

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,
Petitioner,

v.

E-VISION OPTICS, LLC,
Patent Owner.

IPR2024-01071
Patent 8,905,541 B2

Before RICHARD H. MARSCHALL, JOHN D. HAMANN, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

MARSCHALL, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

Petitioner Luxottica of America Inc. filed a Petition requesting *inter partes* review of claims 1–19 of U.S. Patent No. 8,905,541 B2 (Ex. 1001, “the ’541 patent”). Paper 1 (“Pet.”). Patent Owner e-Vision Optics, LLC filed a Preliminary Response. Paper 8 (“Prelim. Resp.”). With our authorization, Petitioner filed a Reply to Patent Owner’s Preliminary Response (Paper 9 (“Prelim. Reply”)) and Patent Owner filed a Preliminary Sur-Reply (Paper 11 (“Prelim. Sur-Reply”)).

We have jurisdiction under 35 U.S.C. § 314. Under § 314, an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the challenged claims in the petition.” *Id.* at § 314(a). If the Board institutes a trial, “the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Because we determine that Petitioner demonstrates a reasonable likelihood that at least one challenged claim is unpatentable, we institute an *inter partes* review of all claims as challenged in the Petition.

BACKGROUND

A. Real Parties-in-Interest and Related Matters

Petitioner states that “Luxottica of America Inc. and Luxottica Group S.p.A. are the real parties in interest for Petitioner.” Pet. 85. Petitioner also identifies EssilorLuxottica S.A. as the parent company to these companies. *See id.* Patent Owner identifies itself as the only real party-in-interest. Paper 7, 1. The parties are reminded of their continuing obligation to update their mandatory notice information “within 21 days of a change of the information.” 37 C.F.R. § 42.8(a)(3).

The parties indicate that the '541 patent is the subject of the following infringement actions: *e-Vision Optics, LLC et al. v. Luxottica Group S.p.A et al.*, No. 8:23-cv-02013 (C.D. Cal.) (“the Litigation”) and *e-Vision, LLC et al. v. Lenovo Group Ltd. et al.*, No. 8:23-cv-01860 (C.D. Cal.) (“the Lenovo Litigation”). Pet. 85–86; Paper 7, 1.

B. The '541 Patent

The '541 patent relates to electronic spectacle frames that have a housing module attached to a structural member of the frame. Ex. 1001, codes (54), (57). An electronics module may be located within the housing module. *Id.* at code (57), 1:48–54. The “electronics module may further include at least any two of: a power source; a controller; and/or a sensing mechanism.” *Id.* at 2:3–5. “[A]n insulating layer may be disposed between one or more electronic components located within the electronics module and the frame of the first device” and the housing module itself “may comprise the insulating layer.” *Id.* at 2:6–12.

Figure 16 illustrates aspects of the invention disclosed in the '541 patent and is reproduced below.

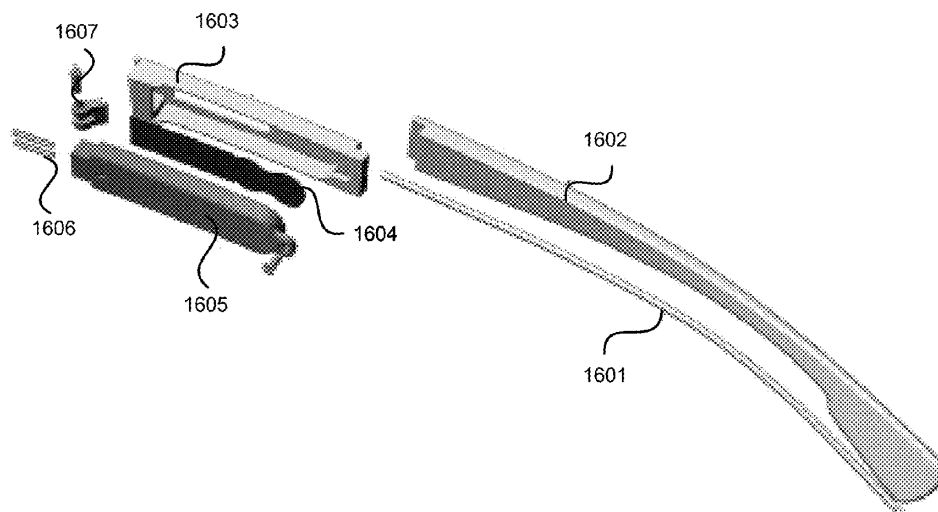


Figure 16 depicts an “assembly of a portion of an electro-active frame.” Ex. 1001, 5:56–57, 41:56–57. Figure 16 shows core element 1601, temple 1602, housing module 1603, switch 1604, and electronics module 1605. *Id.* at 41:62–42:8, 68:36–58. Housing module 1603 “may house (e.g. contain) the electronics module 1605 and be coupled to temple 1602.” *Id.* at 68:48–50. Housing module 1603 may be made of a conductive material, but “in some embodiments an insulating material may be disposed between the housing module 1603 and any electronic components of the electronic frames (e.g. the electronics module 1605).” *Id.* at 68:50–61. In Figure 16, housing module 1603 is disposed between a portion of temple 1602 and the lens housing. *Id.* at 69:5–7.

In some embodiments, the housing module may include an opening through which the electronics module may be inserted and pressure-fitted into position within the housing module so that it snaps into place. *See* Ex. 1001, 70:24–37, Fig. 27. Screws may also be used to secure the electronics module in place, or to secure the housing module to the frame. *Id.* at 69:25–28, 70:41–58.

C. The Asserted Challenges

Petitioner challenges claims 1–19 on the following grounds (Pet. 10):

Claims Challenged	35 U.S.C. §¹	Basis
1–19	103	Howell-596, ² Howell-158 ³
16, 17	103	Howell-596, Howell-158, Hattori-913 ⁴
1–11, 13–19	103	Howell-596
16, 17	103	Howell-596, Hattori-913
1–9, 11, 13–19	103	Kokonaski-166, ⁵ Howell-158
1–9, 11, 13–19	103	Kokonaski-999, ⁶ Howell-158

In support of these challenges, Petitioner submits the Declaration of Dr. John Feland. *See* Ex. 1002.

¹ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the ’541 patent issued from an application having an effective filing date before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability.

² US Patent Pub. No. 2005/0230596 A1, published October 20, 2005 (Ex. 1004, “Howell-596”).

³ US Patent Pub. No. 2006/0023158 A1, published February 2, 2006 (Ex. 1006, “Howell-158”).

⁴ Japanese Unexamined Patent Application Publication Number S58-113913, published July 7, 1983 (Ex. 1007, “Hattori-913”) (original at Ex. 1007, Ex. A; translation at Ex. 1007, Ex. B). We cite to the translation of Hattori-913 at Ex. 1007.

⁵ US Patent Pub. No. 2008/0273166 A1, published November 6, 2008 (Ex. 1008, “Kokonaski-166”).

⁶ WO 2010/080999 A1, published July 15, 2010 (Ex. 1009, “Kokonaski-999”).

D. Challenged Claims

Petitioner challenges all 19 claims of the '541 patent, including independent claims 1 and 19. Claims 1 and 19 recite:

1. A first device, comprising:
 - a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;
 - a first lens and a second lens coupled to the frame; and
 - an electronics module, wherein the electronics module is located within the housing module;wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.
19. A method of fabricating a device, wherein the device comprises
 - a frame having a first temple and second temple; and
 - a housing module comprising:
 - a first end and a second end, wherein the first end comprises an opening; and
 - a body disposed between the first and second end wherein the body comprises a cavity;wherein the method comprises inserting an electronics module into the opening of the first end of the housing module such that the electronics module is disposed in the cavity of the body of the housing module

Ex. 1001, claims 1, 19.

ANALYSIS

A. Discretionary Denial in View of Parallel District Court Litigation

Patent Owner argues that we should exercise discretion to deny institution under 35 U.S.C. § 314 due to parallel district court litigation, citing the discretionary-denial factors articulated in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). See Prelim. Resp. 3–17; Prelim. Sur-reply 1–2.

Institution of *inter partes* review is discretionary. See *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”); 35 U.S.C. § 314(a). The Board may, in the interest of fairness and the efficient use of Board resources, deny institution under § 314(a) where there are parallel district-court proceedings involving the same or substantially the same parties and invalidity challenges. *Fintiv*, Paper 11 at 5–6, 12–13. *Fintiv* presents six factors, which “relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* at 6.

Our analysis under *Fintiv* is guided by the Director’s Memorandum titled *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation* (June 21, 2022)⁷ (“*Fintiv* Memo”). The *Fintiv* Memo sets forth, *inter alia*, that the Board will not discretionarily deny institution under § 314(a) when a petitioner submits a so-called *Sotera* stipulation, i.e., the petitioner “stipulates not to pursue in a

⁷ Available at

https://www.uspto.gov/sites/default/files/documents/interim_proc_discretionary_denials_aia_parallel_district_court_litigation_memo_20220621.pdf.

parallel district court proceeding the same grounds as in the petition or any grounds that could have reasonably been raised in the petition.” *Fintiv* Memo 7 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020)). A *Sotera* stipulation mitigates concerns of potentially conflicting PTAB and district-court decisions and duplicative efforts between the district court and PTAB. *Id.*

Here, Petitioner provides a *Sotera* stipulation: “Petitioner hereby stipulates that, if the Board institutes review, Petitioner will not pursue in the Litigation invalidity of the ’541 patent based on any ground Petitioner raised or reasonably could have raised in this petition.” Pet. 80–81. Petitioner argues that the *Fintiv* Memo “unambiguously states three times that the Board ‘will not’ discretionarily deny institution due to parallel litigation when the petitioner files a *Sotera* stipulation.” Prelim. Reply 1 (citing *Fintiv* Memo at 3, 7, 9).

We agree with Petitioner. In light of the Director’s *Fintiv* guidance regarding a *Sotera* stipulation, we decline to exercise discretion under § 314(a) to deny institution of *inter partes* review. *See Fintiv* Memo 3 (“[T]he PTAB will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB.”); *see also id.* (stating that the *Fintiv* Memo “is issued under the Director’s authority to issue binding agency guidance to govern the PTAB’s implementation of various statutory provisions”).

Moreover, we find unavailing Patent Owner’s arguments that the challenged patent also is asserted against a third party (i.e., Lenovo) in a

separate litigation proceeding on a parallel track (i.e., the Lenovo Litigation), and that “Petitioner’s stipulation should carry no weight here because” it “does not bar Lenovo from litigating the very same invalidity challenges before the district court.” Prelim. Resp. 1, 13–14. Patent Owner adds that Petitioner’s stipulation thus does not mitigate any concerns of duplicative efforts between the district court and the Board, or of potentially conflicting decisions. *Id.* at 14.

We determine that Petitioner’s *Sotera* stipulation mitigates the concerns of potentially conflicting Board and district court decisions as to the disputes between Petitioner and Patent Owner. In addition, Patent Owner does not direct us to any evidence that Lenovo is a real party-in-interest or privy in this proceeding. Nor does Patent Owner direct us to evidence demonstrating any involvement or control by Lenovo in this proceeding. Thus, Lenovo’s actions, including whether Lenovo raises the same grounds of unpatentability in the Lenovo Litigation, should not be imputed to Petitioner. Moreover, as a third party, Lenovo could settle its litigation or change tack on its unpatentability arguments, leaving Petitioner’s unpatentability arguments still to be resolved. We also note that Patent Owner submits that it “is unaware of any post-Memo decision discretionarily denying institution in the[] circumstances” we have here. Prelim. Sur-reply 1.

In sum, in light of the above, we decline to exercise discretion to deny institution under § 314(a).

B. Discretionary Denial under 35 U.S.C. § 325(d)

1. Legal Background

Patent Owner urges us to deny the Petition under 35 U.S.C. § 325(d). Prelim. Resp. 17–31. Pursuant to 35 U.S.C. § 325(d), in determining whether to institute an *inter partes* review, “the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.”⁸ In evaluating whether to exercise our discretion to deny institution under § 325(d), we weigh the following non-exclusive factors:

- (a) the similarities and material differences between the asserted art and the prior art involved during examination;
- (b) the cumulative nature of the asserted art and the prior art evaluated during examination;
- (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;
- (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;
- (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and
- (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8 at 17–18 (PTAB Dec. 15, 2017) (precedential in relevant part).

⁸ The Board institutes trial on behalf of the Director. 37 C.F.R. § 42.4(a).

The enumerated factors “should be read broadly . . . to apply to any situation in which a petition relies on the same or substantially the same art or arguments previously presented to the Office during a proceeding pertaining to the challenged patent.” *Advanced Bionics, LLC v. Med-El Electromedizinische Geräte GMBH*, IPR2019-01469, Paper 6 at 10 (PTAB Feb. 13, 2020) (precedential). Factors (a), (b), and (d) relate to whether the art and arguments presented in the petition are the same or substantially the same as those previously presented to the Office. *Id.* Factors (c), (e), and (f) “relate to whether the petitioner has demonstrated a material error by the Office” in its prior consideration of that art or arguments. *Id.* *Advanced Bionics* summarizes the two-part framework we use to decide whether to discretionarily deny institution under § 325(d):

Thus, under § 325(d), the Board uses the following two-part framework: (1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of [the] first part of the framework is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of [the] challenged claims.

Id. at 8.

2. Discussion

We focus on part two of the *Advanced Bionics* framework because Petitioner demonstrates material error whether or not the same or substantially the same prior art or arguments were previously presented to the Office. Claim 1 recites “wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device” (the “insulating layer limitation”).

Ex. 1001, claim 1. Petitioner alleges that the Examiner “allowed the claims based on applicant’s argument that an ‘insulating layer between electronic components and frame’ was not ‘necessarily present’ in Kokonaski-166,” “[b]ut Howell-158 explicitly discloses, and Howell-596 renders obvious, that purportedly missing limitation.” Pet. 84 (citing Ex. 1004 ¶¶ 184, 195; Ex. 1006 ¶ 53); *see also* Ex. 1003, 76–81 (Office action); 65–66 (reply to Office action); 37 (notice of allowance). For example, Petitioner contends that “Howell-158 discloses an ‘insulating layer between the electrical components or circuit board and the metallic frames.’” Pet. 83 (citing Ex. 1006 ¶ 53).

Patent Owner argues, with respect to Petitioner’s allegation of error involving Howell-158, that “Petitioner relies on a single paragraph of Howell-158, which merely discloses double-sided dielectric tape.” Prelim. Resp. 30 (citing Pet. 22–23). Patent Owner contends that, with one side of the tape “stuck to the circuit board” and the other side “stuck to the temple face,” the Examiner “would have correctly found such a disclosure irrelevant, because applying that tape to the other prior art before the Patent Office (and on which Petitioner relies) would have nullified stated benefits of those references.” *Id.* For example, Patent Owner argues that Howell-596 explains that “it is critical that the UV sensor on the circuit board be left exposed to light outside of the frames in order to function—therefore, making it impractical to wrap the circuit board in double-sided tape.” *Id.* at 30–31 (citing Ex. 1004 ¶¶ 189, 194); *see also* Prelim. Sur-reply 4 (“Howell-158 speaks for itself, describing the adhesive double-sided tape (alleged insulating layer) as ‘glue[ing]’ the temple pieces together.” (citing Ex. 1006 ¶ 53)).

Petitioner characterizes Patent Owner’s argument as nothing more than “unsupported attorney argument about wrapping an entire circuit board in double-sided tape.” Prelim. Reply 8. Petitioner also asserts that Patent Owner’s arguments “are unavailing because in claim 1 it suffices for the insulating layer to be disposed between the frame and a single electronic component within the module.” *Id.*

We agree with Petitioner that the Examiner erred in failing to appreciate that Howell-158 discloses the insulating layer limitation added to claim 1 to gain allowance of that claim. *See* Pet. 21–22. As more fully addressed below in our analysis of Petitioner’s obviousness challenge based on Howell-596 and Howell-158, we agree with Petitioner, based on the current record, that Petitioner establishes a reasonable likelihood of prevailing on its challenge to claim 1. As to the “insulating layer” limitation, we agree with Petitioner that Howell-158 discloses the limitation because it expressly discloses providing “an insulating layer between the electrical components or circuit board” and the frames. Ex. 1006 ¶ 53.

Patent Owner’s argument that using Howell-158’s double-sided tape in Howell-596 would be “impractical” given the presence of Howell-596’s UV sensor does not undermine Petitioner’s showing of material error for several reasons. *See* Prelim. Resp. 30–31. First, as Petitioner notes, Patent Owner’s argument lacks support of testimony from one with at least ordinary skill in the art. While we do not require such testimony, its absence on a highly factual issue such as the interpretation of references and how some teachings may undermine a motivation to combine two references does not persuasively counter Petitioner’s argument and evidence, which includes testimony from Dr. Feland on these same issues. *See* Pet. 22–24 (citing

Ex. 1002 ¶¶ 66–69) (addressing motivation to combine Howell-596 and Howell-158). Second, Howell-158 expressly discloses an insulating layer generally, and provides tape as “[o]ne example” of an insulating layer, undermining Patent Owner’s attempt to limit Howell-158 to a specific application of double-sided dielectric tape that must be applied to Howell-596 in the exact same manner as in Howell-158. *See* Ex. 1006 ¶ 53. Third, Patent Owner’s argument based on the “insulating layer” does not apply to independent claim 19, which does not contain that limitation. *See* Ex. 1001, claim 19.

Accordingly, we are persuaded that the Examiner erred in a manner material to patentability by overlooking the insulating layer disclosures of Howell-158 and their applicability to a combination with Howell-596. Based on our analysis, we find that the Petition does not implicate § 325(d) in a manner sufficient to warrant discretionary denial, and we decline to exercise our discretion to deny institution under § 325(d).

C. Level of Ordinary Skill in the Art

The level of ordinary skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). The person of ordinary skill in the art is a hypothetical person presumed to have known the relevant art at the time of the invention. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In determining the level of ordinary skill in the art, we may consider certain factors, including: “(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.” *Best*

Med. Int'l, Inc. v. Elekta Inc., 46 F.4th 1346, 1353 (Fed. Cir. 2022) (quoting *Daiichi Sankyo Co. v. Apotex, Inc.*, 541 F.3d 1254, 1256 (Fed. Cir. 2007)).

“The patent’s purpose can also be informative.” *Id.*

Petitioner contends that a person having ordinary skill in the art at the time of the invention would have had “at least a bachelor’s degree in mechanical or manufacturing engineering; mechatronics; electrical engineering plus coursework in mechanical engineering, manufacturing engineering, or mechatronics; or a similar technical degree,” and “at least 2 years of experience designing consumer electronics, such as eyewear with electronics.” Pet. 11–12 (citing Ex. 1002 ¶¶ 30–34). Petitioner contends that “[w]ork experience could substitute for formal education and additional formal education could substitute for work experience.” *Id.* Patent Owner does not contest Petitioner’s proposed definition or proffer a definition of its own. *See generally* Prelim. Resp.

We find Petitioner’s definition to be consistent with the problems and solutions disclosed in the ’541 patent and prior art of record, and adopt it as our own for purposes of this Decision. *See, e.g., GPAC*, 57 F.3d at 1579 (approving the determination of the level of ordinary skill in the art by appeal to the references of record).

D. Claim Construction

Pursuant to 37 C.F.R. § 42.100(b), we apply the claim construction standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Under that standard, we give the words of a claim their plain and ordinary meaning as would have been understood by one skilled in the art at the time of the invention and in the context of the entire patent disclosure. *Id.* at 1312–13. Only terms in controversy need be construed, and only to

the extent necessary to resolve the controversy. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Here, Petitioner posits that “no claim terms require construction to resolve the obviousness challenges here.” Pet. 12. Patent Owner does not oppose Petitioner’s contentions or proffer any constructions of its own. *See generally* Prelim. Resp.

At this time, we determine that no express construction of any term is necessary. We note that this determination does not preclude the parties from arguing their proposed constructions of the claims during trial. Indeed, the parties are hereby given notice that claim construction, in general, is an issue to be addressed at trial. A final determination as to claim construction will be made at the close of the proceeding, after any hearing, based on all the evidence of record. The parties are expected to assert all of their claim construction arguments and evidence during the trial, as permitted by our rules.

E. Obviousness Based on Howell-596 and Howell-158

Petitioner argues that the combination of Howell-596 and Howell-158 renders claims 1–19 obvious. Pet. 15–44. Patent Owner does not argue that we should deny institution because Petitioner fails to show a reasonable likelihood of prevailing on this challenge. *See* Prelim. Resp. 3–31. We first provide a brief overview of the references and then address Petitioner’s arguments.

1. Overview of Howell-596

Howell-596 discloses an electronic circuit within eyewear that allows a user to monitor its exposure to radiation, such as ultraviolet or infrared radiation or light. Ex. 1004, code (57).

We reproduce Figure 1 of Howell-596 below.

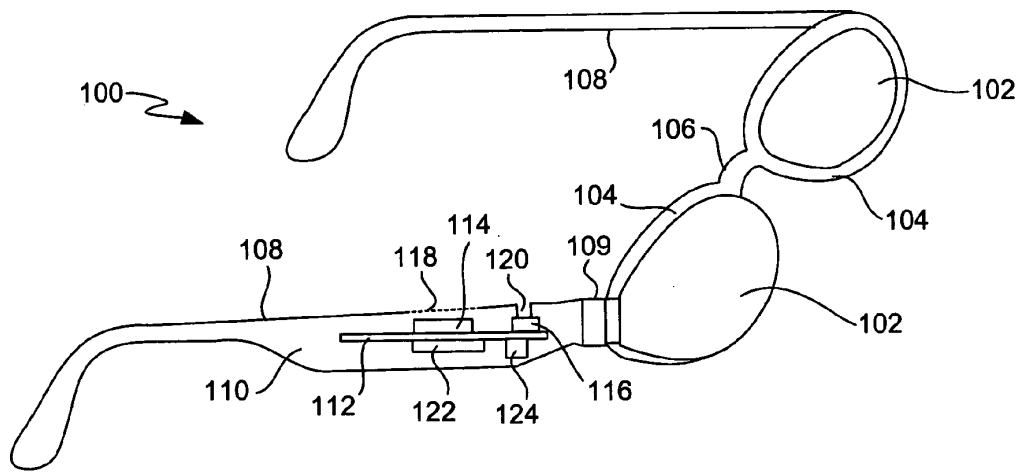


Figure 1 shows “a perspective view of UV monitoring glasses according to one embodiment of the invention.” Ex. 1004 ¶ 15. Figure 1 depicts glasses 100 that include a frame having lens holders 104 and a pair of temples 108. *Id.* ¶ 73. Temples 108 include circuit board 112 within internal cavity 110. *Id.* Solar cell 114 and UV detector 116 are provided within cavity 110. *Id.* Circuitry 122 and display device 124 may be coupled to circuit board 112. *Id.*

Howell-596 discloses embodiments that include further details of module housings. In one embodiment, module housing 1700 houses UV detection system 1500 that includes UV sensor 1506, electrical circuitry 1508, display device 1510, and power supply 1504, such as a solar cell. Ex. 1004 ¶¶ 184, 194, Fig. 17A. Module housing 1700 may include vents or holes so that air can circulate through the housing, or, “[a]lternatively, the

module housing 1700 does not include vents or holes, so as to be water-resistant or water-proof.” *Id.* ¶ 194. Howell-596 states that module housing 1700 is “placed into an opening, cavity or container of an eyewear housing, such as a temple region of the eyewear housing.” *Id.* ¶ 195. In one embodiment, eyewear housing 1720 has an opening, cavity or container 1721 for receiving the module housing 1700, with module housing 1700 contained by the eyewear housing 1720. *Id.* ¶ 196, Fig. 17B.

2. Overview of Howell-158

Howell-158 relates to a “pair of glasses with one or more electrical components partially or fully embedded in the glasses.” Ex. 1006, code (57). The electrical components may include a speaker, a storage medium, and a processor. *Id.*

We reproduce an excerpted version of Howell-158’s Figure 1 to show the key features of the glasses.

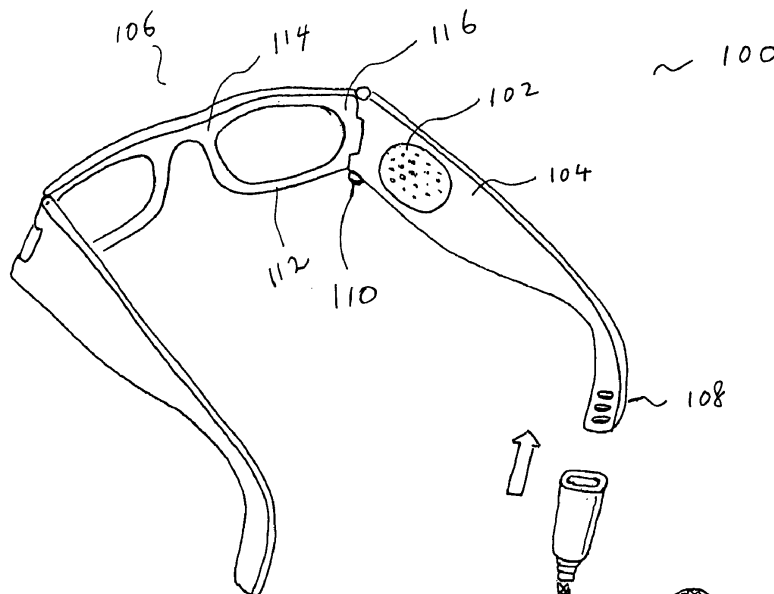


Figure 1 shows glasses 106 having a speaker 102 at least partially embedded in one of temples 104 of glasses 106. Ex. 1006 ¶ 49, Fig. 1. Figure 1

depicts speaker 102 closer to the hinge and lens holder of glasses 106 than free end 108 of temple 104. *Id.* ¶ 49. An insulating layer may be included between the electrical components and the frames. *Id.* ¶ 53. Howell-158 states that in “[o]ne example” the “insulating layer is a tape to encapsulate the electrical components” and further states that the insulating layer may be “dielectric tape” and that “the dielectric tape can be double-sided sticky tape.” *Id.* Howell-158 states that the electrical components may fit within a cavity formed between two halves of temples 104. *Id.*; *see also id.* at claims 26 (referring to a “functional module” including electrical components and a cavity within the frame), 27 (referring to the functional module “removably” provided within the cavity).

3. Discussion

A claim is unpatentable as obvious under 35 U.S.C. § 103(a) if the differences between the claimed subject matter 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 person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

For claim 1, Petitioner points to specific portions of Howell-596 and Howell-158 to support its assertions. Pet. 15–24. Petitioner also relies on

the testimony of Dr. Feland to support its assertions. *See id.* Patent Owner does not address any of Petitioner’s anticipation arguments.

For the preamble, a “first device,” Petitioner contends that Howell-596 discloses glasses that meet the “first device” language. Pet. 15 (citing Ex. 1004 ¶ 73, Fig. 1). Assuming that the preamble limits the claim, an issue we need not reach at this point, and based on the current record, we are persuaded that Petitioner demonstrates, for purposes of this institution decision, that Howell-596 discloses a “first device.”

Claim 1 further recites a “a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member.” Ex. 1001, claim 1. Petitioner asserts that Howell-596 discloses a frame, shown in Figure 1 reproduced above, having temples 108. Pet. 15 (citing Ex. 1004 ¶ 73, Fig. 1). Petitioner also contends that Howell-596 discloses the claimed “housing module” because Howell-596’s Figure 17B depicts “eyewear housing 1720 at the temple, which ‘has an opening, cavity, or container 1721 for receiving the module housing 1700.’” *Id.* at 16–17 (citing Ex. 1002 ¶¶ 60–61; Ex. 1004 ¶¶ 73, 194–196, Fig. 1). Petitioner also argues that “Howell-596’s eyewear housing 1720 is coupled to the lens holder 104 (Fig. 1) of the eyeglass frame, which is a structural member of the eyeglass frame.” *Id.* at 18. Based on the current record, we are persuaded that Petitioner demonstrates, for purposes of this institution decision, that Howell-596 discloses these limitations.

Claim 1 also recites “a first lens and a second lens coupled to the frame; and an electronics module, wherein the electronics module is located within the housing module; wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism.”

Ex. 1001, claim 1. Petitioner argues that Howell-596 discloses glasses having two lenses 102 coupled to the frame of the glasses. Pet. 18 (citing Ex. 1004 ¶ 73, Fig. 1). Petitioner also contends that Howell-596's electronics module has a module housing 1700 with electronics such as UV detection system 1500 within the housing. *Id.* at 19–20 (citing Ex. 1004 ¶¶ 184, 194–196, Figs. 15A, 17A, 17B). According to Petitioner, UV detection system 1500 includes components such as power source 1504, UV sensor 1506, and a microcontroller that meets the “power source,” “sensing mechanism,” and “controller” limitations, respectively. *Id.* at 20–21 (citing Ex. 1004 ¶¶ 184, 192, 194–195, Fig. 15A). Based on the current record, we are persuaded that Petitioner demonstrates, for purposes of this institution decision, that Howell-596 discloses these limitations.

Finally, claim 1 recites “wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.” Ex. 1001, claim 1. Petitioner argues that Howell-158 discloses these limitations because it describes using “an ‘insulating layer between the electrical components or circuit board and the metallic frames’” to “‘prevent circuits from being shorted’ and to ‘reduce leakage current’ in glasses with metallic frames.” Pet. 22 (citing Ex. 1006 ¶ 53). Petitioner also points to the specific examples Howell-158 describes for an insulating layer, including dielectric tape that can be double-sided sticky tape. *Id.* Based on the current record, we are persuaded that Petitioner demonstrates, for purposes of this institution decision, that Howell-158 discloses these limitations and that the combination of Howell-596 with Howell-158's insulating layer teachings would also teach these limitations.

Based on the foregoing, Petitioner persuades us, based on the current record and for purposes of institution, that its proposed combination of Howell-596 and Howell-158 discloses all of the limitations of claim 1. We now turn to the reasons Petitioner provides for the combination of Howell-596 and Howell-158.

Petitioner first notes the overlapping nature of Howell-596 and Howell-158. Petitioner asserts that Howell-158, like Howell-596, discloses various methods of embedding electronics within eyewear, including speaker 102 within temple 104 of Howell-158's glasses. Pet. 21 (citing Ex. 1006 ¶¶ 8, 48–49, 51, 106, 112, 170, claim 26). Petitioner also contends that “Howell-158 incorporates by reference Howell-596 and expressly instructs the POSITA to consider their ‘related’ disclosures,” including suggesting that the Howell-158 eyeglasses should be used with Howell-596's UV radiation detection system. *Id.* at 22 (citing Ex. 1006 ¶¶ 3, 18, 167).

Petitioner provides several reasons why one of ordinary skill in the art “would have been motivated to apply Howell-158's insulating layer between the electronics and other components located within Howell-596's electronics module and its frame.” Pet. 22 (citing Ex. 1002 ¶ 66). These reasons include (1) “Howell-158 incorporates by reference Howell-596, so it expressly instructs the POSITA to combine the disclosures of the two references”; (2) adding Howell-158's insulating layer would have provided the benefits Howell-158 indicates (preventing circuits from being shorted and reducing current leakage); (3) insulating electric components was standard practice; (4) Howell-158 describes several ways to incorporate well-known insulating layers, such that one of ordinary skill in the art would have had a reasonable expectation of success in applying an insulating layer

to Howell-596's glasses; (5) metallic frames were one of only three frame material types and metallic frames have advantages over other materials, such that selecting metallic frames would have been obvious; and (6) "[a]pplying Howell-158's insulating layer represents nothing more than the simple addition of one known element (insulating layer) to another known element (temple containing electronics) to obtain predictable results (electrically insulating the electronics from the temple 'to prevent circuits from being shorted or to reduce leakage current')." *Id.* at 22–23 (citing Ex. 1002 ¶¶ 66–69; Ex. 1006 ¶ 53; Ex. 1011, 57).

Patent Owner does not directly address Petitioner's motivation to combine arguments, or argue that we should deny institution because Petitioner fails to provide an adequate basis for its proposed combination. *See* Prelim. Resp. 3–31. Although Patent Owner raises arguments against the combination of Howell-596 and Howell-158 as part of its argument in favor of discretionary denial pursuant to 325(d), we did not find those arguments persuasive for the reasons discussed above.

Based on the foregoing, Petitioner persuades us, based on the current record and for purposes of institution, that one of ordinary skill in the art would have been motivated to apply Howell-158's insulating layer between electronic components located within Howell-596's electronics module and its frame.

4. Conclusion

Based on the foregoing, Petitioner establishes a reasonable likelihood of showing that the combination of Howell-596 and Howell-158 renders claim 1 obvious. We have also reviewed Petitioner's arguments and evidence addressing independent claim 19. *See* Pet. 43–44. Based on our

review of the current record, Petitioner also establishes a reasonable likelihood of proving that the combination of Howell-596 and Howell-158 renders claim 19 obvious.

We have also reviewed Petitioner’s challenge to the remaining claims subject to this challenge, dependent claims 2–18. *See* Pet. 24–43. Because Petitioner already demonstrates that at least one claim of the ’541 patent meets the threshold for institution, we institute an *inter partes* review of all claims as challenged in the Petition, including these challenges to dependent claims 2–18. *See* 37 C.F.R. §§ 42.108(a), (c); *SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

F. Remaining Challenges

Petitioner asserts that all of the challenged claims would have been obvious based on various combinations of prior art. *See* Pet. 13, 45–78. Patent Owner does not address the merits of these challenges. *See* Prelim. Resp. 3–31.

Because Petitioner already demonstrates that at least one claim of the ’541 patent meets the threshold for institution, we institute an *inter partes* review of all claims as challenged in the Petition, including these challenges. *See* 37 C.F.R. §§ 42.108(a), (c); *SAS*, 138 S. Ct. at 1359–60.

Therefore, at this stage of the proceeding, it is not necessary for us to provide an assessment of every challenge raised by Petitioner, especially, as in this case, when Patent Owner does not address the merits of Petitioner’s arguments for any claim for any ground. Those challenges, in our view, are best left for trial after full development of the record

CONCLUSION

For the foregoing reasons, we determine that Petitioner has shown a reasonable likelihood that it would prevail in proving the unpatentability of at least one of the challenged claims. We thus institute an *inter partes* review of all of the challenged claims on all grounds asserted in the Petition.

Any findings or conclusions in this Decision are made only for the purposes of institution and are not dispositive of any issue. We have not made a final determination with respect to the patentability of any challenged claim. Our final determination will be based on the record as fully developed during trial, including any evidence or argument timely presented by the parties under our Rules.

ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of the '541 patent is instituted on all of the challenged claims and all grounds asserted in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial commences on the entry date of this Decision.

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Patent 8,905,541 B2

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