

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 IPR2023–00424

Patent No. 10,923,225

PATENT OWNER’S SUR-REPLY

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EXHIBITS

Exhibit No.	Description
2001	<i>Nike, Inc. v. lululemon USA Inc. and Curiouser Prods. Inc. d/b/a/ Mirror</i> , Case No. 1:22-cv-00082, ECF No. 68, Joint Claim Construction Statement (S.D.N.Y. Oct. 20, 2022)
2002	Excerpt from Wiley Electrical and Electronics Engineering Dictionary, IEEE Press (2004)
2003	Excerpt from Oxford Dictionary of Computing (6th ed. 2008)
2004	Declaration of Scott McLean, Ph.D.
2005	Deposition Transcript of Henry H. Houh (dated October 5, 2023)
2006	Declaration of June Ann Munford [Served Not Filed]

I. INTRODUCTION

Neither the Petition nor Petitioners’ Reply to Patent Owner’s Response (Paper 25; “Reply”) demonstrates by a preponderance of the evidence that any Challenged Claim of the ’225 patent is unpatentable.

lululemon’s reply arguments concerning Acres (Grounds 1–3) fail because they are predicated on the incorrect construction of “data.” Ground 3 further fails because lululemon failed to demonstrate a POSITA would have been motivated to combine Acres with the secondary reference Pyles. lululemon’s reply arguments concerning Abbondanza (Ground 4–5) fail because (1) they are predicated on the same incorrect construction of “data” and (2) because Abbondanza fails to teach the claimed “sensor device.”

For at least these reasons and the reasons discussed in Nike’s Response, lululemon has not carried its burden of proving by a preponderance of the evidence that any claim of the ’225 patent is unpatentable.

II. CLAIM CONSTRUCTION

The plain and ordinary meaning of “data,” as understood by a skilled artisan viewing the ’225 patent in its entirety, is “factual information that is sensed or collected, and from which decisions or subsequent actions can be made.” Ex. 2004, ¶35. In its Reply, lululemon argues “data” means “information.” Reply, 1. But

lululemon’s proposed construction is not supported by the claims, specification, prosecution history, or extrinsic evidence.

A. The Claims of the ’225 Patent Support Nike’s Construction of “Data”

In its Reply, lululemon argues that the claims of the ’225 patent undermine Nike’s construction of “data” for two reasons: (i) dependent claims 9 and 18, which recite user identification information, show that not all “data” is sensed or collected; and (ii) Nike’s construction of “data” is redundant with other aspects of the claims. Both arguments fail.

First, lululemon argues that claims 9 and 18 are inconsistent with Nike’s construction of “data” because they recite “user identification information.” Reply, 2–3, 7. The “user identification information” recited in claims 9 and 18 is “factual information that is sensed or collected, and from which decisions or subsequent actions can be made.” In arguing otherwise, lululemon mischaracterizes Dr. McLean’s testimony. Reply, 7 (citing Ex. 1014, 35:1–36:12). According to lululemon, Dr. McLean testified that “user identification information” is not “data.” *Id.* But Dr. McLean merely testified that “the sensor senses or collects factual information about performance data, or factual information about performance.” Ex. 1014, 36:2–4. He continued that “identification information” is not “factual information *about performance.*” Ex. 1014, 36:9–12 (emphasis added). He did not testify that “factual information about performance” is the *only* thing that the sensor

senses or collects. In fact, he specified an alternative, i.e. “factual information about performance data.” *See generally*, Ex. 1014, 35:1–36:12.

lululemon also argues that Dr. McLean testified that the sensor device only senses or collects “performance data.” Reply, 7 (citing, *inter alia*, Ex. 1014, 35:3–8). This too takes Dr. McLean’s testimony out of context. lululemon omits the immediately preceding testimony, where Dr. McLean specifies that he is discussing paragraph 60 of his declaration, which addresses only two short passages within the ’225 patent concerning the word “command.” Ex. 1014, 34:17–35:2; Ex. 2004, ¶60. In *those* two passages, Dr. McLean testified, the disclosed sensors are sensing or collecting performance data. *Id.* Dr. McLean’s testimony—when read accurately and in its entirety—does not support lululemon’s position.

lululemon’s only other record support for this position is Dr. Houh’s declaration, which merely parrots the Reply and provides no additional explanation. Reply, 8 (citing Ex. 1015, ¶14). lululemon therefore provides no support for its position that claims 9 and 18 are inconsistent with Nike’s construction of “data.”

Second, lululemon argues that Nike’s construction is redundant with the surrounding claim language. But this argument mischaracterizes the dependent claims. lululemon argues that the “from which decisions or subsequent actions can be made” portion of Nike’s construction is unnecessary because the claims already recite decisions or subsequent actions. Reply, 8. But the claims recitation of *specific*

actions—i.e., “operating a first function of the piece of workout equipment” or “display the first set of activity data”—further narrow the claim. In other words, the surrounding claim language narrows “data” to a type of data form which *these specific* “decisions or subsequent actions can be made.” This language does not render Nike’s construction redundant.

B. The Specification of the ’225 Patent Supports Nike’s Construction of “Data”

1. lululemon only identifies portions of the specification consistent with Nike’s construction

Nike’s construction of “data”—“factual information that is sensed or collected, and from which decisions or subsequent actions can be made”—“is better supported by the specification, and...provides the better description” of the claimed invention. *Osram GmbH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1357 (Fed. Cir. 2007).

Nike’s construction is consistent with the manner in which the specification discusses “data” and “information.” In its Reply, lululemon points to examples in the specification in which “data” and “information” are interchangeable. Reply, 3. But Nike agrees that data can be information. None of lululemon’s cited examples are inconsistent with Nike’s construction. For example, lululemon highlights one example where the specification discloses that “[d]ata also may be transferred from the user’s portable equipment (e.g., module 502, interface device 506, and/or

electronic device 508) to the exercise equipment or other workout or athletic performance setting 604.” Reply, 3 (citing Ex. 1001, at 19:34–37). Nothing about this disclosure contradicts Nike’s construction that “data” means “factual information that is sensed or collected, and from which decisions or subsequent actions can be made.” And lululemon never explains why it is inconsistent. *See* Reply, 3–4.

2. Nike’s construction does not conflate “activity data” and “data”

lululemon also argues that Nike conflates “activity data” and “data.” Reply, 8–9. lululemon seems to argue that because “activity data” is consistent with Nike’s construction, Nike’s construction must be incorrect. *Id.* But lululemon has it backwards. There is no dispute that “data” of limitation [1B] must be broader than “activity data” of limitation [1C]. Reply, 9. Therefore, any construction of “data” must capture the full scope of “activity data.”

lululemon again resorts to mischaracterizing Dr. McLean’s testimony to support its position. According to lululemon, Dr. McLean testified that the only type of data sensed or collected by a sensor is performance/activity data. Reply, 9 (citing Ex. 1014, 35:5–8; 37:14–17). But as noted above, this cited testimony was discussing a narrow portion of Dr. McLean’s declaration, paragraph 60, which related to two specific passages in the ’225 patent about “commands.” Ex. 1014, 34:17–35:2; Ex. 2004, ¶60.

3. lululemon’s cited examples of “data” are sensed or collected

lululemon also argues that the specification includes examples of data that are not sensed or collected. But each of those examples includes data that *is* sensed or collected. For example, lululemon relies on an example in which the specification discloses data “from the sensing devices” that is then derived onto “the proper form or format for display.” Ex. 1001, 12:13–16. As the disclosure makes clear, this data is “from the sensing devices,” i.e., the data is collected from sensing devices in the first instance. This is consistent with Nike’s construction.

As another example, lululemon focuses on the embodiment disclosed in Figure 4. There, the specification discloses that a processor “may process the sensor data” and “change its form.” Ex. 1001, 14:64–67. The specification is clear: the data is “sensor data,” i.e., data collected or sensed from the sensor. This same “sensor data” is then further processed. *Id.* (“[T]he microprocessor on board the sensing system 408, if any, may process *the* sensor data, change *its* form or format, or otherwise manipulate *the* data prior to sending *it* on to other parts of the system 400.”). The data in this embodiment is also collected from sensing devices in the first instance, and thus consistent with Nike’s construction. *See id.* And this is true for each example cited by lululemon. Reply, 10 (citing Ex. 1001, 8:6–8; 15:5–8).

C. The Prosecution History Does Not Support lululemon’s Construction of “Data”

In its Reply, lululemon argues that the prosecution history supports

lululemon’s proposed construction of “data.” Reply, 4–5. But this argument rests on a misapplication of Federal Circuit law. As lululemon notes, the Examiner during prosecution rejected limitation [1B] and mapped “data” to the “machine control signal” of Brown. Reply, 4 (citing Ex. 1011, 3). As lululemon explained, Nike successfully distinguished Brown’s machine control signal on the “activity data” limitation, as opposed to the “first set of data.” Reply, 4–5 (citing Ex. 1012). Statements that distinguish the prior art on bases other than the disputed limitation are not relevant to the meaning of the disputed term. *In re Rambus Inc.*, 694 F.3d 42, 48 (Fed. Cir. 2012); *see also Inline Plastics Corp. v. EasyPak, LLC*, 799 F.3d 1364, 1369 (Fed. Cir. 2015) (“The examiner did not require such limitation, and it was not a condition of patentability. There is no prosecution history disclaimer, which requires clear and deliberate disavowal.”).

lululemon’s reliance on *Malvern Panalytical Inc. v. TA Instruments-Waters LLC*, 85 F.4th 1365 (Fed. Cir. 2023) is misplaced. In *Malvern Panalytical*, the applicant abandoned an argument it made in multiple responses to the examiner’s rejections. *Id.* at 1376. “By abandoning its argument,” the Federal Circuit reasoned, the “applicant acquiesced to the examiner’s views.” *Id.* That case has no application here, because Nike never presented arguments—let alone abandoned any arguments—about Brown disclosing the claimed “data.” Nike instead overcame Brown on other grounds. *See generally*, Ex. 1012; *see also* Reply, 4–5.

lululemon also argues that Nike’s claim construction analysis is somehow deficient because it did not rely on the prosecution history. Reply, 5–6. But, of course, the prosecution history only alters a claim term’s ordinary meaning in specific circumstances (i.e., disclaimer)—none of which apply here. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc). Nike’s construction of “data” is consistent with the *entire* intrinsic record, including the prosecution history, which does not alter the meaning of the term in this case.

D. Extrinsic Evidence Supports Nike’s Construction of “Data”

In its Reply, lululemon argues that certain technical dictionaries cited by Nike support lululemon’s proposed construction. But lululemon mischaracterizes those dictionaries.

First, lululemon points to Nike’s reliance on the Wiley Dictionary. Reply, 12 (citing POR, 18). While Nike had highlighted the first definition of “data” in the Wiley Dictionary, lululemon argues that a POSITA would instead refer to the second definition of “data” because the second definition is more suitable for transmission or computer use. Reply, 12. But the first definition states that data is “factual information” that “is used for processing,” Ex. 2002, 4. And as lululemon’s own expert explained, the ’225 patent also requires processing the data. Ex. 1015, ¶¶28–29. lululemon does not explain why this first definition would be any less relevant to the ’225 patent than the second definition. Reply, 12–13.

Second, lululemon argues Nike’s reliance on the Oxford Dictionary (to distinguish “data” from “instructions”) is misplaced because “instructions” are a type of “data.” For support, lululemon relies only on Dr. Houh’s testimony and a website from 2020. But none of this evidence shows what a skilled artisan would have understood as of the 2007 priority date of the ’225 patent. *See Phillips*, 415 F.3d at 1313. The website excerpts post-date the relevant time period by 13 years. And Dr. Houh merely testified about how a POSITA would understand “data” today. Ex. 1015, ¶21. The Board should reject this evidence and lululemon’s corresponding argument. *See Phillips*, 415 F.3d at 1313.

E. Nike’s Expert’s Opinions Are Reliable

lululemon argues, with no supporting authority, that Dr. McLean’s opinion regarding the meaning of data should be excluded because (1) Dr. McLean did not recognize a printout of an exhibit and (2) Dr. McLean did not use specific technical dictionaries before this proceeding. Reply, 14. These are not grounds for exclusion.

First, Dr. McLean testified that he reviewed the Petition and the exhibits submitted with it, including Exhibit 1011. Ex. 2004, ¶20. When seeing a printout of the document in the middle of a deposition, Dr. McLean testified, “I don’t recall if I [recognize this exhibit].” Ex. 1014, 105:17–20. He testified that he did not recognize it after a brief review; not that he had never reviewed nor read it. *Id.* lululemon did not ask him any further questions about the document and so he did

not look any further in the deposition. *See* Ex. 1014, Index p. 1. lululemon has provided no authority for the proposition that an expert is required to recognize every page of every document they reviewed.

Second, Dr. McLean’s testimony that he was not aware of two technical dictionaries “before this case” is irrelevant. Ex. 1014, 28:5–11. Contrary to lululemon’s suggestion, Dr. McLean never testified that he formed his opinions without considering these dictionaries. *Id.* He did consider these dictionaries. *Id.*; Ex. 2004, ¶42. Dr. McLean simply explained that he had not reviewed these dictionaries before the beginning of “this case.” *Id.* lululemon provides no explanation as to why this constitutes grounds for exclusion.

For the reasons above, the ordinary and customary meaning of “data” as recited in the Challenged Claims is “factual information that is sensed or collected, and from which decisions or subsequent actions can be made.”

III. GROUND 1: LULULEMON FAILS TO DEMONSTRATE THAT ACRES ANTICIPATES ANY CHALLENGED CLAIM

Nothing in lululemon’s Petition nor Reply demonstrates that Acres anticipates any claim of the ’225 patent. In its Reply, lululemon argues that Acres meets Nike’s construction of “data.” Reply, 14–18. lululemon’s argument is flawed for three reasons.

A. Acres fails to teach “transmitting, by the sensor device and to the piece of workout equipment, a first set of data for operating a first

function of the piece of workout equipment” (Limitation [1B] and Limitation [12Cii])

lululemon mischaracterizes its own Petition to argue that Acres teaches “transmitting, by the sensor device and to the piece of workout equipment, a first set of data for operating a first function of the piece of workout equipment” (limitations [1B]) and [12Cii]). *See* Reply, 14–15. In its Petition, lululemon argued that Acres’ Bug sends “commands” to the workout equipment. Petition, 11. But lululemon changes gears in its Reply. lululemon now introduces a new argument involving the “transmission of data” allegedly disclosed in Acres. Reply, 14–15.

In the Petition, lululemon argued (1) Acres’ Bug and its associated sensors are together a sensor device but (2) only the Bug on its own may “send commands” to the workout equipment. Petition, 11 (“For example, Acres discloses that the Bug may send commands to a treadmill or other exercise machine to adjust parameters like speed or incline”). For the first time on Reply, lululemon argues that the “combined sensor device” *transmits* a first set of data as recited in Limitations [1B], and [12Cii]. Reply, 15.

Even in its amended argument, lululemon fails to establish that Acres teaches “transmitting, by the sensor device and to the piece of workout equipment, a first set of data for operating a first function of the piece of workout equipment.” lululemon argues that Acres’ composite Bug senses or collect heart rate. Reply, 15. But lululemon provides no record support for its assertion that “Acres’ Bug and its

associated sensors, working together as a sensor device, transmit factual information, that has been sensed or collected, to the exercise equipment.” Reply, 15.

lululemon also introduces a red herring argument that “commands” include “informational content”. Reply, 16–17. lululemon specifically argues that a command to increase speed a specific amount includes the information related to the speed and increase. *Id.* Even if commands could include informational content, lululemon does not identify any disclosure in Acres in which collected or sensed data is transmitted by the sensor. *Id.* Instead, it only provides one example in which the Bug can control speed and incline to match a user’s goals. Reply, 17 (citing Ex. 1002, [0096]). According to lululemon, the user’s fitness goals are collected factual information. *Id.* But lululemon does not provide any examples of Acres disclosing that this “collected factual information” is transmitted. Reply, 16–17. lululemon establishes that (1) the Bug controls speed and incline and (2) that speed or incline match fitness goals. *Id.* But lululemon fails to connect those two occurrences and does not identify any disclosure in Acres where the fitness goals or user information is transmitted. Dr. Houh’s declaration also does not provide any clarity. Instead, he merely repeats the arguments stated in lululemon’s Reply. Ex. 1015, ¶25.

B. Acres fails to show that “decisions or subsequent actions can be made” from data

lululemon argues that “decisions or subsequent actions can be made from

factual information.” Reply, 17. But the Bug transmits commands, not data, to the treadmill. Petition, 11. lululemon argues that Acres discloses that decisions or subsequent actions can be made from factual information, such as increasing the speed or incline of the treadmill. Reply, 17. It relies on the disclosure in Acres discussed above in Section III.A. Reply, 17 (citing Ex. 1002, [0089], [0096]). As explained above, lululemon has only established that Acres teaches that decisions or subsequent actions are made based on commands transmitted from the Bug. *See* Section III.A. lululemon therefore has not shown that Acres discloses that “decisions or subsequent actions can be made” from “data” under Nike’s proposed construction.

C. Acres’ Commands Are Not Data

lululemon argues that “data” and “commands” are not distinct in the context of the ’225 patent. Reply, 17. lululemon explains that the specification of the ’225 patent discusses actions taken by people, not computers—and thus the distinction “makes no difference.” *Id.* at 17–18. But lululemon provides no additional explanation or reasoning. The Board should not credit this unsupported, conclusory statement.

lululemon also argues Acres commands are “data” because the commands are processed. Reply, 18. lululemon explains that “raw data needs to be processed in order to perform a corresponding operation.” Reply, 18. The claims recite

transmitting data and do not address processing that data. *See* Ex. 1001, 45:8–47:10.

As explained above in Section III.A, lululemon does not establish that the commands include “informational content,” as required by the correct construction. *Supra* Section III.A. Whether the Acres device processes the commands is not relevant to whether it teaches the claims of the ’225 patent.

For these reasons and the reasons discussed in Nike’s Response, lululemon has not shown by a preponderance of the evidence that Acres anticipates any Challenged Claim in Ground 1.

IV. GROUND 2: LULULEMON FAILS TO DEMONSTRATE THAT ACRES RENDERS OBVIOUS ANY CHALLENGED CLAIM

lululemon does not substantively address Ground 2 in its Reply. Therefore, for the reasons discussed in Nike’s Response, lululemon fails to show by a preponderance of the evidence that the Acres renders obvious any Challenged Claim of the ’225 patent.

V. GROUND 3: LULULEMON FAILS TO DEMONSTRATE THAT THE COMBINATION OF ACRES AND PYLES RENDERS OBVIOUS CLAIMS 9 AND 18

In Ground 3, lululemon alleges that Acres in view of Pyles renders obvious claims 9 and 18. Petition, 28–29. Claims 9 and 18 involve data comprising “user identification information.” Ex. 1001, 45:60–63, 46:59–63. Because lululemon has failed to show that independent claims 1 and 12 are obvious in view of Acres (*see* Section IV), its obviousness arguments with respect to dependent claims 9 and 18

necessarily fail—regardless of what Pyles discloses.

As Nike previously explained, lululemon’s proposed combination of Acres and Pyles would create numerous problems, including: (1) rendering the system less portable by tying the user and his or data to a specific piece of workout equipment; (2) eliminating the ability to port data between different workout devices; (3) increasing the risk of a user losing his or her data on a single device; and (4) counteracting the idea that storage on a central cite promotes broad data access to more pieces of workout equipment and to more people. POR, 28; Ex. 2004, ¶¶64–68. In its Reply, lululemon argues that a skilled artisan would have been motivated to combine these references, even if the proposed combination creates certain disadvantages. Reply, 20. Specifically, lululemon argues that a “POSITA would have had reasons (simpler, cheaper, expanded customer base, etc.) for applying Pyles’ teachings to Acres” “even if it meant foregoing some of Acres’ benefits.” Reply, 20 (citing *E.I. du Pont De Nemours & Co. v. MacDermid Printing Sols., L.L.C.*, 657 F. App’x 1004, 1013 (Fed. Cir. 2016) and *In re Urbanski*, 809 F.3d 1237, 1243 (Fed. Cir. 2016)). But lululemon’s reliance on this authority is misplaced. In *E.I. du Pont De Nemours*, the Federal Circuit rejected patent-owner’s argument because it relied on the factually incorrect statement that the method in one of the references had “languished for decades.” 657 F. App’x at 1014. But the record evidence showed the method had been used “right before the [] date of invention.

Id. Here, lululemon has not even suggested Nike’s arguments regarding the disadvantages of the combination are factually incorrect. Reply, 20.

The facts of *Intel Corp. v. Qualcomm Inc.*, are much more analogous to this case. 21 F.4th 784, 795–6 (Fed. Cir. 2021). In *Intel*, both parties agreed that the proposed prior art combination would “impair” the ideal “impedance” in amplifiers of a radio communication device. *Id.* But the parties disagreed about how that impairment would impact a skilled artisan’s motivation to combine. *Id.* at 796. The Federal Circuit held that a POSITA would not have combined the references because “based on the stated importance of low impedance as ‘key’ to [the amplifier], negating this benefit during ‘the majority of the operation’ would have outweighed any reason to combine.” *Id.*¹ The facts here are similar. Dr. McLean explained that the combination is contrary to the intent of Acres. Ex. 2004, ¶¶64–68. Dr. Houh does not dispute this point, and instead focuses on instances where there may be benefits with this proposed combination. Ex. 1015, ¶31. Just like in *Intel*, the stated importance of Acres teaching storage of historical data at a central site (Ex. 1002, [0032]–[0039]) is key to automatically configuring compatible exercise equipment to remove the burden of calculating heart-rate-based exertion levels from

¹ lululemon’s reliance on *Urbanski* is consistent with *Intel*. As lululemon notes, Urbanski explains that a POSITA “would have been motivated to pursue the desirable properties taught by [the secondary reference], even at the expense of foregoing the benefit taught by [the primary reference].” Reply, 20–21 (citing *Urbanski*, 809 F.3d at 1243). In acknowledging the expenses in the combination, *Urbanski* implicitly acknowledges that the benefits and costs must be weighed.

the exerciser (*id.* at [0012]), and negating this benefit would have outweighed any motivation to combine Pyles with Acres. *See Intel*, 21 F.4th at 795–96. lululemon’s only attempt to address the tradeoff is to make the conclusory statement that a POSITA would combine these references because “the benefits outweigh the costs.” Reply, 21. But lululemon has failed to prove that the alleged “benefits outweigh the costs.” lululemon therefore does not meet its burden to establish that a POSITA would combine Acres and Pyles.

For these reasons and the reasons discussed in Nike’s Response, lululemon thus has not shown by a preponderance of the evidence that Acres in view of Pyles renders obvious any Challenged Claim in Ground 3.

VI. GROUND 4: LULULEMON FAILS TO DEMONSTRATE THAT ABBONDANZA RENDERS OBVIOUS ANY CHALLENGED CLAIM

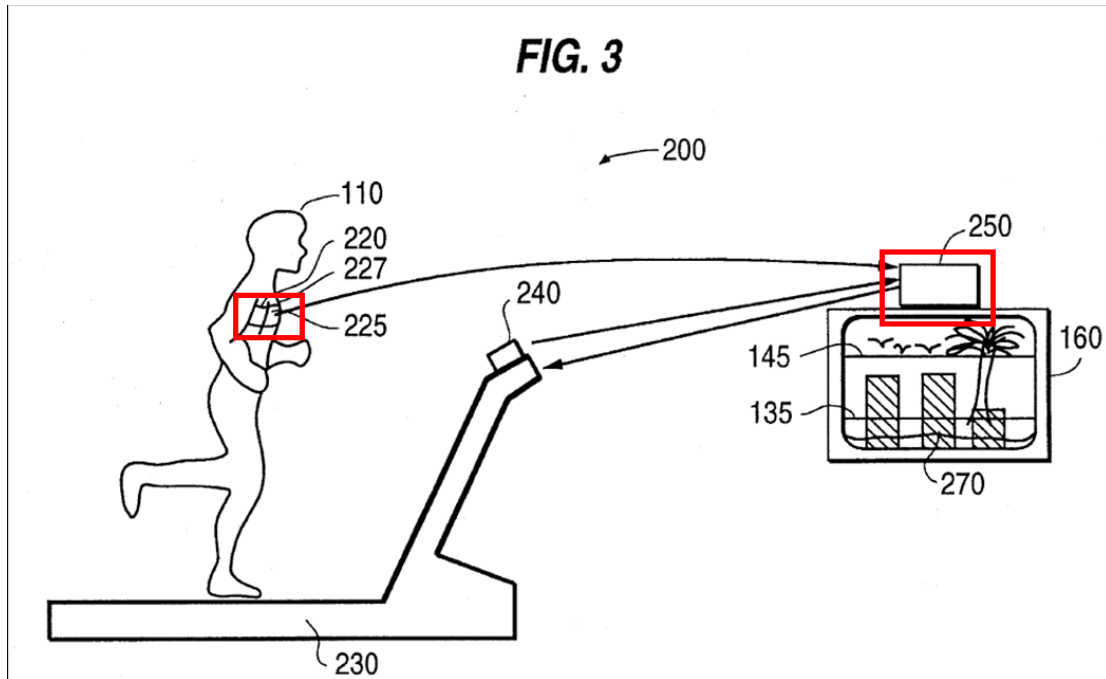
In Ground 4, lululemon asserts that Abbondanza renders obvious claims 1–5, 7, 10, 12–14, 16, and 19. *See* Petition, 32–44. In its Reply, lululemon argues that Abbondanza teaches two claim elements: the “sensor device” and “data.” Reply, 21–25. But all of lululemon’s arguments fail because they rely on the same faulty premise: “Abbondanza’s pulse rate sensor and base unit sensor are *together* a sensor device.” Petition, 34; Reply, 22 (emphasis added). In Abbondanza, the base unit receives signals from a pulse rate sensor, and then the *base unit* transmits those signals and data to a treadmill device. Ex. 1003, 11:14–23. This differs from the claimed invention, which requires that the sensor device *itself* transmit the data to

the workout equipment. *See e.g.*, Ex. 1001, 45:9–20. The Board recognized this important distinction. ID, 22.

For this reason and the reasons discussed in Nike’s Response, lululemon fails to show by a preponderance of the evidence that Abbondanza renders obvious any Challenged Claim of the ’225 patent.

A. Abbondanza Does Not Teach A “Sensor Device”

Independent claims 1 and 12 recite a “sensor” that establishes data communication with the piece of workout equipment. Ex. 1001, 45:10–11, 46:12–15. In its Reply, lululemon points to Abbondanza’s disclosure of a “base unit” with “processing capabilities” as the claimed “sensor.” Reply, 22 (“[t]he pulse rate sensor is an athletic performance data sensor, and the base unit includes processing capabilities.”). Specifically, lululemon argues that Abbondanza describes the pulse rate sensor and base unit as *working together*. Reply, 22 (emphasis added). But as Nike pointed out, Abbondanza discloses that the base unit (250) and the pulse rate sensor device (225) are two separate devices. Ex. 1003, FIG. 3. POR, 34–35.



Id. lululemon’s argument that these two separate components make up the “sensor device” conflicts with Federal Circuit authority. Reply, 23 (citing *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010)). lululemon argues that “the sensor and its **processing capabilities** are not listed separately in the claims.” Reply, 23 (emphasis added). But the processing capabilities are not at issue in the claims. In *Abbondanza*, the sensor and **base unit** are separate components and lululemon provides no reason they should be treated as one. See POR, 30–31 (citing Ex. 1003, 11:14–23) (explaining *Abbondanza*’s disclosure of a “controller that resides in base unit 250 processes” “the user’s pulse rate received via infrared pulse rate transmitter 227” and the base unit “instructs treadmill device 230 to either speed-up or slow-down.”). The Board also questioned lululemon’s argument on this point. See ID, 22 (questioning “why base unit 250,

which is not described as performing any sensing operation, nevertheless is viewed as forming part of a ‘sensor device’’). Therefore, lululemon’s attempt to muddy the waters here should not be given any weight.

The distinction between Abbondanza’s base unit (250) and pulse rate sensor device (225) is further highlighted by lululemon’s discussion of data transmission. lululemon argues in the Petition that the base unit receives a user’s pulse rate from a pulse rate sensor. Petition, 33 (citing Ex. 1003, 10:62–63). It then specifies that the base unit “determines if the user’s pulse rate is within that user’s target heart rate range and instructs treadmill device 230 to either speed-up or slow-down ultimately to cause the user to either work harder . . . or work softer” Petition, 33 (citing Ex. 1003, 11:17–22). But the base unit receives pulse data from a sensor, and then sends instructions to the workout equipment. *Id.* If the sensor and base unit combined to make one device as lululemon suggests, the device would not receive and send different information.

lululemon tries to compare Abbondanza to the specification of the ’225 patent, which only emphasizes why Abbondanza cannot meet this claim limitation. lululemon cites the ’225 patent’s descriptions of sensor devices that include processing capabilities. Reply, 22 (citing Ex. 1001, 16:54–57; 10:35–37, 11:50–58, 10:51–53). But in each of these examples, the processing capabilities are included

with the sensor; the examples have not split the sensor and processing capabilities into different devices and then referred to them as one, as lululemon does.

For these reasons and the reasons discussed in Nike’s Response, lululemon thus has not shown by a preponderance of the evidence that Abbondanza renders obvious any Challenged Claim in Ground 4.

B. Abbondanza Does Not Teach “Data”

Independent claim limitations 1 and 12 recite “a first set of data” for operating the piece of workout equipment. Ex. 1001, 45:8–20; 46:9–24. In its Reply, lululemon argues that Abbondanza teaches “data” under either party’s construction. Reply, 24. According to lululemon, “[b]oth parties agree” that (1) “Abbondanza’s pulse rate sensor senses or collects pulse rate data” and (2) “Abbondanza’s base unit transmits instructions to the exercise equipment.” *Id.* This argument misses the mark for three reasons.

First, lululemon again relies on the same misplaced assumption that these separate components, i.e., the pulse rate sensor and base unit, are *working together* to transmit data to a piece of workout equipment. *Id.* (emphasis added). For the reasons discussed above in Section VI.A, lululemon cannot rely on these separate components in Abbondanza to meet the claimed sensor.

Second, lululemon relies on data that is sent by the combined sensor base unit in Abbondanza. But that combined sensor base unit device receives a first set of

data and sends a second set of data. This argument fails to meet the claim limitation—“a first set of data”—because it recites one set of data, not multiple sets of data. According to lululemon, Abbondanza’s sensor determines “pulse rate,” but the base unit instructs the treadmill to speed-up or slow-down. Petition, 33 (citing Ex. 1003, 10:62–63, 11:17–22). Even if both the pulse rate and instructions were data (which they are not), sending two different sets of data from the sensor to the workout equipment cannot meet this limitation.

Third, lululemon claims Abbondanza renders obvious limitation [1B] and [12Cii] because it discloses “data” as “factual information, from which decisions or subsequent actions can be made.” Reply, 24. lululemon specifically argues that Abbondanza’s “instructions are factual information” because they have “informational content” that inform “subsequent action, e.g., whether to speed up or slow down” the workout equipment. *Id.* For support, lululemon cites its own expert’s declaration and corresponding deposition testimony parroting the same attorney argument without support from Abbondanza or the ’225 patent. *See* Ex. 1015, ¶36 (“an instruction that tells a treadmill to speed up or slow down includes information content” and “the command includes informational content such as a target parameter that is collected”); Ex. 2005; 43:17–45:13. This idea of “target parameter[s]” that lululemon cites comes from Acres, which is a different prior art

reference. *See* Reply, 24 (citing Ex. 1002, [0085], [0089]–[0090]). It is unclear how this reliance on Acres supports lululemon’s positions regarding Abbondanza.

More importantly, Abbondanza’s base unit does not sense or collect data. lululemon specifically fails to explain how Abbondanza’s base unit 250, which is not described as performing any sensing operation, forms part of a “sensor device” for collecting “a first set of data” as recited in claims 1 and 12. lululemon therefore fails to demonstrate that Abbondanza teaches or suggests the plain and ordinary meaning of “data” meaning “factual information that is sensed or collected, and from which decisions or subsequent actions can be made.”

C. Nike Disputes That Abbondanza Teaches Claims 2–5, 7, 10, 13, 14, 16, and 19

lululemon alleges that Nike does not dispute lululemon’s alleged showing that Abbondanza teaches claims 2–5, 7, 10, 13, 14, 16, and 19. Reply, 25. This is incorrect. First, Nike explains in detail why Abbondanza does not meet claims 5 and 14. *See* POR, 36–37, §VI.D.4 (titled “lululemon fails to show that Abbondanza renders obvious claims 5 and 14”). Second, Nike fully addresses independent claim 1, from which claims 2–4, 7, 10 depend and independent claim 12, from which claims 13, 16, and 19 depend. POR, 30–36. lululemon’s arguments with respect to these dependent claims fail for the same reasons. lululemon has failed to show Abbondanza teaches the independent claims.

For these reasons and the reasons discussed in Nike’s Response, lululemon thus has not shown by a preponderance of the evidence that Abbondanza renders obvious any Challenged Claim in Ground 4.

VII. GROUND 5: LULULEMON FAILS TO DEMONSTRATE THAT THE COMBINATION OF ABBONDANZA AND PYLES RENDERS OBVIOUS CLAIMS 9 AND 18

lululemon does not substantively address Ground 5 in its Reply. Reply, 25. Therefore, for the reasons discussed in Nike’s Response, lululemon fails to show by a preponderance of the evidence that the Acres renders obvious any Challenged Claim of the ’225 patent.

VIII. CONCLUSION

For the reasons discussed above and in Nike’s Response, lululemon has failed to prove by a preponderance of the evidence that any of claims 1–10, and 12–19 of the ’225 patent are unpatentable.

Dated: February 29, 2024

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CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the Microsoft Office word count including all footnotes for the foregoing Patent Owner's Sur-Reply, excluding the table of contents, table of authorities, certificate of word count, appendix and certificate of service, totals 5,406 words, which is less than the 5,600 words allowed under 37 C.F.R. § 42.24(c)(4).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies service on lululemon, pursuant to 37 C.F.R. § 42.6(e) and by agreement of counsel, by electronic (e-mail) delivery of a true copy of the foregoing **PATENT OWNER'S SUR-REPLY**, and all supporting exhibits, were served on February 29, 2024 to the following Counsel for lululemon via e-mail:

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