NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

ROBERT BOSCH, LLC, Appellant

v.

ANDREI IANCU, UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE,

Intervenor

 $2017\hbox{-}2122,\, 2017\hbox{-}2124,\, 2017\hbox{-}2239,\, 2017\hbox{-}2241$

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in Nos. IPR2016-00034, IPR2016-00036, IPR2016-00038, IPR2016-00040.

Decided: July 3, 2019

MARK A. HANNEMANN, Shearman & Sterling LLP, New York, NY, argued for appellant. Also represented by Patrick Robert Colsher, Eric Sebastian Lucas, Thomas R. Makin, Joseph Matthew Purcell, Jr.; Ksenia Takhistova, Hunton Andrews Kurth LLP, New York, NY.

BENJAMIN T. HICKMAN, Office of the Solicitor, United

States Patent and Trademark Office, Alexandria, VA, argued for intervenor. Also represented by Thomas W. Krause, Farheena Yasmeen Rasheed, Mai-Trang Duc Dang.

Before Prost, Chief Judge, Lourie and Bryson, Circuit Judges.

LOURIE, Circuit Judge.

Robert Bosch, LLC appeals from four *inter partes* review decisions of the United States Patent and Trademark Office ("PTO") Patent Trial and Appeal Board (the "Board") holding several claims of U.S. Patents 7,484,264 (the "264 patent"), 6,944,905 (the "905 patent"), 6,292,974 (the "974 patent"), and 6,973,698 (the "698 patent") unpatentable as obvious. Costco Wholesale Corp. v. Robert Bosch LLC, No. IPR2016-00040 (P.T.A.B. Mar. 30, 2017) ("'264 Decision"); Costco Wholesale Corp. v. Robert Bosch LLC, No. IPR2016-00036 (P.T.A.B. Apr. 24, 2017) ("'905 Decision"); Costco Wholesale Corp. v. Robert Bosch LLC, No. IPR2016-00038 (P.T.A.B. Mar. 30, 2017) ("'974 Decision"); Costco Wholesale Corp. v. Robert Bosch LLC, No. IPR2016-00034 (P.T.A.B. Apr. 24, 2017) ("'698 Decision"). For the reasons stated below, we reverse the Board's decision regarding the '264 patent and affirm the Board's three other decisions.

BACKGROUND

Bosch owns the four patents at issue claiming beam windshield wiper blades, known simply as beam blades. For purposes of this appeal, beam blades have three main elements: (1) a rubber wiper strip which contacts the windshield; (2) a pre-curved, spring-elastic support element to distribute force along the wiper strip; and (3) a wiper arm, which moves the blade back and forth across the windshield. Beam blades have generally been known in the art for decades.

Although the patents at issue all relate to beam blades, the issues on appeal concern discrete limitations claimed in each patent, which we summarize as follows. Claim 3 of the '264 patent recites a beam blade with a "wind deflection strip," or spoiler, which is "designed as a binary component" and is mounted on the support element. '264 patent col. 8 ll. 17–18. Claim 13 of the '905 patent is representative of that patent for purposes of this appeal and recites a support element with end caps at both ends. '905 patent col. 8 ll. 16–18. Claim 1 of the '974 patent recites a spoiler "mounted directly to the convex surface of [the] support element so as to form a leading-edge face extending in a longitudinal direction of the support element." '974 patent col. 4 ll. 26–29. Finally, claim 1 of the '698 patent recites that the contact force of the wiper strip on the windshield is greater in the center section than at the ends and that the support element has a concave curvature sharper in the center section than at the ends. '698 patent col. 6 ll. 14–22.

Bosch sued Costco Wholesale Corp. ("Costco") for infringing the patents in suit in the District of Delaware, and Costco petitioned for *inter partes* review ("IPR"). Board instituted review of the four patents in suit in addition to other Bosch patents such as U.S. Patent 8,099,823 (the "823 patent"). In four final written decisions, the Board held as obvious: (1) claim 3 of the of the '264 patent over certain prior art references, '264 Decision, slip op. at 38; (2) claims 13, 17, and 18 of the '905 patent over U.K. Patent Application GB2106775 ("Prohaska") and German Patent 1.028.896 ("Hoyler"), '905 Decision, slip op. at 32– 33; (3) claims 1, 2, and 8 of the '974 patent over Prohaska and U.S. Patent 3,192,551 ("Appel '551") or Hoyler, '974 Decision, slip op. at 58; and (4) claim 1 of the '698 patent over U.S. Patent 4,807,326 ("Arai") and U.S. Patent 4,028,770 ("Appel '770"), '698 Decision, slip op. at 48.

In arriving at its overall conclusions, the Board considered Bosch's evidence of secondary considerations. Except for the '905 patent, the Board found that Bosch did not

demonstrate a nexus between the evidence and the claimed inventions. And even for the '905 patent, the Board found that the evidence of secondary considerations was weak and entitled to little weight. '905 Decision, slip op. at 29–32.

Bosch appealed from the Board's decisions. Costco subsequently settled its dispute with Bosch and declined to participate in the appeals. The PTO intervened to defend the Board's decisions as authorized under 35 U.S.C. § 143. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

DISCUSSION

Our review of a Board decision is limited. *In re Baxter Int'l, Inc.*, 678 F.3d 1357, 1361 (Fed. Cir. 2012). We review the Board's legal determinations *de novo, In re Elsner*, 381 F.3d 1125, 1127 (Fed. Cir. 2004), but we review the Board's factual findings underlying those determinations for substantial evidence, *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). A finding is supported by substantial evidence if a reasonable mind might accept the evidence as adequate to support the finding. *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938). "Where there is adequate and substantial evidence to support either of two contrary findings of fact, the one chosen by the board is binding on the court regardless of how we might have decided the issue if it had been raised *de novo*." *Mishara Const. Co. v. United States*, 230 Ct. Cl. 1008, 1009 (1982).

Obviousness is a question of law based on underlying facts, including the scope and content of the prior art, differences between the prior art and the claims at issue, the level of ordinary skill, and relevant evidence of secondary considerations. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966). We have held that whether a skilled artisan would have been motivated to combine prior art references is also a question of fact. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238–39 (Fed. Cir. 2010).

We first address Bosch's specific challenges to the Board's findings in its decisions concerning each of the four patents at issue. We then consider Bosch's more general argument that the Board erred in its evaluation of the secondary considerations evidence.

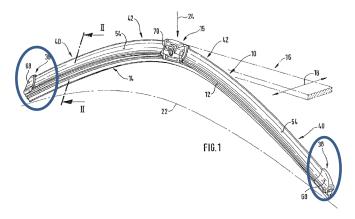
I. '264 Patent

We begin with the '264 patent. Somewhat unusually, both Bosch and the PTO argue that the Board's obviousness holding for this patent cannot stand. In the '264 Decision, the Board held the '264 patent's claim 3, reciting a binary spoiler, obvious over certain references. Slip op. at 38. However, the Board also held a claim in the related '823 patent reciting the same binary spoiler not obvious over the same references and arguments. Costco Wholesale Corp. v. Robert Bosch LLC, No. IPR2016-00041, slip op. at 23 (P.T.A.B. Apr. 12, 2017) ("Petitioner has not provided a reason supported by rational underpinnings . . . for why it would have been obvious to include a binary component").

Unsurprisingly, the parties agree that both decisions cannot be right. Bosch argues that "[n]othing could better evidence an arbitrary and capricious decision than the very same panel reaching exactly the opposite conclusion in two proceedings on an identical issue." Appellant's Br. 65. The PTO agrees, noting that partial reversal of the Board's decision would be proper because the Board itself acknowledged its error but could not correct it because it had lost jurisdiction over the case after Bosch's appeal. Intervenor Br. 38. Under these atypical circumstances, we agree with the parties that the Board's decision was arbitrary and capricious and thus reverse the Board's unpatentability decision with respect to claim 3 of the '264 patent.

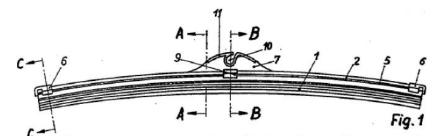
II. '905 Patent

We now address Bosch's appeal over the '905 patent, which focuses on the end caps limitation in claim 13. The '305 patent depicts end caps 38 as follows:



'905 patent fig. 1 (annotations added). The end caps secure the spring strips of the support element. *Id.* col. 4 ll. 31–34.

The Board found that Hoyler taught this limitation by disclosing a beam blade with "clamps" positioned at the ends of the wiper to secure the springs of the support element, as depicted at 6 below:



'905 Decision, slip op. at 19–20; Hoyler, J.A. 10235 ("The longitudinal springs 5 are inserted in lateral slots, held together at the ends of the bar by the clamps 6."), 10237.

On appeal, Bosch argues that Hoyler's clamps do not teach the end cap limitation because they do not fully cover the end and side of the blade and do not cover the sharp corners that could scratch a car or person. Further, Bosch contends that the Board "assumed *ex cathedra* power" and relied on its own technical opinion instead of expert testimony. Appellant's Br. 56.

The PTO responds that substantial evidence supports the Board's finding that Hoyler taught the claimed end caps because its clamps hold together the springs of the support element. According to the PTO, the '905 patent never mentions scratch protection or that the end caps must completely cover the ends.

We agree with the PTO that substantial evidence supports the Board's finding regarding Hoyler's clamps. The Board reasonably found that Hoyler's clamps cover the end of the blade and hold the springs together, like the claimed end caps in the '905 patent. Bosch directs us to no persuasive evidence that the end caps must completely cover the end or prevent scratching, and the '905 patent nowhere mentions such functions. We thus uphold the Board's findings.

III. '974 Patent

Next we address the '974 patent, which claims a spoiler mounted on the support element. Bosch's appeal with respect to this patent focuses on alleged procedural defects in the Board's adjudication, namely that Bosch had insufficient notice of the Board's ultimate theory of unpatentability.

In its petition, Costco argued that it would have been obvious to put a spoiler, as taught in Prohaska, on a beam blade, as taught in either Appel '551 or Hoyler, in order to prevent the known problem of wind lift. Pet. at 22–23, '974 Decision (Paper No. 1). As explained in Prohaska and the '974 patent, wind lift is the tendency of a wiper blade to lift off the windshield due to oncoming wind when a vehicle travels at high speeds. Prohaska col. 1 ll. 8–21; '974 patent

col. 1 ll. 41–52. Bosch agreed that wind lift was a known problem, but only for higher-profile conventional blades like Prohaska that use a yoke structure to distribute force along the blade, and not for lower-profile beam blades. '974 Decision, slip op. at 31–32. The Board disagreed with Bosch, as Prohaska generally described wind lift as being caused by the air stream "striking the wiper blade laterally," not the yoke structure. *Id.* at 32 (quoting Prohaska col. 1 ll. 8–9). Further, the Board credited Costco's rebuttal argument based on U.S. Patent 3,418,679 ("Barth") that it was understood in the art that wind lift was caused by the inverted triangle shape of the wiper strip, a feature common to conventional and beam blades. '974 Decision, slip op at 32–34.

On notice grounds, Bosch objected to the Board's consideration of Barth as evidence that wind lift was a known problem for beam blades. Bosch argued that Barth was only substantively raised in Costco's reply and was not part of any ground of obviousness. The Board disagreed because Barth was cited in Costco's petition and in its expert's opening declaration as part of the knowledge of a skilled artisan. *Id.* at 34. The Board also found that Bosch was on notice of Costco's contention in its petition that a skilled artisan would put a spoiler on a beam blade to prevent wind lift and that Bosch argued to the contrary in its response. *Id.* at 35. Ultimately, the Board held claims 1, 2, and 8 of the '974 patent obvious over Prohaska and either Appel '551 or Hoyler. *Id.* at 58.

Bosch argues on appeal that Costco impermissibly raised new arguments in its reply that a skilled artisan would have considered the wind lift problem to be applicable to beam blades and that the problem was caused by the inverted triangle shape of the wiper strip. Under our decision in *In re NuVasive*, 841 F.3d 966 (Fed. Cir. 2016), Bosch argues that the Board's decision must be vacated.

The PTO responds that the Board did not change theories and properly cited Costco's rebuttal evidence, which was submitted with its petition and accompanying expert declaration.

Under the Administrative Procedure Act and due process guarantees, a patent owner in an IPR is "entitled to notice of and a fair opportunity to meet the grounds of rejection." *NuVasive*, 841 F.3d at 971 (quoting *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1080 (Fed. Cir. 2015)). Whether a patent owner was given such notice is an issue of law we review *de novo*. *Id.* at 970. We agree with the PTO that under these standards, the Board's adjudication fully comported with Bosch's procedural rights.

Contrary to Bosch's argument, Costco's petition put Bosch on notice of its theory that a skilled artisan would put a spoiler on a beam blade to combat wind lift. The petition set forth that a skilled artisan, "knowing the advantages of spoilers that eliminated liftoff tendency," would combine the spoiler of Prohaska with the beam blade support element of Appel '551 or Hoyler to "counter windlift." Pet'n at 22–23, '974 Decision (Paper No. 1). The combination, according to Costco, was "nothing more than a simple arrangement or aggregation of old elements, each performing the same function it had been known to perform." Id. at 23–24. Bosch then took the opportunity to respond to this argument, contending that a person of ordinary skill would understand wind lift to only be a problem for the higher-profile support element of conventional blades.

When Costco cited Barth in its reply, it properly relied on that reference as rebuttal evidence to show that wind lift was understood in the art to be caused by the shape of the wiper strip, not the profile of the support element. It was Bosch who raised the profile issue, and it is not incumbent on the Board or the petitioner "to anticipate and set forth every legal or factual issue that might arise in the

course of the trial." Genzyme Therapeutic Prod. Ltd. P'ship v. Biomarin Pharm. Inc., 825 F.3d 1360, 1366 (Fed. Cir. 2016). Our decision in *Genzyme* is instructive. There, we rejected a patent owner's notice argument based on two references discussed in an IPR petitioner's reply to indicate the state of the prior art. *Id.* at 1369. We concluded that "the Board may consider a prior art reference to show the state of the art at the time of the invention, regardless of whether that reference was cited in the Board's institution decision." Id. at 1369. That is what the Board did here. See '974 Decision, slip op. at 33–34 (crediting Costco's explanation concerning Barth and finding that "it was known that wiper blades having an inverted isosceles triangle cross sectional profile produce a lift off force on the wiper when subject to relative wind in both conventional and beam blades"). Further, like *Genzyme*, and unlike the situation in NuVasive, the Board did not rely on Barth to teach any claim limitations. Compare Genzyme, 825 F.3d at 1369, with NuVasive, 841 F.3d at 971, 975 (vacating and remanding based on insufficient notice where the Board relied on a reference's embodiment, raised for the first time on reply, as the only prior art disclosure of a claim limitation).

Because the Board afforded Bosch ample process and properly considered Barth in determining the knowledge of a skilled artisan, we affirm the Board's judgment of obviousness with respect to claims 1, 7, and 8 of the '974 patent.

IV. '698 Patent

We last address claim 1 of the '698 patent, which has two limitations relevant on appeal. First, the contact force of the wiper strip must be "greater in [the] center section than in at least one of . . . two end sections" (the "force limitation"). '698 patent col. 6 ll. 14–15. Second, the support element must have a concave curvature curved more sharply in the center than at the ends (the "curvature limitation"). *Id.* col. 6 ll. 20–22. Bosch challenges the Board's

finding that these limitations were known in the art and its conclusion that claim 1 would have been obvious.

In its final written decision, the Board determined that no terms in claim 1 required construction because neither party proposed any specific constructions. *'698 Decision*, slip op. at 9–10. However, the Board did observe that claim 1 did not require any particular magnitude of force or curvature differential between the center and ends. *Id.* at 28, 32. Bosch points to no error in this interpretation on appeal.

The Board held claim 1 obvious over Appel '770 and Arai, which we discuss here. Appel '770 was issued in 1977 and discloses beam blades where multiple variables are described as influencing the force distribution of the wiper. These variables include "the width, thickness, and degree of curvature" of the blade. *Id.* at 17; *see* Appel '770 col. 3 ll. 14–44. According to the reference, "it is also possible to combine, in a number of different ways, the various constructional approaches incorporating progressive dimensional variations in free-form curvature, width and/or thickness to provide a superstructure . . . having the desired uniform pressure loading characteristics." Appel '770 col. 3 ll. 46–51. The Board found that these disclosures suggested "a wide range of design options to a person of ordinary skill." '698 Decision, slip op. at 18.

Appel '770 incorporates by reference Appel '551, Appel '770 col. 3 ll. 18–20, and the Board also considered the teachings of the latter reference in its obviousness analysis. Similar to Appel '770, Appel '551 describes a beam blade that distributes pressure "relatively uniformly along the length of the blade." Appel '551, col. 1 ll. 26–27. Ultimately, the combination of the support element and the rubber wiping blade determines the final pressure on the windshield. *Id.* col. 3 ll. 22–26. Three design options are presented to provide uniform pressure: "(1) a parabolic form of free curvature in a spring of uniform section; (2) a

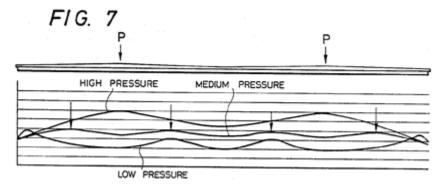
parabolic form of width in a spring of uniform thickness and uniform curvature; or (3) a uniformly tapered thickness in a spring of uniform width and uniform curvature." Id. col. 3 ll. 10-16. The reference also explains that these designs can be combined in various ways to provide uniform pressure. Id. col. 3 ll. 16-22.

However, Appel '551 provides an embodiment that does not adopt any of the options designed for uniform pressure. Instead of using the "theoretically proper curvature," id. col. 4 ll. 7–8, "as a practical compromise" the embodiment has "a circular curvature terminating somewhat short of straight end portions," which "has been found satisfactory due to the ability of the rubber wiper blade to compensate for a limited degree of non-uniform spring load," id. col. 4 ll. 12–17. The specification indicates that this non-ideal curvature—i.e., a circular curvature "modified at the ends with somewhat less curvature," id. col. 3 l. 75-col. 4 l. 1is nonetheless "adapted to provide uniform contact pressure," id. col. 4 ll. 1–2. The Board found that this embodiment taught the curvature limitation claimed in the '698 patent. '698 Decision, slip op. at 24 ("This described structure, less curvature at the ends, is the same structure disclosed in the '698 patent to provide reduced pressure at the end portions.").

The other reference cited by the Board, Arai, issued in 1989 and is also directed to beam blades. Like Appel '551, Arai discloses blades with a "uniform" or "relatively uniform" pressure distribution on the windshield. Arai col. 1 ll. 31–32, col. 3 ll. 43–44. Figure 7 shows the change in

¹ In this context, parabolic curvature refers to a curvature that is sharper in the middle than the ends. Uniform, or circular, curvature means a constant curvature throughout. Holding width and thickness constant, a sharper curvature at a given section exerts a greater contact force. *See* Appellant's Br. 38 n.58.

pressure distribution "according to the invention," *id.* col. 3 ll. 51–52, and is reproduced below:



The high pressure curve shows a somewhat higher contact force in the center than at the ends. *See '698 Decision*, slip op. at 16–17. Arai's specification acknowledges the pressure change and describes it as "small." Arai col. 4 ll. 1–3. The Board found that this disclosure met the force limitation because claim 1 did not require any specific magnitude of force differential between the center and ends. *'698 Decision*, slip op. at 28–29.

Ultimately, the Board found that the combination of Appel '770 (including the incorporated Appel '551) and Arai taught each limitation in claim 1 of the '698 patent. *Id.* at 29. The Board found that a skilled artisan would have combined the references, each directed to beam blades, because Appel '770 taught that various curvatures could be used, and because Appel '551 taught that having lesser curvature at the ends than in the center was a practical compromise resulting in some non-uniform spring load. *Id.* at 31–32. The Board considered Bosch's evidence of secondary considerations but afforded it little weight. *Id.* at 43. In light of all the evidence, the Board concluded that claim 1 would have been obvious. *Id.* at 43–44.

On appeal, Bosch argues that Arai did not teach the claimed force limitation. Further, Bosch argues that each cited reference favored uniform contact force, leaving the Board's motivation to combine finding supported only by hindsight.

The PTO responds that the references both taught the contested limitations, that combining them only required ordinary skill, and that the Board's findings are supported by substantial evidence.

We agree with the PTO and conclude that substantial evidence supports the Board's findings. We begin with the contact force limitation and conclude that substantial evidence supports the Board's finding that Arai disclosed that limitation. While we agree with Bosch that Arai generally describes uniform contact pressure as desirable, it also contemplates somewhat lesser contact pressure at the ends than the center as encompassed within its invention. Figure 7, which Arai describes as "the result according to the invention," clearly shows lesser contact pressure at the ends than the center. Arai col. 3 ll. 51-52, fig. 7. Arai nowhere indicates that absolute uniformity is required. Because the force limitation undisputedly does not require any particular disparity in contact force between the center and the ends, substantial evidence supports the Board's finding that Arai taught the force limitation.

The Board determined that a skilled artisan would make the claimed wiper blade by adopting the curvature taught in Appel '770 and the incorporated Appel '551. We conclude that substantial evidence also supports this finding. As the Board found, Appel '770 taught a wide range of design options to a person of ordinary skill. '698 Decision, slip op. at 17–18. Several of those options are presented in Appel '551 as designed for uniform pressure, *i.e.*, parabolic or circular curvature with varying width or thickness. Appel '551 col. 3 ll. 9–16. But contrary to a "theoretically proper curvature," *id.* col. 4 ll. 7–8, Appel '551 also sets forth, "as a practical compromise," *id.* col. 4 ll. 12–14, the same curvature Bosch claimed in the '698 patent: generally circular curvature but with somewhat less curvature

at the ends, *id.* col. 31.75–col. 41.1. The reference explains that this curvature leads to some "non-uniform spring load," *id.* col. 4 ll. 16–17, which influences the ultimate pressure of the wiper blade on the windshield, *id.* col. 3 ll. 22–26. In light of these teachings, the Board found that a skilled artisan would only need to exercise ordinary skill in applying the "practical compromise" curvature of Appel '551 to achieve non-uniform force as contemplated in Arai. '698 Decision, slip op. at 31–32.

The Board took note of evidence in tension with its finding. Most notably, Appel '551 states that the "practical compromise" curvature is nonetheless "adapted to provide uniform contact pressure." '698 Decision, slip op. at 24–25 (discussing Appel '551 col. 4 ll. 1–2); see also Appel '551 col. 4 ll. 15–17 (describing how the rubber wiper blade can compensate for "a limited degree of non-uniform spring load"). But the Board observed that the '698 patent claimed the same curvature to achieve the opposite result of non-uniform contact force and that Appel '551 indicated that this curvature, unlike the theoretically optimal curvature, would introduce non-uniform spring load. '698 Decision, slip op. at 24–26. In light of this conflicting evidence, we conclude that a reasonable fact finder could accept that the "practical compromise" in curvature would somewhat compromise the uniformity of a wiper blade's contact force.

We note that the Board's finding is also consistent with Arai, which discloses embodiments with non-uniform contact pressure as nonetheless representative of its invention directed to uniform contact pressure. Arai col. 3 ll. 51–52. Like Arai, Appel '551 aims to distribute "pressure load *relatively* uniformly" along the blade but never indicates that absolute uniformity is necessary. Appel '551 col. 1 ll. 23–28 (emphasis added).

For similar reasons, we reject Bosch's assertion that the references teach away from the claimed invention. "A reference does not teach away . . . if it merely expresses a general preference for an alternative invention but does not 'criticize, discredit, or otherwise discourage' investigation into the invention claimed." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quoting *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004)). To the extent there is any difference between the relatively uniform pressure distribution disclosed in the prior art and the somewhat non-uniform distribution claimed in the '698 patent, neither cited reference discredits the latter, as we have already explained.

We thus conclude that substantial evidence supports the Board's findings that the '698 patent claimed no more than using known beam blade components in known ways, and that a skilled artisan exercising ordinary skill would have combined the cited references.

V. Secondary Considerations

We last address the Board's analysis of secondary considerations, which Bosch challenges as undermining each of the Board's judgments.

The Board considered Bosch's objective evidence. Bosch submitted the same secondary considerations evidence in support of each patent, but the Board only found a nexus between the evidence and the claims for the '905 patent.' *905 Decision*, slip op. at 28.

Even for the '905 patent, the Board afforded Bosch's objective evidence little weight. First, Bosch submitted evidence that its wiper blades won three awards. The Board gave minimal weight to this evidence of industry praise because Bosch provided "no description of these awards, copies of them, or persuasive evidence as to what these awards were for and how specifically they relate to the claimed invention." *Id.* at 29–30.

Next, the Board considered Bosch's evidence of longfelt need and the alleged failure of other beam blades. The Board found that there was not a long-felt need solved by the '905 patent because the prior art already provided wiper blades with the claimed components. *Id.* at 30.

Bosch also alleged copying by unspecified "knockoffs." J.A. 11524. The Board found no persuasive evidence of efforts to replicate Bosch's specific products and thus gave no weight to Bosch's evidence. '905 Decision, slip op. at 31.

Bosch further presented sales figures of about \$70M over three years that it asserted were "significant" and showed commercial success. J.A. 11523. However, the Board gave this evidence little weight because it consisted only of raw sales data lacking supporting documentation, any explanation of how the sales were significant, or any comparison to prior or subsequent years' sales. '905 Decision, slip op. at 31–32. Likewise, the Board gave little weight to Bosch's evidence of licensing its family of beam blade patents. *Id.* at 32.

On appeal, Bosch argues that the Board erred in not giving a presumption of nexus to the '698 and '974 patents and that the Board did not give sufficient weight to Bosch's objective evidence. The PTO responds that the Board correctly weighed Bosch's evidence of secondary considerations.

We agree with the PTO. Even assuming that there is a nexus between the objective evidence and the claims of each patent, and having considered Bosch's arguments challenging the Board's weighing of the evidence, we conclude that Bosch has not demonstrated reversible error in the Board's findings. In light of the totality of the evidence, Bosch's sparse evidence of secondary considerations does not outweigh the case for obviousness based on the prior art. Consequently, we affirm the Board's ultimate judgments of unpatentability with respect to the instituted claims of the '905, '974, and '698 patents.

CONCLUSION

We have considered Bosch's remaining arguments but find them unpersuasive. For the foregoing reasons, we reverse the Board's judgment with respect to the '264 patent and affirm the Board's judgment of unpatentability with respect to the '905, '974, and '698 patents.

AFFIRMED-IN-PART, REVERSED-IN-PART

Costs

No costs.