
4 dotted dashed line. So, for example, if I look at Figure 17 of Larsen, right?
5 I see -- so, paragraph 101 of Larsen talks about a hinge structure, upper part
6 hinged together. And if I look at Figure 17, I see a hinge at the top and the
7 bottom, exactly where element 20 is located, right? That's not on the inner
8 side surfaces.

9 JUDGE WEATHERLY: Give me a moment to find Figure 17.
10 You're trying to say Figure 17 of Larsen?

11 MR. HA: Of Larsen, yes, Your Honor. So starting with --

12 JUDGE WEATHERLY: 17B?

13 MR. HA: Yes, Your Honor. So let's start with Figure 17A, which
14 is sort of the other view, right? And you've got an applicator on top of the
15 patient and an applicator below the patient. And it's talking about a hinge
16 structure where that device is able to open up and down to allow a patient in,
17 right?

18 JUDGE WEATHERLY: Okay.

19 MR. HA: And that circular thing is a hinge structure, because
20 that's what's causing the sort of up and down.

21 JUDGE WEATHERLY: Okay. So the circular thing at the center
22 on the, like, horizontal center line on Figure 17B, that's the circular thing
23 you're talking about?

24 MR. HA: Correct. And on --

25 JUDGE WEATHERLY: And down in Figure 17A, does that
26 correspond to what's shown as a kind of a circle on the right-hand edge?

1 MR. HA: Yes, Your Honor.

2 JUDGE WEATHERLY: Okay.

3 MR. HA: So that would still be consistent where 20 is drawn in
4 Figure 1.

5 JUDGE WEATHERLY: Is that a six-panel arrangement?

6 MR. HA: No, those are two panels.

7 JUDGE WEATHERLY: Okay. I asked about six -- you
8 understand why I'm asking about six panels, right? Because of the way it
9 looks in 17A.

10 MR. HA: I'm sorry?

11 JUDGE WEATHERLY: 17A, when you're looking from above,
12 there are six different planes shown there.

13 MR. HA: I think those are basically just sort of a trapezoidal
14 applicator, another trapezoidal applicator --

15 JUDGE WEATHERLY: So those are like different panels that are
16 connected without hinges?

17 MR. HA: I would just call that a single panel, but --

18 JUDGE WEATHERLY: Okay.

19 MR. HA: Yeah, it's just, you know --

20 JUDGE WEATHERLY: But a panel that has a kind of concave,
21 sort of.

22 MR. HA: Yes. And it's doing this, and the hinge structures are at
23 the --

24 JUDGE WEATHERLY: You realize that doing this, like what you
25 described, does not translate to the record, right?

26 MR. HA: Yes, Your Honor. So it's opening up and down --

1 JUDGE WEATHERLY: Yeah, like a clamshell.

2 MR. HA: Yeah, exactly. And the hinges are located exactly
3 where that line 20 would be, but it would still not be on the inner side
4 surfaces, right? Because that hinge is between the two panels and yet it's on
5 the top and the bottom of the two structures.

6 JUDGE WEATHERLY: Looks like it might, you know. Again,
7 I'm sure you recall that I had a lot of skeptical sort of questions for Petitioner
8 on this particular topic, but at the same time hinges aren't mysterious. A lot
9 of kind of hinges, and hinges that allow you to mount things next to each
10 other without gaps or with gaps or gaps that change as the two things move
11 relative to each other, or gaps that don't change as the two things move
12 relative to each other.

13 MR. HA: Right.

14 JUDGE WEATHERLY: So your claims are very quiet about
15 details on hinges. It just says hinges, the only detail being that they be on
16 the inner --

17 MR. HA: Side surfaces.

18 JUDGE WEATHERLY: -- inner side surfaces.

19 MR. HA: Yes, Your Honor.

20 JUDGE WEATHERLY: And I don't even know necessarily what
21 it means to be on the inner side surfaces, whether it means part of the hinge
22 structure contacts those surfaces but all of it need not, or. Do you see what
23 I'm saying?

24 MR. HA: Yeah. So the ALJ actually provided some explanation
25 of what that means, on the inner side surfaces, because one of their non-
26 infringement arguments was that it has to be mounted on the surface,

1 whereas ALJ just simply said, as long as it fits somewhere in the side
2 surfaces, it's fine.

3 JUDGE WEATHERLY: So it contacts the inner side surface
4 anywhere, then that's on the inner side surfaces.

5 MR. HA: Exactly.

6 JUDGE WEATHERLY: Okay.

7 MR. HA: And so, I think that's a fair representation. And even
8 with that understanding, what Judge Moore found was Larsen doesn't
9 disclose that. It only says hinges 10, which is on the bottom of the panels,
10 not on the inner side surfaces, and that is on our Slide 62, where Judge
11 Moore found that.

12 JUDGE WEATHERLY: Right. I'm not sure that that ends the
13 inquiry about whether Larsen suggests hinges on the inner side surfaces.

14 MR. HA: And you're right, because they do have a backup
15 obviousness argument in the petition, and let me cover that as well. So
16 they're basically making two points on, even if Larsen doesn't disclose
17 hinges on the inner side surfaces, well it would have been obvious to place
18 them on the inner side surfaces. And now I'm on Slide 64. This is from
19 their petition.

20 JUDGE WEATHERLY: Your Slide 64?

21 MR. HA: Yes, our Slide 64. And all they say here is, such a
22 modification would have involved nothing more than the use of a known
23 prior element according to known methods to yield predictable results, and
24 that there were a finite number of known predictable solutions. I want to
25 push back on both of those points, and Judge Moore agreed with us on both
26 of those points as well.

1 First, there's nothing in the record demonstrating hinge structures
2 on the inner side surfaces. Nothing, right? If we take Larsen out as
3 disclosing that, there's nothing else in the record. So they haven't done their
4 job of demonstrating that hinges on the inner side surfaces in this particular
5 context was a known prior element. And my colleague will address in the
6 motion to exclude evidence, their belated attempt to try to bring in additional
7 facts surrounding that. But take the petition at its word, nothing directed to
8 that. And Slide 65, we've highlighted Judge Moore's summary of this thing,
9 Biofrontera fails to identify a single illuminator with hinges on the inner side
10 surfaces.

11 Turning to Slide 66, Petitioner did not articulate what the finite
12 number of known solutions were. But as the evidence developed during trial
13 demonstrated, and as Judge Moore concluded here on the top part of that
14 decision, numerous designs to connect the panels of a PDT device flexibly,
15 including, as you noted, without hinges, or with different hinge designs were
16 available in the art. It's not just simple as like, okay, hinges are known, it's
17 on the inner side surface, so let's go do it. There are a lot of different options
18 available to a POSITA before 2015.

19 And as then Judge Moore concludes, before 2015, people would
20 have actually thought placing the hinges on the inner side surfaces would
21 create gaps. But lo and behold, our inventors came in and realized this is
22 actually the way to solve this problem, by placing hinges on the inner side
23 surfaces. And so, our position here is that it's not obvious in that respect.
24 Does that address all of the questions on the hinge structures?

25 JUDGE YANG: I have a question.

26 MR. HA: Yes, Your Honor.

1 JUDGE YANG: So you said if you take Larsen out of the picture,
2 then there is nothing to show hinges on the inner side. Just so that I
3 understand it correctly, does Larsen show hinges on the inner side?

4 MR. HA: Thank you for that clarification. Larsen does not show
5 hinge structures on the inner side surfaces. And my intent there was, if you
6 take out their position that it included a typographical error and includes it,
7 then there's nothing else.

8 JUDGE YANG: So on this typo, I think Counsel for Petitioner
9 pointed out that Larsen also referred numeral 10 as the device. So 10 could
10 be the device and the hinge. What's your response to that?

11 MR. HA: Yeah. So if we follow their argument about what the
12 typo is, that would introduce three separate typographical errors into Larsen.
13 Whereas if we just take our view, hinge means 10, and element 20 refers to
14 this regular row arrangement of LEDs, as Dr. Grove admitted during his
15 deposition, that only leaves one typographical error in Larsen that says
16 present device 10.

17 And so, it's a much easier -- and Judge Moore agreed with us on
18 this point, we can find a cite to that. It's a much easier way to kind of say,
19 yeah, Larsen has one typographical error instead of these three different
20 typographical errors that the Petitioner is trying to propose.

21 JUDGE YANG: Thank you.

22 MR. HA: Okay. I am going to try to skip through the next issue,
23 which is individually configurable, first, and then I want to return back to the
24 uniformly illuminating very quickly. So I think with the hinge structures,
25 that addresses all but three of the challenged claims. The next issue has to
26 do with the individual configurable, which will address the remaining set of

1 claims. And I think if you find in our favor for both of these issues, it'll be
2 dispositive of the entire case.

3 Turning to Slide 70. Let's start with the claim construction. Judge
4 Moore -- so Petitioner in the petition did not propose any kind of
5 construction. Judge Moore in the ITC said, this is plain and ordinary
6 meaning. And what that means is the power output and or light intensity of
7 each panel can be individually controlled. Not some results, not some effect
8 that would appear if you can somehow turn off one or the other. It has to be
9 actually controlled, and each of the panels has to be controlled.

10 And throughout the record, there's only two instances of the word
11 individually coming up in context of light sources, right? The first one that
12 Petitioner points to is in paragraph 70. That, if you look at that, says, figure
13 -- and now I'm on Slide 71, Figures 2A through 2C show plain surface
14 printed circuit boards with light sources mounted on them. And it says,
15 these, i.e. these printed circuit boards, can be used in working models
16 individually, side by side, or in combination with an applicator.

17 And I think that makes perfect sense, because you have printed
18 circuit boards that are individually used, for example, in Figure 1 of the
19 applicator. Each of those panels have to have individual PCDs. It says
20 nothing about each of the panels being controllable. And in fact, if you look
21 at paragraph 27, what it says is, there's just a single control mechanism that
22 can switch on and off, what, the entire device, the device, not the entire
23 device, not each of the applicator panels.

24 Turning to Slide 72, the second cite that Petitioner relies on is
25 Claim 5. I think Judge Weatherly had some premonition about agreeing
26 with the Petitioner on this, but let me try to convince you otherwise.

1 JUDGE WEATHERLY: I'm not sure I would call it a
2 premonition. I'm guessing you're going to explain to me why it was a
3 mistake.

4 MR. HA: Right. So I think what we have to do is, number one,
5 recognize Claim 5 is dependent on Claim 1. And we have to look at claims
6 in light of the specification, which is on paragraph 74. And so let's do that
7 stepwise, right? Which is --

8 JUDGE WEATHERLY: I'm going to stop you right there.

9 MR. HA: Yes, sir.

10 JUDGE WEATHERLY: Our job is not to interpret the scope of
11 the claims in this reference.

12 MR. HA: True.

13 JUDGE WEATHERLY: Our job is to understand what do these
14 claims describe to a person of skill in the art?

15 MR. HA: Yes, Your Honor. And I think if you read Claim 5 in
16 context of paragraph 72, you'll be able to --

17 JUDGE WEATHERLY: To a patent attorney. You're about to
18 argue what a patent attorney would think the claims mean --

19 MR. HA: Well, I would also say --

20 JUDGE WEATHERLY: -- in terms of their scope.

21 MR. HA: Yeah.

22 JUDGE WEATHERLY: I'm trying to get you to focus on when a
23 person of ordinary skill reads this disclosure, what do they see?

24 MR. HA: And let me just jump then to what Judge ALJ Moore
25 found, right? This is on page 73. His conclusion after hearing both of these

26 --

1 JUDGE WEATHERLY: On Slide 73?

2 MR. HA: On Slide 73. His conclusion after hearing both of these
3 arguments was the entire device is adjustable, not that each of the five
4 applicators is individually configurable to control elimination from each
5 panel.

6 JUDGE WEATHERLY: Did he deal with this Claim 5 issue?

7 MR. HA: Yes. Right above he says, individually in Claim 5 does
8 not refer to panels and Biofrontera has no support to show that the output
9 from each panel can be individually controlled. So he specifically addressed
10 this argument as well. And his conclusion was, entire device is controllable.

11 JUDGE WEATHERLY: I think he's overstating that. I disagree
12 with him.

13 MR. HA: Okay. And let me try to make one last effort to try to
14 convince you why. Because individually selected is dependent on Claim 1,
15 which talks about the light sources consisting of two things, semiconductor
16 diode and or at least one laser diode. And I think --

17 JUDGE WEATHERLY: That includes a device that has only
18 semiconductor diodes, correct?

19 MR. HA: That's right. I think you were focusing on the word or
20 there, right? But I think the key point here is, Claim 5 has to be narrower
21 than Claim 1.

22 JUDGE WEATHERLY: Yes.

23 MR. HA: So if you -- and it has to have in part meaning. So yes,
24 Claim 1 can have a scenario where you have just semiconductor diodes or
25 just laser diodes. But if you want to be able to practice Claim 5, you have to
26 further narrow the situation where that device has both semiconductor

1 diodes and laser diodes.

2 JUDGE WEATHERLY: So your argument that Claim 5 requires
3 us to interpret the phrase, and or, in Claim 1 is not really meaning, and or,
4 but only meaning and?

5 MR. HA: In Claim 5, yes. In Claim 1, no. So in Claim 5, it has to
6 be a specific situation where you have both the semiconductor diodes and
7 the laser diodes --

8 JUDGE WEATHERLY: That's what I just said. I thought you're
9 saying Claim 5 requires us to interpret the phrase, and or, as stated in Claim
10 1 as really meaning and.

11 MR. HA: Correct, Your Honor, for Claim 5. Claim 1, it can mean
12 and or or. So, I think that's a proper interpretation because if you look at
13 Claim 74, again it's talking about the control mechanism of --

14 JUDGE WEATHERLY: Did you say Claim 74?

15 MR. HA: Paragraph 74, sorry.

16 JUDGE WEATHERLY: All right.

17 MR. HA: Which is on the left side of our Slide 72. Because that's
18 talking about the control mechanism of the entire device, the invented
19 device, not the different panels, which then goes and talks about the control
20 mechanism that isn't there. And then it says the switch select system for
21 operating different types of the semiconductor diodes or laser diodes, and or
22 laser diodes. So it's really talking about turning on and off one type of
23 diodes across the entire device, not on each of the individual panels. And
24 again, ALJ Moore --

25 JUDGE WEATHERLY: Seems like an awfully fancy on-off
26 switch control mechanism. You're telling me the control mechanism

1 essentially just lets the operator turn the device on or off?

2 MR. HA: That's right. That's what Larsen's disclosing --

3 JUDGE WEATHERLY: And they call that a control mechanism?

4 MR. HA: Right. It's controlling the on and off of the device, the
5 entire device.

6 JUDGE WEATHERLY: As on the whole, like literally turn the
7 device on and turn the device off?

8 MR. HA: Yes, Your Honor. That's what Larsen's disclosing.

9 JUDGE WEATHERLY: Okay. Well, I understand your position.

10 MR. HA: Thank you.

11 JUDGE HOFFMAN: I just want to make sure I understand.

12 MR. HA: Sure.

13 JUDGE HOFFMAN: So Larsen is saying you can turn on the
14 semiconductor diodes or you could turn on the laser diodes or you could turn
15 both of them on?

16 MR. HA: Yes, Your Honor, yes. And it's across the entire five
17 panels, not on each of the individual panels.

18 JUDGE HOFFMAN: Okay. Thank you.

19 MR. HA: One last point about this before I jump to the uniformly
20 illuminate is Petitioner is trying to now rely on Exhibit 2011. I just want to
21 point out that's not related to the control mechanism of Larsen, nor was it
22 ever presented in the petition itself. So that's the only other thing that I
23 wanted to add on that. I know I have only about ten minutes left, and we
24 need to also have Ms. Bridget Belcher cover the second --

25 JUDGE WEATHERLY: She might not be mad that you've used
26 so much of her time. We'll see.

1 MR. HA: So I think all I want to end on is, uniformly illuminate
2 had a particular construction that was agreed upon by both parties. The
3 petition did not demonstrate this at least within 60 percent requirement
4 anywhere in the petition. That's a deficiency of the petition itself that cannot
5 be --

6 JUDGE WEATHERLY: And why isn't Lundahl's teaching of 60
7 percent enough?

8 MR. HA: Because when she goes from the --

9 JUDGE WEATHERLY: Because using LEDs spoils it?

10 MR. HA: Once you break up into five panels and then switch the
11 light source to LEDs, they have to demonstrate that these LEDs actually get
12 you there. They never did that.

13 JUDGE WEATHERLY: But your patent doesn't really describe
14 how to do that except to use the magic hinges?

15 MR. HA: Well, we do. Because if you look at Figures 7 and 8,
16 we're comparing conventional illuminators with the invented device that
17 have all of these different claim characteristics put together. Five panels,
18 hinges on the inner side surfaces, individual controllable power output, all of
19 these are things that are claimed. And once you put all of those things
20 together, that's what allows you to achieve the uniformly illuminate. They
21 haven't done that in their petition.

22 JUDGE WEATHERLY: Okay.

23 MR. HA: So, with only ten minutes left, I call Ms. Bridget
24 Belcher.

25 MS. BELCHER: Okay. I'm going to start you all on page 81
26 -- Slide 81, sorry. And I'm going to talk to you a little bit about the objective

1 indicia of non-obviousness that are present here. First, the ALJ did not
2 address the objective indicia finding that Biofrontera had failed to show that
3 the claims were obvious over Lundahl and Larsen. And if you agree with us
4 here as well that the Petitioner has not made out a prima facie case of
5 obviousness, there's really nothing to rebut, but I'm still going to go through
6 the objective indicia here.

7 First, I'll explain to you why the RhodoLED XL is coextensive
8 with the claims of the '028 Patent. And I'd also like to point out that because
9 the device is coextensive with the claims, there's a presumption of nexus that
10 applies. If we turn to Slide 83, I have Representative Claim 1 here, along
11 with some images from Biofrontera's marketing materials and their user
12 manual for the RhodoLED XL.

13 JUDGE WEATHERLY: So you're saying that because the
14 competitors -- because the Petitioner's device is coextensive with the claims,
15 you are entitled to a presumption of nexus?

16 MS. BELCHER: So Petitioner's device -- there is case law; it does
17 not have to be your own device. If the device embodies the claims and is
18 commercially successful, has received industry praise, then it does not have
19 to be your own device to show that they are.

20 JUDGE WEATHERLY: Okay. Usually it is.

21 MS. BELCHER: Usually it is. In this case, as of the time these
22 papers were filed, we had not marketed our device yet.

23 JUDGE WEATHERLY: Okay.

24 MS. BELCHER: So if we look at Claim 1, you can see in the
25 bottom image there are hinges that connect five panels on the inner side
26 surfaces. They're represented by the blue arrows, and I think I'm going to

1 anticipate your question. If you look at Exhibit 2059, which is cited on page
2 73 of our POR, this is Biofrontera's '169 Patent, which is the Orange Book
3 Patent for the RhodoLED XL. In column 28, lines 58 to 64, they say that
4 hinges 15 are used between the radiation-emitting units. And if you look at
5 Figures 1 and 2, you can see that the placement of the hinges is on the inner
6 side surface.

7 JUDGE WEATHERLY: I'm sorry, I may not be on the right slide.

8 MS. BELCHER: Oh, sorry. This image is not on the slide. I was
9 just anticipating that you were going to --

10 JUDGE WEATHERLY: Yeah, I don't see any hinges in these
11 cartoons.

12 MS. BELCHER: Yeah, so if you look at Exhibit 2059 --

13 JUDGE WEATHERLY: Okay.

14 MS. BELCHER: Yeah, sorry. That's Biofrontera's '169 Patent that
15 covers the RhodoLED XL.

16 JUDGE WEATHERLY: Well, does it?

17 MS. BELCHER: Yes, it does. So if you look at Exhibit --

18 JUDGE WEATHERLY: Who says that?

19 MS. BELCHER: Biofrontera does.

20 JUDGE WEATHERLY: Okay.

21 MS. BELCHER: So if you look at Exhibit 2058, it explains that
22 the '169 Patent is the Orange Book patent for the RhodoLED XL.

23 JUDGE WEATHERLY: Okay.

24 MS. BELCHER: And so that shows the hinges on the inner side
25 surface. And just to add that our expert, Dr. Jokerst, had examined the
26 device and that is in Appendix B, which is her claim chart mapping this

1 against --

2 JUDGE WEATHERLY: The part that the Petitioner says you
3 incorporated by reference?

4 MS. BELCHER: Yeah, and unfortunately our claim chart is in her
5 declaration, which we did --

6 JUDGE WEATHERLY: It is what it is.

7 MS. BELCHER: Yeah. Okay, so that covers the hinges. And
8 also, again, if you look in the top image, boxed in red, it emits a uniform
9 light, the RhodoLED XL. And if you look in the bottom image again, you
10 can see that one of the panels is configured to face a treatment surface, and
11 the other panels are angled relative to that panel. The treatment distance for
12 the RhodoLED XL is within approximately 4 inches of the treatment surface
13 at 4.9 plus or minus 0.59 inches. And if you -- I boxed it in brown, the LED
14 arrangement allows for a higher intensity of light to be emitted.

15 JUDGE WEATHERLY: Which slide are you on right now?

16 MS. BELCHER: Sorry, I'm on Slide 83.

17 JUDGE WEATHERLY: Okay, yeah.

18 MS. BELCHER: Sorry. It allows for a higher intensity of light to
19 be emitted proximate the second shorter edges of the panel with that LED
20 arrangement boxed in brown.

21 JUDGE WEATHERLY: Okay.

22 MS. BELCHER: And then to cover any limitations that are
23 missing from Claim 1, I also have mapped Claim 16 here. You can see that
24 the panels are connected by hinged structures to allow for continuous
25 illumination. And if you look at the image on the right-hand side, the
26 RhodoLED XL meets the more structural limitations in Claim 16, and I can

1 walk you through those if you want, but because we're running out of time.

2 JUDGE WEATHERLY: Yeah.

3 MS. BELCHER: And then in the bottom image, they say that each
4 panel can be independently controlled and turned on and off, and so the five
5 panels are individually configurable to control the illumination.

6 And now if we turn to Slide 85, you can see that these features are
7 not incidental, and Biofrontera actually markets the RhodoLED XL by
8 emphasizing the claimed features. So on the right-hand side, that screenshot
9 is from a presentation by Mark Baldyga, who's Biofrontera's VP of Sales,
10 and he emphasizes the five-panel design, the higher intensity at the top and
11 bottom that's enabled by the -- sorry, at the shorter edges that's enabled by
12 the LED arrangement, and the uniform light. And he also emphasizes the
13 treatment distance within approximately 4 inches here.

14 JUDGE WEATHERLY: And why isn't there an analysis of one of
15 your own clients' products again?

16 MS. BELCHER: I believe that was confidential business
17 information at the time.

18 JUDGE WEATHERLY: At the time. At what time?

19 MS. BELCHER: When we filed the Patent Owner response in
20 May.

21 JUDGE WEATHERLY: Okay. So --

22 MS. BELCHER: And we do have an analysis, actually, of it
23 mapping onto the BLU-U 4170E device on page 77 of the POR. Exhibit
24 2014 is our ITC domestic industry claim chart that maps the '028 Patent
25 against the BLU-U 4170E.

26 JUDGE WEATHERLY: Okay. We'll look at that in the record. It

1 sounds like your showing on that front was a little bit different from -- you
2 spent more -- you all spent more attention mapping these claim elements to
3 the accused device.

4 MS. BELCHER: And we did that on purpose because we're able
5 to show commercial success of this device, which ties into the objective
6 indicia of the whole process.

7 JUDGE WEATHERLY: Because Petitioner's selling one, but
8 you're not.

9 MS. BELCHER: It's being tested, I believe.

10 JUDGE WEATHERLY: Okay. I think that's a yes.

11 MS. BELCHER: As of right now.

12 JUDGE WEATHERLY: You don't have enough -- you didn't have
13 enough evidence?

14 MS. BELCHER: We didn't have enough evidence at the time that
15 we submitted this.

16 JUDGE WEATHERLY: Okay. Which is, you know, again, it is
17 what it is.

18 MS. BELCHER: So if we turn to Slide 87, I can talk a little bit
19 about the industry praise. So we've given you a bunch of examples on page
20 77 of the POR of industry praise for the RhodoLED XL. But I've
21 highlighted two here from two dermatologists who both emphasize the
22 larger illumination area that has enhanced the overall quality of care and the
23 patient experience. And these are enabled by the RhodoLED XL's five-
24 panel design, uniform illumination, and the LED configuration that allowed
25 for higher intensity at the second shorter edge.

26 And if we talk a little bit about the commercial success of the

1 RhodoLED XL, it was commercially successful by -- on 18.5 percent growth
2 in Q4 2024 compared to Q4 2023. And they stated that --

3 JUDGE WEATHERLY: So to what extent does your reliance on
4 secondary considerations depend upon us finding that you're entitled to a
5 presumption of nexus?

6 MS. BELCHER: We did do a nexus analysis in the POR. I don't
7 have the page number off the top of my head right now.

8 JUDGE WEATHERLY: By nexus analysis, do you mean like a
9 nexus -- I refer to it as like a nexus in fact kind of analysis. In other words,
10 not based on a presumption, but a showing that's -- an affirmative showing
11 of nexus.

12 MS. BELCHER: Yes, we do do that in the POR. I think it's on the
13 last page of the PR. I can't remember the page number off the top of my
14 head.

15 JUDGE WEATHERLY: Okay. Well, the fact that it's on one page
16 already causes me to be a little suspicious about whether it carries the day.

17 MS. BELCHER: So earlier when we were talking about -- when
18 we were mapping the device, and also when we were talking about industry
19 praise and the commercial success, we already had walked through the
20 nexus and had explained it. And so it kind of just sums it up right at the end
21 there.

22 JUDGE WEATHERLY: Okay.

23 MS. BELCHER: But the nexus analysis is present throughout the
24 discussion of secondary --

25 JUDGE WEATHERLY: No, but I mean there's a difference
26 between a presumption -- being entitled to a presumption of nexus and --

1 MS. BELCHER: Yeah.

2 JUDGE WEATHERLY: -- and an affirmative showing of nexus.
3 And my question really is to what extent? And then this industry praise, for
4 example, if you're entitled to a presumption of nexus and you have this
5 doctor saying that the RhodoLED XL is fantastic. I'm not sure that he's
6 identifying anything about a claimed feature that makes it fantastic. But if
7 you're entitled to a presumption of nexus, maybe we have to weigh that
8 evidence differently.

9 If you're not entitled to a presumption of nexus, then we have to
10 ask ourselves whether this evidence constitutes an affirmative showing of
11 nexus. I'm not sure that it does. I'm not sure that it doesn't either. But I'm
12 trying to get a sense from you --

13 MS. BELCHER: Yeah.

14 JUDGE WEATHERLY: What do you need us -- where is your --

15 MS. BELCHER: So, again, I don't have the page number set off
16 the top of my head, but we have Mr. Baldyga's deposition transcript in the
17 record where he does talk a little bit about the nexus, and he talks about this
18 --

19 JUDGE WEATHERLY: And that's the Petitioner's VP?

20 MS. BELCHER: Yes, of sales.

21 JUDGE WEATHERLY: Okay.

22 MS. BELCHER: And we've looked at -- so it's Exhibit 2039. I,
23 again, don't have the line number cites, I apologize. But --

24 JUDGE WEATHERLY: What is Ameluz? Is that the drug that --

25 MS. BELCHER: Ameluz is the topical --

26 JUDGE WEATHERLY: The topical.

1 MS. BELCHER: -- that Biofrontera markets.

2 JUDGE WEATHERLY: The evil topical solution.

3 MS. BELCHER: Yeah, it's that one.

4 JUDGE WEATHERLY: Trust me.

5 MS. BELCHER: And so we have his deposition in the record
6 where he does tie these statements to the claimed features of the '028 Patent.
7 So these statements by dermatologists that are touting the praise, or touting
8 the product, he does tie them to the claimed features of the '028 Patent.

9 JUDGE WEATHERLY: Okay.

10 MS. BELCHER: And that is in our --

11 JUDGE WEATHERLY: I mean, the papers will speak for
12 themselves, but I'll take your word for it for now.

13 MS. BELCHER: Yeah. Sorry, I have the cite right here. It's
14 Exhibit 2039, page 44, line 9 through 45, 11. And he says -- he's saying
15 that, which is what I have again on this Slide 85, on the left-hand side, this
16 quote from him. And then he is also testifying at page 40, line 6 through 11,
17 that the purpose of the presentation was to encourage the customers to
18 purchase the RhodoLED XL. And he, again, he's saying that there's the
19 uniform light with all five panels that allow for the full face and full scalp
20 illumination. So the dermatologist --

21 JUDGE WEATHERLY: I'm a little skeptical about how the
22 Petitioner's VP of sales statements can be interpreted as industry praise --

23 MS. BELCHER: Well, he was interpreting the things that these
24 dermatologists -- he was interpreting what these dermatologists were saying
25 here.

26 JUDGE WEATHERLY: Okay.

1 MS. BELCHER: If you look at that quote from Dr. Ted Lane,
2 Biofrontera uses this in their marketing materials.

3 JUDGE WEATHERLY: I'm trying to sell this device. Everybody
4 says it's great.

5 MS. BELCHER: Right. But, I mean, the dermatologists aren't
6 going to like -- they've tested the device and they're going to give their
7 honest feedback about the device. And they've purchased them. At least Dr.
8 Cooper apparently has purchased it himself. On this quote, he's purchased
9 two of the devices after testing.

10 JUDGE HOFFMAN: I just want to make sure that you're paying
11 attention to the time.

12 MS. BELCHER: Yeah, I see. Okay.

13 MR. HA: We'll eat up the five --

14 MS. BELCHER: Yeah, thank you. If I could direct your attention
15 quickly to Slide 89, just briefly go over the commercial success of the
16 RhodoLED XL. So, Biofrontera has said a couple of times publicly that the
17 growth in 2024 can be attributed to the successful launch of the RhodoLED
18 XL. And the graph that I'm showing here is the cumulative sales of the
19 original RhodoLED device versus the sales of the RhodoLED XL device.
20 You can see that until the RhodoLED XL launched, there was a steady
21 increase in sales between quarter one and quarter two of the RhodoLED
22 original device.

23 And then when the RhodoLED XL launched, it saw skyrocketing
24 growth and outpaced the sales of the original RhodoLED. And this is
25 notable because the differences between the original RhodoLED and the
26 RhodoLED XL are the claimed features of the '028 Patent. The five-panel

1 design with a higher intensity of light emitted proximate to second shorter
2 edges, that emits a uniform intensity of light, and that hinges on inter-site
3 surfaces of adjacent panels.

4 JUDGE WEATHERLY: Am I understanding the y-axis on this
5 graph to be -- does 100 mean 100 units?

6 MS. BELCHER: Yeah, so 100 is 100 units sold in 2024.

7 JUDGE WEATHERLY: Okay.

8 MS. BELCHER: So these are the cumulative sales.

9 JUDGE WEATHERLY: Cumulative for the year?

10 MS. BELCHER: Yeah, so like the difference between quarter
11 three and quarter four for the XL is --

12 JUDGE WEATHERLY: Is 100 minus 48 or so.

13 MS. BELCHER: Yeah, so about 50.

14 JUDGE WEATHERLY: Okay, all right. Just want to make sure
15 I'm understanding this part correctly.

16 MS. BELCHER: Yeah. And then in case there's any doubt about
17 commercial success, if you flip to Slide 90, Petitioner's CEO Hermann
18 Luebbert says that the first and foremost contributor to the annual sales
19 growth in quarter four of 2024 was the placement of the newly launched
20 RhodoLED XL plants. And yeah, unless Your Honors have any other
21 questions, we'll rest on the papers for the rest and reserve anything we have
22 left.

23 JUDGE HOFFMAN: Thank you very much, Ms. Gurule. You
24 have ten minutes remaining for rebuttal. And Mr. Landmon, you have 20
25 minutes of rebuttal, and I'll start the timer when you begin speaking.

26 MR. LANDMON: Sorry, just getting my slides up. Perfect, thank

1 you. May I begin? Thank you. I'll be jumping around a little bit, but
2 hopefully making the points clear as I do that. I just wanted to start really
3 quickly with Larsen. Counsel for Patent Owner pointed to figure 17A and
4 17B in Larsen. Just want to quickly say a couple things about that. I mean,
5 first, the parties have never made any arguments about these figures. This
6 has been the first time the Patent Owner has brought it up. It appears to us
7 that the figures cover something totally different. I mean, it looks to be
8 some sort of large, full-body applicator. Certainly, it's not figure 1 of
9 Larsen. That's the figure we've largely been talking about and relying on.

10 And also, he talked about that in relation to the hinge placement.
11 ALJ Moore basically said any hinge that appeared to touch the inner side
12 was sufficient to meet that claim limitation. So even if those figures
13 somehow did relate to the issues before you, those figures seem to
14 demonstrate hinges that meet at least Judge Moore's construction
15 interpretation of the claim term.

16 And if I can turn you to Petitioner, Petitioner's counsel -- I want to
17 focus on their slides first. Just one slide, I think Slide 64. Petitioner's
18 counsel was stating -- was asked about -- made a statement that there's no
19 single --

20 JUDGE WEATHERLY: You mean Patent Owner's counsel?

21 MR. LANDMON: Patent Owner's counsel.

22 JUDGE WEATHERLY: Okay.

23 MR. LANDMON: Thank you. The slide starts with Petitioner's.

24 JUDGE WEATHERLY: Is that mic over there hot again? Is that
25 why we're getting the feedback? No, it was off. Okay.

26 MR. LANDMON: Thank you. Apologies for that.

1 JUDGE WEATHERLY: No, no problem.

2 MR. LANDMON: Patent Owner's counsel said that we have
3 pointed to nothing in the record demonstrating a hinge structure on an inner
4 side surfaces. So a couple of things about that. Obviously, Larsen's there.
5 And you know it's our position, it's Dr. Grove's position, that Larsen does, in
6 fact, have a hinge on the inner side surface. Also, Dr. Grove, in his first
7 declaration, paragraph 151, he talks about there being a finite number of
8 locations where to put them. Paragraph 155, he talks about it being obvious
9 to put them in the inner side surfaces. That's all in the petition in his original
10 declaration.

11 So it's just not true that there's nothing in the record that points to
12 that. I did want to -- if we could put up Slide 24. One of the points that
13 Patent Owner's counsel has pointed to has been about the gaps, including the
14 gaps between the panels. Wanted to put, and we've talked a lot about this
15 -- I've talked a lot about this before about the divergence angles, the known
16 divergence angles, Dr. Grove's testimony. The bottom part of that slide, the
17 bottom part of that demonstrative, demonstrates why the positioning of the
18 LEDs can compensate and the divergence angles known as the LEDs would
19 compensate for any gap between the panels.

20 JUDGE WEATHERLY: This is what I was trying to say before,
21 that the gap can be controlled for by just putting the column of LEDs closer
22 to the edge.

23 MR. LANDMON: Yes, and that's our position, Your Honor.

24 JUDGE WEATHERLY: Although this time I managed to say it in
25 six words instead of 100.

26 MR. LANDMON: If I could have us turn to Slide 57. So Patent

1 Owner's Counsel, again, this was in discussion and in response to questions
2 about what number 20 is in the figure of Larsen that we have to the left.
3 Patent Owner's counsel said it, they say in their papers too, that somehow
4 figure 20 and the pointing of 20 is pointing to regular row arrangements.
5 And they point to figures 2A and 2D in the patent where the regular row
6 arrangements are shown.

7 So stating the obvious, but it's also what Dr. Jokerst submitted to,
8 if you look at figures 2A through 2D, you will not see a reference to 20
9 because there is none. And it also wouldn't make any sense to draw 20 in
10 the gap between the two panels where the area where the hinges would go
11 because regular row arrangements are the LED rows that would be on the
12 face of the panels. They wouldn't be between the panels as is shown in 20 in
13 figure 1 of Larsen.

14 Counsel, when he started as well, counsel for Patent Owner, when
15 he started, talked about the ALJ's initial determination, and he said when I
16 was talking, I only pointed to issues relating to uniform illumination. In our
17 papers we submitted here, and certainly in our petition to the Commission,
18 we have pointed to errors and things that the ALJ got wrong throughout his
19 opinion on all of the disputed issues that we have disputed here. I did want
20 to point out one, because it's not only where I think ALJ Moore went wrong.
21 I think it's also where Patent Owner goes wrong.

22 And if we could turn to Slide 49. And this is in relation to the
23 higher intensity limitation. We see in the bottom left, this comes from the
24 initial determination. But frankly, it actually really comes from Patent
25 Owner, where they draw the light spacing of Lundahl in the other orientation
26 to say that Lundahl would have said put a higher intensity on the long side of

1 the panels in Larsen. And that is what ALJ Moore found. The problem with
2 Patent Owner's position there --

3 JUDGE WEATHERLY: I really disagree with that. Strongly
4 disagree with that. That's not what Lundahl is showing the spacing in. The
5 fact that that's like taking advantage of the weird orientation that Lundahl
6 shows that panel. Yeah.

7 MR. LANDMON: We obviously totally agree with that, Your
8 Honor. We also believe that it is inconsistent with KSR and its progeny.

9 JUDGE WEATHERLY: Yeah.

10 MR. LANDMON: Basically, it's treating a POSA as an
11 automaton. As you know, and I don't mean to belabor the point on the law,
12 but a POSA has creativity --

13 JUDGE WEATHERLY: I mean, all you have to do is read
14 Lundahl to understand that the image is drawn and rotated 90 degrees from
15 the discussion.

16 MR. LANDMON: That's correct, Your Honor. Sorry, I may be
17 done. If you just give me a moment to look at my notes. Sorry, I'm not
18 done. I should have looked at my notes first.

19 One last point. You heard Patent Owner's counsel talk repeatedly
20 about inventor testimony and inventors, you know, saying that they had
21 difficulty. The law is pretty clear that the perspective is from a POSITA, not
22 from the inventors. And there's a lot of law we cite to in our papers, the
23 Standard Oil case, the Intercontinental Great Brands case. There are other
24 cases as well.

25 And one of the interesting things too, one of the inventors here
26 doesn't even qualify under the definition of POSITA that the Board's

1 adopted here. So I think for all of those reasons, for the reasons in our
2 petition, for the reasons set forth in all the papers and the evidence before
3 you, we believe the challenged claim should be rendered invalid as obvious.

4 If you have no other questions, I --

5 JUDGE WEATHERLY: We're a stickler for making findings on
6 patentability, whether it's patentable or -- unpatentable or not unpatentable.

7 MR. LANDMON: Apologies, Your Honor.

8 JUDGE WEATHERLY: I don't expect you to share the same sort
9 of peccadillo that we do on that, but we're not going to be entering any
10 findings on validity or invalidity.

11 MR. LANDMON: Yes. No, I should have used the right
12 terminology. Apologies for that, and thank you for the correction.

13 JUDGE WEATHERLY: We play with words, all of us.

14 MR. LANDMON: Yeah, thank you. I'm happy to answer more
15 questions.

16 JUDGE HOFFMAN: Further question.

17 MR. LANDMON: Yes.

18 JUDGE HOFFMAN: Not to belabor the point on 20 and 10 and
19 the typo, but I'm not convinced that 20 is pointing to the hinge structure. I
20 mean, it could be pointing to the axis, for example, that's illustrated there.
21 And clearly, there's some kind of typo, but we just don't know what it is.
22 And so I wanted to give you another opportunity to address the ALJ's
23 determination regarding the discouraged from placing the hinges between
24 the panels before 2015. I just want to hear one more time what your position
25 is.

26 MR. LANDMON: Yeah. Thank you, Your Honor. Patent Owner'

1 s counsel talked about that in relation to Slide 66 where they cite the
2 opinion. A couple things about that. What the ALJ Moore cited to there is
3 Dr. Jokerst's testimony, which is just her statements. She's not citing any
4 prior art devices. She's not citing -- I think Judge Weatherly asked, you
5 know, were there other prior art devices that we were talking about that
6 would have discouraged one from doing that?

7 She's not doing that. She's just saying that, listen, if you create a
8 gap, you have light shining out here and light shining out here. You need to
9 fill in that gap, and a POSITA needs to know how to fill in that gap. She
10 doesn't address prior art teaching away. It's her own statements that the
11 judge is relying on.

12 And I think at the heart of this, this is that Lundahl teaches that
13 uniformity is important. A POSITA looks at that, realizes that uniformity is
14 important, and then says, okay, I want to create a flexible design. I've got
15 that in Larsen. Where do I put the hinges? I mean, frankly, and we have a
16 lot of testimony, I know we had a lot of discussion the first time I was up
17 about the most obvious place that we see on every door frankly is a hinge
18 between the two items, so between the two panels.

19 And then on the discouragement point, it's, okay, well, then I need
20 to do this in a way that the gap is not so large that I can't overcome that by
21 my placement of the LEDs. Dr. Grove submitted testimony here that a
22 POSITA would have known how to do that, would have known how to place
23 the LEDs, and would have used a hinge. Very notably, and there's been
24 discussion, when both sides have been discussing, the claims don't require a
25 specific kind of hinge. They have another patent on whatever a nested hinge
26 is.

1 The claims just require some hinge structure. So a POSITA, using
2 their normal creativity, would say, okay, I need uniformity because Lundahl
3 tells me I need uniformity. I'm going to use a type of hinge between the
4 panels to keep them as close together. Maybe that's embedding them within
5 the panel. Maybe that's using just a hinge that's pretty small. There are all
6 kinds of different ways to do it. And Larsen itself talks about creating or the
7 fact that he did have continuous illumination between the panels.

8 So I think you put all of that together, and whether you say, well,
9 20 is the hinge. And I know you had some questions when I talked before
10 that the disclosure of respectively connecting one edge with the other, we do
11 believe that's strong enough to support the hinge being there. But also,
12 there's only a few places to put them. And, you know, one of a few is
13 certainly not something to overcome obviousness.

14 JUDGE WEATHERLY: It's an unexpectedly spicy issue. We
15 have an advantage here, that Judge Moore would admit probably that there
16 are three of us and we get to talk about this case and figure out where we go
17 in a consensus way. And don't misinterpret my questions as being
18 representative by the way of what my colleagues think about this case. I
19 don't have any other questions. It looks like you're about to wrap up.

20 JUDGE HOFFMAN: Any further questions? Well, thank you
21 very much for your time.

22 MR. LANDMON: Thank you.

23 JUDGE HOFFMAN: Patent Owner, you have ten minutes for
24 your sur-rebuttal.

25 MR. HA: Thank you, Your Honor.

26 JUDGE HOFFMAN: Give me one moment to start the clock.

1 And I will start your time when you begin speaking.

2 MR. HA: Thank you very much. I'll start with the divergence
3 angle issue, and I'll actually turn to our Slide 31 through 33 for that
4 particular point. So a couple of points I want to make is, they locked
5 themselves in the petition into incorporating, and this is now on Slide 31 of
6 our demonstratives, incorporating the uneven spacing of light sources of
7 Lundahl in making this proposed combination. That's that series of lights
8 that are various different centimeters, like 3.5, 5, and 7 centimeters apart
9 from each other.

10 Now, what Dr. Jokerst is explaining, and this is on Slide 32, is
11 when you have that uneven spacing that the Petitioner's proposed
12 combination actually put forth in the petition, well, if you look at the hot
13 spots of the LEDs, most of those hot spots are going to appear right directly
14 below the LEDs themselves. So the regions in between may or may not
15 actually meet that required at least within 60 percent of the measured
16 maximum. Their proposed combination and their petition had to
17 demonstrate that, but it didn't, and that's the issue. And I think Petitioner's
18 counsel said Dr. Grove sort of rebutted Dr. Jokerst's position on this.

19 JUDGE WEATHERLY: Let me ask you a question about Dr.
20 Jokerst's depiction here.

21 MR. HA: Yes.

22 JUDGE WEATHERLY: And the papers will bear this out, so
23 almost regardless of what you answer, we'll figure out what she means.
24 Does she mean -- she depicts these LED sources as throwing a relatively
25 narrow angle cone of light energy?

26 MR. HA: So this is -- so Dr. Jokerst's --

1 JUDGE WEATHERLY: Is this her saying it might be like this,
2 therefore Petitioner's failed to make out a case? Or is this her saying, no,
3 this is how LEDs project light?

4 MR. HA: Her point on paragraph 128 is spacing LEDs as taught
5 by Lundahl's uneven spacing of light sources would create gaps. That's her
6 explicit statement.

7 JUDGE WEATHERLY: And how does she know that? She has
8 no idea what the scale of those spaces are.

9 MR. HA: So we do know what the scale is because you see the
10 dimensions here on Slide 31, for example --

11 JUDGE WEATHERLY: Oh, I see. Those are dimensions from
12 Lundahl?

13 MR. HA: Correct.

14 JUDGE WEATHERLY: Okay.

15 MR. HA: And so --

16 JUDGE WEATHERLY: But again, that's the combination. That's
17 your characterization of Petitioner's combination --

18 MR. HA: Correct.

19 JUDGE WEATHERLY: -- is a perfect bodily incorporation of
20 take the LED tubes -- the fluorescent tubes out of Lundahl and plug in LEDs
21 in exactly the same physical gap of spacing.

22 MR. HA: And it's their wording that we're looking at, right? This
23 is paragraph 179 of Dr. Grove's declaration that incorporates the uneven
24 spacing of light sources of Lundahl. So we're taking what they presented in
25 the petition and we're rebutting what they presented.

26 JUDGE WEATHERLY: Yeah. Well, again, usually it's about

1 teachings between references, not bodily incorporation. And a reference to
2 the uneven spacing of light sources, what you're asking us to find is that Dr.
3 Grove is saying the specific three and a half centimeter, 5 cm, 7 cm gaps
4 shown in Lundahl, right? That's what the uneven spacing means from your
5 perspective?

6 MR. HA: That's correct.

7 JUDGE WEATHERLY: Now, was there any cross-examination
8 on that point?

9 MR. HA: Yes, Your Honor.

10 JUDGE WEATHERLY: So what did he say?

11 MR. HA: He said -- so let me explain this a little bit further. So
12 he submitted an ITC expert report. He submitted another declaration that
13 both says you're incorporating the uneven spacing. We then took the
14 deposition --

15 JUDGE WEATHERLY: Yeah, but my point is I'm not sure that
16 incorporating the uneven spacing means what you say it means.

17 MR. HA: And so the deposition, the cross-examination testimony
18 at the ITC, we locked him in and asked him the question, are you relying
19 specifically on that spacing? And he said, yes. And the IPR deposition --

20 JUDGE WEATHERLY: That spacing meaning three and a half
21 millimeters.

22 MR. HA: Correct.

23 JUDGE WEATHERLY: But do you talk about three and a half
24 centimeters and 5 cm in the depo?

25 MR. HA: Yes, we do.

26 JUDGE WEATHERLY: And is that a record in our case?

1 MR. HA: Yes, Your Honor.

2 JUDGE WEATHERLY: And it's ITC cross-examination?

3 MR. HA: It's both ITC cross-examination as well as IPR cross-
4 examination.

5 JUDGE WEATHERLY: Okay. The ITC cross-examination that
6 was on the stand in front of Judge Moore, right?

7 MR. HA: That's a deposition --

8 JUDGE WEATHERLY: Okay, all right.

9 MR. HA: -- for the ITC proceeding.

10 JUDGE WEATHERLY: And is there any evidence that goes
11 against you on this specific point?

12 MR. HA: Well, in the -- so after he admitted in the ITC deposition
13 that he is relying on the spacing, when we tried to confirm that in the IPR
14 deposition a couple of months later, he then says, no, I'm just relying on the
15 various teachings, despite the fact that his ITC expert report and the IPR
16 declaration used identical verbatim words. So that's the issue that we're
17 raising in the motion to exclude evidence, where he's now trying to give
18 himself more flexibility in making the change despite the fact that the
19 original declaration presented should have locked himself into --

20 JUDGE WEATHERLY: Doing that with a supplemental
21 declaration of some kind that was submitted with the reply?

22 MR. HA: Yes, Your Honor.

23 JUDGE WEATHERLY: Just as a point of practice for you in the
24 future, I'm not sure that it's -- to try to get us to exclude evidence on a Rule
25 403 basis is a really, really tall, really tough challenge.

26 MR. HA: We understand.

1 JUDGE WEATHERLY: Right.

2 MR. HA: Yes, Your Honor.

3 JUDGE WEATHERLY: I hope that I've demonstrated, at least by
4 the questions I'm asking, that we're not really worried about evidence being
5 prejudicial or misunderstanding the evidence --

6 MR. HA: Understood, Your Honor.

7 JUDGE WEATHERLY: -- on the bench here.

8 MR. HA: Yes. And I think Your Honors are totally capable of
9 deciphering which arguments are new and which ones are ones that are
10 presented --

11 JUDGE WEATHERLY: Well, if an argument's new though, that's
12 a different issue. And I will just refer to it as kind of a Rule 23 issue, where
13 your argument would be that the Petitioner has exceeded the proper scope of
14 a reply.

15 MR. HA: Yes, Your Honor.

16 JUDGE WEATHERLY: And that we should disregard to the
17 extent that they've exceeded that scope. But you really haven't presented
18 that argument for us, have you?

19 MR. HA: Well, only because I think the panels have routinely
20 discarded new arguments of improper scope.

21 JUDGE WEATHERLY: I just had a decision I wrote vacated
22 because I didn't consider someone's declaration testimony on reply.

23 MR. HA: Understood. Which is why we're --

24 JUDGE WEATHERLY: And it's reversible error for me to not
25 consider something that the Federal Circuit thinks I should consider.

26 MR. HA: Right. Which is exactly the reason why we're moving to

1 exclude the evidence.

2 JUDGE WEATHERLY: Well, it's also reversible error for me to
3 exclude evidence if the Federal Circuit thinks it's something that I should
4 have considered.

5 MR. HA: Understood.

6 JUDGE WEATHERLY: If we do consider the evidence, then
7 what? What does that do to your position? Does it --

8 MR. HA: Well, it still has the overall defect of, number one, not
9 presenting or demonstrating the required construction. So regardless of what
10 the spacing is, they still haven't demonstrated it needs to be at least within 60
11 percent of the maximum.

12 JUDGE WEATHERLY: To some extent, doesn't that depend on
13 us agreeing with Dr. Jokerst that these LEDs emit light in this really tight
14 cone pattern?

15 MR. HA: I think it's just a procedural defect. They have no
16 discussion whatsoever. And I'll point you to our demonstrative Slide 41,
17 which is their entire discussion of this uniformly illuminating in the petition.
18 So we've presented here on Slide 41, and we've color coded their individual
19 discussion of Lundahl in blue and their individual discussion of Larsen in
20 pink. No where did they ever talk about these two things in combination
21 with one another.

22 JUDGE WEATHERLY: Which two things are you talking about?

23 MR. HA: How the proposed combination of Lundahl --

24 JUDGE WEATHERLY: Right. What the spacing precisely
25 should be on the LED sources?

26 MR. HA: Including the at least within 60 percent maximum,

1 including how you actually apply the teachings of one to the other and --

2 JUDGE WEATHERLY: Yeah, that's tough for you because, I
3 mean, there's no argument that Lundahl doesn't say that uniformity is
4 important. There's no argument that Larsen says that uniformity is
5 important. The question ends up being whether Petitioner's showing about
6 uniformity in the combination that they propose is sufficient.

7 MR. HA: Yeah, so I want to push back on Larsen's teaching that
8 uniformity matters, right? Which is Larsen only talks about gap-free
9 illumination, which is not uniform as required by the construction. It's
10 similar to our figure 7, which has a conventional illuminator where you can
11 have a gap-free illumination that falls below 60 percent. When they make
12 the proposed combination of breaking up the panel, placing these LEDs in
13 this specific uneven spacing, they have to go and demonstrate that the
14 greater than 60 percent is met. They haven't done any of that.

15 JUDGE HOFFMAN: On that point, the challenged patent, column
16 3, talks about the lighted hinge, which really refers to the U-shape. It talks
17 about the nested hinges. It talks about the individual configurable aspect.
18 And it seems to suggest those three things in combination are what results in
19 this uniform illumination. Is that not correct? If we found a combination
20 -- if we determined the combination with those three things was obvious,
21 wouldn't it not have uniform elimination?

22 MR. HA: And I'm sorry I missed the three things. I just want to
23 make sure I have that exactly right.

24 JUDGE HOFFMAN: Sure. It's in column 3. And it refers to it as
25 the lighted hinge, which seems to refer to the U-shape of the device. It talks
26 about the nested hinges, which goes to the gap-free, and it talks about the

1 individually configurable aspect of the panels.

2 MR. HA: So I want to push back on that. The lighted hinge is an
3 embodiment that's not a disputed issue because literally that embodiment
4 actually uses a light at the hinge, so that's a lighted hinge. Nested hinge, as
5 we noted earlier, is one type of a hinge that's on the inner side surface.
6 You're right about the individually configurable, but we also have additional
7 characteristics like the higher intensity of light near the shorter edges relative
8 to the non-shorter edges. It's these various combinations of technologies that
9 are put together that makes the claim inventive. And I think your point
10 about these three is just slightly off.

11 JUDGE HOFFMAN: Okay. Thank you.

12 MR. HA: I think I'm over my time, so I will sit down.

13 JUDGE HOFFMAN: Okay. Are there any further questions from
14 the panel? Counsel, thank you so very much. We appreciate your level of
15 preparedness today. I believe it was very helpful for us. And we will take
16 this case under advisement and issue our final written decision in due course.
17 The panel will be leaving now, but please remain in the room to confer with
18 the court reporter to ensure that there are no questions regarding the spelling
19 of names or terms. Thank you again.

20 (Whereupon, the above-entitled matter went off the record at 4:04
21 p.m.)

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