

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

**PRELIMINARY RESPONSE OF PATENT OWNER
NIKE, INC.**

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2002	Curriculum Vitae of Scott Mclean, Ph.D.
2003	Testimony List for Scott Mclean, Ph. D.

I. INTRODUCTION

Nike, Inc. (“Nike”) is the owner of U.S. Patent No. 10,188,930 (Ex. 1001, “the ’930 patent”). Nike submits this preliminary response to lululemon Athletica Canada Inc.’s and lululemon USA Inc.’s (“lululemon’s”) Petition, which challenges the patentability of claims 1, 5–7, and 12 of the ’930 patent (the “Challenged Claims”). Nike requests that the Board deny institution because lululemon fails to establish a reasonable likelihood of prevailing as to any Challenged Claim.

The Challenged Claims relate to a method for “monitoring a user performing an athletic movement and/or exercise and generating a combinatory fitness-athleticism score.” Ex. 1001 at Abstract. The combinatory score must include both a “fitness sub-score” and a separate “athleticism sub-score.” *Id.* at 22:23–31. Both sub-scores are calculated based on data received by a sensor that is monitoring a single “athletic movement and/or exercise.” *Id.* at 26:17–22. In other words, the claimed method involves monitoring a single athletic movement and calculating a combinatory score reflecting a user’s fitness level *and* athleticism level. *Id.* at Abstract, 1:49–51, 22:25–31.

lululemon challenges the claims on three grounds. In Ground 1, lululemon alleges anticipation by Lofi (Ex. 1002). In Ground 2, lululemon alleges obviousness over Lofi in view of Kitagawa (Ex. 1004). *Id.* at 27. And in Ground 3, lululemon alleges obviousness over Maeueller (Ex. 1003) in view of Kitagawa. *Id.* at 46.

But lululemon has not shown a reasonable likelihood of prevailing because all of the asserted prior art references lack a key limitation of the Challenged Claims. Specifically, none of the cited art, either alone or in combination, teaches or suggests calculating *both* a fitness sub-score and a separate athleticism sub-score (and as a result, a combinatory fitness-athleticism score) based on a *single* “athletic movement” and a *single* “set of instructions.” At best, the cited references merely teach or suggest the calculation of a fitness sub-score and an athleticism sub-score based on *multiple* athletic movements following *multiple* sets of instructions. lululemon attempts to fill this gap with expert testimony, but lululemon’s expert provides only conclusory testimony of no probative value. Because none of the cited references teach or suggest this critical claim limitation, lululemon cannot establish a reasonable likelihood of prevailing with respect to any of the Challenged Claims on any of the asserted grounds. The Board should thus deny institution.

II. TECHNICAL BACKGROUND

A. The ’930 Patent

The ’930 patent concerns a method and apparatus “for monitoring a user performing an athletic movement and/or exercise and generating a combinatory fitness-athleticism score” therefrom. Ex. 1001 at Abstract. The combinatory fitness-athleticism score includes *both* a fitness sub-score and an athleticism sub-score. *Id.* at 1:49–51, 22:25–31. One example of a combinatory fitness-athleticism

score, the “Fuel Print,” is shown below with a fitness sub-score (left) and an athleticism sub-score (right).

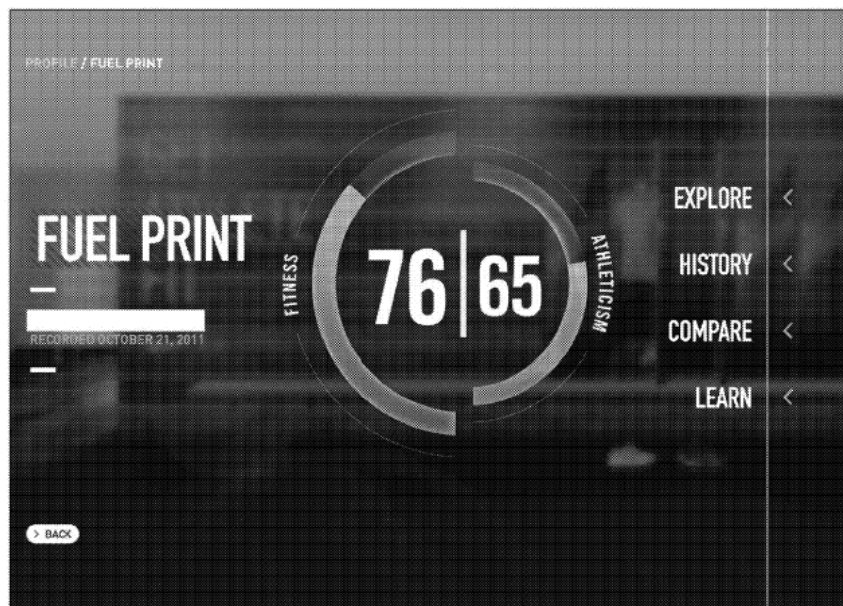


FIGURE 12

Id. at Fig. 12.

The apparatus “may instruct a user to perform an athletic movement with predefined criteria.” *Id.* at 12:55–57; *see also id.* at 22:48–59. The apparatus monitors the user with one or more sensors while the user performs an exercise, and then determines the sub-scores and a combinatory score based on “a plurality of parameters relating to the user’s performance,” such as “form, tempo, estimated fatigue, oxygen kinetics and/or other parameters.” *Id.* at 23:7–11, 23:56–59.

The ’930 patent specification makes clear that a user’s performance during a “single athletic activity,” or a “single exercise,” may serve as the basis for determining *both* one or more attribute(s) of athleticism *and* one or more attribute(s)

of fitness. *See id.* at 23:25–7, 23:31–33. These attributes are “detected, measured, and/or calculated” and then used to determine fitness and athleticism sub-scores, which are then used to calculate the combined fitness-athleticism sub-score. *See id.* at 23:33–36, 22:23–31. “[E]xample fitness attributes may include, but are not limited to: endurance, flexibility, strength and combinations thereof.” *Id.* at 23:36–38. “[E]xample athleticism attributes may include, but are not limited to: speed, agility, reaction, power, balance, and combinations thereof.” *Id.* at 23:39–41.

Claim 1 is an independent claim from which all other Challenged Claims depend. Independent claim 1 is reproduced below with limitations 1A–1I identified:

1. A computer-implemented method comprising:
 - [1A] providing first instructions to a user to perform a first athletic movement;
 - [1B] receiving, from a sensor, first activity data representing the first athletic movement;
 - [1C] calculating with a processor, based on the first activity data, a first combinatory fitness-athleticism score;
 - [1D] providing, in response to a triggering event, second instructions to the user to perform a second athletic movement;
 - [1E] receiving, from the sensor, second activity data representing the second athletic movement;
 - [1F] calculating, with the processor, based on the second activity data, a second combinatory fitness-athleticism score,
 - [1G] wherein the first and the second combinatory fitness-athleticism scores each comprise a fitness sub-score and a separate athleticism sub-score of the user,
 - [1H] wherein the fitness sub-score is calculated, by the

processor, using one or more of an endurance fitness attribute, a flexibility fitness attribute and a strength fitness attribute of the user, and

[1I] wherein the athleticism sub-score is calculated, by the processor, using one or more of a speed athleticism attribute, an agility athleticism attribute, a reaction athleticism attribute, a power athleticism attribute and a balance athleticism attribute of the user.

Id. at 26:16–42.

B. Prior Art

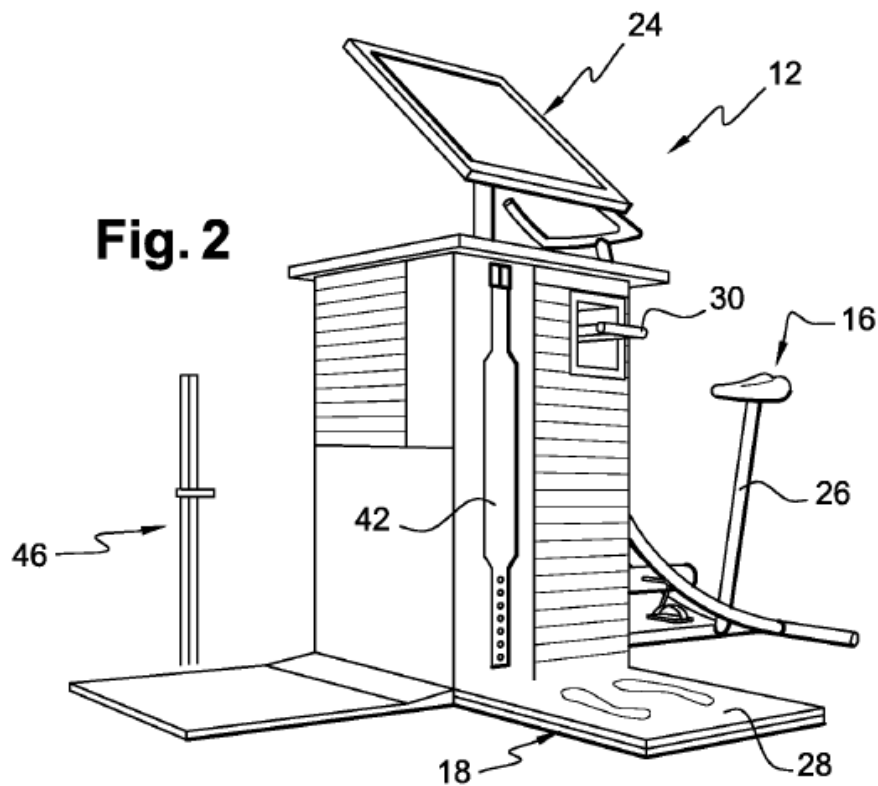
1. Lofi

Lofi (Ex. 1002, WO 2006/111687) is directed to a device that evaluates a user's physical fitness by administering a series of tests. *See* Ex. 1002 at 30:1–3.¹ According to Lofi, individuals interested in their physical fitness historically relied on a “competent person” to conduct a physical evaluation because it was difficult to evaluate physical fitness “autonomously and reliably.” *See id.* at 30:4–31:12.

Lofi purports to overcome this difficulty by providing the “one-stop” device or “terminal,” shown in Figure 2 below.

¹ Nike cites to the exhibit page numbering of Lofi (Exhibit 1002) in its entirety.

The English document begins at page 28.



Id. at Fig. 2. “This terminal makes it possible, in a reduced space, to collect [] different measurements” from a person using the terminal and “facilitate[s] the evaluation of their physical fitness, autonomously and with reliability.” *Id.* at 38:18–20. To do so, the terminal prompts a user to perform a series of multiple athletic movements, and measures data during the performance of those movements to evaluate a user’s endurance, body composition, muscular strength, and coordination or motricity. *Id.* at 31:13–25. The terminal then determines a score for each athletic movement by comparing the measured value with a “distribution curve corresponding to the person’s population group.” *Id.* at 31:23–25.

Lofi discloses that “terminal 12” has a “means of measurement.” *Id.* at 32:21–22. Specifically, “terminal 12” provides (1) a “means 16 of measurement of endurance”; (2) a “means 18 of measurement of body composition”; (3) a “means 20 of measurement of muscular strength”; and (4) a “means 22 of measurement of . . . coordination or motricity.” *Id.* at 32:21–26. The terminal (12) further includes a “screen 24 and/or keyboard” to enable the user to input data. *Id.* at 32:23–33:2.

Lofi’s terminal (12) instructs the user to perform a series of tests for evaluating the four categories listed above. *Id.* at 40:9–18. For example, in determining muscle strength, the device asks the user to contract their abdominal muscles while wearing abdominal belt 42 and “[t]he belt then transmits a signal proportionate to the effort exerted by the abdominal muscles” to the device. *Id.* at 36:4–7. As another example, to measure flexibility, the device asks the user to “stand on a heightened pedestal,” and then to “bring [a] pallet to as low as possible, bending forwards without giving way to their legs.” *Id.* at 36:20–8:4. Lofi describes other test prompts given to users such as pedaling, gripping, balancing on one foot, etc. *Id.* at 33:7–38:17.

After measuring the user’s performance data during each test, the device compares the collected data with a “distribution curve corresponding to the [user’s] population group,” and “allocate[s] a score to the [user]” for each individual test. *Id.* at 31:23–25, 39:16. A user’s “physical fitness” score is then calculated by averaging that user’s scores for each of the measurement criteria, i.e., body composition,

endurance, muscular strength, and motricity. *Id.* at 39:17–25. Lofi’s device generates only one criteria score for each test activity. *Id.*

2. Maeueler

Maeueler (Ex. 1003, EP 2324762A1) is directed to “a fitness test system for determining a fitness test result that is indicative of a user’s physical fitness.” Ex. 1003 at [0001]. Maeueler discloses that “[i]t would be desirable to be able to use such a system in a home setting or in another setting where expert guidance is unavailable, while still maintaining a high level of confidence in the obtained results.” *Id.* at [0006]. The fitness test system includes “a computing module for accessing a collection of fitness tests” and “one or more peripheral devices . . . adapted to measure one or more input parameters.” *Id.* at [0007]. As depicted in Figure 2, Maeueler discloses three peripheral devices containing one or more sensors: a handheld computing device (20), an exercise mat (21) and a distance detecting device (22):

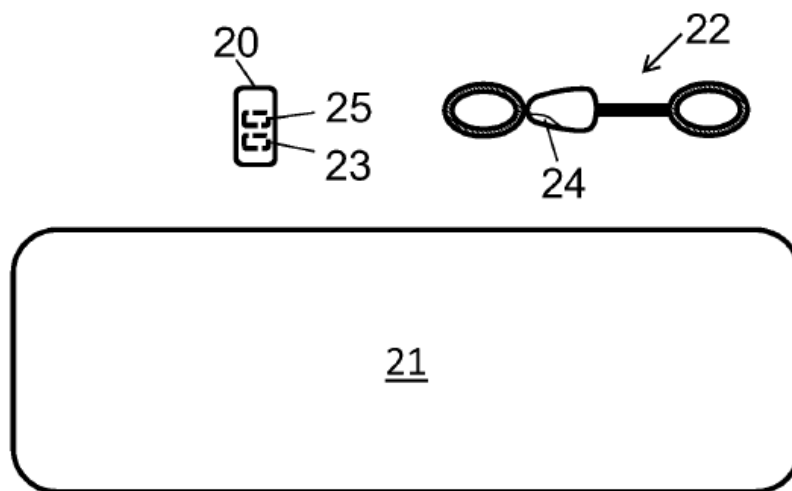


FIG. 2

Id. at Fig. 2.

Maeueller's system conducts tests related to five "components of physical fitness": "cardiovascular endurance, muscle strength, flexibility, balance, and body composition." *Id.* at [0004], [0010]. Maeueller discloses specific, mutually exclusive exercises that the user may perform to determine a "fitness test result" for each of the five aforementioned components. *Id.* at [0019]. As the user performs exercises associated with a particular component, a peripheral device measures "one or more input parameters" to determine a fitness test result. *Id.* For example, Maeueller discloses a run test to determine the "cardiovascular endurance" component of physical fitness and a Stork balance test to determine the "balance component." *Id.* at [0031], [0044]. Maeueller's system generates only one "fitness test result" score for each exercise activity. *Id.*

3. Kitagawa

Kitagawa (Ex. 1004, U.S. Pat. No. 7,810,392) is directed to a “system for measuring a person’s age on the basis of his/her physical strength.” Ex. 1004 at Abstract. Specifically, Kitagawa discloses that a user’s age is calculated based on the time it takes the user to complete certain exercise courses each made up of multiple different exercises. *See id.* Kitagawa describes that the “exercise courses are formed so that the user demonstrates various physical abilities, including muscle strength at multiple portions of his/her body, flexibility of the body, balance of the body, and agility of the body.” *Id.*

Kitagawa’s system requires an exercise course including a series of obstacles and/or equipment for facilitating exercise movements “in a recreational facility.” *Id.* at 1:15–18. For example, the exercise course may feature “multiple logs . . . installed at a predetermined height” and “a structure, arranged in the middle of the passageway, that has a low ceiling.” *Id.* at 2:46–53. Or the course may include “a meandering, upward-sloped passage way” for “climbing up and jumping down; jumping over; crawling up and running down; or climbing while avoiding obstacles.” *Id.* at 2:54–60. Kitagawa explains that “[i]t is preferable that said exercise courses be accommodated in a long dome made of polystyrene foam.” *Id.* at 3:52–53.

Kitagawa’s system uses a predefined “index of the amount of exercise that a

user performs.” *Id.* at 3:54–67. Each exercise course has its own predefined index values as shown below in Table 3:

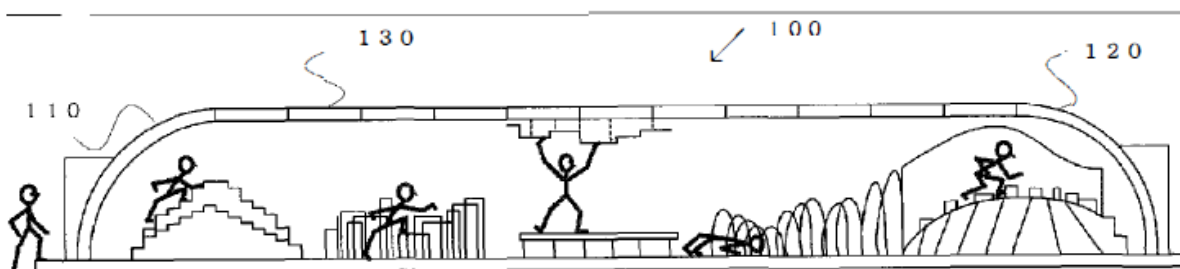
TABLE 3

Course	Legs	Arms	Flexi- bility	Balance	Agility	Intelli- gence
Log Range	6	4	9	10	4	6
Climb of Grief	7	6	6	6	8	6
Divided Pathway	7	2	9	9	9	2
Road of Torsion	7	3	6	10	5	3
Wall of Stagnation	4	8	7	7	4	4
Cave of Bones	4	5	10	7	4	4
Stretch with Hanging Rings	4	6	10	3	5	2

Id. at Table 3.

An exercise course is depicted below in Figure 18. Kitagawa discloses that Figure 18 shows a “longitudinal sectional view of the inside of the long dome 100 in which the exercise courses are accommodated.”

Fig. 18



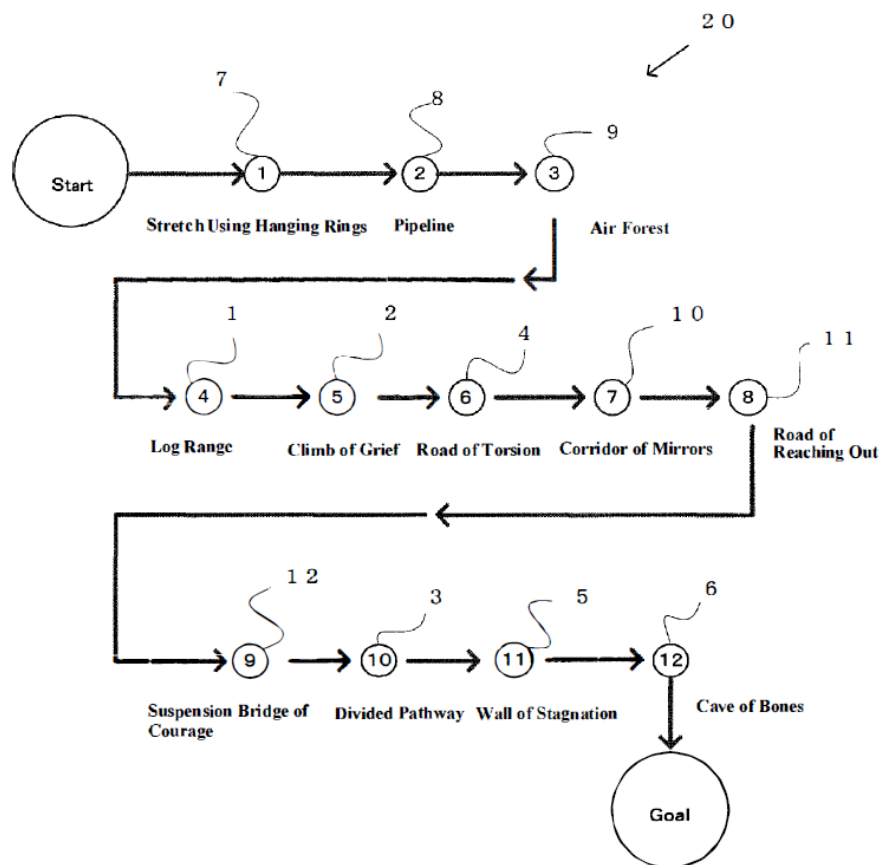
Id. at Fig. 18, 13:4–6.

In operation, Kitagawa teaches that a user must first check in at a service counter with an application to use the system. *Id.* at 8:31–42. The user then provides the system with certain physiological measurements, such as the user’s

blood pressure and pulse rate. *Id.* at 8:31–42. The user is then given a stopwatch to manually record on a scorecard how long it took to complete each course. *Id.* at 8:43–52. After the user provides this and other personal information, like actual age, to the service counter, the system analyzes the scorecard and calculates the user’s age “on the basis of [] physical strength.” *Id.* at 8:56–61.

In one embodiment, Kitagawa teaches a 12-part exercise course as shown below in Figure 1:

Fig. 1



Id. at Fig. 1. Kitagawa discloses that “[t]he various types of exercise and various conditions are designed so that each physical ability can be evaluated by measuring

the completion time for each exercise course.” *Id.* at 11:1–4. Kitagawa only uses one parameter measured during exercise activity to calculate its physical strength age: completion time. *Id.* at 2:25–40.

III. PERSON OF ORDINARY SKILL IN THE ART

For the purposes of this Preliminary Response only, Nike applies lululemon’s proposed level of skill in the art. According to lululemon, a person of ordinary skill in the art (“POSITA”) for the technology of the ’930 patent would have had (1) a bachelor’s degree in engineering, computer science, industrial design, biomechanics, or a related field, and (2) at least two years of experience researching, developing, designing, and/or testing fitness or physiological sensors, wearable devices, physiological or biomechanical devices, remotely-controlled systems or interfaces, and/or network-based applications and/or equipment, or the equivalent experience or education. Petition at 13. Nike reserves the right to further address lululemon’s proposed level of ordinary skill and/or propose a different level of ordinary skill, if the Board institutes trial.

IV. CLAIM CONSTRUCTION

As a general rule, claim terms are given their “ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). The “ordinary and customary meaning” is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.*

at 1313. A POSITA is deemed to read the claim term “not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

lululemon concedes that no claim construction is necessary for the purposes of this proceeding. Petition at 14. Nike agrees. All terms and phrases in the ’930 patent have their ordinary and customary meanings, which are readily apparent, and no further construction is required. Nike discusses the ordinary and customary meaning of certain claim terms in the context of lululemon’s unpatentability grounds below.

V. INSTITUTION SHOULD BE DENIED

lululemon bears the burden of demonstrating a reasonable likelihood that it will prevail in showing the unpatentability of at least one Challenged Claim. *SMIC, Ams. v. Innovative Foundry Techs., LLC*, IPR2020-00837, Paper 13 at 13–14 (PTAB Oct. 9, 2020) (citing 35 U.S.C. §§ 314(a) and 312(a)(3)). To meet its burden, “[i]t is of the utmost importance” that lululemon “identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3)).

As to the alleged anticipation in Ground 1, lululemon must show a reasonable likelihood of proving that “the four corners of a single, prior art document describe

every element of the claimed invention” in the same specific “arrange[ment] as in the claim.” *See Net MoneyIN, Inc., v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008). The Board regularly denies petitions that “lack particularity or present deficient or conclusory analysis.” *Sinjimoru v. Geneze Innovation Inc.*, IPR2021-00493, Paper 8 at 11 (PTAB July 28, 2021). The requirement for particularity “takes on heightened importance when considered in conjunction with” the “all-or-nothing approach” that applies to decisions on institution. *Adaptics Limited v. Perfect Co.*, IPR2018-01596, Paper 20 at 17 (PTAB Mar. 6, 2019) (informative). “Ambiguous references do not, as a matter of law, anticipate a claim.” *Wasica Fin. GmbH v. Cont’l Auto. Sys.*, 853 F.3d 1272, 1284 (Fed. Cir. 2017).

As to its obviousness grounds (i.e., Grounds 2 and 3), lululemon must show a reasonable likelihood of proving that “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made” to a skilled artisan. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). lululemon must “articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” *U.S. Well Servs., LLC v. Halliburton Energy Servs., Inc.*, IPR2022-01163, Paper 9 at 10 (PTAB Dec. 20, 2022) (quoting *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016)). lululemon cannot rely on conclusory statements or blanket assertions of common sense to fill gaps and missing limitations

from the prior art. *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362–63 (Fed. Cir. 2016). “It is not the Board’s job to cobble together assertions from different sections of a petition or citations of various exhibits in order to infer every possible permutation of a petitioner’s arguments.” *Microsoft Corp. v. FG SRC, LLC*, 860 Fed. App’x 708, 713 (Fed. Cir. 2021). lululemon’s obviousness arguments “must be made with particularity, not opacity.” *Id.*

As discussed on a ground-by-ground basis below, Grounds 1–3 all suffer from the same defect. None of the cited art, either alone or in combination, teaches or suggests calculating *both* a fitness sub-score and an athleticism sub-score (and as a result, a combinatory fitness-athleticism score) based on a *single* “athletic movement” and a *single* “set of instructions.” Instead, the cited references only teach or suggest the calculation of fitness sub-scores and athleticism sub-scores based on *multiple* athletic movements following *multiple* sets of instructions. lululemon’s failure to identify this claim limitation in the prior art undermines all of its asserted grounds.

As a result, lululemon has not met its reasonable likelihood burden as to any ground of unpatentability for any Challenged Claim. Nike thus respectfully requests that the Board deny institution.

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

lululemon fails to show a reasonable likelihood that Lofi anticipates claims 1

and 5–7. Lofi teaches a device for evaluating a user’s physical fitness by prompting the user to perform a variety of distinct tests for endurance, body composition, muscular strength, and coordination or motricity and then assigns corresponding scores for each test. Ex. 1002 at 31:13–25. But Lofi does not disclose a method of calculating *both* a fitness sub-score and an athleticism sub-score (and as a result, a “combinatory fitness-athleticism score”) based on a *single* “athletic movement” and a *single* “set of instructions.”

Lofi is different from the ’930 patent’s claimed invention in two significant ways. First, the Lofi device measures data corresponding to only one component of physical fitness at a time. *Id.* at 33:7–38:6. Unlike the method claimed in the ’930 patent—which calculates a fitness sub-score and an athleticism sub-score based on a “first athletic movement,” the Lofi device does not measure *both* fitness and athleticism components from a *single* “athletic movement.” *See id.* at 39:16–25. Second, and relatedly, lululemon fails to show that the alleged “combinatory fitness-athleticism score” disclosed in Lofi is made up of *separate* fitness and athleticism sub-scores.

As a result of these differences, lululemon’s assertions as to claim limitation 1C, 1D, and 1F all fail. lululemon has thus failed to show a reasonable likelihood that Lofi anticipates any Challenged Claim.

1. 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 adequately show that Lofi discloses limitation 1C, which recites calculating a “combinatory fitness-athleticism score” based on “the first activity data.”

Claim 1 of the ’930 patent recites a specific type of “first activity data.”² The “first activity data” in limitation 1C is measured from a *single* athletic movement, namely the “first athletic movement.” Ex. 1001 at 26:17–18. That “first activity data” is then used to calculate both a “fitness sub-score” and an “athleticism sub-score,” which are in turn used to calculate the “combinatory fitness-athleticism score.” *Id.* at 26:19–22, 26:34–42. In other words, the “first activity data” recited in claim 1 must (i) derive from a *single* athletic movement and (ii) include *separate* measurements of both fitness and athleticism. Ex. 2001 at ¶¶ 54–56.

The “first activity data” that lululemon identifies in Lofi is different. lululemon begins by identifying the “first athletic movement” as any one of the multiple distinct tests disclosed by Lofi. Petition at 16–17. For example, lululemon alleges that “pedaling represents a first athletic movement.” *Id.* at 16. As another example, lululemon alleges that the “balance test” disclosed in Lofi is “a first athletic

² For purposes of this preliminary response only, Nike assumes that Lofi discloses “activity data,” as recited in claims 1 and 11. Nike reserves the right to challenge whether Lofi discloses “activity data” if IPR is instituted.

movement.” *Id.* at 17; *see also id.* at 16 (“[e]ach of these tests qualify as a first athletic movement”); Ex. 1005 at ¶¶ 54–59. Each of these “athletic movements” identified by lululemon is a single distinct test that yields only a single measurement. The “activity data” from these “athletic movements” does not yield both a fitness sub-score *and* an athleticism sub-score. Rather, the “activity data” from each alleged “athletic movement” is only capable of yielding a fitness sub-score *or* an athleticism sub-score. Ex. 2001 at ¶¶ 57–59.

The Board should also disregard Dr. Fischer’s testimony with respect to limitation 1C because lululemon never cites to it. Nowhere in lululemon’s argument regarding limitation 1C does lululemon rely on Dr. Fischer’s expert opinion. *See* Petition at 20–22. lululemon has thus failed to show with particularity that it is advancing arguments consistent with Dr. Fischer’s opinions on limitation 1C. The Board disregards expert testimony for less, and should similarly disregard Dr. Fischer’s testimony here. *EiKO Global, LLC, v. Blackbird Tech LLC*, IPR2017-00980, Paper 16 at 23 (PTAB Sept. 1, 2017) (citing 37 C.F.R. § 42.6(a)(3) (“Arguments that are not presented and developed in the Petition, and instead are incorporated by reference to [an expert] declaration, are not entitled to consideration.”)).

Even if lululemon had advanced Dr. Fischer’s opinions regarding this limitation (it did not), they do not cure Lofi’s deficiencies. Dr. Fischer points to

Lofi’s disclosure of a test where the user is instructed to “pedal as fast as possible for a short period of approximately 10 seconds.” Ex. 1005 at ¶ 64. According to Dr. Fischer, this test provides data for both strength *and* power because the measurement is expressed in Watts. *Id.* But Lofi’s express disclosure contradicts Dr. Fischer’s opinion. Lofi discloses that the pedaling test is used to measure only strength. Ex. 1002 at 34:9–21 (“[T]he [] ergometric bicycle can be used to measure [] leg strength.”). Lofi never once mentions “power” as part of this test. *Id.* Because Dr. Fischer’s testimony contradicts the express language of Lofi itself, his testimony should be disregarded. *Wilson v. Martin*, 789 F. App’x 861, 870 (Fed. Cir. 2019) (“The purpose of extrinsic evidence in an anticipation analysis is to educate the decision-maker to what the reference meant to persons of ordinary skill in the field of the invention, not to fill gaps in the reference.”); *see also Advanced Fiber Tech. v. J&L Fiber Servs.*, 674 F.3d 1365, 1374 (Fed. Cir. 2012).

Dr. Fischer also claims that because Lofi “clearly provides examples of tests for flexibility and balance,” “[a] POSITA would understand that these could be readily integrated into a single activity.” Ex. 1005 at ¶ 67. Lofi, however, does not disclose or suggest that the flexibility and balance activities can be combined into a single activity. Instead, Lofi teaches separate tests used to measure flexibility (Ex. 1002 at 36:20–37:7) and balance (*id.* at 37:8–38:6). Dr. Fischer’s argument

contradicts the teachings of Lofi, and therefore fails for the same reasons described above. *See Wilson*, 789 F. App'x at 870.

For these reasons, lululemon has not adequately shown that Lofi discloses limitation 1C. The Board should deny institution on this basis alone.

2. lululemon fails to show Lofi discloses “providing, in response to a triggering event, second instructions to the user to perform a second athletic movement” (Limitation 1D)

lululemon also fails to adequately show that Lofi discloses limitation 1D, which recites providing “second instructions” to the user to perform a “second athletic movement.” Ex. 1001 at 26:23–25. lululemon’s arguments for this limitation fail for two reasons: (1) lululemon contradicts its earlier position on what constitutes a “first athletic movement” and (2) rather than identifying a “second set of instructions,” lululemon relies on Lofi’s disclosure of repeating the “first set of instructions.”

First, lululemon’s assertions as to limitation 1D fail because lululemon now changes what it identifies as a “first athletic movement.” Previously, when asserting that Lofi meets limitation 1A, lululemon argued that *each* individual test described in Lofi constitutes a “first athletic movement.” *See* Petition at 16–18 (separately describing pedaling as a first movement, abdominal muscle contraction as a first movement, etc.). But when asserting that Lofi meets limitation 1D, lululemon argues that an entire series of tests disclosed by Lofi corresponds to a “first athletic

movement.” Petition at 22 (“Lofi discloses providing instructions to a user to perform an athletic movement corresponding to several tests.”).

lululemon’s attempt to prove anticipation by cobbling together an anticipation argument by cherry picking parts of a single reference fails as a matter of law. *See Net MoneyIN*, 545 F.3d at 1371; *Microsoft Corp.*, 860 Fed. App’x at 713. It is “not enough that the prior art reference . . . includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention” to show anticipation.” *BlephEx, LLC v. Myco Indus., Inc.*, 24 F.4th 1391, 1400 (Fed. Cir. 2022). Instead, because the “hallmark of anticipation is prior invention,” the asserted prior art reference “must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN*, 545 F.3d at 1370. lululemon’s shifting sands approach to identifying the “first athletic movement” shows that lululemon has not identified the elements of claim 1 “arranged as in the claim.” *See id.*

Second, lululemon’s assertions as to limitation 1D fail because lululemon has not identified “second instructions” or a “second athletic activity” in Lofi. Ex. 1001 at 26:23–30. lululemon asserts that Lofi discloses limitation 1D by teaching that “the user can **repeat** Lofi’s series of tests to ‘revise their [] results’” by “entering a username and password at a terminal and **repeating** the test.” Petition at 23 (emphasis added). In other words, lululemon argues that Lofi’s disclosure of

repeating the test(s)—i.e., repeating the “first instructions” and “first athletic movement”—is equivalent to the Lofi system providing “second instructions” regarding a “second athletic movement.” *Id.*; Ex. 2001 at ¶¶ 60–63.

lululemon’s assertions are improper because they ignore a fundamental canon of claim construction: “[d]ifferent claim terms are presumed to have different meanings.” *SimpleAir, Inc. v. Sony Ericsson Mobile Comm’s AB*, 820 F.3d 419, 431 (Fed. Cir. 2016). lululemon points to the exact same instructions as both the “first instructions” and “second instructions”; and lululemon points to the exact same athletic movement as the “first athletic movement” and the “second athletic movement.” Petition at 22–23. lululemon never explains why it is appropriate to give different claim terms the same meaning, and thus fails to rebut the presumption that the two terms have different meanings. *SimpleAir*, 820 F.3d at 431. lululemon’s failure to address this canon or the presumption dooms its argument that Lofi discloses limitation 1D. *See Microsoft Corp. v. Ipa Techs., Inc.*, IPR2019–00812, Paper 44 at 138–39 (PTAB Oct. 15, 2020) (noting that “[s]uch [claim construction] arguments and evidence are the type of material that should have been included in the Petition in the first instance to present a *prima facie* case of unpatentability”).

For these reasons, lululemon has not adequately shown that Lofi discloses limitation 1D. The Board should deny institution on this basis alone.

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

lululemon also fails to adequately show that Lofi discloses limitation 1F, i.e., calculating a “second combinatory fitness-athleticism score” based on “the second activity data.”

The “second activity data” in limitation 1F—just like the “first activity data” in limitation 1C—is measured from a *single* athletic movement, namely the “second athletic movement.” Ex. 1001 at 26:19–22, 26:26–30. The “second activity data” is then used to calculate *both* a “fitness sub-score” and an “athleticism sub-score,” which are in turn used to calculate the “second combinatory fitness-athleticism score.” *Id.* at 26:26–30. In other words—just like the “first activity data” in limitation 1C—the “second activity data” recited in limitation 1F must (i) derive from a *single* athletic movement (i.e. the “second athletic movement”) and (ii) include *separate* measurements of *both* fitness and athleticism. For two reasons, lululemon has failed to show to a reasonable likelihood that Lofi discloses limitation 1F.

First, the “second activity data” that lululemon identifies in Lofi does not include *separate* measurements of both fitness and athleticism based on a *single* athletic movement. As an initial matter, lululemon’s argument should be rejected because the argument is unclear and lacks particularity. lululemon does not clearly

indicate whether the “second activity data” it identifies in Lofi is derived from an individual test or a series of tests. *See* Petition at 24. This alone warrants rejection of lululemon’s argument. *Sinjimoru*, IPR2021-00493, Paper 8 at 11 (rejecting grounds for lack of particularity). But regardless of whether lululemon relies on activity data from a single test or a series of tests, its argument fails. Each test administered by Lofi is a single distinct test that yields only a single measurement. Ex. 1002 at 33:7–38:6. If lululemon’s argument relies on a single test in Lofi, the “activity data” from this “athletic movement” cannot yield both a fitness sub-score *and* an athleticism sub-score. Rather, the “activity data” from each individual “athletic movement” is only capable of yielding a fitness sub-score *or* an athleticism sub-score. *See id.*; Ex. 2001 at ¶ 65. If lululemon’s argument relies on the series of tests disclosed in Lofi—i.e., multiple athletic movements—then any activity data derived from that series of tests is not activity data from a *single* athletic movement. *See id.*; Ex. 2001 at ¶ 65. Although lululemon’s argument is unclear, lululemon has failed to show that Lofi discloses “calculating, with the processor, based on the second activity data, a second combinatory fitness-athleticism score,” as recited in limitation 1F.

Second, the “second activity data” that lululemon identifies in Lofi is data generated by repeating the same test(s) that lululemon identified when arguing that Lofi disclosed the “first activity data” (i.e. the “first athletic movement”). Lofi

discloses that when a user logs in to a different terminal, they will be able to “revise their profile and results,” meaning they will be able to revise their first physical fitness score. Ex. 1002 at 41:3–5. Lofi therefore teaches only that a user may revise, or override, their previous score as opposed to creating a separate second combinatory score. For the same reasons discussed above with respect to limitation 1D (*see* Ex. 2001 at ¶¶ 61–62), revising or overriding the “first combinatory fitness-athleticism score” is not calculating a “second combinatory fitness-athleticism score.” *SimpleAir*, 820 F.3d at 431 (“Different claim terms are presumed to have different meanings.”).

For these reasons, lululemon has not adequately shown that Lofi discloses limitation 1F. The Board should deny institution on this basis alone.

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

lululemon fails to demonstrate there is a reasonable likelihood that Lofi alone, or in combination with Kitagawa, renders obvious any of the Challenged Claims. lululemon’s arguments based on Lofi suffer from the same critical flaw described above with respect to Ground 1, i.e., Lofi does not disclose a method of calculating *both* a fitness sub-score *and* an athleticism sub-score (and as a result, a “combinatory fitness-athleticism score”) based on a *single* “athletic movement” and a *single* “set of instructions.”

Seeming to recognize this, lululemon in Ground 2 relies on Kitagawa in the

alternative as teaching the “first combinatory score” and “second combinatory score” recited in limitations 1C and 1F.³ But this argument also fails because Kitagawa never discloses “calculating” a first or second combinatory score, as recited in limitations 1C and 1F. In addition, lululemon has not shown that a POSITA *would* have looked to Kitagawa to combine the cited subject matter with the alleged teachings of Lofi. lululemon instead relies on impermissible hindsight to argue that a POSITA *could* have combined these two references.

For at least these reasons, lululemon has fallen short of its burden to show a reasonable likelihood of success for any Challenged Claim in Ground 2.

1. lululemon fails to show Lofi in view of Kitagawa teaches or suggests “calculating with a processor, based on the first activity data, a first combinatory fitness-athleticism score” (Limitation 1C)

lululemon fails to adequately show that Lofi alone, or in combination with Kitagawa, teaches or suggests limitation 1C, which recites calculating a “combinatory fitness-athleticism score” based on “the first activity data.” Ex. 1001 at 26:21–22.

³ For all other limitations, lululemon relies exclusively on Lofi. For at least the same reasons discussed in Ground 1, lululemon fails to show that Lofi discloses limitation 1D and lululemon fails to show that Lofi renders limitation 1D obvious.

As described above with respect to this limitation in Ground 1, claim 1 of the '930 patent requires a specific type of “first activity data.”⁴ The “first activity data” recited in claim 1 must (i) derive from a *single* athletic movement and (2) include *separate* measurements of both fitness and athleticism. Ex. 1001 at 26:17–22, 26:34–42. But the “first activity data” that lululemon identifies in Lofi does not serve as the basis for measuring attributes of both fitness and athleticism. In its discussion of limitation 1B, lululemon alleges that Lofi discloses a “first activity data” when it discloses a signal transmitted from a belt for monitoring abdominal contractions that is “proportionate to the effort exerted by the abdominal muscles.” Petition at 30–31. But this “activity data” does not yield both a fitness sub-score *and* an athleticism sub-score. '930 Patent at 26:19–22, 26:34–42 (requiring that the fitness sub-score be calculated using one or more of an endurance, flexibility, and strength attribute, and the athleticism sub-score be calculated using one or more of speed, agility, reaction, power, and balance attributes). Rather, the “activity data” from this alleged “athletic movement” only yields a fitness sub-score: muscle strength. *See* Ex. 1002 at 35:24–36:9.

lululemon then changes course with its identification of “activity data” in its argument for limitation 1C. Specifically, lululemon states that the terminal in Lofi

⁴ For purposes of this preliminary response only, Nike assumes that Lofi discloses “activity data,” as recited in claims 1 and 11. Nike reserves the right to challenge whether Lofi discloses “activity data” if IPR is instituted.

“enables collection of ‘different measurements’ corresponding to an individual’s performance on each test (e.g., activity data).” Petition at 31–32. According to lululemon, Lofi then provides an “aggregate score corresponding . . . to the weighted average of each fitness test score.” *Id.* at 33. It is unclear whether lululemon is relying on the data from each individual test, or the data from series of tests, as constituting activity data. *Sinjimoru*, IPR2021-00493, Paper 8 at 11 (discussing that the Board regularly denies petitions that “lack particularity”). But either way, lululemon fails to meet its burden, as it cannot show that a *single* athletic movement yields a “combinatory fitness-athleticism score” for the reasons described when addressing limitation 1C for Ground 1 above. Ex. 2001 at ¶ 69.

lululemon’s proposed combination of Kitagawa with Lofi fails to cure these deficiencies. Kitagawa does not disclose a “first combinatory fitness-athleticism score” which is calculated with a processor based on “first activity data.” Ex. 1001 at 26:19–22. lululemon focuses on two aspects of Kitagawa, neither of which provide the requisite disclosure.

First, lululemon erroneously points to Kitagawa’s disclosure of a user recording their pulse at the beginning and ending of an exercise course as measurement of “activity data.” Petition at 34. But Kitagawa actually discloses that the only parameter the user records which is used to determine “physical strength age” and “physical ability[ies]” is the time it takes him or her to complete the

exercise course(s). Ex. 1004 at 9:6–10, 11:1–4. As Kitagawa discusses, the purpose of recording pulse is “to help ensure that the user refrains from exercising excessively” and to “tell whether he/she has been exercising enough.” *Id.*; Ex. 2001 at ¶ 70. And the stopwatch of Kitagawa only records elapsed time, it does not sense a user’s activity data. Ex. 2001 at ¶ 71.

Second, lululemon relies on Table 3 in Kitagawa as disclosing a “combinatory” score. Petition at 34–35. But Kitagawa’s Table 3 merely shows pre-defined indexes that are stored in the memory of Kitagawa’s system. Ex. 1004 at 10:65–66. These pre-defined indexes are not based on the user’s activity. Thus, these indexes cannot be combined to form a “combinatory fitness-athleticism score.” Ex. 2001 at ¶ 72. And Kitagawa never discloses using the values of Table 3 to generate a “combinatory score.” Ex. 1001 at 26:19–22. Instead, Kitagawa appears to use the pre-defined indexes as part of a formula to calculate an individual attribute to which a particular exercise course relates, for example, a score of muscle strength. Ex. 1004 at 10:37–60.

For these reasons, lululemon has not adequately shown that Lofi alone, or in view of Kitagawa, teaches or suggests limitation 1F. The Board should deny institution on this basis alone.

2. lululemon fails to show Lofi in view of Kitagawa teaches or suggests “providing, in response to a triggering event, second

instructions to the user to perform a second athletic movement” (Limitation 1D)

As discussed above in with respect to limitation 1D in Ground 1, lululemon has not adequately shown that Lofi teaches limitation 1D because (1) lululemon contradicts its earlier position on what constitutes a “first athletic movement” and (2) rather than identifying a “second set of instructions,” lululemon relies on Lofi’s disclosure of repeating the “first set of instructions.” Petition at 36–37. These same flaws undermine any argument that Lofi renders obvious limitation 1D, and lululemon does not present any additional arguments that Lofi renders obvious limitation 1D. Nor does lululemon assert that Kitagawa teaches or suggests limitation 1D.

As a result, lululemon has not adequately shown that Lofi alone, or in view of Kitagawa, teaches or suggests limitation 1D. The Board should deny institution on this basis alone.

3. lululemon fails to show Lofi in view of Kitagawa teaches or suggests “calculating, with the processor, based on the second activity data, a second combinatory fitness-athleticism score” (Limitation 1F)

lululemon fails to adequately show that Lofi alone, or in combination with Kitagawa, discloses limitation 1F, which recites calculating a “second combinatory fitness-athleticism score” based on “the second activity data.” Ex. 1001 at 26:28–30.

For the same reason discussed above with respect to limitation 1F in Ground 1, lululemon has not shown that Lofi renders obvious limitation 1F. lululemon has not met its burden to show that Lofi discloses limitation 1F because the “second activity data” that lululemon identifies in Lofi (1) does not include *separate* measurements of both fitness and athleticism based on a *single* athletic movement, and (2) is generated by repeating the same test(s) that lululemon identified when arguing that Lofi disclosed the “first activity data” (i.e. the “first athletic movement”), as opposed to separate and distinct test(s). Petition at 20–22, 24, 39–41; Ex. 2001 at ¶¶ 54–59, 64–66. These same flaws undermine any argument that Lofi renders obvious limitation 1F, and lululemon does not present any additional arguments that Lofi renders obvious limitation 1F.

Kitagawa does not cure the deficiencies in lululemon’s arguments. As discussed above with respect to limitation 1C in Ground 2, Kitagawa does not disclose the calculation of a “combinatory fitness-athleticism score” calculated with a processor based on “activity data.” Ex. 1001 at 26:21–22. Kitagawa only relies on elapsed time, not any data directly related to a user’s activity. Ex. 1004 at 9:6–10, 11:1–4. While lululemon points to Kitagawa’s disclosure of indexes (*see* Petition at 40–41 (citing Ex. 1004 at 2:33–36)), Kitagawa never discloses measuring those values or using them to generate a “combinatory score.” Thus, for the same reasons Kitagawa does not teach or suggest the calculation of a first combinatory

fitness-athleticism score based on first activity data (limitation 1C), Kitagawa also doesn't teach or suggest the calculation of a second combinatory fitness-athleticism score based on second activity data (limitation 1F). Ex. 2001 at ¶¶ 70–72.

As a result, lululemon has not adequately shown that Lofi alone, or in view of Kitagawa, teaches or suggests limitation 1F. The Board should deny institution on this basis alone.

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

lululemon argues that “it would have been obvious to combine Lofi’s monitoring of an individual’s athletic activity using sensors with Kitagawa’s exercises that simultaneously assess multiple physical activity attributes with a reasonable expectation of success.” Petition at 27. This argument is fundamentally flawed. Even if Lofi and Kitagawa generally relate to the same field of endeavor—assessing some aspects of a user’s physical fitness—that alone is insufficient to show a motivation to combine. *See Johns Manville Corp. v. Knauf Insulation, Inc.*, IPR2018-00827, Paper 9 at 10 (PTAB Oct. 16, 2018) (holding that neither “mere compatibility of [] references” or existence in “same field of endeavor” is sufficient “to establish that the skilled artisan would have had reason to combine the teachings of the prior art as claimed in the challenged patent”). The systems and methods described in Lofi and Kitagawa are incompatible and vastly different for at least the

two reasons described below, such that a POSITA would not have looked to Kitagawa to modify Lofi's teachings.

First, Kitagawa is incompatible with Lofi. Introducing the teachings of Kitagawa into Lofi's system for evaluating a user's physical fitness would destroy the benefits that Lofi purports to provide over conventional technologies. Specifically, Lofi touts the ability of its apparatus to evaluate the physical fitness of a user in a one-stop, compact, and autonomous fashion. *See* Ex. 1002 at 30:4–31:12, 38:18–20. By sharp contrast, Kitagawa discloses a system for measuring age based on physical strength that requires a tremendous amount of space and infrastructure. *See* Ex. 1005 at ¶¶ 117–119; Ex. 1004 at 2:46–60; 3:52–53. For example, Kitagawa teaches creating exercise courses, i.e., physical obstacle courses, that are arranged inside of long polystyrene foam domes on which users complete various exercises. *See, e.g.,* Ex. 1004 at 3:52–53. Incorporating the exercises of Kitagawa, as lululemon proposes, would destroy the compact, efficient nature of Lofi's device, which is pre-designed to allow a user to perform a specific set of exercises. *See* Ex. 2001 at ¶¶ 74–78.

Second, Kitagawa is vastly different from Lofi. Kitagawa teaches a cumbersome manual process for “measuring age on the basis of physical strength.” Ex. 1004 at 2:14–16. Contrary to how Dr. Fischer describes Kitagawa—a “sensing system[]” for “monitor[ing] users” that “streamline[s]” “physical fitness

assessments”—Kitagawa would be more aptly described as a process for self-monitoring fitness. Ex. 1005 at ¶¶ 125–126. As Kitagawa describes, a user must check in at a service counter to have biometric measurements taken, and take a scorecard to record their own time as they move through the exercise courses, and then return to the counter to have their age score calculated. *See id.* at 8:30–42. There would have been no reason for a POSITA, at the time of the invention, to look to such a clunky and error-prone manual calculation process to fill the gaps in a device which automatically monitors and senses the information necessary to calculate scores indicative of a physical fitness of a user. Ex. 2001 at ¶¶ 75–77.

Therefore, lululemon fails to show that a POSITA would have been motivated to combine Lofi and Kitagawa. The Board should deny institution on this basis alone.

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

lululemon fails to show a reasonable likelihood that Maeueller alone or in combination with Kitagawa renders claim 1 obvious. As with the Lofi reference above, Maeueller does not teach or suggest a method of calculating *both* a fitness sub-score and an athleticism sub-score (and as a result, a “combinatory fitness-

athleticism score”) that is based on “activity data,”⁵ which is derived from a *single* “athletic movement.” As such, Maeueller fails to teach or suggest the first and second “combinatory fitness-athleticism score” of limitations 1C and 1F.

lululemon relies on Kitagawa in the alternative to teach limitation 1F, but Kitagawa does not cure the deficiencies in Maeueller because Kitagawa also fails to teach or suggest a method of calculating *both* a fitness sub-score and an athleticism sub-score based on “activity data,” which is derived from a *single* “athletic movement.” And a POSITA would not have looked to Kitagawa to do so as lululemon has not shown an adequate motivation to combine Kitagawa with Maeueller. lululemon merely swaps out the Lofi primary reference for another primary reference that has the same deficiencies and makes substantially the same flawed arguments as to why Kitagawa allegedly cures those deficiencies.

For at least these reasons, lululemon has fallen short of its burden to show a reasonable likelihood of success for any Challenged Claim in Ground 3.

⁵ For purposes of this preliminary response only, Nike assumes that Maeueller discloses “activity data,” as recited in claims 1 and 11. Nike reserves the right to challenge whether Maeueller discloses “activity data” if IPR is instituted.

1. lululemon fails to show Maeueller teaches or suggests calculating “a first combinatory fitness-athleticism score” that is “based on the first activity data” (Limitation 1C).

lululemon fails to show that Maeueller teaches or suggests limitation 1C, which recites calculating a “combinatory fitness-athleticism score” based on “the first activity data.” Ex. 1001 at 26:21–22.

As discussed above with respect to limitation 1C of Grounds 1 and 2, claim 1 of the '930 patent requires a specific type of “first activity data.” To reiterate, the “first activity data” in limitation 1C is measured from a *single* athletic movement, namely the “first athletic movement.” Ex. 1001 at 26:17–20. That “first activity data” is then used to calculate both a “fitness sub-score” and an “athleticism sub-score,” which are in turn used to calculate the “combinatory fitness-athleticism score.” *Id.* at 26:19–22. In other words, the “first activity data” recited in claim 1 must (i) derive from a *single* athletic movement and (ii) include *separate* measurements of both fitness and athleticism.

The “first activity data” that lululemon identifies in Maeueller is different. lululemon relies on Maeueller’s disclosure of an “aggregate fitness index” calculated from activity data gathered from *multiple* athletic movements. Petition at 51–52. Maeueller teaches assessing health by measuring five “components of fitness”: “endurance, strength, flexibility, balance, and body composition.” Ex. 1003 at [0004]. Maeueller teaches that each component is assessed separately by performing

separate tests. Ex. 1003 at [0023] (“[T]he user may also select one or more components of physical fitness and the computing module handles the selection of suitable, representative fitness tests associated to each selected component.”). For example, Maeueller teaches the “Stork balance test” to measure balance. *Id.* at [0044]. Maeueller also teaches “a run test, a walk test or a step test” to measure cardiovascular endurance and push-ups to measure muscle strength of the upper body. *Id.* at [0031] and [0037]. lululemon therefore cannot identify any teaching or suggestion in Maeueller of a “combinatory fitness-athleticism score” derived from a *single* “athletic movement.” Ex. 2001 at ¶¶ 80–84.

lululemon’s reliance on Figure 5 of Maeueller highlights the insufficiency of lululemon’s position. Petition at 51–52. Pointing to Figure 5, lululemon argues that a user of Maeueller’s system “can select two components of physical fitness to assess” such as flexibility and balance. *Id.* at 52. According to lululemon, the user in Maeueller “perform[s] the exercises associated with each test” and “receive[s] a numerical fitness test result reflecting a combination of the flexibility and balance attributes being evaluated.” Petition at 52 (citing Ex. 1005 ¶ 94). But Figure 5 clearly shows that the “aggregate fitness index 55” is calculated based on a series of separate exercises—not a *single* “first athletic movement”:

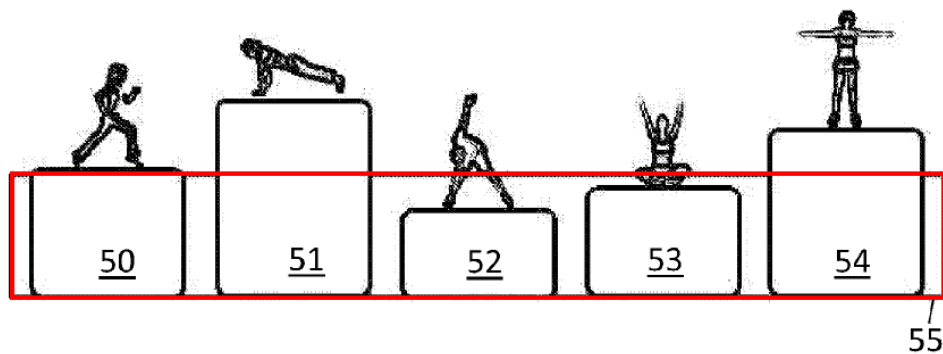


FIG. 5

Ex. 1003 at Fig. 5 (annotated to show “aggregate fitness index 55”); *see also id.* at [0052] (“Each health-related component is presented by a column: cardiovascular endurance 50, muscle strength 51, flexibility 52, balance 53, body composition 54 and an aggregate fitness index 55.”). And, lululemon’s discussion of claim 1 further underscores that Maeueller uses multiple, discrete exercises to generate Maeueller’s aggregate fitness index. *See* Petition at 52 (“a user can . . . perform the exercises associated with each test”), 54 (“Maeueller’s computing module receives both the collected *first activity data corresponding to the first test* (e.g., flexibility) as well as *second activity data corresponding to the second test* (e.g., balance).”); Ex. 2001 at ¶ 83.

For these reasons, lululemon has not met its burden of showing that Maeueller teaches or suggests limitation 1C. The Board should deny institution on this basis alone.

2. lululemon fails to show Maeueller teaches or suggests calculating a second combinatory fitness-athleticism score” that is “based on the second activity data” (Limitation 1F)

lululemon also fails to show that Maeueller, alone or in combination with Kitagawa, teaches or suggests limitation 1F, which recites calculating a “second combinatory fitness-athleticism score” that is “based on the second activity data.” Ex. 1001 at 26:28–30.

As discussed in Grounds 1 and 2, the “second activity data” recited in claim 1 must (i) derive from a *single* athletic movement (i.e. the “second athletic movement”) and (ii) include measurements of *both* fitness and athleticism. lululemon’s arguments concerning limitation 1F fail for two overarching reasons: (1) each of Maeueller’s tests yields only a single measurement and (2) Kitagawa fails to cure the deficiencies in Maeueller.

a. Each of Maeueller’s tests yield only a single measurement

lululemon provides two flawed arguments in attempting to show that Maeueller teaches a “second combinatory fitness-athleticism score.” First, unlike limitation 1C where lululemon argued that the combinatory score was disclosed by two separate tests (i.e. flexibility and balance, *see* Petition at 51–52), lululemon alleges here that Maeueller’s disclosure of an exemplary endurance test teaches a first combinatory fitness-athleticism score. Petition at 55. Second, lululemon alleges that repeating Maeueller’s exemplary endurance test teaches a second

combinatory fitness-athleticism score. *Id.* at 56. Both arguments fail because each of Maeueller’s tests, including the endurance test, yield only a single measurement. lululemon’s arguments are addressed in turn below.

First, lululemon points to Maeueller’s endurance test in which “a user is instructed to run for 12 minutes,” and alleges that “the user is monitored by one or more peripheral devices [that] collect heart rate data and speed data.” Petition at 55 (citing Ex. 1005 at ¶ 105). According to lululemon, “Maeueller’s computing module calculates a fitness index numerical score that is a combination of the endurance and speed attributes being assessed.” *Id.* lululemon is wrong because Maeueller never teaches or suggests measuring either heart rate data or speed data during the 12-minute run test. Instead, the only “component of physical fitness” that Maeueller associates with the run test is endurance. *See* Ex. 1003 at [0031]–[0036]. And, Maeueller does not teach measuring speed with *any* of the five components of physical fitness, let alone as part Maeueller’s “aggregate fitness index.” *Id.* at Fig. 5; *see also id.* at [0052]. Thus, Maeueller’s 12-minute run test does not teach or suggest “a combinatory fitness-athleticism score” because Maeueller does not teach or suggest calculating *both* a fitness sub-score and a separate athleticism sub-score based a *single* “athletic movement” (i.e., the run test). Ex. 2001 at ¶¶ 87–88.

Dr. Fischer’s opinions regarding limitation 1F should not be considered by the Board because they are merely cited in lululemon’s Petition with no further

explanation. *EiKO Global*, IPR2017-00980, Paper 16 at 23 (“Arguments that are not presented and developed in the Petition, and instead are incorporated by reference to [an expert] declaration, are not entitled to consideration.”). These include opinions that Maeueller teaches “a combination of endurance and speed attributes,” (Petition at 55–56 (citing Ex. 1005 at ¶ 105)) and that “[a] POSITA would understand that one or more of the tests described in Maeueller would be clustered in groups” (Ex. 1005 at ¶ 105). According to Dr. Fischer, a group of several different tests would then be equivalent to a single “athletic movement.” *Id.* But, Maeueller never discusses clustering its tests in groups. Further, Dr. Fischer’s opinion cannot be relied on because it is conclusory. *See e.g., Corp. et al. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15–16 (PTAB Aug. 24, 2022) (precedential); *Sinjimoru*, IPR2021-00493, Paper 8 at 11. For example, rather than citing to Maeueller or providing other evidence to support his opinion that the tests described in Maeueller would be clustered in groups, Dr. Fischer merely concludes that “[d]oing so would be obvious.” Ex. 1005 at ¶ 105.

Second, similar to its arguments for Lofi, lululemon alleges that “[w]hen a user repeats the tests described above with respect to Limitations 1A–1D, a second combinatory fitness-athleticism score is calculated.” Petition at 56. This argument fails for the same reasons discussed above with regard to limitation 1F in Ground 1. In short, even if Maeueller did teach a “combinatory fitness-athleticism score” (it

does not), simply repeating a test cannot produce “a second combinatory fitness-athleticism score” because the “second athletic movement” must be different than the “first athletic movement.” *SimpleAir*, 820 F.3d at 431 (“Different claim terms are presumed to have different meanings.”).

b. Kitagawa does not cure the deficiencies of Maeueller

lululemon relies on Kitagawa in the alternative to satisfy limitation 1F. *See* Petition at 56–58. But, Kitagawa does not cure the deficiencies in Maeueller because Kitagawa also fails to teach or suggest a method of calculating *both* a fitness sub-score and an athleticism sub-score (and as a result, a second “combinatory fitness-athleticism score”) based on a *single*, “second athletic movement.” Ex. 1001 at 26:28-30. As discussed above, the “second activity data” recited in claim 1 must (i) derive from a single athletic movement and (ii) include separate measurements of both fitness and athleticism. Kitagawa does not teach or suggest either of these requirements of the “second activity data.”

lululemon fails to identify sub-scores based on a *single*, “second athletic movement.” lululemon points to Table 3 of Kitagawa as allegedly teaching “a second combinatory fitness-athleticism score.” *See* Petition at 57–58. Specifically, lululemon alleges that the collection of “indexes” disclosed in Table 3 represent multiple fitness and athleticism sub-scores. *Id.* at 56 (citing Ex. 1004 at 2:33-36.). lululemon mischaracterizes Kitagawa. Kitagawa’s “indexes” are not fitness and

athleticism sub-scores for two reasons. First, Kitagawa’s indexes are not “based on the second activity data” as recited in claim limitation 1F. Kitagawa’s indexes are not based on any activity data because they are not measured at all. Rather, Kitagawa’s indexes are pre-defined constants stored in the memory of Kitagawa’s system that do not change depending on who completes a given exercise course. *See id.* at 10: 61–65 (“Table 3 shows the amounts of exercise (shown as indexes) ***to be performed*** ins (sic) exercise courses 1 to 7”) (emphasis added). Second, the indexes are not based on a *single* “second athletic movement.” Instead, Kitagawa’s indexes are representative of the amount of exercise to be performed when a user completes an *entire* exercise course. *See id.* at 10: 61–65; Ex. 2001 at ¶ 89.

In sum, lululemon does not adequately show that claim 1 is invalid as obvious over the combination of Maeueller and Kitagawa because neither reference teaches or suggests a first or second “combinatory fitness-athleticism score.” *See St. Jude Med., Inc. v. Access Closure, Inc.*, 729 F.3d 1369, 1381–82 (Fed. Cir. 2013) (holding that 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); *Qualtrics, LLC v. OpinionLab, Inc.*, IPR2014-00366, Paper 45, at 12 (PTAB July 30, 2015) (same).

For these reasons, lululemon has not met its burden of showing that Maeueller alone, or in view of Kitagawa, teaches or suggests limitation 1F. The Board should deny institution on this basis alone.

3. Lululemon fails to show a motivation to combine Maeueller with Kitagawa

Even if Kitagawa did cure the deficiencies of Maeueller (it does not), lululemon fails to show that a POSITA would have been motivated to combine Maeueller and Kitagawa to arrive at claim 1 for at least the three reasons below:

First, Kitagawa is incompatible with Maeueller. For similar reasons described above for Lofi, introducing the teachings of Kitagawa into Maeueller's system for evaluating a user's fitness would destroy the benefits that Maeueller purports to provide over the art. Specifically, Maeueller touts the ability "to use such a system in a home-setting or in another setting where expert guidance is unavailable." Ex. 1003 at [0006]. By contrast, Kitagawa discloses a system for measuring age based on physical strength that requires a tremendous amount of space and infrastructure, and which relies on other persons for guidance. Ex. 1005 at ¶¶ 117–119; Ex. 1004 at 2:46–60; 3:52–53. For example, Kitagawa teaches creating exercise courses, i.e., physical obstacle courses, that are arranged inside of long polystyrene foam domes on which users complete various exercises. Ex. 1004 at 2:46–60; 3:52–53. Kitagawa's fitness evaluative process also requires a user to interact with a person at a service counter in order to receive their fitness evaluation. *Id.* at 8:30–42.

Incorporating the exercises of Kitagawa, as lululemon proposes, would destroy the compact, efficient nature of Maeueller's system. Ex. 2001 at ¶¶ 92–93.

Second, Kitagawa is vastly different from Maeueller. Kitagawa teaches a cumbersome manual process for “measuring age on the basis of physical strength.” Ex. 1004 at 2:14–16. As Kitagawa describes, a user must check in at a service counter to have biometric measurements taken, and take a scorecard to record their own time as they move through the exercise courses, and then return to the counter to have their age score calculated. *See id.* at 8:30–42. There would have been no reason for a POSITA, at the time of the invention, to look to such a clunky and error-prone manual calculation process to fill the gaps in a system such as Maeueller's which automatically monitors and senses the information necessary to calculate scores indicative of a physical fitness of a user. Ex. 2001 at ¶¶ 93–94.

Third, the proposed combination is redundant because Maeueller already solves the problem that lululemon relies on Kitagawa to solve. The Board has held that a POSITA would not be motivated to combine references if the proposed combination is redundant. *S.-Tek Sys., LLC v. Engineered Corrosion Sols., LLC*, 748 F. App'x 1003, 1007 (Fed. Cir. 2018). lululemon alleges that “it would have been obvious to a POSITA to look to Kitagawa and incorporate Kitagawa's simultaneous monitoring of multiple physical abilities . . . into Maeueller” and that a POSITA would have done so “[i]n order to more comprehensively understand

which components need improvement.” Petition at 57–58 (citing Ex. 1005 at ¶ 136). But Maeueller already does this. Maeueller monitors a user performing exercises so that it can “assist the user in deciding upon a direction for further workout.” *See* Maeueller at [0010]. Thus, the proposed combination is redundant because Maeueller already helps the user “to more comprehensively understand which components need improvement.” Petition at 57–58 (citing Ex. 1005 at ¶ 136).

For the reasons discussed above, lululemon fails to show a reasonable likelihood of proving that Maeueller in view of Kitagawa renders claim 1 obvious. lululemon’s challenges of dependent claims 5–7 and 12 on this ground fail for the same reasons.

VI. CONCLUSION

lululemon fails to meet its burden of showing a reasonable likelihood of prevailing as to at least one of the Challenged Claims. The Board should deny institution.

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Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that this preliminary response complies with the type-volume limitations of 37 C.F.R. § 42.24(a)(1)(i). This preliminary response (including figure labels and annotations) contains 10,175 words as calculated by the “Word Count” feature of Microsoft Office 365 Word application, the word processing program used to create it, and manual counting of the annotations in the figures.

The undersigned further certifies that this preliminary response 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 preliminary response 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 April 10, 2023, a true and entire copy of this **PRELIMINARY RESPONSE OF PATENT OWNER NIKE, INC TO IPR2023-00348**, and all supporting exhibits, were served via e-mail to the Petitioner by serving the correspondence address of record, indicated below.

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