

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON ATHLETICA CANADA INC.
AND LULULEMON USA INC.,
Petitioner

v.

NIKE, INC.,
Patent Owner.

IPR2023-00348
Patent 10,188,930 B2

Record of Oral Hearing
Held: April 4, 2024

Before JOSIAH C. COCKS, GEORGE R. HOSKINS, and
STEPHEN E. BELISLE, *Administrative Patent Judges*.

APPEARANCES:

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The above-entitled matter came on for hearing Thursday, April 4, 2024, commencing at 10:01 a.m. EST, at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia.

P-R-O-C-E-E-D-I-N-G-S

10:01 a.m.

JUDGE BELISLE: Good morning. This is the oral hearing in IPR2023-00348 involving U.S. Patent Number 10,188,930 B2. The court reporter will prepare the official transcript for this hearing. The petitioner is lululemon athletica canada inc. and lululemon usa inc. The patent owner is Nike, Inc.

I am Judge Belisle. I'm joined by Judge Cocks and Judge Hoskins. Judge Hoskins is appearing remotely by video. Counsel, please introduce yourselves, beginning with counsel for Petitioner.

MR. YAP: Good morning, Your Honors. This is Alex Yap with Morrison and Foerster for Petitioner lululemon. With me here today is my colleague Jean Nguyen, Morrison and Foerster as well.

JUDGE BELISLE: Thank you. Patent owner?

MR. HARRIS: Good morning, Your Honors. I'm Michael Harris for Patent Owner Nike, Inc. With me is Aaron Bowling, also Lindsey Staubach, and then, with us today also is in-house counsel for Nike, Kim Van Voorhis.

JUDGE BELISLE: Thank you. Although we have pretty much the same cast of characters as the prior hearing, for purposes of the record, I am going to begin with some general guidance. It will sound very familiar to you.

We have the entire record available to us, including the parties' demonstratives. When referring to the demonstratives, papers, or exhibits, please do so clearly and explicitly by slide or page number. Please pause a few seconds after identifying the page you want us to go to to provide us some time to find it.

1 Please do not interrupt the other party while that party is presenting its
2 arguments. If you have an objection, please raise it during your argument.

3 Pursuant to our hearing order, each party has 60 minutes to present its
4 argument. In addition, at least one of Petitioner's counsel is participating in
5 this hearing as a LEAP practitioner, so we've granted Petitioner an additional
6 15 minutes of argument time, for a total of 75 minutes.

7 And just to clarify, for Patent Owner, your LEAP practitioner is only
8 for the next case; is that correct? The '349?

9 MR. HARRIS: That's correct. That's correct, yes.

10 JUDGE BELISLE: Each party may reserve time solely to rebut the
11 opposing party's arguments. You may not use rebuttal to address an issue
12 for the first time during the hearing. Petitioner will proceed first because it
13 bears the burden of proving unpatentability.

14 Petitioner, how much time, if any, do you want to reserve for rebuttal?

15 MR. YAP: We'll reserve 30 minutes.

16 JUDGE BELISLE: Thirty minutes. You may begin.

17 MR. YAP: Your Honor, we have some demonstratives printed out in
18 copies.

19 JUDGE BELISLE: We have them up on the screen, but we will take
20 them if you've provided.

21 MR. YAP: Sure. Thank you.

22 JUDGE BELISLE: Thank you.

23 MR. YAP: Mr. Court Reporter?

24 COURT REPORTER: Thank you.

25 PETITIONER ARGUMENT

26 MS. NGUYEN: May it please the Board, good morning, Your
27 Honors. My name is Jean Nguyen of Morrison and Foerster, representing

1 Petitioner lululemon athletica canada inc. and lululemon usa inc. Petitioner
2 respectfully submits that the challenged claims of the '930 patent are
3 unpatentable.

4 Please turn to slide 2. I've prepared a number of slides for today's
5 hearing. As you can see here, my presentation is divided into five modules.
6 I'd like to provide an overview of the '930 patent in the first module, discuss
7 claim construction in the second module, followed by a discussion of the art
8 in the third, fourth, and fifth modules.

9 Starting with a brief overview of the '930 patent, please turn to slide 4.
10 The '930 patent is directed to monitoring a user performing an athletic
11 movement and/or exercise and generating a combinatory fitness athleticism
12 score. As described in the bottom passage, this combinatory fitness
13 athleticism score comprises two sub-scores: a fitness sub-score and an
14 athleticism sub-score.

15 Please turn to slide 5, which shows Claim 1 of the '930 patent. Claim
16 1 is the only independent claim challenged in this proceeding. It recites a
17 computer-implemented method that performs six steps. Two of those steps
18 are shown in the top passage of the slide: receiving, from a sensor, first
19 activity data representing the first athletic movement, and calculating with a
20 processor, based on the first activity data, a first combinatory fitness
21 athleticism score.

22 Claim 1 also requires, as shown in the bottom passage of the slide,
23 that each combinatory fitness athleticism score comprise these two sub-
24 scores: the fitness sub-score, and a separate athleticism sub-score. In other
25 words, the combinatory fitness athleticism score is calculated from the
26 athletic movement, which provides both a fitness sub-score and an
27 athleticism sub-score.

1 Now, while the Board asked the parties in its DI to brief three claim
2 construction issues, the only term whose meaning is disputed between the
3 parties is athletic movement, shown in green. In addition, there are some
4 disputes regarding the art, which I will discuss later.

5 So please turn to slide 6. First, let's talk about the '930 patent's
6 combinatory fitness athleticism score, shown here, in figure 12. The
7 combinatory fitness athleticism score comprises a fitness sub-score, for
8 example, 76, the number shown on the left of the slide, and an athleticism
9 sub-score, for example, the number 65, shown on the right, as individual
10 sub-scores. The combinatory fitness athleticism score may alternatively be
11 represented by averaging, summing, or otherwise combining the two sub-
12 scores into an individual score.

13 Now, turning to slide 7, let's take a look at the fitness sub-score,
14 highlighted in yellow, as claimed. The fitness sub-score is calculated using
15 one or more of an endurance fitness attribute, a flexibility attribute, and a
16 strength fitness attribute. And the specification provides examples of an
17 athletic movement for each attribute.

18 Turning to slide 8, one example athletic movement for the endurance
19 attribute is vertical jumps. Looking at slide 9, for the flexibility attribute, the
20 specification provides leg raises and/or reverse reaches as an example
21 athletic movement. And then, please turn to slide 10. For the strength
22 attribute, the specification provides static lunges and/or push-ups as an
23 example athletic movement.

24 Now, if you would, please turn to slide 11. And looking at the
25 athleticism sub-score, which is the other sub-score for the combinatory
26 fitness athleticism score, as claimed, the athleticism sub-score, highlighted

1 in yellow, is calculated using one or more of speed, agility, reaction, power,
2 and balance athleticism attributes.

3 Turning to slide 12, one example athletic movement provided in the
4 specification is cone sprints, and this is for the speed, agility, and reaction
5 athleticism attributes. Looking at slide 13 for the power attribute, the
6 specification provides vertical jumps as an example athletic movement. And
7 then, finally, for the balance attribute, the specification identifies hops and
8 sticks as an example athletic movement.

9 Please turn to slide 15. So, to sum, the specification provides several
10 example athletic movements, including vertical jumps, leg raises, reverse
11 reaches, static lunges, and push-ups, shown in blue on the left side of the
12 slide, used in calculating the fitness sub-score; also, cone sprints, vertical
13 jumps, and hops and sticks, shown in green on the right side of the slide,
14 used in calculating the athleticism sub-score.

15 So, moving on to claim construction, the only term whose
16 construction is in dispute between the parties is athletic movement. Please
17 turn to slide 17. As the Board preliminarily found in its DI, the '930 patent
18 provides a definition for athletic movement. And this definition comes from
19 column 4, lines 7 to 11 of the specification.

20 Turning to slide 18, Petitioner agrees with the Board that athletic
21 movement should be given the same meaning as the one provided in the
22 specification. And Patent Owner, in its Patent Owner Response, described
23 athletic movement as the inventor's lexicography and then cited the same
24 column 4, line 7 to 11 definition of the specification.

25 In the POR, Patent Owner tried to argue that the patent's definition
26 means a single athletic movement, as highlighted -- as underlined in red.
27 But if we turn to slide 19, Patent Owner's construction seems to have

1 evolved during the proceeding. As I just discussed and as shown in the top
2 passage in the -- Patent Owner's proposed construction in the POR was
3 single athletic movement. Petitioner then responded in the reply, paper 24,
4 pages 3 to 5, how, as the Board correctly pointed out, it is incorrect to
5 interpret the specification's definition as a single athletic movement.

6 So, then, what followed after this is Patent Owner trying to reconcile
7 its construction with the specification's definition by admitting in its
8 surreply, paper 25, page 3, shown at the bottom passage of this slide, the
9 first sentence: that athletic movement includes multiple movements. Then,
10 in the surreply, Patent Owner provides a different construction, this time,
11 single type of exercise or athletic activity, underlined in the bottom passage
12 of this slide.

13 But Your Honors, it doesn't stop there. So, now, if you can, please
14 take a look at slide 12 of Patent Owner's demonstratives. Patent Owner
15 changed its construction again. This time, it's a single type of exercise or
16 athletic activity that may include multiple coordinated movements.
17 Regardless, Your Honors, whichever construction Patent Owner chooses, all
18 of them should be rejected.

19 Please turn to slide 20. One reason why Your Honors should reject
20 Patent Owner's construction is because it is based on one embodiment and
21 one sentence that is not the specification's definition at column 4, lines 7 to
22 11. And Patent Owner's one sentence is instead from column 23, lines 61 to
23 64, which starts with in one embodiment, and then describes only one
24 athletic movement of vertical jumps. In other words, Patent Owner is citing
25 to a different portion of the specification and, essentially, is asking Your
26 Honors to limit the meaning of athletic movement to this one embodiment,
27 which is vertical jumps.

1 JUDGE BELISLE: So, Counsel, my understanding of at least one of
2 Patent Owner's arguments on claim construction is that this athletic
3 movement term, that what they're saying when they say a single athletic
4 movement is that it can be any one of all of those movements that are talked
5 about in the -- in the specification. So, when it says a first athletic
6 movement including movements such as these types of movements, that
7 they're effectively interpreting it to be that it's selecting one of those like
8 from a list. I can select one of those movements as the move -- as the first
9 athletic movement. So, in your argument today, please address why that's
10 not right.

11 MS. NGUYEN: Yes, Your Honor. I will in the next few slides. So,
12 again, Patent Owner's construction requires -- and this is from their surreply
13 -- a single type of exercise or athletic activity, but I wanted to explain and
14 understand what is required of Claim 1 under Patent Owner's construction.

15 So, if we look at Claim -- slide 5 again, Claim 1 requires the
16 combinatory fitness athleticism score, again, comprising both the fitness
17 sub-score and the athleticism sub-score. Thus, each athletic movement must
18 provide a fitness sub-score and an athleticism sub-score. In other words,
19 under Patent Owner's construction, Claim 1 requires a single type of exercise
20 or athletic activity that provides both the fitness sub-score and an athleticism
21 sub-score.

22 JUDGE COCKS: Counsel, I have one question. It's somewhat of a
23 high-level question, but of the three grounds that you have proposed, are
24 they all predicated on movements that are associated with multiple exercises
25 or activities?

26 MS. NGUYEN: Under Petitioner's construction and the Board's
27 preliminary findings, all grounds are predicated -- it encompasses either

1 single types of exercises or multiple. Under Patent Owner's construction, it
2 would be covered only -- it would cover only single types of exercises.

3 JUDGE COCKS: So let me follow-up then. So do your grounds
4 contemplate multiple movements as a part of a single exercise in accounting
5 for the claims?

6 MS. NGUYEN: Yes. Your Honor, that's a possibility, yes.

7 JUDGE COCKS: Okay. Thank you.

8 MS. NGUYEN: So, looking at slide 21, let's take a look at the
9 specification's definition again. This is, again, column 4, lines 7 to 11 of the
10 '930 patent. Patent Owner makes two arguments in its surreply in response
11 to Petitioner's arguments that the specification does not mean a single
12 athletic movement.

13 So Patent Owner first argues that its proposed construction is
14 consistent with the specification's definition, but Your Honors, when
15 discussing how Patent Owner believes its construction is consistent, taking a
16 look at the surreply, page 4, Patent Owner states that many -- not all -- of the
17 athletic movements disclosed in the specification meets its construction. So
18 Patent Owner is effectively agreeing that its construction is narrower than
19 the specification's definition. And Your Honors, it's Petitioner's position that
20 there is no reason for the construction to be narrower than the specification's
21 definition, especially since Patent Owner never provides a reason.

22 JUDGE BELISLE: Counsel, this image that's on the screen, is that
23 one of your slides, or is that just an exhibit you're referring to?

24 MS. NGUYEN: Yes. This is the surreply, paper 25, page 4.

25 JUDGE BELISLE: Okay. Just give us a moment to find it.

26 MS. NGUYEN: Yes.

1 JUDGE BELISLE: Because, unfortunately, what's on that screen
2 does not appear on my screen automatically. So the citation again to what's
3 on the screen is?

4 MS. NGUYEN: Yes. That is the surreply, paper 25, at page 5. Oh,
5 sorry, page 4.

6 JUDGE COCKS: And what are you directing our attention to? What
7 should we be taking from this?

8 MS. NGUYEN: Yes. So, if you'll see at the surreply, in this page 4
9 discusses claims construction. This is Patent Owner's response to
10 Petitioner's reply. As shown in the highlighted passage, Patent Owner is
11 stating that many of the athletic movements disclosed in the specification
12 meet its construction. Note, it -- the Patent Owner does not say all of the
13 athletic movements disclosed in the specification meet its construction.

14 JUDGE BELISLE: Counsel, is -- my understanding of what's being
15 argued there is that, again, this -- these athletic movements, that there's an
16 attempt to isolate athletic movements to a particular type of exercise.

17 MS. NGUYEN: Right.

18 JUDGE BELISLE: Like running or swimming. And there seemed to
19 have been a realization that if you're running, while your legs are moving,
20 your arms are moving. Your abdominals are moving, so there's a lot of
21 moving parts to that movement. But -- so my question again is why is that
22 not a fair interpretation of athletic movements? Why does athletic
23 movements include both running and rowing and swimming all at the same
24 time?

25 MS. NGUYEN: So, Your Honors, Petitioner's position is not that
26 athletic movements includes all of running, rowing, swimming, and cycling

1 at the same time, but it could be, for example, two of the four movements
2 performed sequentially. And this is based on the specification's definition.

3 If we go back here, you'll see, right, the specification definition
4 doesn't put a limit on the movement being a single type of movement.
5 Rather, it just has to include movements relating to fitness, exercise,
6 flexibility, et cetera.

7 JUDGE BELISLE: So, in the quoted specification on your slide 21 --
8 this goes back to my first, sort of, just statement -- Patent Owner is saying
9 athletic movement includes movements related to these various things that
10 are listed in that sentence. And my understanding is, the interpretation that's
11 being offered to us from Patent Owner is that you have an athletic movement
12 that can be selected from all these different types of movements, not that it
13 necessarily includes, you know, sort of in sequence or at the same time all of
14 those movements.

15 In a sense, I'm picking one of -- one cookie out of a cookie jar, and
16 they're telling me what all the cookies are, but I get to pick one.

17 MS. NGUYEN: Right.

18 JUDGE BELISLE: So, again, try to -- why is that not a correct
19 interpretation of a first athletic movement?

20 MS. NGUYEN: Yeah. So, Your Honor, if you could -- I have a few
21 slides -- in few slides, I'll address that argument, if it's okay.

22 JUDGE BELISLE: It's okay.

23 MS. NGUYEN: Okay. So, just turning back to the specification's
24 definition. I did want to talk a little bit about Patent Owner's second
25 argument. Patent Owner argues -- and this is raised for the first time in the
26 surreply -- that the definition shown here, on slide 21, must mean single type
27 of athletic movement. And the reason that athletic movement, underlined in

1 red, cannot be coextensive with what follows the phrase part of, highlighted
2 in yellow. More specifically, Patent Owner argues athletic movement
3 cannot be coextensive with exercise routines, highlighted in blue.

4 And you can see from the plain language of the specification's
5 definition that the word "part of" does not preclude a situation where athletic
6 movement can be coextensive with exercise routines. And "part of"
7 definitely does not preclude a situation where athletic movement includes
8 multiple exercises or multiple types of exercises. Just "part of," and its
9 definition, it does not inform how many movements or types of movements
10 are included in the term athletic movement.

11 And just to point Your Honors, we already addressed -- Petitioner
12 already addressed the meaning of "part of" on page 3 of our reply, paper 24,
13 and this was Patent Owner's only response.

14 So, if I may, turn to slide 22. Patent Owner's construction should be
15 rejected -- and this, perhaps, goes to your question, Judge Belisle -- because
16 it excludes several embodiments. Now, earlier, we talked about running,
17 rowing, swimming, and cycling. The one point I wanted to make is that
18 although those are exercises that Patent Owner has identified, the
19 specification does not discuss the running, rowing, cycling, or swimming as
20 providing both sub-scores that we had seen earlier on Claim 1.

21 And here, this shows an example where Patent Owner's construction
22 should be rejected because it excludes several embodiments. So Petitioner
23 identified several embodiments -- and that's on page 5 of the reply, paper 24
24 -- that would be excluded under both the Board's preliminary findings and
25 Patent Owner's construction. Your Honors also identified several excluded
26 embodiments on page 18 of the DI.

1 This slide, slide 22, shows one example, which comes from column
2 23, lines 25 to 33. And you'll see there are two sentences in this passage. In
3 the first sentence, it starts with in one embodiment, and then it describes a
4 single athletic activity. That's the first sentence.

5 And then, the second sentence starts with yet in another embodiment,
6 and it describes a first type of exercise providing the athleticism attribute
7 and then the second type of exercise providing the fitness attribute. So, in
8 other words, that second sentence referring to the another embodiment
9 discloses athletic movement as including multiple types of movements
10 because, again, Claim 1 requires each athletic movement provide two sub-
11 scores.

12 And this entire passage is consistent, again, with the Board's
13 preliminary findings and Patent Owner's construction -- or sorry --
14 Petitioner's construction. Patent Owner's construction, on the other hand,
15 would exclude the second sentence called the another embodiment. Again,
16 we identified this in our reply. Patent Owner has no response.

17 Now, turning to slide 23, Patent Owner's construction further excludes
18 the embodiments crossed out on slide 23. So, leg raises, reverse reaches,
19 static lunges, push-ups, cone sprints, and hops and sticks, these are all
20 excluded under Patent Owner's construction. And this comes from the
21 specification description at column 23, line 48, to column 24, line 15.

22 Each one of these crossed-out exercises on the slide provides either
23 the fitness sub-score or the athleticism sub-score, not both. And recall,
24 Patent Owner's construction -- under Patent Owner's construction, Claim 1
25 requires a single type of exercise or athletic activity for both the fitness sub-
26 score, shown in blue, and the athleticism sub-score, shown in green. And
27 because none of the crossed-out exercises on this slide provides both sub-

1 scores, as required by Claim 1, these exercises would be excluded under
2 Patent Owner's construction.

3 JUDGE BELISLE: And Counsel, why does that matter?

4 MS. NGUYEN: With --

5 JUDGE BELISLE: Why does it matter that it excludes some of
6 what's disclosed in the spec, but still includes other things that are disclosed
7 in the spec?

8 MS. NGUYEN: Yeah. So, under Patent Owner's construction, it
9 would be inconsistent with the claim language, right, because it would
10 exclude the embodiments. And generally, unless the claim language says
11 these embodiments should be excluded, right, the embodiments in the
12 specification should be encompassed by the claim.

13 And then, turning to slide 24 -- and this goes towards your question,
14 Judge Belisle -- with respect to the earlier slide, slide 23, regarding the
15 excluded embodiments, Patent Owner's response to this, raised for the first
16 time in the surreply, is shown here. And I've provided relevant limitations
17 of Claim 1, showing the top passage of the slide. You'll see it recites
18 receiving the first athletic movement. And then, later on in Claim 1, it
19 recites receiving the second athletic movement.

20 And so, Patent Owner's response was that they are not excluding
21 embodiments because Claim 1, as a whole, covers multiple exercises. So,
22 according to Patent Owner, one exercise is for the first athletic movement,
23 and another exercise is for the second athletic movement.

24 But Your Honors, this argument doesn't even work with Patent
25 Owner's construction, and let me explain why. So we're going to take leg
26 raises as an example for the first athletic movement. So, if leg raises is the
27 first athletic movement, shown in blue, it is a single type of exercise or

1 athletic activity, but it does not -- it only provides the fitness attribute shown
2 in blue. It does not provide the athleticism attribute shown in green. And
3 again, athletic movement -- each athletic movement of Claim 1 must provide
4 both fitness attribute and athleticism attribute.

5 JUDGE BELISLE: So, Counsel, something that kind of bugs me in
6 this case is there's a lot of statements like that in the record and both sides, in
7 their briefs, that, for example, like what you just said that leg raises is used
8 to provide a fitness measure. Well, why can't it be used to provide an
9 athleticism measure? Doesn't it just matter what it is you're measuring as far
10 as your data? I mean, if I do leg raises quickly, seemingly, I can measure
11 that aspect. If I do them slow with a lot of weight, I can measure something
12 different. Why -- what is in the spec that is telling me I can only measure
13 certain fitness or athleticism attributes out of a given exercise?

14 MS. NGUYEN: Yeah. So, for the '930 specification, with respect to
15 leg raises, and going back to slide -- yeah -- slide 9, right. The '930
16 specification only describes these exercises, leg raises as the example, as
17 providing information for the flexibility attribute. So there is no disclosure
18 in the '930 patent that leg raises is also used in the calculation with respect to
19 the athleticism attribute.

20 MR. YAP: And Your Honor, if I may add to this, this spec also
21 provided vertical jumps. And for vertical jumps, this spec said that, well, it
22 provides both attributes. So the inventor clearly knows that there are certain
23 exercises that can provide both attributes. And so, for example, hops and
24 sticks, it doesn't say it provides the fitness attribute.

25 MS. NGUYEN: And then, if I -- just to finish up this slide 24, none
26 of the crossed-out exercises shown in slide 23 provides both attributes. So

1 that's why all these crossed-out exercises on slide 23, in addition to others,
2 are excluded under Patent Owner's construction.

3 So, unless Your Honors have any questions -- other questions
4 regarding claim construction, I will now turn to the instituted grounds and
5 how the prior art discloses or teaches the challenged claims. Please turn to
6 slide 26.

7 The Board instituted inter partes review based on three grounds with
8 Lofi and Maeueler as primary references, and Kitagawa as the second
9 reference for obviousness for grounds 2 and 3. And note, on the slide,
10 although the bottom row says ground 4, it's actually ground 3.

11 Now, if Your Honors agree with the Board's preliminary findings and
12 Petitioner's construction of athletic movement, then Your Honors should
13 find at least Claim 1 unpatentable as the parties do not dispute that Lofi and
14 Maeueler each discloses or teaches the limitations of Claim 1, the only
15 independent claim, under Petitioner's construction. But if Your Honors, for
16 some reason, agree with Patent Owner's construction, then as I will express
17 in the next few slides, the prior art still teaches or discloses Claim 1.

18 So, starting with Lofi, and please turn to slide 28. Lofi teaches a
19 terminal device, shown in Figure 2, and it is used to evaluate the physical
20 fitness of a person by having the person perform tests and then taking
21 measurements. It analyzes the measurements. And then, for each measure,
22 it calculates a score. And then, it also calculates an overall score of physical
23 fitness.

24 Turning to slide 29, one example of test in Lofi is the 8-minute pedal
25 test, where the person is asked to pedal on a bicycle for a period of 8
26 minutes. The 8-minute pedal test determines maximum oxygen
27 consumption, which represents endurance, highlighted in blue, and a signal

1 expressed in Watts, shown in green, is generated as a part of Lofi's
2 endurance measure.

3 Now, turning to slide 30, another one of Lofi's leg test is the leg
4 strength test, where the person is asked to pedal, again, on a bicycle, as fast
5 as possible, for approximately ten seconds. The leg strength test generates a
6 strength signal, a speed signal, and then, a strength versus speed curve is
7 generated from the strength and speed signals. With Lofi's leg test, a signal
8 expressed in Watts, shown in green on the slide, is generated as part of Lofi's
9 strength measure.

10 And then, turning to slide 31, Lofi discloses several other tests,
11 another strength test, a flexibility test, a balance test, and a test that measures
12 the reflexes of the person. Strength and flexibility are fitness attributes, as
13 highlighted in blue, and then balance and reflexes are athleticism attributes.

14 JUDGE BELISLE: Counsel, can we return back to slide 30, please?
15 So, on slide 30, the quoted statement about the peak of the strength/speed
16 curve, and I believe you indicated that there's two signals there. Can you
17 direct me in the reference where it says that there's a strength signal and a
18 speed signal being generated?

19 MS. NGUYEN: Yes. So Lofi discusses this on page 5. Yeah, so it's
20 on page 5, and there's discussion at column 4, until line 18, exhibit number
21 -- Exhibit 1002, and Lofi -- in Lofi, there's a discussion that -- well, so it
22 talks about strength versus speed curve, and in order to generate that strength
23 versus speed curve, you would need to determine strength, and you'd also
24 need to determine speed.

25 JUDGE BELISLE: So the reference itself doesn't say there's two
26 separate signals; is that correct?

1 MS. NGUYEN: No, Your Honors. It's not our position that they're
2 separate signals, just that strength is generated, speed is generated, and then
3 strength versus speed curve is generated.

4 JUDGE BELISLE: Okay.

5 MS. NGUYEN: Okay. So, as I discussed earlier, Lofi determines
6 scores for each measure, and an overall score is determined from the scores
7 for each measure. And just going back to Lofi's 8-minute pedal test, Lofi
8 calls this an endurance measure, and on slide 28, there would be multiple
9 scores for each measure. Lofi's leg strength test is called a strength measure.
10 And there would be also, as shown in the bottom passage of slide 28, scores
11 for each measure. And then, from the scores for each measure, an overall
12 score of physical fitness is calculated.

13 So, for Claim 1 and Lofi, the only dispute is whether Lofi discloses an
14 athletic movement under Patent Owner's construction. Athletic movement
15 under the Board's preliminary findings and Petitioner's construction
16 encompasses both single and multiple types of exercises, and as shown
17 earlier, Lofi's tests provide for both fitness and athleticism attributes. So,
18 therefore, Lofi discloses Claim 1 under Petitioner's construction. Patent
19 Owner does not dispute this.

20 So, then, taking a look at slide 34 and Claim 1, Lofi still teaches
21 Claim 1 under Patent Owner's construction. Again, under Patent Owner's
22 construction, Claim 1 requires a single type of exercise or athletic activity
23 that provides both the fitness sub-score and the athleticism sub-score.

24 And if we can, turn to slide 35. Petitioner pointed to two tests in Lofi.
25 Each test discloses a single type of exercise or athletic activity that provides
26 both the fitness sub-score and the athleticism sub-score, i.e., meets Claim 1
27 under Patent Owner's construction. So Lofi's 8-minute pedal test involves a

1 single type of exercise of pedaling on a bicycle. It determines maximum
2 oxygen consumption, shown in blue. That is a fitness attribute for
3 endurance. And then, it also generates a signal in Watts, which is power.
4 Power is an athleticism attribute, shown in green.

5 With respect to Lofi's leg strength test, it's again, same single type of
6 exercise, pedaling on a bicycle. It generates signals with respect to strength
7 and speed. And then, the measurement generates a signal expressed in
8 Watts, again, power, an athleticism attribute.

9 And with respect to Patent Owner's arguments and Lofi and Claim 1,
10 Patent Owner makes two arguments. The first argument is that Lofi never
11 uses the exact word power, but as Your Honors can see on the slide, Lofi
12 uses the word Watts. And a POSITA knows, both parties' experts know that
13 Watts is power. So, for example, Patent Owner's expert provided testimony
14 regarding this well-known concept at Exhibit 1017, page 51, line 23 to page
15 52, line 3, and then page 54, lines 3 to 9.

16 If we could, turn to slide 36. I wanted to talk about Patent Owner's
17 second argument. And Patent Owner's second argument is that Lofi's tests
18 do not calculate an endurance or strength score separate from a speed or
19 power score. But, Your Honors, as you can see here from the language of
20 Claim 1, Claim 1 does not require calculating an endurance score. Claim 1
21 does not require calculating a strength score. Instead, Claim 1 requires, as
22 shown in the top passage, calculating a fitness sub-score using an endurance
23 attribute and using a strength attribute.

24 And also, Claim 1 does not require calculating a speed score, shown
25 in the bottom passage, or a power score. Instead, Claim 1 requires
26 calculating an athleticism sub-score using one or more of a speed attribute

1 and power attribute. So endurance, strength, speed, power, these are all
2 attributes, not scores, and they are attributes that are used, not calculated.

3 Unless Your Honors have any questions regarding Lofi and Claim 1,
4 I'd like to briefly discuss Claim 7.

5 JUDGE BELISLE: Just one. Does Petitioner have a position on
6 whether in Claim 1 the -- like, for example, the fitness sub-score, is that
7 limited to using only an endurance or a flexibility or a strength attribute?

8 MS. NGUYEN: Well, Claim 1 requires using one or more of an
9 endurance, strength attribute, and there are other attributes recited. So --

10 JUDGE BELISLE: But it's a comprising claim.

11 MS. NGUYEN: Correct.

12 JUDGE BELISLE: The claim is comprising.

13 MS. NGUYEN: Correct.

14 JUDGE BELISLE: And this does not include sort of the traditional
15 consists -- selected from a list consisting of X, Y, and Z. It just says that it's
16 using one or more of the listed attributes. But so, my question is, does
17 Petitioner interpret that language to mean that it's limited to only those
18 attributes?

19 (Pause.)

20 MR. YAP: Your Honors, maybe I can answer that?

21 JUDGE BELISLE: Yes.

22 MR. YAP: The claim, as you pointed out, doesn't limit to just these
23 three attributes that's been listed here.

24 JUDGE BELISLE: Can you restate that? I don't think the record
25 picked that up.

26 MR. YAP: The claim, as it is -- as it's drafted, doesn't -- because it
27 uses comprising, that doesn't discount it as using --

1 (Simultaneous speaking.)

2 MS. NGUYEN: I'm sorry. Let me go to that full language.

3 MR. YAP: So it says it has to -- the score has to be -- the sub-score
4 has to be calculated using one or more. So we know there's -- it includes
5 other fitness attributes, other attributes, it must be calculated using one or
6 more of those three that are explicitly listed in the claim. All right. Because
7 --

8 JUDGE BELISLE: Thank you.

9 MR. YAP: Thank you.

10 MS. NGUYEN: Okay. So please turn to slide 38. Claim 7 requires a
11 predefined ordering of drills. And turning to slide 39, Lofi discloses a
12 predefined ordering of drills. Starting at Exhibit 1002, at page 10, line 9,
13 Lofi provides a description of how its terminal operates. So, first, the user is
14 asked to input information. Then Lofi states, once this stage is completed,
15 the different measurements are implemented. Your Honors, the use of the
16 word once means timing or, in other words, an order is involved.

17 After this, in Lofi, is the passage shown on the slide, slide 39, where
18 Lofi uses the word subsequently, another word that suggests timing is
19 involved, and then says the following tests are carried out, listing the
20 different tests in a specific, predefined order. Additionally, Lofi discloses
21 repeating the tests so that the user can update his or her results. And as
22 Petitioner's expert explains, to repeat a test, each test, including the second
23 and the first test, would have the same order, which would be predefined so
24 that attempts for the test involve an apples-to-apples comparison.

25 Unless Your Honors have any questions about Lofi, I'd like to now
26 discuss Kitagawa. And Kitagawa is, again, used in ground 2 and ground 3,
27 our obviousness grounds, but if we could, please turn to slide 41.

1 Kitagawa teaches a system that assesses the user's physical fitness
2 using exercises such as the one shown in Figure 18 here. As Kitagawa
3 describes in the bottom passage, it assesses a variety of physical abilities or,
4 in other words, attributes, such as strength, flexibility, balance, and agility.

5 Now, turning to slide 42, Table 3 of Kitagawa shows that each
6 exercise is used to assess multiple attributes. The table here provides seven
7 different exercises. Each exercise assesses leg and arm strength and
8 flexibility, which are fitness attributes, shown in blue. And the same
9 exercise also assesses balance, agility, and intelligence, which are
10 athleticism attributes, shown in green.

11 And so, Patent Owner argues, for the first time in the surreply, that
12 each exercise involves multiple types of exercises because, according to
13 Patent Owner, each index or, in other words, number, shown in Table 3,
14 represents the number of exercises performed.

15 So, for example, according to Patent Owner, the first exercise, called
16 Log Range, would have ten types of balance exercises, and that's represented
17 by the number 10. But Your Honors, Petitioner respectfully disagrees. Ten
18 is quite the number of exercises, and actually, for log range, it would be a
19 total of 39 different exercises. That's a lot of exercises. But just to be sure,
20 let's look at what Kitagawa says.

21 Kitagawa is -- provides explanations that show that Patent Owner's
22 argument is wrong. For example, Kitagawa, Exhibit 1004, column 2, lines
23 31 to 33, it explains that an index is the extent to which a user utilizes each
24 of his or her various physical abilities. So, in other words, an index
25 represents difficulty. Then, let's take a look at column 4, lines 26 to 28.
26 Kitagawa describes an Exercise Course 2 as the user climbing up a slope.

1 Kitagawa then says the index value for leg muscle strength can be made
2 large.

3 So let's go back to Table 3, shown on slide 42. You'll see that
4 Exercise Course 2 is also the second row of the table called Climb of Grief,
5 and it has a leg muscle strength index value of 7. This 7 represents the
6 extent to which a user utilizes his or her leg strength for the single type of
7 exercise of climbing a slope. This is not 7 types of exercises. Thus,
8 Kitagawa teaches a single type of exercise or athletic activity that provide
9 both a fitness attribute and an athleticism attribute. Kitagawa teaches an
10 athletic movement under Patent Owner's construction.

11 Turning to slide 43, for ground 2, the Lofi and Kitagawa combination
12 combines Lofi's fitness device equipped with sensors in combination with
13 Kitagawa's teachings of assessing multiple attributes for each exercise. For
14 ground 2, Patent Owner argues that there is no motivation to combine
15 because Kitagawa alone has deficiencies. And this is shown on slide 73 of
16 Patent Owner's demonstratives, also discussed in the surreply, paper 25,
17 pages 18 and 19.

18 Specifically, Patent Owner argues that Kitagawa does not generate
19 activity data. Kitagawa does not generate combinatory fitness athleticism
20 score. Kitagawa does not use sense data in calculating a score. But Your
21 Honors, the petition's combination relies on Lofi, not Kitagawa for teaching
22 activity data and for teaching calculating a combinatory fitness athleticism
23 score. Petitioner addressed these arguments in the reply, paper 24, pages 14
24 to 16. And instead of providing a rebuttal, Patent Owner just repeats the
25 same arguments in its surreply.

26 Therefore, since Kitagawa teaches an athletic movement under Patent
27 Owner's construction and Lofi teaches all other limitation and because Claim

1 1 is the only disputed claim for ground 2, Your Honors should find all
2 challenged claims unpatentable, at least under ground 2, even under Patent
3 Owner's construction.

4 So, unless Your Honors have any questions specific to Kitagawa, I'd
5 like to now discuss Maeueller. And turning to slide 45, Maeueller discloses a
6 fitness test system that determines a user's fitness for a plurality of
7 components of physical fitness. This system calculates a numerical score
8 value for each component of physical fitness and also calculates an overall
9 aggregate fitness index.

10 Turning to slide 46, one test that Maeueller teaches is a 12-minute run
11 test where the individual is asked to run as fast as possible for 12 minutes.
12 The distance run is measured in meters, and the maximal oxygen
13 consumption, VO₂max, is calculated using the formula shown on this slide.
14 As highlighted in blue, maximal oxygen consumption, VO₂max, represents
15 endurance, a fitness attribute, and is highlighted in green. The distance run
16 over a time of 12 minutes represents speed, which is an athleticism attribute.

17 Now, turning to slide 47, Maeueller discloses several other tests, a
18 strength test, a flexibility test, and a balance test. As highlighted in blue,
19 strength and flexibility are fitness attributes, and as highlighted in green,
20 balance is an athleticism attribute.

21 Turning to slide 48, Maeueller calculates a sub-score for the individual
22 components. Example components are endurance, strength, flexibility, and
23 balance. And then, Maeueller also calculates the aggregate fitness index.
24 Now, the slide shows Figure 5, and as Maeueller describes, some of the
25 scores for the components that are tested are displayed in this graphical
26 visualization of Figure 5.

1 And then, if you could, turn to slide 50, which provides the language
2 of Claim 1, again, just providing it to keep it fresh in our minds. It requires
3 a combinatory fitness athleticism score comprising two sub-scores. And as I
4 discussed earlier, athletic movement, under the Board's preliminary findings
5 and Petitioner's construction, encompasses both single and multiple types of
6 exercises. Maeueller, calculating the individual scores and having the
7 different tests for each component of physical fitness, also Maeueller
8 calculating an overall score, shows that Maeueller teaches Claim 1 under
9 Petitioner's construction. Patent Owner does not dispute this.

10 And then, if you could, turn to slide 51. Maeueller also teaches athletic
11 movement under Patent Owner's construction, and this is with its 12-minute
12 run test that measures distance run over a period of 12 minutes. Speed is
13 distance run over time, an athleticism attribute shown in green, and maximal
14 oxygen consumption, VO2max, represents endurance, a fitness attribute.
15 Both speed and endurance are attribute -- what Maeueller calls components
16 of physical fitness that are used in calculating the aggregate fitness score.

17 But one thing I may add, Your Honors, even if Your Honors do not
18 find that Maeueller teaches athletic movement under Patent Owner's
19 construction, ground 3 is an obviousness ground, Maeueller in combination
20 with Kitagawa. And as discussed earlier, Kitagawa teaches an athletic
21 movement, even under Patent Owner's construction.

22 Please turn to slide 52. These --

23 JUDGE BELISLE: Counsel, just so you're aware, you're in your
24 rebuttal time now, which is okay, but it's just coming out of your rebuttal
25 time.

26 MS. NGUYEN: The Maeueller-Kitagawa combination combines
27 Maeueller's fitness test with Kitagawa's teachings of multiple attributes of --

1 for a single type of exercise. Patent Owner argues that there's no motivation
2 to combine because, according to Patent Owner, Maeueller and Kitagawa are
3 redundant. But Your Honors, Petitioner respectfully disagrees.

4 As explained at page 20 of the reply, paper 24, and also pages 57 and
5 58 in the petition, paper 2, what Kitagawa adds are teachings of tests for
6 assessing various attributes. So, that is, Kitagawa leads to providing a more
7 comprehensive understanding of the attributes, attributes beyond the ones
8 provided by Maeueller alone. So, unlike Kitagawa -- or sorry -- unlike
9 Maeueller, Kitagawa provides an understanding of intelligence and agility.

10 And in addition, not only does the combination improve on Maeueller
11 by adding additional attributes, but also, the combination leads to fewer
12 exercises. So, with Maeueller alone, the user has to perform four exercises
13 for five attributes, whereas Kitagawa allows the combination to receive six
14 attributes for a single exercise. So, in other words, fewer exercises for the
15 same, if not more, attributes. As a result, Kitagawa teaches athletic
16 movement under Patent Owner's construction. Maeueller teaches all other
17 limitations.

18 There is a motivation to combine. There is no redundancy. Claim 1 is
19 the only disputed claim for ground 3. Your Honors should find all
20 challenged claims unpatentable under ground 3.

21 Unless Your Honors have any questions regarding Maeueller, I would
22 like to address one other point. So, going back to the surreply, paper 25,
23 page 4, and to Patent Owner's arguments that athletic movements -- and they
24 -- again, they list running, swimming, rowing, and cycling. Your Honors,
25 so, first, we disagree that running, rowing, swimming, and cycling are
26 example athletic movements covered by the specification because the '930
27 patent specification does not describe anyone of these exercises as providing

1 both the fitness sub-score and the athleticism sub-score, as required by
2 Claim 1.

3 But if Your Honors, for some reason, find that anyone of these
4 exercises does satisfy athletic movements, then, Your Honors, I'd like to
5 note that Maeueller -- sorry -- Lofi teaches cycling, and additionally,
6 Maeueller teaches running. So, to the extent that athletic movement -- to the
7 extent that cycling is encompassed under athletic movement, then, at the
8 very least, Lofi also teaches an athletic movement for the '930 patent Claim
9 1. And to the extent that running is an athletic movement to the '930 patent,
10 Maeueller teaches running, and therefore, also satisfies athletic movement of
11 Claim 1.

12 So, unless Your Honors have any questions, that concludes my
13 presentation.

14 JUDGE BELISLE: Judge Hoskins?

15 JUDGE HOSKINS: No, thank you.

16 MS. NGUYEN: Thank you.

17 JUDGE BELISLE: Patent Owner?

18 (Pause)

19 JUDGE BELISLE: All set?

20 MR. HARRIS: All set.

21 JUDGE BELISLE: Counsel, how much time do you want to reserve
22 for rebuttal?

23 MR. HARRIS: How -- let's do ten minutes.

24 JUDGE BELISLE: Okay. You may begin.

25 PATENT OWNER ARGUMENT

26 MR. HARRIS: Thank you, Your Honor. I'm going to start with claim
27 construction of "athletic movement" because, listening to Counsel's

1 arguments and presentation, I think there is a fundamental misrepresentation
2 of what our claim construction is and has been from the beginning of this
3 proceeding.

4 And I think that misrepresentation is important because it goes
5 directly to the question that Judge Cocks asked at the start of the day, which
6 is, well, if athletic movement is singular, how does that impact your
7 grounds. And the answer to the question is all of their grounds fail if athletic
8 movement in the claim is singular and not plural. So let me -- let me dig
9 into it because I think that's the real dispute. I have the claim up on the
10 screen here.

11 JUDGE COCKS: Counsel, let me clarify. By singular, we're not
12 talking about movement; we're talking about exercise or activity. Is that --

13 MR. HARRIS: Exactly. So let me walk through that, Your Honor. I
14 have slide -- Nike's demonstrative slide 11 on the screen right now. This is
15 -- this is Claim 1. And I'm going to walk through this, Your Honor, but
16 really, the dispute here, the claim construction dispute is is athletic
17 movement in Claim 1 singular, or is it plural? There's no S on the end of
18 movement. It's singular. Athletic movement in this claim is singular. And
19 if you agree with us on that, and I'm going to walk why -- walk through why
20 you should, if you agree with us on that, their grounds fail. And I'm also
21 going to walk through why that's the case.

22 Okay. So, first of all, there is no dispute an athletic movement -- a
23 singular athletic movement, can include many movements, many bodily
24 movements, including drills. I want to take some of the examples that Lulu's
25 counsel pointed out to you. Let's take cone runs -- cone sprints. A cone
26 sprint involves many movements, running to and from a cone, many bodily

1 movements: legs are moving, arms are moving, torso is moving, everything
2 is moving, lots of movements.

3 It can also involve multiple drills. Run as fast as you can from cone 1
4 to cone 2, and then run as many times as you can between cone 1 and cone 2
5 for a minute. Multiple drills, all running, lots of movements, the
6 specification says that's an athletic movement.

7 JUDGE BELISLE: So, Counsel, what if during one of those back-
8 and-forths, they start jumping?

9 MR. HARRIS: The specification -- so here's our -- Nike's position on
10 that is going to be that's a different athletic movement, but -- but for
11 purposes of this proceeding, even if you consider that a single athletic
12 movement and you construe Claim 1 to mean athletic movement, singular,
13 as opposed to plural, Lulu still fails. I'm going to show you exactly why that
14 is.

15 Okay. So what did we hear from Lulu's counsel? We heard, oh, well,
16 Nike is excluding all these different embodiments. If athletic movement is
17 singular, Nike is excluding all kinds of different embodiments. And let me
18 -- I want to go to the slide that they showed you.

19 This is Lulu demonstrative slide 15. You'll remember seeing this, and
20 they said, well, here are all the individual athletic movements that the '930
21 patent discloses or teaches as examples of athletic movements. And Nike's
22 construction excludes all of them except vertical jumps, according to
23 Lululemon. And why? What's the argument for why we're excluding these
24 others? They say, well, the specification for cone sprints -- the specification
25 says that it's an example of an athletic movement that would result in an
26 athleticism score, right? That's what we heard.

1 What you didn't hear, there's nowhere in the specification where the
2 inventor said cone sprints can only be used to determine an athleticism sub-
3 score. The inventors didn't say that. They didn't exclude cone sprints from
4 an athleticism or athletic score. They gave an -- it's an example. It's an
5 example of one athletic movement that you could use to get an athleticism
6 score.

7 You could also use cone sprints to get a fitness score, right?
8 Endurance, how many times can you run between two cones in a minute?
9 That'd be an endurance attribute. That's an endurance score. You can get
10 both athleticism and fitness from cone sprints. And the specification doesn't
11 say you can't.

12 And the same thing is true for all of the other athletic movements.
13 The individual athletic movements, singular, each one of them that's
14 disclosed in the spec, nowhere did the inventor say, oh, well, you can only
15 use vertical jumps for one but not the other. It's not in there.

16 JUDGE COCKS: But, Counsel, I think they're point might have been
17 that vertical jumps is referenced as a type of exercise that generates both
18 types of scores, whereas these other ones were not identified as generating
19 both types of scores. So step me through the significance of that.

20 MR. HARRIS: Sure. So that vertical jump is used as an example of
21 two different types of scores at two different places in the specification. It's
22 not like the inventor said in one sentence it said vertical jumps are used for
23 athleticism and fitness only. There's -- and again, there is nowhere in the
24 spec -- you would have to read the limitation into the spec. You'd have to
25 read something into the spec that says, well, the inventors, because they
26 didn't say cone sprints could be used for fitness, well, then we're limited to
27 these examples.

1 And if you're going to do that -- if you're going to do that, then you'd
2 really have to limit Claim 1 to only vertical jumps because that's the only
3 example that's disclosed in the spec that does both athleticism and fitness.
4 So, if you're going to read that in from the spec, the Claim 1 would be
5 limited to vertical jumps, and their prior art doesn't teach that.

6 Okay. So why does this matter? Why -- let's go back to the claim
7 language. And this is, again, Nike's demonstrative slide 11. What does the
8 claim require? The claim requires providing instructions to perform a first
9 athletic movement -- singular, not plural -- receiving, from a sensor, activity
10 data representing that first athletic movement -- singular, not plural -- and
11 then calculating a combinatory fitness score where the score has two
12 separate sub-scores, right? So, what this claim requires, in the first part of
13 the claim, single athletic movement results in a combined score that has two
14 separate sub-scores.

15 Let's look at what Lululemon claims are the individual athletic
16 movements in the Lofi reference. And this is why -- this was why the
17 singular versus plural matters. I want to direct your attention to their
18 petition -- Lulu's petition. It begins on page 16. And I'll give you a second
19 to get there.

20 JUDGE BELISLE: Go ahead.

21 MR. HARRIS: Okay. So, on -- beginning on page 16, pages 16, 17,
22 and 18 of Lululemon's petition, Lulu identifies not what we contend is an
23 athletic movement, but what lulu contends is an athletic movement in the
24 Lofi reference. And Lulu identifies six different and distinct athletic
25 movements. Beginning on page 16, this is under the section titled Element
26 1(a). What does Lululemon say? The paragraph begins one test. One test is
27 for endurance, and this evaluates sustained effort on a bicycle. How does

1 Lulu end that paragraph? In this example, pedaling represents a first athletic
2 movement.

3 Next paragraph, another distinct, different test designed to test
4 strength. Pedaling at an individual's highest speed represents a first athletic
5 movement. Lululemon doesn't say, oh, this is part of the same athletic
6 movement, or all of these movements combined are an athletic movement.
7 In their petition -- and they're stuck with this -- Lululemon identifies -- and
8 they go on; they do four more -- Lululemon identifies, on pages 16, 17, and
9 18, six distinct athletic movements. They identify them as six distinct
10 athletic movements. Each of these movements -- there's no dispute. Each of
11 these movements in Lofi results in a single score.

12 Then Lofi says, okay, once you have these six individual scores, you
13 can average them all together and you can have a combined score. There is
14 not a single athletic movement that Lulu identifies as an athletic movement,
15 not a single athletic movement in Lofi that results in a score with two sub-
16 scores, a combinatory score. To get to that combination score in Lofi, you
17 have to take the score from athletic movement number 1 and combine it with
18 score from athletic movement number 2 and 3 and 4 and 5 and 6. Multiple,
19 plural, athletic movements. That's not what the claim covers. Lulu's
20 arguments -- Lulu's unpatentability arguments fail if athletic movement is
21 construed as singular, not plural.

22 Same thing for the Maeueller references. Maeueller identifies five
23 different tests that Lulu, in its petition, identifies as separate athletic
24 movements. Each of those results in a single score. Those single scores
25 from five different athletic movements combine together for the alleged
26 combinatory score. Very, very different from that what claim recites.

1 JUDGE BELISLE: Counsel, if we agree with Petitioner that the first
2 athletic movement, with respect to Lofi, can include those multiple
3 exercises, does your defense fail then --

4 (Simultaneous speaking.)

5 MR. HARRIS: It does not, Your Honor. And the reason it doesn't is
6 because that first pedaling exercise, however -- whatever you want to put
7 into it in Lofi, it still only results in a single score, not a combinatory score
8 of two sub-scores. The result of that activity, that instruction, sensor activity
9 calculation is a single score. It's not until later that it's combined with other
10 scores from other athletic movements that it becomes a combination score,
11 according to Lulu's petition.

12 JUDGE BELISLE: My question, though, is if we allow the
13 aggregation of those exercises as a single movement, or as the first athletic
14 movement, why does that not satisfy the claim language?

15 MR. HARRIS: I see. So, if you allow the aggregation of those six
16 individual movements in Lofi, or take four of them, whatever, more than
17 one, right? If you allow the aggregation of all of those to be an athletic
18 movement, singular, our defenses fail, but you've also rewritten the claim.
19 You've significantly rewritten Claim 1 to say something very different than
20 how it's -- how it reads, what it recites -- the invention that it recites.

21 JUDGE BELISLE: All right. So, Counsel, let's go to the front page
22 of the challenged patent, Exhibit 1001, specifically to the abstract. And in
23 the abstract, it states, the athletic movement, singular, may comprise a
24 plurality of drills configured to test a plurality of fitness attributes and/or a
25 plurality of athleticism attributes of the user. Why does not that one
26 sentence dispute what you're telling us to construe the claim language as?

1 MR. HARRIS: Yeah. If that sentence read -- Your Honor, if that
2 sentence read the athletic movement may comprise a plurality of athletic
3 movements, I would agree with you. But there's a difference in this
4 specification between drills and athletic movement. A single athletic
5 movement may include a plurality of drills, such as, for the vertical jump
6 example, jump as high as you can, then jump as many times as you can for a
7 minute, then jump as high as you can again. That would be multiple drills,
8 but a single athletic movement. There -- in other words, there's a difference
9 -- in this specification, there's difference between athletic movement, which
10 is defined, and drill.

11 JUDGE BELISLE: Well, but, Counsel, it's convenient to use the
12 same type of exercise with the word drill, but I could have a drill where the
13 drill is do push-ups, sit-ups, and then run two miles. That would be the drill.
14 So why does that not include multiple movements?

15 MR. HARRIS: Yeah. And this is the point that we were trying to
16 make earlier. If you -- I think that construction would be wrong, but even if
17 you adopt that construction -- and by the way, I don't think you need to
18 figure out where to draw this line for purposes of this proceeding because of
19 the way that Lulu has argued its petition because in its petition, what they
20 identify as an athletic movement, singular, even if it includes multiple -- you
21 know, running and jumping, what they identify as an athletic movement
22 results in a single score, not a combination score.

23 So you don't have to figure out where to -- this Board doesn't have to
24 figure out where exactly to draw that line on, well, what kind of drills and
25 bodily movements can be part of a single athletic movement. You don't
26 have to do that because of the way that Lululemon chose to argue this in
27 their petition and what they identified as the athletic movement.

1 JUDGE COCKS: Counsel, I understand that point you're making, but
2 if you would, humor me. Along -- my colleague has said, in the abstract, in
3 column 4, lines 7 to 11, which is probably unsurprising that I want to look at
4 this, it refers the athletic movement including movements associated with
5 multiple exercises. So I understand the point you're making about the
6 petition deficiency, but from a claim construction perspective, how does this
7 not support Petitioner's construction, i.e. an athletic movement including
8 multiple movements of different exercises?

9 MR. HARRIS: Yeah. And again, I think that if this language read an
10 athletic movement includes athletic movements, then I would agree with
11 you, but --

12 (Simultaneous speaking.)

13 MR. HARRIS: -- not what it says.

14 JUDGE COCKS: Sorry. I don't want to interrupt, but it says it
15 includes movements related to fitness, exercise, and flexibility.

16 MR. HARRIS: Exactly.

17 JUDGE COCKS: That sounds like athletic movements to me, and it's
18 -- and then it goes on to express that it associated with multiple participant
19 athletic competitions, exercise routines, and combinations thereof. The plain
20 reading of that, to me, suggests an athletic movement is defined as including
21 multiple movements of multiple exercises. How is that not what flows
22 readily from those four lines?

23 MR. HARRIS: Again, Your Honor, our position is what flows readily
24 from those four lines is that the term -- the whole term, not just movement,
25 but the term athletic movement includes movements -- bodily movements
26 relating to fitness, exercise, and flexibility. That's what it says. We don't
27 disagree with it.

1 I think that what we don't do though is go a step farther and say, okay,
2 since athletic movement, singular, is defined to include movements, plural,
3 then an athletic movement, singular, must also be the same thing as athletic
4 movements, plural, in Claim 1. In Claim 1, it is athletic movement, singular,
5 not plural. That athletic movement, singular, in Claim 1 may include
6 multiple bodily movements, right? The processor instructs the user to do
7 multiple bodily movements, that's the first athletic movement, singular.
8 From that movement, a combination score must be calculated.

9 JUDGE COCKS: Okay. I think that's two issues. And I understand
10 your point on the combination of the score associated with athletic
11 movement. I guess, I'm focusing -- maybe this is belaboring the point, but in
12 my -- I understand your answer, but in my mind, column 4, lines 7 to 11
13 suggest Petitioner's construction of athletic movement, or at least more
14 consistent with Petitioner's construction. Is that -- that's my take. Assuming
15 that's the case, you're saying that their grounds still fail for other reasons --
16 separate reasons.

17 MR. HARRIS: It still fails, right. Yeah. Understood, Your Honor.
18 And it -- this section, column 4, lines 7 to 11 in the '930 patent, we would
19 submit what it says is that an athletic movement, singular, may include
20 multiple body movements relating to fitness, exercise, or flexibility, which is
21 like any exercise, right? Running, jumping, squatting, push-ups, they all
22 involve multiple body movements. That's what column 4, lines 7 to 11 says.
23 It does not say that an athletic movement, singular, means the same thing as
24 an athletic movements, plural.

25 JUDGE COCKS: Okay. I understand your answer. Thank you.

26 JUDGE HOSKINS: Mr. Harris?

27 MR. HARRIS: Yes.

1 JUDGE HOSKINS: Let me -- I think I understand what's going on
2 here, but let me just try to take an example and make sure that I do
3 understand. So let's take the example of swimming. So the person is
4 swimming. Is it your claim construction then, in terms of getting data from
5 that, from the swimming, it would have to be, like, one component, one
6 movement of the swimming.

7 So maybe the data is coming from how fast the legs are going up and
8 down as the swimmer is kicking, or perhaps, how much of the arm
9 movement is -- would those be two different movements? Is that -- in the
10 claim -- so one of those is what's being called out in the claim in that
11 example?

12 MR. HARRIS: No. I think in that example, swimming is your
13 athletic movement. And --

14 JUDGE HOSKINS: So, now, I'm very confused because I think you
15 would agree that swimming, if that's your movement, well, you've got
16 multiple movements in that movement. We've got the legs going up and
17 down. We've got the arms going around, so I'm -- now, I'm confused about
18 what exactly is a --

19 MR. HARRIS: Okay. So let's take that swimming example. In this
20 example, swimming, we would say is an athletic movement, singular.
21 Swimming includes multiple bodily movements: arms are moving, legs are
22 moving, the entire body is moving. The claim requires -- Claim 1 of this
23 patent requires that from that swimming, that single athletic movement,
24 swimming, from swimming, a combinatory score is calculated that includes
25 two separate sub-scores: an athleticism sub-score and a fitness sub-score.

26 Our argument is that Lululemon has identified in the prior art, take
27 Lofi for instance, six individual athletic movements similar to swimming.

1 One of them is biking. One of them is -- there's a weight belt that you wear,
2 and you contract your abdominal muscles, just like swimming. Each of
3 those is an individual, single athletic movement. None of them, none of
4 them result in a combinatory score. Every single one of those six athletic --

5 JUDGE HOSKINS: My question is simply about movement, but you
6 know, we've got -- we have, kind of, a set number of steps. We have -- in
7 the claim. We have instructions to perform a movement, and then receiving
8 data representing the movement. I -- that's what I'm asking about right now.
9 The combinatory score comes in later.

10 And I'm -- I'm struggling with your claim construction. How is
11 somebody to determine what falls under the scope of those two limitations?
12 If swimming is a movement as recited in those two limitations, but it
13 involves multiple movements, I don't know how you can determine how one
14 thing is covered by those two limitations and how another thing is not.

15 MR. HARRIS: Well, and again, Your Honor, I don't think you need
16 to draw the -- for purposes of this proceeding, I do not believe that you need
17 to draw a line on what arm movement or leg movement or toe movement or
18 hip movement and combination of those movements would or would not
19 constitute an athletic movement. You can look at the claim language itself.
20 The claim language requires a set of instructions to perform a movement.
21 Then the movement is performed.

22 So, I think for purposes of this proceeding, you can treat athletic
23 movement like a black box. And the question is how many black boxes are
24 in this claim 1. Is it a single black box with some movement in it, or is it
25 multiple black boxes with multiple different movements in each black box?
26 If it's just a single black box -- and we think that's what the claim language

1 says because it's singular, not plural -- if it's just a single black box,
2 Lululemon fails.

3 JUDGE HOSKINS: All right. Thank you.

4 JUDGE BELISLE: Counsel, while we're on this first athletic
5 movement, is there anything that precludes a first athletic movement? Can I
6 define with my instructions that your first athletic movement is to do a sit-
7 up, roll over, do a somersault, do a push-up, jump, do jumping jacks 20
8 times, go back and do another push-up and then stop, that that's the athletic
9 movement that I want you to do? Why can that not be the first athletic
10 movement with those instructions?

11 MR. HARRIS: And just so we're clear, if that's where the Board
12 comes out and says that's the first athletic movement, and I -- sorry I'm
13 repeating myself again, Judge Cocks -- but even if you say that's the first
14 athletic movement, Lululemon's petition still fails because of what they
15 identified in their petition as the individual athletic movements.

16 But -- so, to answer your question, Your Honor, I would say that those
17 -- that those are -- a skilled artisan would -- and our expert would agree with
18 this -- a skilled artisan would consider those to be very different athletic
19 movements. You know, running is an athletic movement. Jumping --

20 JUDGE BELISLE: But why? Why? This seems more like a -- just a
21 labels game as to taking a particular thing I do with my body and sticking a
22 label on what it is. I mean, whether I'm swimming, running, push-ups -- I'm
23 sure most people are familiar with the inside of a gym. There's a lot of
24 things you can do in a gym, and there's a lot of things that you can just do
25 out on the lawn that constitute lots of movements. And you could put a label
26 on any one of those as -- you could make up a word and apply it to a new set

1 of movements. Why do we have to stick to swimming, running, and try to
2 define those quite narrowly as very limited movements?

3 MR. HARRIS: I don't think you need for purposes of this proceeding,
4 but that's what the specification does, right? And Lululemon agrees with
5 this. We heard it in their presentation. They showed us this slide, their slide
6 -- demonstrative slide 15. There really isn't a dispute that vertical jumps is
7 an athletic movement. Leg raises is an athletic movement. Static lunges are
8 an athletic movement. Cone sprints are an athletic movement, but -- yeah.

9 JUDGE BELISLE: And I agree with that, but the claim -- Claim 1,
10 for example -- I mean, is it your position that Claim 1 requires a particular
11 type of exercise be performed?

12 MR. HARRIS: No.

13 JUDGE BELISLE: Okay.

14 MR. HARRIS: It requires an -- a single athletic movement.

15 JUDGE BELISLE: Okay. Continue.

16 MR. HARRIS: Okay. Well, that covers, I think, everything that we
17 wanted to cover. That Maeueller reference, we think, has the same flaws as
18 Lofi. In fact, none of these references disclose what Lululemon identifies as
19 a single athletic movement resulting in a combination score.

20 I do want to point out, in the petition -- we went through the petition,
21 pages 16 through 18 of the petition, where Lulu identifies what it contends
22 are individual athletic movements. In their reply and today, they brought up
23 this 8-minute pedal test. This isn't in their petition. You can look -- study
24 pages, 16, 17, 18, and it's not there, and they didn't make this argument in
25 their petition.

26 But nonetheless, this 8-minute pedal test, again, just like all the other
27 tests in Lofi, results in a single score, not a score with two sub-scores. Sure,

1 later Lofi teaches that you can take this single score and add it to the single
2 score of other individual athletic movements, but this 8-minute pedal test
3 doesn't save the day for Lululemon.

4 Same with the leg strength test, they -- Lululemon directed your
5 attention to that last sentence. This is their demonstrative slide 30. The
6 sentence from Lofi reads the peak of the strength/speed curve corresponds to
7 the maximum capacity of legs expressed in Watts. Again, this wasn't in the
8 petition. Pages 16, 17, 18 in the petition, this argument is not there. It
9 shows up for the first time in their reply and in this slide today. Same thing
10 here, though. This athletic movement results in a single score, not two
11 scores. This doesn't save the day for Lululemon.

12 I'll save the rest of my time.

13 JUDGE BELISLE: Counsel, before you leave, we might as well close
14 the door, here, on this interpretation of the athletic movement. And can you
15 please address dependent Claims 6 and 7 as to why those claims don't
16 support Petitioner?

17 MR. HARRIS: Yeah. You bet, Your Honor. Dependent Claim 6, let
18 me just -- I think I have a slide on it. Okay. To us, Dependent Claim 6 is
19 very similar, and our answer is very similar to the abstract, where the
20 abstract says the athletic movement can include a plurality of drills, and we
21 explained, well, sure it can. A plurality of different running drills, a plurality
22 of different jumping drills, it's still a single athletic movement, same thing
23 for Claim 6.

24 Now, if Claim 6 had said the first instructions and the second
25 instructions include a plurality of athletic movements, I would agree with
26 you and Petitioner that the athletic movement, singular, in Claim 1 could be
27 broader, and it could be plural, but that's not what Claim 6 says. It's not

1 saying that the athletic movement, singular, in Claim 1, is actually athletic
2 movements, plural, with an S. It's saying that singular athletic movement
3 can include multiple drills, just like the abstract.

4 JUDGE BELISLE: And so, please tell me again, when you say can
5 include multiple drills, what are you contemplating? What does that mean?

6 MR. HARRIS: Yeah. Like, an endurance drill. Let's take cone
7 sprints, for instance. An endurance drill could be run as many times as you
8 can -- sprint as many times as you can between these two cones. And then,
9 when you're done with that, sprint as fast as you can between cone 1 and
10 cone 2, which would -- which would measure -- it would be an athleticism
11 attribute. So different running drills, all part of the same athletic movement.

12 JUDGE HOSKINS: And then, just so I'm -- the -- in that example,
13 the athletic movement is running; is that correct?

14 MR. HARRIS: Correct.

15 JUDGE HOSKINS: Thank you.

16 JUDGE BELISLE: Thank you.

17 MR. HARRIS: Thank you.

18 (Pause.)

19 JUDGE BELISLE: Petitioner, when you're ready.

20 PETITIONER REBUTTAL

21 MS. NGUYEN: Okay. So, starting with claim construction and
22 Patent Owner's arguments. First, I wanted to address Patent Owner's
23 construction. As Your Honors heard, Patent Owner's construction is -- and
24 just to emphasize the point -- a single type of exercise or athletic activity.
25 And Patent Owner, if I heard correctly, said that Your Honors shouldn't limit
26 Patent Owner's -- the construction of athletic movement to vertical jumps,
27 but Your Honors, that's precisely our point.

1 Patent Owner relies on this one sentence which solely describes
2 vertical jumps. And as you can see here, the '930 specification, it says
3 vertical jumps as utilized as part of determining endurance, may also be used
4 to determine power. So endurance is a fitness attribute, and power is an
5 athleticism attribute. So the inventors clearly knew how to describe in the
6 specification, in one sentence, a single athletic movement, according to
7 Patent Owner's construction, that is used for both sub-scores, both attributes.

8 And the '930 patent inventors did not do that with respect to the other
9 crossed-out exercises, which further supports that looking at the
10 specification as a whole, and the meaning of athletic movement, these
11 crossed-out exercises show that athletic movement should not be limited to a
12 single type of exercise or athletic activity.

13 JUDGE COCKS: Counsel, not to put words in your opposing
14 counsel's mouth, but I think the suggestion that was made was that, well,
15 while those two attributes are mentioned for one type of activity, vertical
16 jumps, it's not excluded from the other ones there; it just didn't happen to be
17 mentioned. What's your take on that?

18 MS. NGUYEN: Right. So, I think Patent Owner argued that, you
19 know, we should be allowed -- the specification doesn't use the word only,
20 for example, looking at, let's say, hops and sticks, right? The fact that this
21 sentence doesn't say only the balance attribute, right? So we should,
22 therefore, assume hops and sticks also has a fitness attribute. But Your
23 Honors, if we're allowed to bring in disclosure outside of the specification,
24 then why can't we do the same for the prior art, right? Even if it's the same
25 movement.

26 So, in our position, the '930 patent specification being intrinsic
27 evidence should provide the most meaning and color as to what an athletic

1 movement means and to which ones of these movements the attributes
2 would be used for.

3 And in our position, for Petitioner's construction, it would seem
4 unreasonable, the specification providing all these athletic movements, it
5 would be unreasonable to say that either we're allowed to bring in whatever
6 we want for hops and sticks and say, you know what? Even though the
7 specification calls it a balance attribute, why not just also bring in some sort
8 of fitness attribute, right? Rather, the more consistent definition with what a
9 person of ordinary skill in the art would understand is that athletic
10 movement should not be limited to a single type.

11 And earlier, Patent Owner talked about, well, this athletic movement
12 includes bodily movements. Petitioner respectfully disagrees because the
13 '930 patent is about testing, assessing a user's physical fitness. So, a user
14 having a body, that would already be part of the definition of a movement.

15 So, like Your Honor acknowledged earlier, athletic movement
16 includes movements relating to fitness, exercise, flexibility. The part after
17 movements with the part that says relating to fitness, exercise, flexibility,
18 that is very similar to athletic, and movements, plural, is also synonymous
19 with movement in the quote. So there's really nothing here that says we're
20 limited to a single type of movement.

21 I also wanted to add that, with respect to the petition at page 16, I
22 know Patent Owner pointed Your Honors to that. And specifically, page 16
23 of the petition is discussing Lofi. So let's walk through page 16, and
24 actually, it continues onto page 17, Element 1(a). Right. So the first test
25 that's discussed on page 16 is a test for endurance. The '930 patent claims
26 endurance would be a fitness attribute used to calculate the fitness sub-score.

1 Okay. So then, the next test discusses strength. And strength would
2 also be a fitness attribute. So endurance -- endurance would be a fitness
3 attribute. Strength would be a fitness attribute. Okay. The third one is
4 another strength test, again, a fitness attribute. And then, moving on to page
5 17, another test is flexibility. And flexibility would also be the strength --
6 the fitness attribute. Okay. Sorry. The last paragraph of page 17 is balance.

7 Now, balance is an athleticism attribute, so it is incorrect for Patent
8 Owner to suggest or even say that under Petitioner's construction, Lofi's test,
9 as outlined and described on pages 16 and 17, do not result in a combinatory
10 fitness athleticism score. And it continues, actually, on to page 18 of the
11 petition, which is reaction. Reaction also another attribute for the
12 athleticism sub-score.

13 And then, the last thing I wanted to add is that Patent Owner argued
14 that with respect to Lofi and, for example, the 8-minute pedal test, that this
15 was not addressed in the petition. But Your Honors, we respectfully
16 disagree. It's located at page 16 of the petition, paper 2, also page 10 of the
17 reply, paper 24.

18 Further, we have expert testimony from Petitioner's expert in the
19 declaration submitted with the petition, paragraph 59, 64. And then, for
20 Lofi's leg strength test, petition paper 2, page 16, reply, paper 24, page 12,
21 and also, Dr. Fischer, Patent Owner -- or Petitioner's expert, Exhibit 1005,
22 paragraph 50.

23 (Pause.)

24 MS. NGUYEN: Oh, yeah. Okay. So, then, just the last point, and I
25 think Your Honors have heard this today, but just, it's Petitioner's position
26 that athletic movement includes multiple exercises and not a single type of
27 exercise or athletic activity, according to Patent Owner's construction. And

1 Petitioner's construction, including -- encompassing both multiple and single
2 types of exercises, the grounds would not fail because as described during
3 the presentation I gave earlier, at the very least, all of Lofi's tests involve an
4 athletic movement. Here, it would be multiple athletic -- multiple types of
5 athletic movements for both the fitness and athleticism attributes.

6 And then, Lofi's 8-minute pedal test and leg strength test each
7 individually provide -- they are a single type of exercise or athletic
8 movement, and they both provide or -- each provide a fitness attribute and
9 an athleticism attribute. And additionally, for Maeueler, that would be the
10 case as well. Again, all of these exercises, both the fitness and athleticism
11 attribute under Petitioner's construction, would result in both attributes and a
12 combinatory fitness athleticism score.

13 And then Maeueler has the 12-minute run test, which a single type of
14 exercise, running, and it provides both the fitness attribute and athleticism
15 attribute. Further, grounds 2 and 3 rely on Kitagawa. Kitagawa provides all
16 of those attributes, and Patent Owner does not dispute that all of these
17 attributes are provided.

18 That's it. Thank you.

19 JUDGE BELISLE: Thank you.

20 (Pause.)

21 MR. HARRIS: Okay. Just a few points.

22 JUDGE BELISLE: All set?

23 PATENT OWNER REBUTTAL

24 MR. HARRIS: Yeah. Thank you. I want to start with -- Lulu's
25 counsel walked through pages 16 and 17 of the Petition, and really proved
26 the point for us. And Judge Cocks, I'm going to come back to my
27 overarching theme as it doesn't really matter where you draw the line on

1 what bodily movements are included in a single athletic movement. You
2 don't have to draw that line.

3 Lululemon has identified six very specific things in Lofi that it
4 contends are a single athletic movement. All of them are the result in -- I
5 think I made this point earlier, but I just want to be clear. All of them are the
6 result of a separate set of instructions, and Lulu's expert agrees with that.

7 This is paragraph 66. I have it on the screen right now. This is
8 paragraph 66 of Exhibit 1005. Lulu's expert opines that for each of these six
9 athletic movements -- independent, distinct athletic movements that Lofi
10 discloses, each of them is performed from a different, separate set of
11 instructions. So, in other words, instruction, athletic movement, score,
12 instruction, athletic movement, score, instruction, athletic movement, score,
13 six times. That's very different than Claim 1 of the '930 patent.

14 I believe Lulu said that we don't dispute that that figure and that Table
15 3 in the Kitagawa reference discloses attributes. It's a predefined index of
16 numbers. Kitagawa is very, very different. Kitagawa -- there really is no
17 measurement of athletic data in Kitagawa, as you know. The single score
18 that Kitagawa provides is a physical age/strength score, and that's based
19 purely on time -- elapsed time for different -- the different events.

20 And then, finally, I believe Lulu's counsel said that Claim 1 must
21 cover separate or multiple types of activities because the whole purpose of
22 this invention is a combined fitness athleticism score. And I want to take
23 you back to the claim language. Claim 1 includes two -- two athletic
24 movements, right? You have the instructions, first athletic movement, a
25 combination score, a triggering event, and then there's another set of
26 instructions and another athletic movement.

1 So, Lulu's argument that, oh, well, there must be multiple activities
2 here because that's the whole point of this invention, it's right in the claim
3 itself. There are two separate athletic movements in the claim. Each of
4 them is a single athletic movement, but there are two of them in the claim.

5 Thank you, Your Honors.

6 JUDGE BELISLE: Thank you. Counsel, your case is submitted.
7 We're going to take it under advisement, and we are off the record.

8 (Whereupon, the above-entitled matter went off the record at 11:44
9 a.m.)

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