

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MAGIC LEAP, INC

Petitioner,

v.

PERCEPT TECHNOLOGIES INC.

Patent Owner.

IPR2023-00494

Patent 9,010,929

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

I.	THE CHALLENGD CLAIMS REQUIRE CIRCUITRY THAT IS ACTIVATED IN REACTION TO EYE MOTION OF THE USER.....	1
1.	The Technology is Not so Challenging as to Require Expert Testimony to Understand	3
2.	Magic Leap Agrees the Plain and Ordinary Meaning Controls but What that Plain and Ordinary Meaning Is Cannot be Left Unsaid	5
3.	The Plain and Ordinary Meaning of “Responsive To” is “In Reaction To”	6
II.	THE CHALLENGED CLAIMS ARE NOT UNPATENTABLE IN VIEW OF MANN ’895 AND PEMER.....	9
III.	CONCLUSION	15

TABLE OF AUTHORITIES

CASES

<i>Avia Group Int’l, Inc. v. L.A. Gear Cal., Inc.</i> , 853 F.2d 1557 (Fed. Cir. 1988).....	2
<i>Centricut, LLC v. Esab Group, Inc.</i> , 390 F.3d 1361 (Fed. Cir. 2004).....	1, 15
<i>Graham v. John Deere Co. of Kan. City</i> , 383 U.S. 1 (1966).....	6, 10
<i>Homeland Housewares, LLC v. Whirlpool Corp.</i> , 865 F.3d 1372 (Fed. Cir. 2017).....	1
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	2
<i>O2 Micro Int’l. Ltd. v. Beyond Innovation Tech. Co., Ltd.</i> , 521 F.3d 1351 (Fed. Cir. 2008).....	5, 6
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	1
<i>Wyers v. Master Lock Co.</i> , 616 F.3d 1231 (Fed. Cir. 2010).....	5

I. THE CHALLENGED CLAIMS REQUIRE CIRCUITRY THAT IS ACTIVATED IN REACTION TO EYE MOTION OF THE USER

Petitioner, Magic Leap, argues that Percept's Patent Owner response is "insufficient to rebut [its] petition." Reply at 1. Not true. Nothing requires the Board to accept Petitioner's declarant's testimony concerning the patentability of the challenged claims, especially where, as here, that testimony is at odds with the meaning of the claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) ("[A] court should discount any expert testimony 'that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.'" (quoting *Key Pharms. V. Hercon Labs. Corp.*, 161 F.3d 709, 716 (Fed. Cir. 1998); *Homeland Housewares, LLC v. Whirlpool Corp.*, 865 F.3d 1372, 1378 (Fed. Cir. 2017) (expert testimony that is inconsistent with the record, or based on an incorrect understanding of the claims must be disregarded). Moreover, in cases such as this, testimony from a technical expert is not a prerequisite for establishing any proposition. *See, e.g., Centricut, LLC v. Esab Group, Inc.*, 390 F.3d 1361, 1369 (Fed. Cir. 2004) ("In many patent cases expert testimony will not be necessary because the technology will be easily understandable without

the need for expert explanatory testimony.”) (quotation omitted); *and see KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) (“Rigid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it.”). Nor are Dr. LaViola’s opinions regarding the ultimate conclusion of obviousness either “necessary or controlling” on the matter. *Avia Group Int’l, Inc. v. L.A. Gear Cal., Inc.*, 853 F.2d 1557, 1564 (Fed. Cir. 1988) (“[A]n expert’s opinion on the legal conclusion of obviousness is neither necessary nor controlling.”).

Besides, there appears to be no meaningful dispute regarding the meaning of the claim limitations at issue. In its Patent Owner’s Response, Precept stated that by specifying that an eye sensor activates circuitry “responsive to” eye motion, the challenged claims specify that such circuitry must be activated *in reaction to* the eye motion. PO Response at 1. Now, Magic Leap’s declarant admits such a definition is consistent with the plan and ordinary meaning of “responsive to.” Ex. 1016, ¶ 35 (“the Heritage Dictionary includes a definition that includes ‘readily reacting’”). Dr. LaViola goes on to say that a person of ordinary skill in the art would not impose a temporal requirement to such a reaction, *id.*, but nonetheless, even the dictionary he cites indicates there must, in fact,

be a “reaction.” Ex. 1017 at 4 (responsive: “readily inclined to respond or react appropriately . . .”); *and see id.* (respond: “to show some reaction to a force or stimulus,” “react in response”). Accordingly, the parties agree and the Board should construe the challenged claims so that the recited “circuitry” be activated *in reaction to* eye motion, for that is what it means to be “responsive.”

1. The Technology is Not so Challenging as to Require Expert Testimony to Understand

Insofar as the disputed claim limitation is concerned, the ’929 patent explains:

The circuitry 106 in the device could be, for example, eye sensors which could be pressure sensors, capacitive sensors or some other type of sensor for allowing the eyes to direct the activities. Eye movement sensors, for example, could be used to activate and control the binocular glasses. Similarly, a digital camera could be put on the glasses that would allow the same kinds of technology to take pictures by the person directly.

. . . .

Also, in a preferred embodiment a method for sensing and controlling the digital media could be implemented in a variety of ways. For example, an activity of the eye itself would control the activity of the media focal. So,

for example, if the idea was to zoom the image, the eye would blink twice. It would also be possible to detect facial and eye movements (squinting, for example), as well as changes in the pupil and iris.

Ex. 1001 at 3:20-43. Setting aside the particular examples being discussed, what is apparent is that eye movement is what the circuitry reacts to (e.g., whether to activate and control binocular glasses, take pictures via a digital camera, or control digital media). This eye movement is one type of a broader “activity of the eye,” and it is eye movement that is recited in the challenged claims, for example: “an eye sensor coupled to the frame member, the eye sensor activating the circuitry responsive to *eye motion* of a user.” *Id.* at 5:62-64 (claim 1, emphasis added).

One does not require expert testimony to understand from the ’929 patent that whatever the circuitry might be, it must be responsive to eye motion. Both the claims and specification make this clear. Further, one does not require expert testimony to recognize that the ’929 patent does not employ the phrase “response to” in anything other than its “plain and ordinary meaning.” There are no special definitions set forth in the specification, and the examples that are included in the specification describe the circuitry 106 reacting to eye movement. At least at this level of detail, such things are not so difficult to understand as to require expert

testimony to make them clearer. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1242 (Fed. Cir. 2010) (“[E]xpert testimony is not required when the references and the invention are easily understandable.”).

2. Magic Leap Agrees the Plain and Ordinary Meaning Controls but What that Plain and Ordinary Meaning Is Cannot be Left Unsaid

Magic Leap agrees that the claims of the '929 patent should be construed consistent with their “plain and ordinary meaning.” Reply at 3. But Magic Leap is wrong when it urges the Board not to adopt an explicit construction for the disputed limitation, “the eye sensor activating the circuitry responsive to eye motion of a user.” *Id.* at 4.

First, absent a claim construction the Board cannot make a final determination concerning the patentability of the challenged claims. *See O2 Micro Int’l. Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1361-1362 (Fed. Cir. 2008) (although “district courts are not (and should not be) required to construe every limitation present in a patent's asserted claims,” and even if a term in question has a “well-understood definition,” the court must interpret the scope of any claim term for which the parties have presented a “fundamental dispute”).

Second, it is not sufficient for Magic Leap or the Board to simply say that the claims should be given their “plain and ordinary meaning” and consider the job of construction to be done. See Reply at 4. Using a “plain and ordinary meaning” may indicate *how* the claims are to be understood, but it does not specify *what* the claims mean. *O2 Micro Int’l. Ltd.*, 521 F.3d at 1361 (“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”). It is the *what* that matters for it is *what* the claims mean to the person of ordinary skill in the art that will determine whether or not the claims are unpatentable in view of the prior art. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17-18 (1966) (among other things, assessing obviousness requires a determination of differences between the prior art and the claims at issue).

3. The Plain and Ordinary Meaning of “Responsive To” is “In Reaction To”

Contrary to Magic Leap’s assertion, Reply at 16, Precept is not proposing that the plain and ordinary meaning of “responsive to” be somehow revised to suit a new or special definition. In its Patent Owner Response, Precept was clear that, “To be ‘responsive,’ the circuitry must be

activated *in reaction to* eye motion.” PO Response at 1, 8 (emphasis in original). Understanding that the phrase “responsive to” means “in reaction to” is certainly not providing the term a new or special definition.

First, Dr. LaViola stated he consulted two dictionaries to aid his understanding of the meaning of “responsive to.” Ex. 1016 at ¶ 25. One of those dictionaries, the “Heritage Dictionary,” defines “response” as “The act of responding,” or “a reply,” or “reaction.” Ex. 1018 at p. 3. And, although Dr. LaViola states the Heritage Dictionary does not define “responsive to,” Ex. 1016 at ¶ 26, it does define “responsive” as “answering or replying; responding” and “readily reacting to suggestions, influences, appeals, or efforts.” Ex. 1018 at p. 3. Thus, this first of the two dictionaries supports Precept’s position that to be “responsive,” the circuitry recited in the challenged claims must be activated *in reaction to* eye motion.

The second of the two dictionaries consulted by Dr. LaViola, “Webster’s Dictionary,” defines “respond” as “to show some reaction to a force or stimulus (the pupil of the eye ~s to change of light intensity); react in response.” Ex. 1017 at p. 4. A “response” is “an act or action of responding,” and “responsive” is defined as “constituting a response or made in response to something,” or “readily inclined to respond or react appropriately or sympathetically to influences, suggestions, impressions.” *Id.*

Avoiding the circularities of these definitions, one recognizes that to be responsive is to respond or react. It is particularly interesting, considering that the term in question relates to motion of the eye, that one of the referenced examples for a “response” is the *reaction* of the pupil of the eye to a change of light intensity. This supports Precept’s position that to be “responsive,” the circuitry recited in the challenged claims must be activated *in reaction to* eye motion.

Second, the function of claim construction is to interpret the meaning and scope of a patent’s claims, *Phillips*, 415 F.3d at 1312-1313, yet Magic Leap’s suggestion that “an eye sensor that is ‘responsive to’ a thing (*e.g.*, eye motion) responds to that thing,” *see, e.g.*, Reply at 14, offers no help whatsoever in understanding the meaning of these claims. To say that something is responsive if it responds is entirely circular and does not make the claim limitations any clearer.

Precept, on the other hand, has explained how the context in which the claim terms in dispute have been used, along with the written description of the invention provided in the specification, help to explain the meaning of “responsive to.” PO Response at 7-8. This, now in combination with the support garnered from the very dictionaries consulted by Dr. LaViola,

should leave no doubt that to be “responsive,” the circuitry recited in the challenged claims must be activated *in reaction to* eye motion.

II. THE CHALLENGED CLAIMS ARE NOT UNPATENTABLE IN VIEW OF MANN ’895 AND PEMER

Magic Leap is wrong when it argues that Precept tried to demonstrate the patentability of the claims by attacking the references separately. Reply at 15. In fact, Precept was clear that, “rather than the iris feature detector of Perner, or a Mann ’895-Perner **combination**, being *responsive to eye motion of a user*, as required by the challenged claims, the iris feature detector of Perner, or a Mann ’895-Perner **combination**, actually *causes eye motion of a user*.” PO Response at 16 (emphasis added). Moreover, Precept argued, “the proposed Mann ’895-Perner **combination** fails to teach or suggest ‘an eye sensor coupled to the frame member, the eye sensor activating the circuitry responsive to eye motion of a user,’ as recited in independent claim 1.” *Id.* at 22 (emphasis added). Suggesting, as Magic Leap does, that Precept did not address the combined teachings of the cited references finds no support in the actual record.

As the Board well knows, assessing obviousness requires, among other things, determining the scope and content of the prior art. *Graham*, 383 U.S. at 17. It is natural, therefore, for any analysis to begin with an

exposition of the teachings of the references being relied upon. Indeed, virtually every written decision of this Board includes such an analysis and so it should come as no surprise that Precept's Patent Owner response also included a discussion of the teachings of Mann '895 and Perner. PO Response at 11-12, 13-14. That discussion, along with an analysis of the Petition, and this Panel's own Institution Decision revealed that, "Petitioner does not rely on Mann '895 for disclosing the eye sensor being 'responsive to eye motion of the user' per claim 1." Paper 10 at 22. Instead, "Petitioner argues Perner discloses an eye sensor that is responsive to eye motion of the user." *Id.*

Precept thus made two arguments; First, that Perner did not, in fact, disclose an eye sensor that is responsive to eye motion of the user. PO Response at 15-16. And second, that a Mann '895-Perner *combination* does not suggest to a person of ordinary skill in the art an eye sensor that is responsive to eye motion of the user. *Id.* at 16-22. The first argument addresses the scope and content of the prior art, and the second addresses the nonobviousness of the subject matter of the challenged claims. This is exactly the kind of analysis which the Supreme Court has indicated must be performed. *Graham*, 383 U.S. at 17, 22-26.

Magic Leap is also wrong when it argues that, “Mann ’895 in view of Perner meets the eye sensor limitation under any reasonable claim construction.” Reply at 15 *et seq.* Remember, Magic Leap originally offered no explicit construction for the eye sensor limitation. Pet. at 4 (“Petitioner does not believe any claim construction is necessary for this Petition . . . “). Now, the very dictionaries consulted by Magic Leap’s own declarant compel a recognition that the circuitry recited in the challenged claims is activated *in reaction to* eye motion.

The basic teachings of the two references stand largely undisputed. Reply at 16 (“Petitioner and Patent Owner agree on relevant aspects of how the combined system would operate.”). To reiterate, based on the teachings of Mann ’895 and Perner, a person of ordinary skill in the art would conclude that the granting or not granting of a “sight license” would be responsive to the use of a biometric password, not eye motion. PO Response at 15 . It is the presence or absence of such a password that the granting/not granting of the sight license reacts to.

Magic Leap urges, “the skilled artisan would understand an eye sensor activating circuitry ‘responsive to’ the eye motion to simply mean an eye sensor activating the circuitry in response to the eye motion.” Reply at 17. But as previously explained, simply saying that something is “responsive to”

another thing if it “responds to” that other thing is circular. And, in any event, to “respond” is “to show *some reaction* to a force or stimulus (the pupil of the eye ~s to change of light intensity); react in response.” Ex. 1017 at p. 4 (emphasis added). Thus, even under Magic Leap’s own reading of the disputed limitations, the activating circuitry must “react to” the eye motion. In this respect Perner, and, hence, any Mann ’895-Perner combination, is clear: the iris feature detector *causes*, rather than *reacts to*, eye movement.

Magic Leap does not dispute this point, Reply at 17, but contends that Perner’s eye sensor also responds to eye motion. This is not the case. First, Perner states, “A conventional iris scanner centers the eye in a field of view, creates one or more images of the eye, identifies an outer boundary of the iris in the images, extracts the image of the iris, scales and filters the extracted image, and generates a code corresponding to the iris” which can be used for identification or authentication. Ex. 1006 at [0004]. None of these actions can be considered responding to eye motion, and certainly not reacting to eye motion, as required by the claims.

Second, Perner’s own eye sensor “causes the eye movement source to cause rapid eye motion, and the sensor to capture first and second iris images over a time interval in which only an iris can move in the first and second images.” *Id.* at [0006]. Capturing the eye images does not respond to

(and also does not react to) the eye motion in any way. Instead, the first and second eye images are captured according to a time interval that begins when Perner causes an LED to illuminate. *Id.* at [0020] (“[T]he controller 120 turns off the first light source 112 and immediately causes the second light source 114 to illuminate. Reflexively, the eye moves quickly and becomes fixed on the illuminated second light source 114.”). The eye motion is *reflexive*. It is an automatic action caused by illumination of the LED. But, the capturing of the images is not, in any way, responsive to, that is, it is not in reaction to, that action (the motion of the eye). If, for some reason, the motion of the eye did not occur, the images would still be captured. *Id.* at [0030] (“The controller turns off the first light source and turns on the second light source (320), and ***commands the image sensor to begin acquiring the second image*** (322).”); and see *id.* at [0027] (indicating that images may be taken and an edge pattern produced even if there is no physiological response from the eye – i.e., if the eye is dead). The command from the controller to capture the second image occurs irrespective of whether the user’s eye moves or not. Nothing in Perner suggests that the command is issued only after movement is detected or that the command is otherwise connected to any eye movement.

Once the two images are captured, they are used to create an “edge pattern” which can be compared to reference images in a database. *Id.* at [0035]. Ultimately, it is the result of such a comparison that determines whether or not any privileges (such as granting a sight license in the case of Mann ’895-Pemer) are granted. *Id.* Notably, it is **not** the user’s eye motion that triggers the comparison of the edge pattern to the database. The comparison takes place after the two images have been captured and an edge pattern obtained, *id.* at [0026], but, as demonstrated above, these actions are divorced from any eye motion and the image capture and subsequent comparison would occur even in the absence of such movement, as a result of a command from the controller.

Magic Leap argues that things can be responsive to multiple events. Reply at 18. But it remains that to be responsive to something there must be a reaction to that thing. As demonstrated above and in Precept’s Patent Owner Response, neither the capturing of the images nor the granting of the sight license (by virtue of producing a correct biometric password from the images) in a Mann ’895-Pemer combination is in reaction to eye motion. Instead, at best in such a combination, Pemer's prompting of eye motion means that Mann 895's eye sensor would react to Pemer's prompt, not to eye motion. Furthermore, while a correct edge pattern from Pemer’s iris detector

may rely upon eye motion, *id.* at [0027], such *reliance* is not sufficient to demonstrate activation “*responsive to*” eye motion, as recited in the challenged claims. Neither Dr. LaViola nor either of the dictionaries he introduces defines “responsive” as “relying upon.” To respond is to show some reaction to, as the pupil of the eye to a change in light intensity. Ex. 1017 at p. 4. Reliance is not enough. And, for the reasons discussed above, in a Mann ’895-Pemer combination there is no reaction to eye motion that causes granting of the sight license.

III. CONCLUSION

That Magic Leap has offered the testimony of Dr. LaViola while Percept has relied on the disclosure of the ’929 patent and the teachings of the references is of no moment. Although “it is impermissible for the [PTAB] to base its factual findings on its expertise, rather than on evidence in the record,” the PTAB’s “expertise appropriately plays a role in interpreting record evidence.” *Brand v. Miller*, 487 F.3d 862, 869 (Fed. Cir. 2007). And, in cases such as this, where the prior art and the claims are readily understandable, the Board need not rely on expert testimony to reach its decision. *Centricut*, 390 F.3d at 1369.

Accordingly, the Board should confirm the patentability of claims 1-6, 8, 11, 17, and 22 of the '929 patent over Magic Leap's, challenges based on Mann '895 and Pemer. The proposed Mann '895-Pemer combination fails to teach or suggest "the eye sensor activating the circuitry responsive to eye motion of a user," as recited in each of the challenged independent claims. By specifying that the eye sensor activates circuitry "responsive to" eye motion, the claims specify that such circuitry must be activated *in reaction to* the eye motion. In a Mann '895-Pemer combination, on the other hand, a "license to see" would be granted according to whether or not an "edge pattern" produced from a pair of images compares favorably (or not) to reference images in a database. An iris feature detector of a Mann '895-Pemer combination would invoke, rather than be *responsive to*, eye motion. Accordingly, the challenged claims are not obvious in view of such a combination and the Board should enter a final decision confirming same.

Respectfully submitted,

Dated: February 29, 2024

/Tarek N. Fahmi/

Tarek N. Fahmi

Reg. No. 41,402

Ascenda Law Group, PC
2150 N First St., Suite 420
San Jose, CA 95131
Tel: 866-877-4883
Email: tarek.fahmi@ascendalaw.com

WORD-COUNT CERTIFICATE

I certify that the foregoing document complies with the type-volume limitation of 37 C.F.R. § 42.24(a) and (b) and contains 3,584 words (including words in drawings created by the Patent Owner or as annotations added by the Patent Owner to images reproduced in this document) based on the word count indicated by Microsoft® Word for Mac v. 16.81, excluding those portions exempted by the rule.

/Tarek N. Fahmi/

Tarek N. Fahmi

Reg. No. 41,402

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing:

PATENT OWNER'S SUR-REPLY

and its accompanying exhibits were served on February 29, 2024, by filing this document through the PTAB P-TACT System as well as by delivering a copy via email directed to the attorneys of record for the Petitioner at the following addresses:

Mehran Arjomand
Alex S. Yap
Bryan Blumenkopf
MORRISON & FOERSTER LLP
707 Wilshire Boulevard, Suite 6000
Los Angeles, CA 90017

Email:
MArjomand@mofo.com
AYap@mofo.com
BBlumen@mofo.com
MagicLeap-Percept-IPR@mofo.com

The parties have agreed to electronic service in this proceeding.

Respectfully submitted,

Dated: February 29, 2024

Ascenda Law Group, PC
2150 N First St., Suite 420
San Jose, CA 95131
Tel: 866-877-4883
Email: patents@ascendallaw.com

/Tarek N. Fahmi/

Tarek N. Fahmi
Reg. No. 41,402