

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LULULEMON ATHLETICA CANADA INC. and LULULEMON USA INC.
Petitioners

v.

NIKE, INC.
Patent Owner

Case IPR2023-00348
Patent 10,188,930

PATENT OWNER'S SUR-REPLY

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2002	Curriculum Vitae of Scott Mclean, Ph.D.
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2004	9/22/23 Declaration of Scott McLean, Ph.D.
2005	9/7/23 Deposition Transcript of Dr. Gregory Fischer

I. INTRODUCTION

Neither the Petition nor Petitioners' Reply (Paper 24, "Reply") demonstrates by a preponderance of the evidence that any claim of the '930 patent is unpatentable.

The Challenged Claims recite a method of monitoring a user performing an "athletic movement." Based on that "athletic movement," the claimed method generates a "combinatory fitness-athleticism score" that includes two sub-scores: a "fitness sub-score" and an "athleticism sub-score." The claimed method calculates both sub-scores from a *single* "athletic movement"—i.e., a single type of exercise or athletic activity that may include multiple coordinated movements.

In its Reply, lululemon continues to rely on its strained construction of "athletic movement" as including *multiple* "athletic movements." This construction is nonsensical and inconsistent with the intrinsic record. But without it—all of lululemon's grounds fail. In other words, lululemon has not shown that either of its primary references—Lofi (Grounds 1–2) or Maeueller (Ground 3)—teach or suggest calculating a combinatory score reflecting a user's fitness level *and* athleticism level based on a *single* "athletic movement." And Kitagawa (Grounds 2–3) fails to cure the deficiencies in Lofi and Maeueller.

For at least these reasons, lululemon has not carried its burden of proving by a preponderance of the evidence that any claim of the '930 patent is unpatentable.

II. CLAIM CONSTRUCTION

In its Institution Decision (Paper 13, “DI”), the Board asked the parties to submit proposed constructions for three terms in claim 1 of the ’930 patent: (a) “[first/second] athletic movement”; (b) “[first/second] instructions”; and (c) “[first/second] activity data.” DI, 20; Ex. 1001, 26:16–42. In its Reply, lululemon asserts that the constructions of the “instructions” and “activity data” terms are not in dispute.¹ See Reply, 1–2. The parties’ only dispute is about the meaning of “[first/second] athletic movement.”

A. “[first/second] athletic movement”

The term “athletic movement,” as used in the ’930 patent, means a *single* “athletic movement,” i.e., a “a single type of exercise or athletic activity.” Ex. 2004, ¶¶36–40; Response, 16–21. In its Reply, lululemon continues to assert the circular notion that “athletic movement” encompasses *multiple* “athletic movements.” Reply, 2.

lululemon spends much of its Reply arguing an undisputed proposition: that an “athletic movement” can include multiple “movements.” *E.g.*, Reply, 3 (“The phrase ‘part of’ just confirms that ‘athletic movement’ encompasses multiple

¹ lululemon admits that Nike’s proposed meaning of “activity data” matches the plain language of limitation 1B. Reply, 9.

‘movements.’”). lululemon’s argument conflates “movement” and “athletic movement.” *See* Reply, 2. There is no dispute that an “athletic movement” may include multiple movements. *See* Response, 20. The ’930 patent uses “athletic movement” to describe a *single type of exercise or athletic activity*, such as running, swimming, cycling, pushups, or squats. *See* Ex. 2004, ¶40; Response, 20–21 (citing Ex. 1001, 23:61–64). As Nike has explained, an “athletic movement” may include multiple coordinated movements, like the way a runner coordinates the multiple motions of their arms and legs. *Id.*; Response, 20–21. But the term “athletic movement” does not include a series of multiple exercises or athletic activities—such as a triathlon where the athlete first swims, then bikes, and then runs. *See id.*

lululemon’s strawman argument—that an “‘athletic movement’ includes multiple movements”—infects nearly all of its arguments about claim construction. Reply, 5; *see also id.*, 2–8. Once that strawman is set aside, none of lululemon’s arguments hold water. *See id.*, 2–8. The following sections address lululemon’s arguments in the order set forth in lululemon’s Reply. *Id.*

i. The specification’s definition of “athletic movement” is consistent with a single type of exercise or athletic activity

In its Reply, lululemon argues that the specification’s definition of “athletic movement,” shown below, is inconsistent with Nike’s proposed construction of “athletic movement.” Reply, 2–3.

As used herein, an “athletic movement” includes movements relating to fitness, exercise, flexibility, including movements that may be part of one or more single and multiple participant athletic competitions, exercise routines, and/or combinations thereof.

Ex. 1001, 4:7–11. lululemon highlights two portions of the definition as undermining Nike’s proposed construction. But upon closer review, each portion supports Nike’s position.

First, lululemon points to the specification’s disclosure that an “athletic movement *includes movements*.” Reply, 2–3 (citing Ex. 1001, 4:7–11). As discussed above, there is no dispute that an “athletic movement” may include multiple movements. As Nike highlighted in its Response, many of the “athletic movements” disclosed in the ’930 patent—running, swimming, rowing, and cycling—include multiple, coordinated movements. *See* Response, 16–21 (citing Ex. 2004, ¶¶36–40; Ex. 1001, 23:61–64). Nike’s proposed construction of an “athletic movement”—a single type of exercise or athletic activity—is entirely consistent with this aspect of the definition.

Second, lululemon next points to the portion of the definition that describes an “athletic movement” as “part of one or more single and multiple participant athletic competitions, exercise routines, or combinations thereof.” Reply, 3 (citing Ex. 1001, 4:7–11). This too is undisputed and consistent with Nike’s proposed construction. *See* Response, 19. A single “athletic movement”—such as running—

may be “part of” a larger athletic competition or exercise routine that includes another “athletic movement.” In fact, this portion of the definition undermines lululemon’s proposed construction. If an “athletic movement” included multiple “athletic movements,” as lululemon alleges, an “athletic movement” would not be “part of” an exercise routine—the “athletic movement” would be coextensive with the exercise routine. *See* Ex. 1001, 4:7–11. This portion of the definition thus supports Nike’s construction—not lululemon’s.

ii. None of the remaining evidence identified in lululemon’s Reply is inconsistent with Nike’s proposed construction

- a. The Claims: lululemon’s claim differentiation argument fails as a matter of law and fact

In its Reply, lululemon argues that Nike’s proposed construction fails under the doctrine of claim differentiation. lululemon points to dependent claim 6, which recites that “the first instructions and the second instructions include a plurality of drills.” Reply, 4 (citing Ex. 1001, 26:57–58). According to lululemon, this language in claim 6 requires that “athletic movement,” as recited in independent claim 1, “encompass multiple movements.” *Id.* This argument fails for two reasons.

First, as a matter of law, lululemon’s proposed application of claim differentiation is inappropriate here. Dependent claim 6 is already narrower than independent claim 1 because it specifies that the first instructions and second instructions must be selected from a specific “plurality of drills”—rather than from

some other source (e.g., an athletic competition). Ex. 1001, 26:58–60. The “plurality of drills” must be drills that are “configured to test a plurality of fitness attributes” and “a plurality of athleticism attributes of the user.” *Id.* The doctrine of claim differentiation does not apply unless the independent and dependent claims are identical in scope. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1238 (Fed. Cir. 2016) (“This court has declined to apply the doctrine of claim differentiation where the claims are not otherwise identical in scope.”) (internal quotations omitted); *Laitram, LLC v. Ashworth Bros., Inc.*, No. 2022-1044, 2023 WL 3449148, at *4 (Fed. Cir. May 15, 2023). Thus, claim 6 has a narrower scope than claim 1 even under the challenged construction. Since the claim construction does not generate any redundancy, the doctrine of claim differentiation does not apply here.” Moreover, claim differentiation “should not be used to overcome the specification’s description of a term.” *Laitram*, 2023 WL 3449148, at *4 (citing *Wi-Lan USA, Inc. v. Apple Inc.*, 830 F.3d 1374, 1391 (Fed. Cir. 2016)). Here, because the specification expressly defines “athletic movement,” lululemon’s assertion of claim differentiation to alter that meaning is inappropriate.

Second, the recitation of a “plurality of drills” in dependent claim 6 is not inconsistent with Nike’s proposed construction. A POSITA would understand that claim 6 simply requires the first and second instructions to identify a first and second “athletic movement” that are selected from a certain catalog of drills (i.e. the first

and second instructions may “include a plurality of drills”). *See* Ex. 2004, ¶39; Response, 19. Claim 6 does not require a user to perform a “plurality of drills.” The “plurality of drills” is instead the universe of drills from which the first and second “athletic movement” are selected. This is similar to the way a POSITA would understand the abstract of the ’930 patent—as discussed in Nike’s Response. *See* Response 19–20.

- b. The Specification: none of the specification excerpts identified by lululemon are inconsistent with Nike’s proposed construction

In its Reply, lululemon argues that Nike’s proposed construction would exclude certain embodiments described in the specification. Reply, 4–5. lululemon is wrong for three reasons.

First, several of the “embodiments” cited by lululemon relate to multiple “movements” or “combinations of movements.” Reply, 5 (citing Ex. 1001, 4:7–11, 19:6–7). As discussed above, there is no dispute that a single “athletic movement” may include multiple coordinated movements. Ex. 2004, ¶40; Response, 16–21. These “movements”-related embodiments are thus consistent with Nike’s proposed construction.

Second, the other “embodiments” cited by lululemon—which describe, for example, “at least one exercise” or “one or more exercises”—are not excluded from claim 1 under Nike’s construction. *See* Reply, 5 (citing Ex. 1001, 8:38; 12:59–60;

14:24–28; 22:43–48; 22:53–55; 22:56–59; 23:48–24:15). Instead, embodiments describing multiple exercises are entirely consistent with Nike’s construction of “athletic movement,” because claim 1 recites both a “first athletic movement” and a “second athletic movement.” Ex. 1001, 26:17–18, 26:23–25. In other words, claim 1—when viewed as a whole, including all limitations—encompasses “at least one exercise” and “one or more exercises.” Nothing in the cited passages use the term “athletic movement” to refer to multiple athletic movements or exercises. To the contrary, as Nike highlighted in its Response, when the inventors wanted to refer to multiple athletic movements—they did so using the plural form of the term, “athletic movements.” *See* Response, 17–18. This not only undercuts lululemon’s argument—it also demonstrates that, when the inventors wanted to refer to multiple “athletic movements,” they knew how to do so. *Id.* And in claim 1, the inventors chose to the singular form of the word “athletic movement.” *Id.*

Third, lululemon mischaracterizes the law concerning the importance of the abstract in claim construction disputes. lululemon attempts to distinguish *Spirit Communications*, a case Nike cited for the proposition that the abstract carries little importance when resolving claim construction disputes. *See* Reply, 7 (citing *Spirit Commc’ns Co. L.P. v. Comcast Cable Commc’ns LLC*, No. 11-cv-2684, 2014 WL 5089402, at *38 (D. Kan Oct. 9, 2014)). Specifically, lululemon argues that (i) *Spirit* ascribed minimal value to the abstract only because the abstract contained one

“single statement” relevant to claim construction; and (ii) the Patent Office has since amended 37 C.F.R. § 1.72, which the *Spirit* court cited in its decision. Both arguments are baseless. In this case, like in *Spirit*, lululemon relies on only a “single statement” in the abstract. *See* Reply, 6–7. And the Patent Office’s amendment of its regulation is irrelevant—courts continue to recognize the limited value of an abstract in claim construction. *See, e.g., Takeda Pharm. Co. Ltd. v. Mylan, Inc.*, No. 12-cv-24, 2012 WL 4832813, at *9 (S.D.N.Y. Oct. 11, 2012) (refusing to read in a limitation from the abstract because “abstracts are more properly understood as describing a preferred embodiment of the invention”); *Verco Decking, Inc. v. Consol. Sys., Inc.*, No. 11-cv-2516, 2014 WL 3894144, at *6 (D. Ariz. Aug. 8, 2014) (“[T]he Abstract is best understood as a summary of the preferred and illustrative embodiment described in the specification. It does not purport to and as a practical matter cannot describe the full scope of all of the claims of the patent.”). lululemon’s cited authority merely states that the abstract is “potentially helpful”—it does not contradict the notion that the abstract is of minimal value in most claim construction disputes. *See* Reply, 7. But even if the Board considers the abstract—that disclosure is entirely consistent with Nike’s proposed construction. A POSITA would understand the abstract as disclosing that the “athletic movement” may be selected from a certain catalog of drills (i.e. the athletic movement may “comprise a plurality of drills”). *See* Ex, 2004, ¶39; Response, 19–20. The abstract does not equate an

“athletic movement” with a “plurality of drills.” To the contrary, it defines the “plurality of drills” as the universe from which the “athletic movement” is selected.

- c. Expert Testimony: Dr. Fischer’s testimony fails to rebut Nike’s proposed construction of “athletic movement”

In its Reply, lululemon relies on certain testimony from Dr. Fischer that has no bearing on the parties’ dispute. For example, lululemon points to Dr. Fischer’s testimony that “movements, plural, can include more than one drill and/or more than one exercise.” Reply, 7 (citing Ex. 2005, 60:21–61:1). Whether or not “movements, plural” includes more than one drill or exercise is irrelevant. The question is whether “athletic movement” means multiple athletic movements. And Dr. Fischer points to no evidence in the specification or elsewhere to support that contention. Nor does Dr. Fischer address the specification’s use of distinct terms for a singular “athletic movement” and plural “athletic movements.” The Board should thus give no weight to the testimony of Dr. Fischer.

Ultimately, lululemon’s Reply fails to set forth any evidence that contradicts Nike’s proposed construction of “athletic movement” as “a single type of exercise or athletic activity.” Nor has lululemon provided any credible argument for the proposition that an “athletic movement” can include multiple “athletic movements.” For the reasons discussed above and in Nike’s Response, the Board should construe

“athletic movement” to mean “a single type of exercise or athletic activity.”

III. LULULEMON FAILS TO SHOW THAT ANY CHALLENGED CLAIM IS UNPATENTABLE

A. Ground 1: lululemon Fails To Show That Lofi Anticipates Claims 1 and 5–7

i. lululemon fails to show Lofi discloses “calculating with a processor, based on the first activity data, a first combinatory fitness-athleticism score” (limitation 1C)

lululemon fails to show that Lofi discloses limitation 1C, which recites calculating a “combinatory fitness-athleticism score” based on “first activity data.” *See* Ex. 2004, ¶58; Response, 24–25.

In its Reply, lululemon points to Lofi’s 8-minute pedaling endurance test and leg strength test—each measuring a fitness attribute. *See* Reply, 10–12. The results of these two tests are measured in Watts—and Watts is a unit of power (i.e., an athleticism attribute). *See id.*, (citing Ex. 1002, 4:20–22, 5:12–18). As a result, lululemon argues, Lofi teaches a “combinatory fitness-athleticism combinatory score.” lululemon is wrong for three reasons.

First, Lofi never mentions “power.” Ex. 2004, ¶60. Lofi’s description concerning the 8-minute pedaling test measures only one attribute that is used in the calculation of an aggregate score: endurance. *See* Ex. 1002, 39:16–25. And Lofi discloses that an endurance measurement is expressed as a “maximum oxygen consumption”—not power—using Watts as the unit of measurement. *Id.* Lofi’s test for measuring lower limb strength similarly lacks any mention of “power.” Ex. 2004,

¶60. The leg strength test is used to calculate only one attribute: strength. lululemon has thus not shown that either test explicitly discloses an athleticism score.

Second, lululemon's inherency argument (Reply, 11) must fail because lululemon has not shown that a power score is "necessarily present" in either of these tests described by Lofi. *See HTC Corp. v. Cellular Commc'ns Equip., LLC*, 877 F.3d 1361, 1368 (Fed. Cir. 2017) ("A party seeking to establish inherent anticipation must show that a person of ordinary skill in the art would recognize that missing descriptive matter in a prior art reference is nevertheless necessarily present."). All lululemon has shown is that Lofi's pedaling test measures endurance and Lofi's leg strength test measures strength—both fitness sub scores. *See* Ex. 2004, ¶60. lululemon has thus not shown that either test inherently discloses an athleticism score.

Third, in order for power to be disclosed by Lofi's 8-minute pedaling endurance test and/or leg strength test, either (a) power *is derived* from the endurance and/or leg strength scores, or (b) power *is* the score generated from the 8-minute pedaling endurance test and/or leg strength test. But lululemon's argument fails under either scenario. To the extent that lululemon is alleging that a power score could be *derived* from maximum oxygen consumption or leg strength—both measured in Watts—lululemon has not shown that power is actually derived by the claimed processor (i.e., "calculate[ed] with a processor") as claim 1 requires. Ex.

1001, 26:21–22. And to the extent that lululemon is alleging that power *is* the score generated from the 8-minute pedaling endurance test and/or leg strength test, Lofi’s disclosure of these two tests would still not teach limitation 1C (or limitation 1F for the same reason) because the power score must be “separate” from the endurance or strength score. Ex. 1001, 26:31–33 (“the first and the second combinatory fitness-athleticism scores each comprise a fitness sub-score and *a separate* athleticism sub-score of the user”) (emphasis added); *see also Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1288 n.10 (Fed. Cir. 2017) (“It is highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous.”). But in both tests, the purported power score is the same score as—i.e., not “separate” from—the endurance and/or leg strength score.

ii. lululemon fails to show Lofi discloses “calculating, with the processor, based on the second activity data, a second combinatory fitness-athleticism score” (limitation 1F)

In its Reply, lululemon fails to show that Lofi discloses limitation 1F, i.e., calculating a “second combinatory fitness-athleticism score” based on “the second activity data” for the same reasons as limitation 1C above. Specifically, the “second activity data” that lululemon identifies in Lofi does not include measurements of both fitness and athleticism based on a *single* “athletic movement.” lululemon admits in its Reply that its Petition mapped “Lofi’s series of tests”—i.e., multiple “athletic movement[s]”—to the “second activity data.” Reply, 13. Thus, any data derived

from that “series of tests” is not “second activity data representing the second athletic movement,” under the proper construction of “athletic movement.” *See* Ex. 2004, ¶¶62–63; *see also* Response, 27–29. As a result, lululemon’s Reply confirms that Lofi fails to disclose calculating a “second combinatory fitness-athleticism score.”

iii. lululemon fails to show Lofi discloses claim 7

Nothing in lululemon’s Petition or Reply has shown that Lofi discloses claim 7 of the ’930 patent. Dependent claim 7 recites that the first and second “instructions include a predefined ordering of drills that are configured to be provided to the user during a single workout session.” As Nike explained in its Response, Lofi is silent as to any particular ordering of the tests within its series of tests. Ex. 1002, 11:15–18; Response, 29–30; Ex. 2004, ¶64. lululemon relies on the following disclosure in Lofi: “[s]ubsequently, the following tests are carried out: measurement of reflexes, measurement of the strength of upper limbs.” Reply, 13–14 (citing Ex. 1002, 11:15–16). But this passage merely states that those tests are carried out, not the particular order with which they are administered.

In its Reply, lululemon relies on Dr. Fischer’s deposition testimony to argue for the first time that “it would only make sense that a user” repeating tests would

do so “in the same order.”² Reply, 14 (citing Ex. 2005, 104:20–105:6). But Dr. Fischer’s testimony is insufficient for two reasons. First, Dr. Fischer’s opinion only goes to “the second instructions,” as recited in claim 7. *See* Petition, 22–23 (lululemon relies on repeating tests for “a second athletic movement” performed “in response to” “second instructions” in limitation 1D). Thus, lululemon’s new argument fails to address “the first instructions” that must also “include a predefined ordering of drills.” Ex. 1001, 26:61–64.³ Second, Dr. Fischer’s testimony is conclusory and cannot be relied on to fill gaps in an anticipation ground. *Xerox Corp. et al. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15–16 (PTAB Aug. 24, 2022); *Network Com., Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1361 (Fed. Cir. 2005) (rejecting expert opinions that were not “support[ed] . . . with any references to industry publications or other independent sources.”).

² lululemon’s new argument is unrelated to Nike’s claim construction position and is thus improperly presented for the first time on reply. Such a “meaningfully distinct contention” is not permissible when, as here, it could have been presented in the Petition. *Yita LLC v. MacNeil IP LLC*, 69 F.4th 1356, 1367 (Fed. Cir. 2023); *see also id.*, 1365–67.

³ Nike’s arguments here also apply to lululemon’s arguments concerning claim 7 in Ground 2 and are incorporated by reference therein.

B. Ground 2: lululemon Fails To Show The Lofi-Kitagawa Combination Renders Obvious Claims 1 and 5-7

i. lululemon fails to show Lofi in view of Kitagawa teaches or suggest calculating a first or second “combinatory fitness-athleticism score” (limitations 1C and 1F)

lululemon fails to show that Lofi in view of Kitagawa teaches or suggests limitation 1C, which recites calculating a “combinatory fitness-athleticism score” based on “the first activity data.” *See* Ex. 2004, ¶¶67–72; Response, 31–35.

In its Reply, lululemon argues that Nike’s Response only addresses Lofi’s abdominal strength test and ignores the fact that lululemon’s Petition also “explains that Lofi discloses bicycle tests, a balance test, a flexibility test, and a reaction test.” Reply 14–15 (citing Petition, 28–31). But Lofi’s bicycle tests, balance test, flexibility test, and reaction test all suffer from the same flaw as the abdominal strength test—none of these individual tests yield “activity data” that generates *both* a fitness sub-score *and* an athleticism sub-score. Instead, the bicycle tests—which measure strength or endurance—and the flexibility test yield only a fitness sub-score. *See* Petition, 28–31; Ex. 1002, 65:34–37. And the balance and reaction tests yield only an athleticism sub-score. *See* Petition, 28–31; *see also* Ex. 2004, ¶¶58–61. Thus, lululemon’s reliance on Lofi’s bicycle, balance, flexibility, and reaction tests are insufficient to meet limitation 1C under the proper construction of “athletic movement.” *See* Response, 31–35; Ex. 2004, ¶¶58–63, 65–68.

ii. The combination of Lofi and Kitagawa also fails to satisfy limitations 1C and 1F

lululemon's proposed combination of Kitagawa with Lofi fails to cure Lofi's deficiencies with regard to limitations 1C and 1F. *See* Response, 33–36, Ex. 2004, ¶¶69–78. lululemon now argues in its Reply that it relies on Lofi for “activity data” and Kitagawa for “its teachings of exercise courses, each designed to assess both fitness and athleticism attributes” and for its disclosures of “fitness devices equipped with sensors.” Reply, 15. But lululemon's arguments still fail.

lululemon argues that “it would have been obvious to combine Kitagawa's multiple combinatory scores specific to each exercise course together with known fitness devices equipped with sensors,” such as Lofi's sensors or Kitagawa's pulse meter. Reply, 15–16 (emphasis in original). But lululemon has not shown that Kitagawa's pulse meter nor Lofi's sensors, if used to monitor a user during an individual test, could generate both fitness and athleticism attributes from a single “athletic movement.” As discussed in Nike's Response, Kitagawa's pulse meter does not monitor “activity data,” and thus does not generate any “score”—let alone a “combinatory fitness-athleticism score.”⁴ *See* Response, 33–35.

⁴ In addition, Kitagawa's pulse meter is unnecessary to achieve lululemon's stated goal of monitoring physical abilities because Lofi already discloses a pulse meter. *See, e.g.*, Ex. 1002, 4:7–13. Thus, Kitagawa is redundant to Lofi in this respect.

Further, lululemon has not identified any disclosure in Kitagawa concerning a POSITA's knowledge" of "fitness devices equipped with sensors." Reply 15. Instead, lululemon cites only to statements from the parties' experts concerning the existence of sensors in the art generally. *See id.* (citing Ex. 1005, ¶125; Ex. 2005, 109:24–110:10; Ex.1017, 19:9–15.). But lululemon does not make any arguments concerning how or why the sensors available in the art could or would be combined with Lofi and/or Kitagawa to calculate a "combinatory score" based on "athletic data" representing a *single* "athletic movement." *See* Reply, 15–16; Petition 31–36. Thus, Lofi and Kitagawa cannot be combined to meet limitations 1C or 1F. As a matter of law, a challenged claim is not invalid as obvious over a combination of references where a claim limitation is not disclosed in at least one of the individual references. *See St. Jude Med., Inc.*, 729 F.3d at 1381-82; *Vizio, Inc. v. Int'l Trade Comm'n*, 605 F.3d 1330, 1342–43 (Fed. Cir. 2010).

iii. lululemon fails to show a motivation to combine Lofi with Kitagawa

In its Reply, lululemon merely repeats its Petition argument that "it would have been obvious to a POSITA to look to Kitagawa to incorporate simultaneous monitoring of multiple physical abilities (e.g., flexibility, balance, agility) into Lofi's fitness tests and include Kitagawa's pulse meter to achieve this goal." Reply, 17 (citing Petition, 35–36). For the reasons discussed in Nike's Response, a POSITA would not have had a motivation to combine Lofi and Kitagawa. In particular,

Kitagawa does not disclose “simultaneous monitoring” of any “athletic movement” to generate “activity data.” *See* Response, 33–35. Kitagawa does not “monitor” any physical or physiological parameters of the user while the user is completing an exercise course. *See id.*; Ex. 2004, ¶¶69–71. As discussed, Kitagawa only discloses subjective pre-defined indexes of the amount of exercise performed. *See* Response, 33; Ex. 1004, 2:25–40.

C. Ground 3: lululemon fails to show Maeueller in view of Kitagawa renders obvious claims 1, 5-7, and 12

i. lululemon fails to show Maeueller teaches or suggests calculating a first or second “combinatory fitness-athleticism score” (limitations 1C and 1F)

lululemon fails to show that Maeueller in view of Kitagawa teaches or suggests limitations 1C and 1F, which recite calculating a first and second “combinatory fitness-athleticism score” based on the first and second set of “activity data.”

In its Reply, lululemon argues that Maeueller’s disclosure of a 12-minute run test to measure cardiovascular endurance (i.e., a fitness sub-score) also teaches measuring speed (i.e., an athleticism sub-score). As a result, lululemon argues, Maeueller teaches a “combinatory fitness-athleticism combinatory score.” *See* Reply, 18–19 (citing Ex. 1003, ¶¶[0031]–[0035]). This is wrong. Maeueller does not disclose measuring speed in connection with the 12-minute run test. Ex. 2004, ¶86. Instead, Maeueller only measures time and distance during the 12-minute run test. *See* Ex. 1003, ¶¶[0031]–[0035]. The measured distance is then used to only

calculate the maximal oxygen consumption (VO₂max) of the user. *Id.*, ¶[0031]. Based on that calculation of VO₂max, Maeueller estimates endurance. *Id.* But Maeueller never discloses calculating a combinatory fitness score using a speed measurement. In fact, speed is not mentioned in connection with the endurance test at all.⁵ *See id.*, ¶¶[0031]–[0035]; Ex. 2004, ¶86.

Maeueller teaches that speed *is not* calculated as part of its disclosed tests. To the contrary, Maeueller teaches assessing a “person’s health state” by measuring up to “five “components of physical fitness”: “endurance, strength, flexibility, balance, and body composition.” Ex. 1003, ¶[0010]. But Maeueller’s only mention of “speed” indicates that speed is *not* health related. Ex. 1003, ¶[0008] (“An example of a component of physical fitness that is not health-related, but performance-related, is speed.”). Thus, Maeueller does not teach measuring speed with any test to assess health—let alone in connection with its disclosure of a 12-minute run test to measure cardiovascular endurance.

ii. lululemon fails to show a motivation to combine Maeueller with Kitagawa

lululemon still fails to show that a POSITA would have been motivated to

⁵ Even if speed (i.e., an “athleticism sub-score”) *can* be calculated from parameters measured in the 12-minute run test (Reply, 19), lululemon has not shown that speed is *actually* “calculat[ed] with a processor,” as claim 1 requires. Ex. 1001, 26:21–22.

combine Maeueller and Kitagawa. In its Reply, lululemon argues that the proposed combination is not redundant of Maeueller alone. Specifically, lululemon argues that “Kitagawa adds i[n] multiple exercise courses for various attributes to generate unique scores” and provides “a more comprehensive understanding of strength, flexibility, balance, agility, and intelligence.” Reply, 20. lululemon is wrong for at least three reasons.⁶

First, Maeueller already discloses measuring strength, flexibility, and balance—albeit through separate tests, performed in response to separate instructions. *See* Ex. 1003, ¶[0004], Ex. 2004, ¶¶80–86, Response, 37–44. And lululemon fails to show how Kitagawa would provide “a more comprehensive understanding” of these attributes. *See* Reply, 20.

Second, lululemon has not explained why a POSITA would look to Kitagawa to add agility as an additional physical ability to be monitored in addition to those already monitored in Maeueller. Instead, lululemon improperly uses the ’930 patent itself as a roadmap for the proposed combination. *See InTouch Techs., Inc. v. VGO*

⁶ These reasons are in addition to the fact that, as discussed in Ground 2, Kitagawa does not use “activity data” that is received from a sensor or based on user performance when “measuring age on the basis of physical strength.” *See* Ex. 1004, 2:14–16; Ex. 2004, ¶90.

Commc'ns, Inc., 751 F.3d 1327, 1351 (Fed. Cir. 2014) (using the challenged patent itself as a roadmap fails to provide the “articulated reasoning with some rational underpinning” required by *KSR*) (quoting *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007)).

Third, the Challenged Claims do not recite “intelligence” as a fitness or athleticism sub-score. *See* Ex. 1001, 26:34–42. Thus, Kitagawa’s purported measuring of intelligence is not relevant to the invalidity analysis.

Therefore, lululemon’s reply arguments fail to show that a POSITA would have been motivated to combine Maeueler and Kitagawa.

iii. The Board should disregard Dr. Fischer’s opinions concerning limitation 1F

lululemon argues that Nike’s “procedural attacks on the Petition and Dr. Fischer’s opinions” have no merit because “the Petition provided an adequate explanation” of lululemon’s arguments concerning limitation 1F. Reply, 21 (citing Ex. 1005, ¶105). lululemon is wrong. lululemon cites to Dr. Fischer’s declaration to support its allegation that “Maeueler’s computing module calculates a fitness index numerical score that is a combination of the endurance and speed attributes being assessed.” *Id.*, (citing Petition 55–56; Ex. 1005, ¶105). As a result, according to lululemon, “a group of several different tests would then be equivalent to a single ‘athletic movement.’” *Id.* But, as explained above in Section III.C.i, Maeueler never discusses measuring speed—let alone measuring speed and endurance from a single

“athletic movement.” And Dr. Fischer fails to support his opinion that a POSITA would combine the endurance and speed attributes with any references to industry publications or other independent sources. *See Network Com., Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1361 (Fed. Cir. 2005).

iv. lululemon fails to show that Maeueller in view of Kitagawa discloses claim 6

lululemon’s Reply arguments fail to show that Maeueller in view of Kitagawa discloses that the first and second “instructions include a plurality of drills configured to test a plurality of fitness attributes of the user and a plurality of athleticism attributes of the user,” as recited in claim 6. Specifically, lululemon fails to show that Maeueller discloses “a plurality of athleticism attributes of the user.” lululemon alleges that Maeueller teaches two athleticism attributes: balance and speed. Reply, 22. And for the speed attribute, lululemon relies on Maeueller’s 12-minute run test. *Id.* But for the reasons discussed above, Maeueller’s 12-minute run test does not disclose measuring speed. *See supra*, § III.C.i. As a result, lululemon has only identified a single athleticism attribute disclosed in Maeueller, i.e., balance. lululemon thus fails to show that Maeueller in view of Kitagawa teaches “a plurality of athleticism attributes of the user.”

IV. CONCLUSION

lululemon fails to prove by a preponderance of the evidence that any of claims 1, 5–7, or 12 of the '930 patent are unpatentable. Nike requests that the Board enter a final written decision affirming the patentability of those claims.

Dated: January 26, 2024

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that this Sur-Reply complies with the type-volume limitations of 37 C.F.R. § 42.24(a)(1)(i). This Sur-Reply (including figure labels and annotations) contains 5,316 words as calculated by the “Word Count” feature of Microsoft Office 365 Word application, which is less than the 5,600 words allowed under 37 C.F.R. § 42.24(c)(4).

The undersigned further certifies that this Sur-Reply complies with the typeface requirements of 37 C.F.R. § 42.6(a)(2)(ii) and typestyle requirements of 37 C.F.R. § 42.6(a)(2)(iii). This Sur-Reply has been prepared in a proportionally spaced typeface using Microsoft Office 365 Word application in Times New Roman 14 point font.

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned Certifies that on January 26, 2024, a true and entire copy of this **PATENT OWNER'S SUR-REPLY**, was served via e-mail to lululemon by serving the correspondence address of record, indicated below.

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