

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,
Petitioner,

v.

E-VISION SMART OPTICS, INC.,
Patent Owner.

IPR2024-01072
Patent 10,598,960 B2

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

HAMANN, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Denying Patent Owner's Motion to Strike
37 C.F.R. § 23(b)

I. INTRODUCTION

In this *inter partes* review, Luxottica of America Inc. (“Petitioner”) challenges the patentability of claims 1–26 (“the challenged claims”) of U.S. Patent No. 10,598,960 B2 (Ex. 1001, “the ’960 patent”), owned by E-Vision Smart Optics, Inc. (“Patent Owner”). We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons discussed herein, we determine that Petitioner shows by a preponderance of the evidence that the challenged claims are unpatentable.

A. Procedural History

Petitioner filed a Petition requesting *inter partes* review of the challenged claims. Paper 1 (“Pet.”). Patent Owner filed a Preliminary Response. Paper 7. With our authorization, Petitioner filed a Preliminary Reply to Patent Owner’s Preliminary Response to address further the issue of discretionary denial under 35 U.S.C. § 314(a). Paper 8. Patent Owner filed a Preliminary Sur-reply in response. Paper 10. We instituted *inter partes* review of the challenged claims on all of the grounds raised in the Petition. Paper 12 (“Dec. on Inst.”), 18.

Following institution, Patent Owner filed a Corrected Response to the Petition. Paper 24 (“PO Resp.”). Petitioner filed a Reply to Patent Owner’s Corrected Response. Paper 28 (“Pet. Reply”). Patent Owner filed a Sur-reply to Petitioner’s Reply. Paper 32 (“PO Sur-reply”).

An oral hearing was held on October 6, 2025. A transcript of the oral hearing is included in the record. Paper 40 (“Tr.”).

B. Real Parties-in-Interest

Petitioner states that “Luxottica of America Inc. and Luxottica Group S.p.A. are the real parties in interest for Petitioner,” and that “[t]he parent company of each . . . is EssilorLuxottica S.A.” Pet. 80. Patent Owner identifies itself as a real party in interest. Paper 27, 1.

C. Related Matters

The parties identify *e-Vision Optics, LLC v. Luxottica Group S.p.A.*, No. 8:23-cv-02013 (C.D. Cal.) and *e-Vision, LLC v. Lenovo Group Ltd.*, No. 8:23-cv-01860 (C.D. Cal.), as matters that may affect, or be affected by, a decision in this proceeding. Pet. 80; Paper 27, 1.

D. The Challenged Patent

The '960 patent “is directed to electronic eyewear modules and systems to be worn by a wearer, whereby an electronic eyewear system with a docking station can be easily joined with a plurality of electronic application modules.” Ex. 1001, 1:66–2:4. Figure 3, shown below, illustrates an embodiment of the '960 patent.

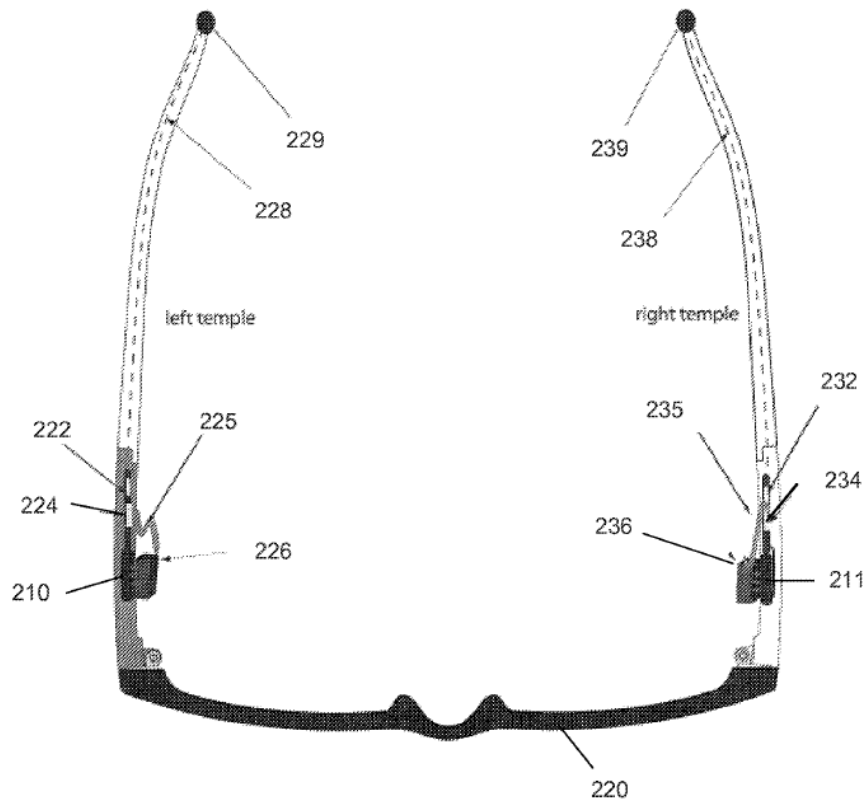


FIG. 3

Figure 3 “is a top-down view of an exemplary frame including earbuds and docked application modules connected to connection points of the frame in accordance with” the ’960 patent. *Id.* at 6:1–4. As illustrated, “an eyewear frame includ[es] lens holder 220, and left and right temple portions.” *Id.* at 12:17–19. “Each of the left and right temple portions include a docking station 210, 211, and a docked application module 226, 236, respectively, adapted to be mounted to the docking station.” *Id.* at 12:19–22. In addition, “each of the left and right temple portions also includes an electronic connector 225, 235, respectively, including a first set of preconfigured application connection points and associated conductive paths, configured to connect application connection points of the modules to the eyewear.” *Id.* at 12:22–28. As illustrated, “electronic connectors 225, 235 can be connected at one end to . . . application modules [226, 236], and at the other end to

electronics modules 224, 234 of the eyewear frame.” *Id.* at 12:41–44. In addition, “power sources 222, 232 in each of the temple portions” “may be connected to application modules 226, 236 to provide operating and/or rechargeable power.” *Id.* at 13:42–45.

“Preferably, more robust processing may be included in electronics modules of the frame, thereby reducing the size and/or data or power requirements of the docked application module.” *Id.* at 12:53–56.

“Electronics modules 224, 234, or other functional devices included in the eyewear, such as electronic lenses, cameras, displays, microphones, speakers, etc., may be referred to as functional member(s) of the eyewear.” *Id.* at 12:56–60. “The application modules 226, 236 and/or electronics modules 224, 234 may include[, *inter alia*,] one or more of still photo camera, video camera, digital audio player, display, . . . cell phone, audio system, communication system, [and] video system.” *Id.* at 12:61–13:5. Also as illustrated, “the eyewear frame may include a speaker, such as earbuds 229, 239, and one or more of the modules may be configured to provide an audio signal to the speaker(s) via audio connectors 228, 238.” *Id.* at 13:22–25.

In addition, the ’960 patent explains that “[t]he application module which is docked within the docking station can comprise a wireless chip . . . to enable wireless communication between the docked application device module (application module) and a remotely located device, such as” a smart phone or computer. *Id.* at 19:4–11. Moreover, the application module can provide “desired functionality for the wearer by way of the application device module which is docked within the docking station.” *Id.* at 19:65–20:2. For example, “an application module being that of a wireless enabled personal assistant module docked within the docking station of the

inventive eyewear (upon a verbal question raised orally by the wearer of the inventive eyewear about the weather) by way of a miniature microphone, voice recognition chip contained within the personal assistant device module and also a wireless chip or circuit also contained within the personal assistant device module could communicate to the wearer's wireless enabled computer or smart phone to address any number of questions of the wearer" (e.g., "to look up the weather on the internet wirelessly and then answer the question about the weather thru the speakers or ear buds located within the inventive eyewear"). *Id.* at 20:2–16.

E. The Challenged Claims

Petitioner challenges claims 1–26 in this proceeding. Claims 1, 11, and 22 are independent claims. Claims 11 and 22 are reproduced below:

11. Eyewear comprising:
 - an eyewear frame having a first temple and a second temple;
 - and
 - an application module mechanically coupled to the eyewear frame, the application module including a wireless chip to communicate with a wireless enabled device,
 - wherein the wireless enabled device is configured to recognize a presence of a wearer of the eyewear based at least in part on communication with the wireless chip.

Ex. 1001, 25:20–30.

22. Eyewear comprising:
 - an eyewear frame having a first temple and a second temple;
 - an application module mechanically coupled to the eyewear the application module comprising a transmitter and a wireless chip to wirelessly transmit a password from the application module from a wearer of the eyewear to a computer to access the computer.

Ex. 1001, 25:20–30.

F. Instituted Grounds of Unpatentability

We instituted trial based on the following grounds of unpatentability, which are all the grounds of unpatentability raised in the Petition:

Claim(s) Challenged	35 U.S.C. §¹	Reference(s)/Basis
1–3, 6–10	103(a)	Jannard ²
1–8, 10	103(a)	Osterhout ³
1–10	103(a)	Jannard, Osterhout
11–18, 20–24, 26	103(a)	Jannard, Rosenblatt ⁴
19	103(a)	Jannard, Rosenblatt, Gunaratne ⁵
25	103(a)	Jannard, Rosenblatt, Nielsen ⁶
11–18, 20–24, 26	103(a)	Chen, ⁷ Rosenblatt
19	103(a)	Chen, Rosenblatt, Gunaratne
25	103(a)	Chen, Rosenblatt, Nielsen

Pet. 12, 14–75. Petitioner submits in support of its arguments the Declaration of John Feland, Ph.D. (Ex. 1003). Patent Owner submits in support of its arguments the Declaration of Professor James H. Oliver, Ph.D. (Ex. 2014).

II. LEVEL OF ORDINARY SKILL IN THE ART

To determine whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art

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 ’960 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 2012/0105740 A1, published May 3, 2012 (Ex. 1005, “Jannard”).

³ US 2011/0214082 A1, published Sept. 1, 2011 (Ex. 1006, “Osterhout”).

⁴ US 2009/0006846 A1, published Jan. 1, 2009 (Ex. 1007, “Rosenblatt”).

⁵ US 2010/0238034 A1, published Sept. 23, 2010 (Ex. 1008, “Gunaratne”).

⁶ US 6,665,842 B2, issued Dec. 16, 2003 (Ex. 1009, “Nielsen”).

⁷ US 7,306,332 B2, issued Dec. 11, 2007 (Ex. 1010, “Chen”).

at the time of the invention. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). In assessing the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citing *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962–63 (Fed. Cir. 1986)). “[O]ne or more factors may predominate.” *Id.*

In our Decision on Institution, we adopted the definition Petitioner proposes for one having ordinary skill in the art at the time of the invention of the ’960 patent. Dec. on Inst. 10. Namely, we found that one of ordinary skill in the art “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 eyewear and/or consumer electronics,” and that “[w]ork experience could substitute for formal education and additional formal education could substitute for work experience.” *Id.* (citing Pet. 10–11 (citing Ex. 1003 ¶ 28)) (alteration in original).

Patent Owner proposes a different definition for one of ordinary skill in the art, but does not specifically address any deficiencies in Petitioner’s proposed definition. PO Resp. 6. Because Petitioner’s definition of the level of skill in the art is consistent with the ’960 patent and the asserted prior art, we maintain it for purposes of this Final Written Decision. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC*, 57 F.3d at 1579; *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978). Our analysis herein, however, does not turn on which of the parties’ definitions we adopt.

III. CLAIM CONSTRUCTION

Because the Petition was filed after November 13, 2018, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b), following the standard articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). 37 C.F.R. § 42.100(b); 83 Fed. Reg. 51,340, 51,340–41, 51,343 (Oct. 11, 2018). In applying such standard, claim terms generally are given their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art, at the time of the invention and in the context of the entire patent disclosure. *Phillips*, 415 F.3d at 1312–13. “In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

Here, neither party sets forth any term for claim construction. Pet. 11; PO Resp. 5–6; Pet. Reply 1–2. We determine that we do not need to construe any term to resolve the disputes between the parties. *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)) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’”). We afford the claim terms their plain and ordinary meaning.

IV. PRINCIPLES OF LAW

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed.

Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to Patent Owner except in limited circumstances not present here. *See Dynamic Drinkware*, 800 F.3d at 1378 (discussing the burden of proof in *inter partes* review).

A claim is unpatentable 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 of the invention to a person having ordinary skill in the art. *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 ordinary skill in the art; and (4) objective evidence of non-obviousness, if present.⁸ *See Graham*, 383 U.S. at 17–18. When evaluating a claim for obviousness, we also must “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

V. GROUNDS CHALLENGING CLAIMS 1–10

Petitioner argues that (i) Jannard renders claims 1–3 and 6–10 obvious, (ii) Osterhout renders claims 1–8 and 10 obvious, and (iii) the combination of Jannard and Osterhout renders claims 1–10 obvious. Pet.

⁸ Patent Owner does not present arguments or evidence of such objective evidence of non-obviousness. *See generally* PO Resp.

12–46. Patent Owner does not address Petitioner’s arguments for these grounds. *See generally* PO Resp.

We have reviewed Petitioner’s showings for these grounds. Based on the evidence and arguments of record, we find that Petitioner demonstrates by a preponderance of the evidence that the limitations of the claims challenged for each ground are taught by the art asserted for that ground and that one of ordinary skill in the art would have been motivated to combine the referenced teachings in the manner Petitioner does. Hence, we determine for each of these grounds that Petitioner shows by a preponderance of the evidence that the claims challenged would have been obvious to one of ordinary skill in the art over the cited prior art references.

VI. OBVIOUSNESS OVER JANNARD AND ROSENBLATT

Petitioner argues that the combination of Jannard and Rosenblatt renders claims 11–18, 20–24, and 26 obvious. Pet. 46–60. For the reasons that follow, we determine that Petitioner shows by a preponderance of the evidence that the combination of Jannard and Rosenblatt renders these claims obvious.

A. Summary of Jannard

Jannard relates to “devices that humans can wear on their heads and which include electronics such as, for example, speakers, microphones, processors, transmitters, receivers, video display technology, and/or interface electronics for interacting with a wireless network and/or providing content to a user.” Ex. 1005 ¶ 3. More specifically, Jannard teaches “a dual speaker eyewear system,” which “comprises an eyeglass, having a right earstem and a left earstem,” “[a] first speaker . . . supported by the right earstem, . . . a second speaker . . . supported by the left earstem,” and “[a]n electronics module . . . supported by the eyeglass and in electrical

communication with each of [a] first and second speakers.” *Id.* ¶ 10. Jannard teaches that “[t]he module may include electronics for processing audio and/or video input and/or output signals.” *Id.* at code (57).

B. Summary of Rosenblatt

Rosenblatt “is directed to a system for remotely directing a host device to perform an operation using a key.” Ex. 1007, code (57). “The key may include a communications circuitry for transmitting data, for example a key identifier or an instruction to perform an operation, within a personal area network created by the communications circuitry.” *Id.* Rosenblatt explains that “[w]hen a host device is within [a] personal area network, the key may transmit data received by a transceiver on the host device,” and “[i]n response to receiving the data, the host device may perform an operation (e.g., an authentication operation).” *Id.* Rosenblatt further discloses that “the key may transmit data identifying an operation for the host device to perform,” and “the host device may store in memory key identification information and an associated operation which may be retrieved when the key is brought in proximity of the host device.” *Id.*

C. Challenged Claim 11

Patent Owner does not dispute that the combination of Jannard and Rosenblatt teaches claim 11’s limitations. Rather, Patent Owner argues that Petitioner does not show that one of ordinary skill in the art would have been motivated to combine Jannard and Rosenblatt’s teachings with a reasonable expectation of success. PO Resp. 17–23; PO Sur-reply 1–11. In particular, Patent Owner argues that (i) Petitioner’s arguments for motivation to combine and reasonable expectation of success are conclusory and unsupported, and (ii) one of ordinary skill in the art would not have been motivated to combine Jannard and Rosenblatt’s teachings because such a

combination would be inoperable. We address the parties' arguments below.

1. Combining Jannard and Rosenblatt

Petitioner argues that the combination of Jannard and Rosenblatt teaches claim 11's limitations, and that one of ordinary skill in the art would have been motivated to combine these teachings to render claim 11 obvious. Pet. 46–49; Pet. Reply 4–10.

First, Petitioner argues that Jannard teaches claim 11's eyewear limitations, including “eyewear comprising an eyewear frame and an application module mechanically coupled to the eyewear frame,” where the “application module includes a wireless chip and a transmitter.” Pet. 46; *see also id.* at 14–19, 49 (mapping art). And Petitioner argues that Rosenblatt teaches the remaining limitation of having another device recognize a presence of a wearer based at least partly on communication with the wireless chip, as in claim 11. *Id.* at 46–47 (citing Ex. 1007 ¶¶ 58–61, 95); *see also id.* at 49–51 (mapping art).

We agree with Petitioner and find, based on the evidence and arguments of record, that Petitioner demonstrates by a preponderance of the evidence that claim 11's limitations are taught by the combination of Jannard and Rosenblatt. *See* Pet. 14–19, 49–51.

Second, Petitioner argues that one of ordinary skill in the art would have been motivated to combine Jannard and Rosenblatt's teachings as Petitioner does. Pet. 46–49. We agree. In particular, we agree with Petitioner that Rosenblatt teaches that its “key^[9] or its functionality may be

⁹ Rosenblatt's embodiment of a key that Petitioner relies upon comprises communications circuitry. Pet. 49–50; Pet. Reply 5 (citing Ex. 1007 ¶ 43).

incorporated in an electronic device, for example in a cellular telephone, a mobile communications device, a pocket-sized personal computer (e.g., an iPAQ or a Palm Pilot) a personal media device (e.g., an iPod), a camera, a video recorder, a computer (e.g., a laptop computer), a key (e.g., car keys), a remote controller, or any other suitable electronic device.” Pet. 47; Ex. 1007 ¶ 7. In other words, Rosenblatt teaches that a wide variety of electronic devices are suitable for incorporating Rosenblatt’s key or its functionality. Ex. 1007 ¶ 7.

We also find persuasive Petitioner’s argument and Dr. Feland’s testimony that Jannard’s “application module for eyewear is one such suitable device in which to incorporate Rosenblatt’s key or its functionality.” Pet. 47 (citing Ex. 1003 ¶ 156). This argument and testimony are consistent with Rosenblatt’s teaching of a wide variety of suitable devices. *Compare id. and Ex. 1003 ¶ 156, with Ex. 1007 ¶ 7*. Moreover, as Petitioner argues, Rosenblatt teaches that its “key . . . may include a clip or other connecting mechanism for attaching [the] key . . . to an object that the user typically carries,” such as “a user’s wallet, cellular telephone, personal media device (e.g., an iPod), *wired headset, wireless headset*, watch, bag, belt, article of clothing, or any other suitable object.” Ex. 1007 ¶ 43 (emphasis added). We find persuasive Dr. Feland’s testimony that Jannard’s eyewear system is a carried object like a wired or wireless headset in the context of Rosenblatt’s teaching. *See Ex. 1003 ¶ 156; Ex. 1007 ¶ 43*. We also find persuasive Dr. Feland’s testimony that incorporating Rosenblatt’s key or its functionality into Jannard’s application module “desirably ‘provid[es] functional fashion having device operation capabilities,’ which is consistent with Rosenblatt recommendations.” Ex. 1003 ¶ 156 (quoting Ex. 1007 ¶ 58) (alteration in original); Ex. 1007 ¶ 58 (“[T]he key may be integrated with

clothing or an accessory item, providing functional fashion having device operation capabilities.”).

We also find persuasive Petitioner’s argument and Dr. Feland’s testimony that one of ordinary skill in the art would have been motivated to incorporate Rosenblatt’s key or its functionality in Jannard’s application module to achieve the benefits disclosed in Rosenblatt, including controlling host devices responsive to wireless communication with Jannard’s application module. Pet. 47; Ex. 1003 ¶ 156. We view this as using a known technique (Rosenblatt’s teaching of incorporating a key or its functionality into an electronic device) to improve a similar device (Jannard’s eyewear and application module with wireless communication for functions) in the same way. *See KSR*, 550 U.S. at 417 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”); *see also* Pet. 48; Ex. 1003 ¶ 157.

We find unavailing Patent Owner’s argument that “Petitioner’s arguments for alleged motivation to combine are conclusory and unsupported.” PO Resp. 22. As we discuss above, Petitioner’s detailed arguments are supported by explicit teachings from Rosenblatt to incorporate Rosenblatt’s keys and their functionalities into a wide variety of suitable electronic devices, including headsets.

In addition, we agree with Petitioner and find that one of ordinary skill in the art would have had a reasonable expectation of success in making the combination. *See* Pet. 48–49; Pet. Reply 9–10. In particular, we agree with Petitioner and find that one of ordinary skill in the art would have reasonably expected success in incorporating Rosenblatt’s key or its

functionality in Jannard’s application module in view of Rosenblatt’s explicit teaching that its key or its functionality may be incorporated into a wide variety of suitable electronic devices, and may be attached to a carried object, such as a wired or wireless headset. Ex. 1007 ¶¶ 7, 43. We credit Dr. Feland’s testimony in this regard, as we find it consistent with Rosenblatt’s teachings. *Compare* Ex. 1003 ¶ 158, *with* Ex. 1007 ¶¶ 7, 43, 58.

We also agree with Petitioner that Jannard¹⁰ too supports that one of ordinary skill in the art would have had a reasonable expectation of success in making the combination. Pet. Reply 9–10. In particular, Jannard teaches a detachable module, which already includes components enabling wireless communication. Ex. 1005 ¶¶ 79, 86. Jannard teaches that the detachable module is connectable to an eyeglass frame. *Id.* ¶ 79. Thus, as Petitioner argues, Jannard shows that having a module for wireless communication mounted to eyewear was known, and thus incorporating Rosenblatt’s key or its functionality had a reasonable expectation of success. Pet. Reply 9–10.

We find unavailing Patent Owner’s argument that Petitioner does not address whether the key Petitioner adopts would be suitable for embedding in eyewear. PO Resp. 22. As we discuss above, Petitioner argues that Rosenblatt’s communications circuitry provides the key functionality, and that Rosenblatt teaches that a wide variety of electronic devices are suitable, such as headsets for such technology. Moreover, as we discuss above,

¹⁰ Because we find Petitioner’s reliance on Jannard’s teachings sufficient to support this argument for reasonable expectation of success, we do not address Exhibit 1025 and the related arguments, which Petitioner characterizes “[a]s another example.” Pet. Reply 9–10.

Petitioner provides that Jannard already teaches having a module for wireless communication mounted to eyewear, further supporting that Jannard's eyewear and its application module are suitable for Rosenblatt's communications circuitry or its functionality.

In sum, we find that Petitioner shows that one of ordinary skill in the art would have been motivated to combine Jannard and Rosenblatt's teachings with a reasonable expectation of success.

2. Inoperable Combination Arguments

Patent Owner argues that one of ordinary skill in the art "would not have been motivated to combine the eyewear teachings of Jannard[] with Rosenblatt's 'key'^[11] . . . to achieve eyewear 'wherein the wireless enabled device is configured to recognize a presence of a wearer of the eyewear based at least in part on communication with the wireless chip,' as required by claim 11." PO Resp. 18. Rather, "[t]he excessive size and power requirements needed to implement Rosenblatt's key within the confines of the eyewear of Jannard[] would render the combination inoperable," according to Patent Owner. *Id.* (citing Ex. 2014 ¶47); PO Sur-reply 1, 4. In making these arguments, Patent Owner argues that Rosenblatt's key must be a certain type with certain components, and that this certain key type would be inoperable for eyewear.

More specifically, Patent Owner argues that one of ordinary skill in the art "would have understood that Rosenblatt describes several distinct types of 'keys' when disclosing that a key can be 'incorporated in an electronic device, for example in a cellular telephone, a mobile

¹¹ Petitioner identifies Rosenblatt's (i) key as teaching the claimed application module, which includes a wireless chip; and (ii) host device as teaching the claimed wireless enabled device. Pet. 49–50.

communications device, a pocket-sized personal computer (e.g., an iPAQ or a Palm Pilot) a personal media device (e.g., an iPod), a camera, a video recorder, a computer (e.g., a laptop computer), a key (e.g., car keys), a remote controller, or any other suitable electronic device.” PO Resp. 19 (quoting Ex. 1007 ¶ 7). Patent Owner argues that one of ordinary skill in the art “would have known that garment clips and car keys, for instance, cannot host the same electrical components as laptop computers and are, accordingly, much more limited in terms of size, functionality, and power-requirements.” *Id.* (citing Ex. 2014 ¶¶ 48–49).

We do not disagree with Patent Owner that Rosenblatt teaches multiple embodiments of a key, and that some embodiments may have different size, functionality, and power requirements. *See generally* Ex. 1007. But these arguments—and cabining embodiments into distinct types and categories—are inapposite. They are directed to generalities, rather than being directed to the specific teachings and the key embodiment that Petitioner adopts.

In addition, Patent Owner argues that Rosenblatt describes an embodiment where the key includes “a power supply, a user interface and a display,” and that such a key may “include a processor distinct from communications circuitry.” PO Resp. 19 (citing Ex. 1007 ¶ 41). According to Patent Owner, this disclosure would have indicated to one of ordinary skill in the art that such a key would be embodied in a device the size of a small computer or a cell phone. *Id.* (citing Ex. 2014 ¶¶ 49–52). But Petitioner does not adopt this embodiment—for example, Petitioner does not point to a user interface and a display, nor having a processor distinct from communications circuitry. *See* Pet. 49–51; Pet. Reply 5–8. Thus, this argument is unavailing.

Similarly, we find unavailing Patent Owner’s argument that Rosenblatt teaches an embodiment where key memory can “host a database of the host devices to which key 200 was paired” and “store instructions that key 200 can transmit to cause each host device to perform one or more operations,” which would have indicated to one of ordinary skill in the art that the key incorporates operating and program software to host such databases, functionality that could not have been done in a car key or a garment clip. PO Resp. 19–20 (citing Ex. 1007 ¶ 38; Ex. 2014 ¶ 53). Even if this argument is correct, we find it unavailing as Petitioner does not rely on Rosenblatt’s key having such a database. *See* Pet. 49–51; Pet. Reply 5–8.

And, we find unavailing Patent Owner’s conclusion that based on the teachings of these two above embodiments of a key “that wireless communication between a ‘key’ and a wireless-enabled device . . . would have required . . . that the key be embodied in computers . . . or cell phones with similarly complex functionality.” PO Resp. 20. Simply put, Patent Owner provides no principled basis to support extending its arguments directed to two specific embodiments to cover all key embodiments that communicate with a wireless-enabled device. Nor does Patent Owner cite expert testimony or other support for this argument, which we find unavailing. *Id.*; *In re Geisler*, 116 F.3d 1465, 1471 (Fed. Cir. 1997) (explaining that attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value).

We thus also find unavailing Patent Owner’s argument that “Rosenblatt’s ‘key’ would therefore have comprised integrated circuits including processor, memory, storage, and wireless communications chips” because this argument is premised on Patent Owner’s argument that wireless

communication between any key and a device would have required the key be embodied in a computer, which again, we find unavailing. PO Resp. 20.

We now turn to Patent Owner's arguments directed to Rosenblatt's teachings and key embodiment adopted by Petitioner. In particular, Patent Owner points to Petitioner's "reli[ance] on Rosenblatt's disclosure of a key creating its own personal area network." *Id.* (citing Pet. 50; Ex. 1003 ¶ 163; Ex. 1007 ¶¶ 10, 58). Patent Owner argues that one of ordinary skill in the art "would have understood that, to create its own personal area network based on Rosenblatt's teachings, the 'key' would need to be a computer comprising processor, memory, storage and wireless networking components." *Id.* (citing Ex. 2014 ¶ 49). Patent Owner relies on Dr. Oliver's testimony for this argument.

Notably, Dr. Oliver testifies that "[a]lthough Rosenblatt includes a 'key fob' and a 'clip' alongside 'mobile telephone' and 'personal media device' as devices 'harbor[ing] a key that creates personal area networks,' it is my opinion that [one of ordinary skill in the art] would have recognized that car key fobs and garment clips were not capable of housing and powering wireless transceivers capable of creating personal area networks, in contrast with cell phones and personal media devices that may contain wireless transceivers with that capability." Ex. 2014 ¶ 49. Dr. Oliver provides no evidentiary support for this opinion. *Id.* Nor does Dr. Oliver provide a detailed justification for contradicting Rosenblatt's explicit teachings (e.g., "F[igure] 5 shows person 510, *key fob* 520, *clip* 530, mobile telephone 540, and personal media device 550, each of which may harbor a key that creates personal area networks 512, 522, 532, 542 and 552, respectively."). *Id.*; Ex. 1007 ¶ 57 (emphasis added), Fig. 5 (showing the personal area networks around each); Pet. 7. Accordingly, we give little to

no weight to this testimony. *See In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (“[T]he Board is entitled to weigh the declarations and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations.”); 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”).

Nor does Dr. Oliver’s cited testimony support Patent Owner’s argument that a key would need to comprise a “processor, memory, storage and wireless networking components” to create its own personal area network. PO Resp. 20; Ex. 2014 ¶ 49. Rather, this testimony—which also lacks factual corroboration—is premised on the key being part of a computer. Ex. 2014 ¶ 49. We thus also give little to no weight to this testimony. And accordingly, we find unavailing Patent Owner’s arguments and Dr. Oliver’s testimony regarding dimensions, power requirements, and other design considerations as they also are premised incorrectly on these components and the key being part of a computer. PO Resp. 20–22 (citing Ex. 2014 ¶¶ 50–56).

Rather, we agree with Petitioner and find that Rosenblatt teaches that a key having communications circuitry can be used “to create a relatively short-range personal area network” using “any suitable communications protocol . . . including . . . Bluetooth, . . . infra-red, and other relatively localized wireless communication protocols.” Ex. 1007 ¶¶ 6, 34; Pet. 49; Pet. Reply 6. We also agree with Petitioner and find that Rosenblatt teaches that “[b]ecause key 200 may require so few elements, and these elements may be very small in size, key 200 may be a very small device” (e.g., key fob or a coin-sized object). Ex. 1007 ¶¶ 7, 34, 43 (“Key 200 may be any suitable device that includes at least communications circuitry 202 and

memory 204.”); Pet. Reply 5–7; *see also* Pet. 7–8 (citing Ex. 1007 ¶ 57, Fig. 5 (showing that, *inter alia*, a fob and a clip could have a key that creates a personal area network)). Moreover, as we discuss above, Dr. Oliver acknowledges that Rosenblatt states that a device as small as a key fob or a clip can harbor a key that creates a personal area network. Ex. 2014 (citing Ex. 1007 ¶ 57). Thus, we disagree with Patent Owner that incorporating Rosenblatt’s key, as Petitioner does, with Jannard’s eyewear would be inoperable.

In addition, we find unavailing Patent Owner’s arguments as they relate to purported advanced wireless transceiver chips. PO Sur-reply 7 (citing Ex. 2014 ¶ 49). In particular, as we discuss above, Rosenblatt teaches that devices such as a fob and a clip can create a personal area network, which is contrary to Patent Owner’s argument that only large-device keys (e.g., a computer) using advanced wireless transceiver chips can create a personal area network. *Id.* Moreover, as Petitioner argues, Rosenblatt teaches that Bluetooth is a suitable communications protocol to create a personal area network, and Dr. Oliver’s testimony identifies WiFi—not Bluetooth—as requiring an advanced wireless transceiver chip. *Compare* Ex. 1007 ¶ 6, 34, *with* Ex. 2014 ¶ 49; Pet. 49; Pet. Reply 6. And, as Petitioner argues, Jannard’s application module already includes a Bluetooth transceiver for wireless communications, which is contrary to Patent Owner’s argument about needing advanced wireless transceiver chips. Pet. 19 (citing Ex. 1007 ¶ 86), 49.

In sum, we find unavailing Patent Owner’s arguments that combining Jannard and Rosenblatt’s teachings in the manner Petitioner does would render an inoperable combination.

3. *Summary*

In sum, we determine that Petitioner shows by a preponderance of evidence that claim 11 would have been obvious to one of ordinary skill in the art in view of the combination of Jannard and Rosenblatt.

D. Challenged Claims 12–18, 20–23, and 26

Petitioner argues that the combination of Jannard and Rosenblatt teaches claims 12–18, 20–23, and 26. Pet. 51–60. Claims 12–18, 20, and 21 depend directly or indirectly from independent claim 11, and claims 23 and 26 depend from independent claim 22. Patent Owner does not provide separate arguments directed to any of these claims, but rather relies on its arguments made as for independent claim 11. PO Resp. 28–37; PO Sur-reply 24. As we discuss above, we find these arguments unavailing. *See supra* Section VI.C.

We have reviewed Petitioner’s showings for claims 12–18, 20–23, and 26. Based on the evidence and arguments of record, we find that Petitioner demonstrates by a preponderance of the evidence that the limitations of these claims are taught by the combination of Jannard and Rosenblatt, and that one of ordinary skill in the art would have been motivated to combine these references in the manner Petitioner does.

E. Challenged Claim 24

Claim 24 recites “[t]he eyewear of claim 22, wherein the wireless enabled device^[12] is configured to adjust a brightness and/or a volume of the

¹² The parties treat a “wireless enabled device” as a “computer,” which is consistent with independent claim 22 and provides antecedent basis. Pet. 59 (“As best as Petitioner understands, P[atent Owner] intended to recite ‘computer’ in place of ‘wireless enabled device.’”), 62 (same for claim 25); PO Resp. 36 n.1.

computer.” Ex. 1001, 26:34–36. We agree with Petitioner and find that the combination of Jannard and Rosenblatt teaches claim 24. Pet. 59; Pet. Reply 20–21.

In particular, we agree with Petitioner and find that Rosenblatt teaches a host device being a computer, which may include a display. Ex. 1007 ¶¶ 52–53; Pet. 59. We also find persuasive Dr. Feland’s testimony that a computer’s display “varies its brightness to visually present information to a user.” Ex. 1003 ¶ 208 (citing Ex. 1011,¹³ 5).

We find unavailing Patent Owner’s argument that “Rosenblatt merely indicates that a computer ‘may include a display’ . . . , without discussion of brightness . . . control in a computer.” PO Resp. 37 (citing Ex. 1007 ¶¶ 51–53); PO Sur-reply 21. Rather, we credit Dr. Feland’s testimony that a computer’s display “varies its brightness to visually present information to a user,” and hence we find that it is configured to do so. Ex. 1003 ¶ 208; *see also* Tr. 162:11–12 (Patent Owner stating that it “is not disputing in this proceeding that most computers have a brightness adjustment of some kind”).

VII. OBVIOUSNESS OVER CHEN AND ROSENBLATT

Petitioner argues that the combination of Chen and Rosenblatt renders claims 11–18, 20–24, and 26 obvious. Pet. 63–73. For the reasons that follow, we determine that Petitioner shows by a preponderance of the evidence that the combination of Chen and Rosenblatt renders these claims obvious.

¹³ Excerpts from Microsoft Computer Dictionary (5th ed., 2002).

A. Summary of Chen

Chen relates to (i) “eyewear with temple assemblies that contain storage recesses and detachable temples, temple tips, or other temple attachments”; (ii) “eyewear with temple components that provide additional functions”; and (iii) “prior works of art that provide thermal regulation of the head.” Ex. 1010, 1:15–22.

B. Challenged Claim 11

Patent Owner argues that Petitioner does not show that one of ordinary skill in the art would have been motivated to combine Chen and Rosenblatt’s teachings for the same reasons as Patent Owner argues for the Jannard and Rosenblatt ground. PO Resp. 23–24. As we discuss above, we find these arguments unavailing. *See supra* Section VI.C.

In addition, Patent Owner argues that Chen is non-analogous art and that Chen does not teach the claimed application module. We address each in turn.

1. Purported Non-analogous Art

Patent Owner argues that there was no motivation to combine Chen and Rosenblatt’s teachings to achieve claim 11 because of the difference in subject matter between Chen and the ’960 patent. PO Resp. 24–27. Put differently, Patent Owner argues that Chen is non-analogous art. *Id.*; PO Sur-reply 12–15. For the reasons below, we agree with Petitioner that Chen is analogous art to the ’960 patent.

A reference qualifies as prior art for a determination under § 103 when it is analogous to the claimed invention. *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). “Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the

inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) (citing *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986)). Below we focus on the first of these tests.

“We determine the field of endeavor ‘by reference to explanations of the invention’s subject matter in the patent application, including the embodiments, function, and structure of the claimed invention.’” *Netflix, Inc. v. DIVX, LLC*, 80 F.4th 1352, 1359 (Fed. Cir. 2023) (quoting *In re Bigio*, 381 F.3d at 1325)).

We agree with Petitioner and find that the ’960 patent is in the field of eyewear and consumer electronics. Pet. 13. The ’960 patent discloses that its “subject matter is directed to electronic eyewear modules and systems to be worn by a wearer, whereby an electronic eyewear system with a docking station can be easily joined with a plurality of electronic application modules.” Ex. 1001, 1:66–2:4; Pet. 9. We also agree with Petitioner that the ’960 patent acknowledges “a need for a single pair of fashionable eyewear capable of . . . utilizing one or more of a multitude of different application devices while the wearer is wearing the eyewear.” Ex. 1001, 1:59–62; Pet. Reply 13. Patent Owner argues that “[t]he ’960 [p]atent pertains to the field of wearable embedded electronics, namely ‘commercial eyewear comprising electronics.’” PO Resp. 24 (citing Ex. 1001, 1:24–25). We view the parties’ descriptions of the field of the ’960 patent to be substantively the same.

In addition, we agree with Petitioner and find that Chen also is in the field of eyewear and consumer electronics. Pet. 13 (citing Ex. 1003 ¶ 59). Chen is titled “Eyewear Temple Assembly,” and its field of invention includes that an aspect of its invention “relate[s] to eyewear with temple components that provide additional functions.” Ex. 1010, code (54),

1:18–20; Pet. Reply 13. Moreover, Chen teaches that its eyewear “provides the flexibility to add functionalities . . . in an integrated and concealed manner.” Ex. 1010, 2:43–46; Pet. 13 (citing Ex. 1003 ¶ 59). According to Chen, its “temple assembly invention is comprised of a temple, removable cartridge, cartridge compartment that can accommodate and conceal one or multiple said cartridge(s), and temple tip.” Ex. 1010, 2:55–59. Chen also teaches that “[t]he removable cartridge comprises . . . materials and components, *including electronic* or non-electronic or any combination thereof, which will provide functions such as thermal regulation.” *Id.* at 2:60–63 (emphasis added). And Chen teaches that its “invention allows the addition of diverse functions to eyewear through the installment of cartridge(s) comprised of different, unique capabilities.” *Id.* at 4:22–24. These disclosures from Chen directly support our finding that Chen is in the field of eyewear and consumer electronics.

Patent Owner argues that “Chen [is] directed to eyewear containing thermally regulating removable cartridges.” PO Resp. 24 (citing Ex. 2014 ¶ 62); *see also* PO Sur-reply 13 (arguing that “each section of Chen would guide [one of ordinary skill in the art] to the field of thermal regulation”). Patent Owner argues that Chen “‘present[s] an eyewear temple assembly that provides the flexibility to add thermal regulation to eyewear in an integrated and concealed manner’ by placing in the eyewear temples ‘exchangeable cartridges, which can provide thermal regulation of a user’s head.’” PO Resp. 25 (citing Ex. 1010, 2:49–52, code (57)) (alteration in original). In addition, Patent Owner argues that “Chen’s description of its ‘field of the invention’ further states that ‘the present invention relates to prior works of art that provide thermal regulation of the head.’” *Id.* (citing Ex. 1010, 1:20–22). And Patent Owner argues that one of ordinary skill in

the art “would have understood Chen’s field of endeavor to be thermally regulated clothing (i.e., cooling or heating garments), such as cooling hats and headbands, which typically use materials with heating or cooling attributes (such as phase-changing materials . . .) rather than electronics to achieve the desired effect.” *Id.* (citing Ex. 2014 ¶ 62).

We find that Patent Owner incorrectly limits Chen’s field to thermal regulation. Chen’s teachings clearly relate to eyewear with removable cartridges. *E.g.*, Ex. 1010, code (54), 1:18–20, 2:55–59, Fig. 1. And Chen teaches that the removable cartridges can comprise electronic components. *Id.* at 2:60–63. Chen also teaches that its “invention allows the addition of diverse functions to eyewear through the installment of cartridge(s) comprised of different, unique capabilities.” *Id.* at 4:22–24. That much of Chen’s discussion relates to thermal regulation does not negate Chen’s explicit broader teachings. Moreover, “[t]he Supreme Court’s decision in [*KSR*] directs us to construe the scope of analogous art broadly, stating that ‘*familiar items may have obvious uses beyond their primary purposes*, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle.’” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (quoting *KSR*, 550 U.S. at 402).

Accordingly, we find Patent Owner’s arguments unavailing.

In sum, we find that Chen and the ’960 patent are in the same field of endeavor, and Chen thus is analogous art.

2. Application Module

Patent Owner argues that the combination of Chen and Rosenblatt fails to disclose “an application module mechanically coupled to the eyewear frame, the application module including a wireless chip to communicate with a wireless enabled device,” as recited in claim 11. PO

Resp. 27; PO Sur-reply 15–16. In particular, Patent Owner argues that “Chen does not disclose or suggest that the cartridge includes—or even could include—‘a wireless chip to communicate with a wireless enabled device.’” *Id.* (citing Ex. 2014 ¶ 64).

Petitioner, however, also argues that Rosenblatt teaches this limitation. *See* Pet. 49–50, 69–70; Pet. Reply 16. In particular, Petitioner argues that “Rosenblatt discloses a system that includes a key (application module) with a wireless chip for remotely causing a host device (wireless enabled device) to perform an operation.” Pet. 69–70. For example, Petitioner argues that Rosenblatt discloses a key that includes communications circuitry and creates a relatively short-range personal area network, using a protocol such as Bluetooth. *Id.* at 49 (citing Ex. 1007 ¶ 6). Petitioner also argues that Rosenblatt teaches that its communications circuitry may be integrated within the packaging of a key 110 (e.g., integrated into a printed circuit board), which confirms the key may include a wireless chip. *Id.* at 50 (citing Ex. 1007 ¶ 30; Ex. 1003 ¶ 163).

We find these arguments persuasive and find that Rosenblatt teaches “an application module mechanically coupled to the eyewear frame, the application module including a wireless chip to communicate with a wireless enabled device.” Patent Owner does not address these teachings from Rosenblatt as to this claim limitation, and thus fails to show that the combination does not teach the limitation. *See In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references”).

In addition, we find unavailing Patent Owner’s argument that “Chen’s lack of disclosure of any specific design for electronic modules in eyewear

would have left [one of ordinary skill in the art] without any guidance as to how to configure Chen’s eyewear in combination with Rosenblatt’s wireless communication techniques,” and thus, one of ordinary skill in the art “would therefore have lacked any reasonable chance of succeeding in that combination.” PO Resp. 26–27 (citing Ex. 2014 ¶ 63). Rather, we find persuasive Dr. Feland’s testimony that one of ordinary skill in the art “would have reasonably expected success in incorporating Rosenblatt’s key or its components or functionality in the application module in Chen based on Chen’s disclosure that ‘[t]he removable cartridge comprises of materials and components, including electronic or non-electronic or any combination thereof,’ and Rosenblatt’s recommendation to incorporate the key or its components or functionality ‘. . . in a cellular telephone, a mobile communications device, a pocket-sized personal computer (e.g., an iPAQ or a Palm Pilot) a personal media device (e.g., an iPod) . . .’ or to attach the key to a wired or wireless headset.” Ex. 1003 ¶ 227 (citing Ex. 1010, 2:60–63; Ex. 1007 ¶¶ 7, 43) (alterations in original); Pet. Reply 14–15.

3. *Summary*

In sum, we agree with Petitioner and find, based on the evidence and arguments of record, that Petitioner demonstrates by a preponderance of the evidence that claim 11’s limitations are taught by the combination of Chen and Rosenblatt, and that one of ordinary skill in the art would have been motivated to combine these references in the manner Petitioner does. *See* Pet. 63–70.

C. *Challenged Claims 12–18, 20–23, and 26*

Petitioner argues that the combination of Chen and Rosenblatt teaches claims 12–18, 20–23, and 26. Pet. 70–73. Claims 12–18, 20, and 21 depend directly or indirectly from independent claim 11, and claims 23 and 26

depend from independent claim 22. Patent Owner does not provide separate arguments directed to any of these claims, but rather relies on its arguments made as for independent claim 11. PO Resp. 28–37; PO Sur-reply 24. As we discuss above, we find these arguments unavailing. *See supra* Section VI.C.

We have reviewed Petitioner’s showings for claims 12–18, 20–23, and 26. Based on the evidence and arguments of record, we find that Petitioner demonstrates by a preponderance of the evidence that the limitations of these claims are taught by the combination of Chen and Rosenblatt, and that one of ordinary skill in the art would have been motivated to combine these references in the manner Petitioner does.

D. Challenged Claim 24

The parties set forward the same arguments for claim 24 for this ground as they do for the Jannard and Rosenblatt ground. Pet. 59; Pet. Reply 20–21. Accordingly, for the same reasons, we agree with Petitioner and find that the combination of Chen and Rosenblatt teaches claim 24. *See supra* Section VI.E.

VIII. GROUNDS CHALLENGING CLAIM 19

Petitioner argues that the combinations of (i) Jannard, Rosenblatt, and Gunaratne and (ii) Chen, Rosenblatt, and Gunaratne render claim 19 obvious. Pet. 60–61, 73–74; Pet. Reply 17–20. Patent Owner disputes this. PO Resp. 37–42; PO Sur-reply 16–20. The parties largely address these grounds together, and thus we elect to do so also.

A. Summary of Gunaratne

Gunaratne “relates to a system for detecting drowsiness in a machine operator, and in particular, to a system having a facial action database with a plurality of stored high priority sleepiness facial actions that are used for

rapidly detecting drowsiness in a machine operator.” Ex. 1008 ¶ 1. More specifically, Gunaratne teaches “captur[ing] a plurality of facial images of the individual and compar[ing] one or more facial parameters from the images to a plurality of stored high priority sleepiness facial actions that are in a prioritized action database.” *Id.* at code (57). “Based on the comparison, a current level of sleepiness can be determined for the individual and an actuator can be actuated in order to alert the individual and possibly any other individuals that may be in the vicinity.” *Id.*

B. Challenged Claim 19

Claim 16 recites “[t]he eyewear of claim 11, wherein the wireless enabled device is located in an automobile,” and claim 19 recites “[t]he eyewear of claim 16, wherein the wireless enabled device is configured to control a functionality of the automobile to awake the wearer should the wearer fall asleep.” Ex. 1001, 26:5–6, 26:15–18. Above we find that the combinations of Jannard and Rosenblatt, and Chen and Rosenblatt teach claims 11 and 16. *See supra* Sections VI.C–D, VII.B–C.

We agree with Petitioner and find that the combinations for claim 19 each teach “wherein the wireless enabled device is configured to control a functionality of the automobile to awake the wearer should the wearer fall asleep.” Pet. 60–61, 73–74; Pet. Reply 17–20. In particular, we agree with Petitioner and find that Rosenblatt teaches that its host device (wireless enabled device) can be an automobile. Ex. 1007 ¶ 61. In addition, we agree with Petitioner and find that Gunaratne teaches a system that “can rapidly detect the drowsiness of an individual operating a machine,” such as a motor vehicle. Ex. 1008 ¶ 18. Gunaratne also teaches having an actuator “alert the individual that he or she is becoming drowsy and may fall asleep unless

proper action is taken.” *Id.* ¶ 26. The actuator “can be an audio actuator such as . . . a radio in a motor vehicle.” *Id.*

In addition, we agree with Petitioner and find that a common issue with automobiles known to one of ordinary skill in the art was drowsiness while driving. Ex. 1008 ¶ 2; Ex. 1003 ¶ 214. We also agree that Gunaratne teaches that its drowsiness-alert functionality “has utility as a safety feature” for a driver of an automobile. Ex. 1008 ¶¶ 17–18. Thus, we agree with Petitioner and find that one of ordinary skill in the art would have been motivated to add Gunaratne’s drowsiness-alert functionality to the automobile in the combination of Jannard and Rosenblatt, and Chen and Rosenblatt in light of these explicit teachings to increase safety. Ex. 1003 ¶ 216; *see also Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1379 (Fed. Cir. 2023) (“‘[U]niversal’ motivations known in a particular field to improve technology provide ‘a motivation to combine prior art references even absent any hint of suggestion in the references themselves.’”).

We find unavailing Patent Owner’s argument that “Gunaratne is directed to subject matter that is very different from Jannard[]’s (eyewear with embedded audio system), Chen’s (eyewear with heating/cooling cartridges) or Rosenblatt’s (wireless communications between various electronic keys and a host device).” PO Resp. 38. Rather, when more than one prior art reference is used as the basis of an obviousness rejection, it is not required that the references be analogous art to each other. *Sanofi-Aventis Deutschland GmbH v. Mylan Pharms. Inc.*, 66 F.4th 1373, 1380 (Fed. Cir. 2023). Instead, the references must be analogous to the claimed invention. *In re Bigio*, 381 F.3d at 1325.

We also find unavailing Patent Owner’s argument that “Gunaratne is not reasonably pertinent to the problem faced by the inventor.”

PO Sur-reply 17. In particular, Patent Owner argues that “[t]he ’960 patent sought to address problems of using a wireless enabled device to control things external to the device.” *Id.* (citing Ex. 1001, 19:32–63). Patent Owner argues that “[m]erely because one such thing was an automobile does not mean that Gunaratne would have been at the inventor’s logical command.” *Id.*

Rather, we agree with Petitioner and find that the ’960 patent (and claim 19) addresses the problem of awaking a driver who has fallen asleep, disclosing that “the remote wireless enabled devices located within the automobile can . . . awake wearer should wearer fall asleep.” Pet. Reply 18 (citing Ex. 1001, 19:44–50) (alteration in original); Ex. 1001, 19:44–50 (“In another embodiment of the invention the wearer of the wireless enabled eyewear enters his or her automobile and the remote wireless enabled devices located within the automobile can (by way of example only) do one or more of the following: adjust the seat, radio, temperature, limit maximum speed, awake wearer should wearer fall asleep.”). Thus, we find that Gunaratne is reasonably pertinent to a particular problem (automobile driver drowsiness) with which the inventor was involved. Accordingly, we find that Gunaratne is analogous art.

We also find unavailing Patent Owner’s argument that “[n]ot only does Gunaratne fail to describe eyewear, it also relies on different technology inapposite of eyewear: capturing an image of a user’s face,” which “precludes Gunaratne from being in a field directed to eyewear and/or wearables, because logically, the image of a person’s face captured in Gunaratne F[igure] 2 could not be captured from a wearable resting on the same person’s face.” PO Sur-reply 17 (citing Ex. 1008 ¶¶ 31–32, Figs. 1–2); *see also id.* at 19 (making the similar argument that “implementation of

Rosenblatt’s ‘keys’ in an automobile does not provide a basis for combining drowsiness detection techniques with eyewear”). Rather, Gunaratne’s teachings as mapped by Petitioner to claim 19 relate to the wireless enabled device (i.e., a host device (electronic systems) in the automobile) implementing Gunaratne’s teachings rather than the eyewear implementing Gunaratne’s teachings. Pet. 60–61 (citing Ex. 1007 ¶ 61). Such mapping is consistent with the claim language. *See* Ex. 1001, 25:20–30, 26:5–6, 26:15–18; *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998) (stating “the name of the game is the claim”).

We also find unavailing Patent Owner’s argument that “[t]o implement Gunaratne as part of an automobile wireless enabled device would have required an automobile computer that embodied the complex database structure and ran the image acquisition and recognition software of Gunaratne,” and that “Gunaratne, Jannard[], Chen and Rosenblatt provide no guidance to [one of ordinary skill in the art] as to how to build such a wireless enabled device at all and, furthermore, fail to provide guidance as to how to install such a device within the constraints of an automobile.” PO Resp. 40 (citing Ex. 2014 ¶ 72). Rather, we agree with Petitioner that Gunaratne expressly discloses such “a system and a process for detecting drowsiness in an individual operating a machine” and that an actuator can “alert the individual that he or she is becoming drowsy and may fall asleep unless proper action is taken,” which demonstrate that the limitations of claim 19 are disclosed. Pet. Reply 18 (quoting Ex. 1008 ¶¶ 4, 26).

We also find unavailing Patent Owner’s argument that the combinations provide no information to one of ordinary skill in the art as to how such a device would be “configured to recognize a presence of a wearer of the eyewear based at least in part on communication with the wireless

chip” of an eyewear’s electronic application module. PO Resp. 40–41 (citing Ex. 2014 ¶ 72). Rather, as we discuss above, Jannard and Rosenblatt provide such teachings. *See supra* Section VI.C.

We also find unavailing Patent Owner’s argument that “it is only through impermissible hindsight, guided by the teachings of the ’960 [p]atent, that [one of ordinary skill in the art] could have been motivated to combine Gunaratne with Jannard[] or Chen and Rosenblatt as Petitioner asserts.” PO Resp. 41. Rather, as we discuss above, Petitioner shows express rationale supporting motivation to combine the references. Again, we agree with Petitioner that “Rosenblatt discloses its host device (wireless enabled device) can be an automobile,” “[a] common issue with automobiles known to [one of ordinary skill in the art] is drowsiness while driving,” and “Gunaratne discloses a system that addresses this known issue.” Pet. Reply 20.

In sum, we find that Petitioner demonstrates by a preponderance of the evidence that the combination of Jannard, Rosenblatt, and Gunaratne, and the combination of Chen, Rosenblatt, and Gunaratne each render claim 19 obvious.

IX. GROUNDS CHALLENGING CLAIM 25

Petitioner argues that the combinations of (i) Jannard, Rosenblatt, and Nielsen and (ii) Chen, Rosenblatt, and Nielsen render claim 25 obvious. Pet. 61–63, 74; Pet. Reply 21–24. Patent Owner disputes this. PO Resp. 42–44; PO Sur-reply 21–24. The parties largely address these grounds together, and thus we elect to do so also.

A. Summary of Nielsen

Nielsen “relates to information retrieval, and more particularly to adaptively changing the font size with which information retrieved over a

network is displayed.” Ex. 1009, 1:9–11. More specifically, Nielsen teaches that “[w]hen retrieving documents over a network, such as the Internet, the font size imposed by default or by a style sheet is sometimes not the right size for comfortable viewing by a user.” *Id.* at code (57). Nielsen thus maintains a database of font size changes made by a user to particular documents, which is used to infer a font size preference for a document. *Id.* Nielsen displays a document using a recorded preference. *Id.* “If no preference is found for a document, a check is made to determine if a preference has been specified for a different document related to that document by having a common portion of a network address.” *Id.* “That is, if a preference had been specified for one chapter of a document having a particular network address, a preference would be inferred for other chapters of the document based on a common portion of a hierarchical address.” *Id.*

B. Challenged Claim 25

Claim 25 recites “[t]he eyewear of claim 22, wherein the wireless enabled device is configured to adjust a font size of an application in the computer.” Ex. 1001, 26:37–39. Above we find that the combinations of Jannard and Rosenblatt, and Chen and Rosenblatt teach claim 22. *See supra* Sections VI.D, VII.C.

We agree with Petitioner and find that the combinations for claim 25 each teach “wherein the wireless enabled device is configured to adjust a font size of an application in the computer.” Pet. 61–63, 74; Pet. Reply 21–24. In particular, we agree with Petitioner and find that Rosenblatt teaches its host device (wireless enabled device) can be a computer. Ex. 1007 ¶ 61; Pet. 62. We also agree that one of ordinary skill in the art would have known that font sizes on computers should be adapted to user preferences. Ex. 1009, 1:14–63; Ex. 1003 ¶ 220.

Moreover, we agree with Petitioner and find that Nielsen teaches “adaptively changing the font size with which information retrieved over a network is displayed.” Ex. 1009, 1:9–11; Pet. 62. In particular, Nielsen teaches that a document is “displayed with a size preference found in one of the databases.” Ex. 1009, 2:54–56. Nielsen also teaches that this display may be presented by a browser application executed in a computer. *Id.* at 2:7–14, 4:11–12, 5:29–35; Ex. 1003 ¶ 221.

In addition, we agree with Petitioner and find that one of ordinary skill in the art “would have been motivated to add Nielsen’s adaptive font functionality to the computer in the combinations . . . because Nielsen suggests” that it beneficially “provide[s] a way for adapting font size in a browser or other User Interface based on user font-size preferences for retrieved documents.” Ex. 1009, 1:55–57; Ex. 1003 ¶ 222. Moreover, Nielsen teaches that adapting font size “accommodate[s] the needs of a variety of network users who have different individual preferences for viewing documents” and “account[s] for display differences which may cause the same document to appear differently on different displays.” Ex. 1009, 1:58–63. We also agree with Petitioner that adding the functionality would enable Rosenblatt’s computer to realize these benefits. Ex. 1003 ¶ 222; *see also* Ex. 1007 ¶¶ 51–52 (teaching that the host device may include a display).

We find unavailing Patent Owner’s argument that one of ordinary skill in the art “would be unlikely to consider Nielsen in the context of designing eyewear with embedded electronics (such as Jannard[]) or equipped with thermally regulating cartridges (such as Chen), let alone motivated to combine those references.” PO Resp. 42–43 (citing Ex. 2014

¶ 76). As above, the references must be analogous to the claimed invention, and need not be analogous to each other. *See In re Bigio*, 381 F.3d at 1325.

We also find unavailing Patent Owner’s argument that “Nielsen is not reasonably pertinent to the problem faced by the inventor.” PO Sur-reply 22. Rather, we agree with Petitioner and find that Nielsen addresses “adaptively changing the font size,” which is pertinent to the ’960 patent’s embodiment addressing the problem of automatically changing font size responsive to user and device presence, disclosing that “the remote wireless enabled devices located within the computer can . . . adjust the brightness, volume, font size, [and] access email.” Ex. 1001, 19:50–55; Pet. Reply 21–22. Thus, we find that Nielsen is reasonably pertinent to a particular problem with which the inventor was involved, and that Nielsen is analogous art.

We also find unavailing Patent Owner’s argument that one of ordinary skill in the art would have had no reasonable expectation of success in combining Nielsen with the other references because “Nielsen provides no teachings or suggestions regarding how to implement its database of webpage font changes and preferences in a computer in wireless communication with an electronic key such as disclosed in Rosenblatt, or when such a computer interacts with eyewear embedding an audio electronic system such as Jannard[.]” PO Resp. 43–44 (citing Ex. 2014 ¶¶ 77–79). Rather, we find that Nielsen teaches how to implement its teachings on a computer, as the claim directs. *See Hiniker*, 150 F.3d at 1369. That the computer also is in wireless communication with eyewear does not impact Nielsen’s teachings as to the computer.

We also find unavailing Patent Owner’s argument that “Petitioner’s attempt to conjure a motivation to combine the references is unavailing

except as impermissible hindsight.” PO Resp. 44. Rather, we agree with Petitioner and find that “Rosenblatt discloses its host device (wireless enabled device) can be a computer,” that one of ordinary skill in the art “would have known that font sizes on computers should be adapted to user preferences,” and that Nielsen teaches a method for adaptively changing the font size. Pet. Reply 23–24; Pet. 62.

In sum, we find that Petitioner demonstrates by a preponderance of the evidence that the combination of Jannard, Rosenblatt, and Nielsen, and the combination of Chen, Rosenblatt, and Nielsen each render claim 25 obvious.

X. PATENT OWNER’S MOTION TO STRIKE

Patent Owner moves to strike Exhibit 1025 (US 2006/0023158 A1, published Feb. 2, 2006 to Howell) and arguments related thereto in Petitioner’s Reply. Paper 30, 1. Patent Owner argues that the exhibit and related arguments are new in violation of 37 C.F.R. § 42.23(b). Petitioner opposes Patent Owner’s Motion to Strike. Paper 31. Patent Owner filed a reply to the opposition. Paper 33.

As we note above, however, we find Petitioner’s reliance on Jannard’s teachings sufficient to support its arguments for reasonable expectation of success. *See supra* Section VI.C.1. Thus, we do not reach Exhibit 1025 and the related arguments, which Petitioner characterized “[a]s another example” beyond Jannard. *Id.*; Pet. Reply 9–10. And thus, we do not reach the alleged new arguments and evidence that Patent Owner seeks to strike.

Accordingly, this motion is moot. For this reason, we deny Patent Owner’s Motion to Strike.

XI. CONCLUSION¹⁴

Based on the full record, we determine that Petitioner shows by a preponderance of the evidence that the challenged claims would have been obvious.

Claim(s)	35 U.S.C. §	Reference(s) /Basis	Claim(s) Shown Unpatentable	Claims Not Shown Unpatentable
1–3, 6–10	103(a)	Jannard	1–3, 6–10	
1–8, 10	103(a)	Osterhout	1–8, 10	
1–10	103(a)	Jannard, Osterhout	1–10	
11–18, 20–24, 26	103(a)	Jannard, Rosenblatt	11–18, 20–24, 26	
19	103(a)	Jannard, Rosenblatt, Gunaratne	19	
25	103(a)	Jannard, Rosenblatt, Nielsen	25	
11–18, 20–24, 26	103(a)	Chen, Rosenblatt	11–18, 20–24, 26	
19	103(a)	Chen, Rosenblatt, Gunaratne	19	
25	103(a)	Chen, Rosenblatt, Nielsen	25	

¹⁴ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

Overall Outcome			1–26	
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XII. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), Petitioner has shown by a preponderance of the evidence that claims 1–26 of the ’960 patent are unpatentable;

FURTHER ORDERED that Patent Owner’s Motion to Strike (Paper 30) is *denied*; and

FURTHER ORDERED that parties to the proceeding seeking judicial review of this Final Written Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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