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Paper 67
Entered: March 30, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COSTCO WHOLESALE CORP.,
Petitioner,

v.

ROBERT BOSCH LLC,
Patent Owner.

Case IPR2016-00040
Patent 7,484,264 B2

Before PHILLIP J. KAUFFMAN, WILLIAM V. SAINDON, and BARRY L. GROSSMAN, *Administrative Patent Judges.*

KAUFFMAN, *Administrative Patent Judge*.

FINAL WRITTEN DECISION

35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. OVERVIEW

Costco Wholesale Corp. ("Petitioner") filed a Petition (Paper 1, "Pet.") requesting *inter partes* review of claims 1, 2, and 3 of U.S. Patent No. 7,484,264 B2 (Ex. 1001, "the '264 patent"). Pet. 1. Robert Bosch LLC ("Patent Owner") filed a Preliminary Response (Paper 15, "Prelim. Resp.") to the Petition. We instituted *inter partes* review of claims 1, 2, and 3.

We discuss preliminary matters, such as motions, in Section II below.

We held an oral hearing on January 18, 2017. *See* Paper 65 ("Tr."); *see also* Ex. 1206 (Petitioner's transcript errata).

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claims on which we instituted trial.

For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 2, and 3 the '264 patent are unpatentable.

B. RELATED PROCEEDINGS

The parties indicate that the '264 patent is at issue in: *Robert Bosch LLC v. Alberee Products Inc. et al.*, No. 12-574-LPS (consolidated with No. 14-142-LPS) (D. Del.) ("the related litigation"). Pet. 1; Paper 4, 1.

The parties are currently involved in the following *inter partes* proceedings ("these proceedings"):

Case #	U.S. Patent #	Abbreviation
IPR2016-00034	6,973,698	"the '698 patent"
IPR2016-00036	6,944,905	"the '905 patent"
IPR2016-00038	6,292,974	"the '974 patent"
IPR2016-00039	7,228,588	"the '588 patent"
IPR2016-00040[1]	7,484,264	"the '264 patent"
IPR2016-00041	8,099,823	"the '823 patent"

Two of the patents at issue in these proceedings, the '905 patent and the '974 patent, were at issue in prior litigation between Patent Owner and Pylon Manufacturing Corporation. Paper 36, 2. *Robert Bosch LLC v. Pylon Manufacturing Corporation* (D. Del., Case No. 08-542 (SLR)) ("the Pylon litigation"). *See* Paper 33, 1.

In these proceedings, sometimes a party submitted an identical paper or exhibit in all of the proceedings even though that paper or exhibit may not be applicable, or applies in a different manner, to a particular proceeding. At other times, we are able to apply the analysis of one proceeding to another.

[1] The '264 patent is a division of the application that became the '588 patent (IPR2016-00039). Ex. 1001, [62]. The remaining patents are not related.

C. EVIDENCE AND ASSERTED GROUNDS OF UNPATENTABILITY

Petitioner asserts that the challenged claims are unpatentable under the following grounds:

Claims Challenged	**§**	**References(s)**
1, 2	103(a)	Prohaska[2] and Kotlarski '383[3]
1, 2	103(a)	Prohaska and Merkel[4]
3	103(a)	Prohaska, Kotlarski '383, and Kotlarski '090[5]
3	103(a)	Prohaska, Merkel, and Kotlarski '090
3	103(a)	Prohaska, Kotlarski '383, and Mathues[6]
3	103(a)	Prohaska, Merkel, and Mathues

In the Patentability section below, we address these grounds in three groupings:

1. *Prohaska and either Kotlarski '383 or Merkel*
2. *Prohaska, either Kotlarski '383 or Merkel, and Kotlarski '090*
3. *Prohaska, either Kotlarski '383 or Merkel, and Mathues*

[2] U.K. Patent Application No. GB 2 106 775 A, published Apr. 20, 1983 (Ex. 1003).

[3] PCT WO 99/02382, published Jan. 21, 1999 (Ex. 1006). The certified English translation begins at page 27.

[4] PCT WO 99/12784, published March 18, 1999 (Ex. 1016). The certified English translation begins at page 20. We reference the U.S. counterpart filed as Ex. 1017 (U.S. Pat. No. 6,295,690 B1). References to "Merkel," mean the prior art, while references to "Mr. Merkel" pertain to that person.

[5] PCT WO 00/34090, published June 15, 2000 (Ex. 1008). We reference the U.S. counterpart (Pat. No. 6,523,218 (Ex. 1009)). *See* Pet. 5, n. 1.

[6] U.S. Patent No. 3,121,133, issued Feb. 11, 1964 (Ex. 1013).

II. PRELIMINARY MATTERS

A. PETITIONER'S MOTION TO STRIKE AND MOTION TO EXCLUDE

1. Motion to Strike

Petitioner's Motion to Strike and associated papers[7] do not differ from the Motion to Strike in IPR2016-00038 in any meaningful way. We adopt that analysis here, and accordingly, that Motion is *denied*.

2. Motion to Exclude

Petitioner's Motion to Exclude and associated papers[8] do not differ from the Motion to Exclude in IPR2016-00039 in any meaningful way. We adopt that analysis here, and accordingly, that Motion is *granted-in-part* and *denied-in-part* as outlined below.

a) Mr. Merkel's former testimony

Just as in IPR2016-00039, the patent at issue in the proceeding at hand was not at issue in the Pylon litigation. Consequently, for the reasons given in IPR2016-00039, Petitioner has demonstrated that Mr. Merkel's testimony from the Pylon litigation is inadmissible hearsay, and with respect to this evidence, Petitioner's Motion is *granted*.

b) Mr. Kashnowski's testimony

Our analysis in IPR2016-00038 is applicable here. Consequently, Petitioner has not demonstrated effectively that the testimony at issue is

[7] *See* Paper 31 (authorizing the Motion), Paper 33 (Petitioner's Motion), Paper 36 (Patent Owner's opposition).

[8] *See* Paper 29 (Petitioner's Objections); Paper 50 (Petitioner's Motion); Paper 58 (Patent Owner's Opposition); Paper 63 (Petitioner's Reply to Patent Owner's Opposition).

inadmissible hearsay, and with respect to this evidence, the Motion to Exclude is *denied*.

c) Related Portions of Patent Owner's Response

We do not exclude any portion of Patent Owner's Response, but will not consider any citations to the excluded portion of Exhibit 2005.

B. PATENT OWNER'S MOTION TO EXCLUDE

The Motion to Exclude and associated papers[9] have no meaningful distinction from the Motion to Exclude in IPR2016-00038, and consequently Patent Owner's Motion to Exclude portions of Mr. Peck's Declaration (Ex. 1100) is *denied*.

C. MOTIONS FOR OBSERVATION

Patent Owner submitted a Motion for Observation on cross-examination of Mr. Peck, and Petitioner submitted a response. Papers 51, 57. We considered these observations in making our analysis below. Generally, we are persuaded by each of Petitioner's responses.

[9] *See* Papers 37, 49, 55, 62.

III. THE CLAIMED SUBJECT MATTER

A. ILLUSTRATIVE CLAIM

Of the challenged claims, 1 is independent and follows:

1. A wiper blade (**10**) for an automobile windshield (**14**), with an elongated belt-shaped, flexible resilient support element (**12**) having a longitudinal axis, on the lower belt surface (**22**) of which that faces the windshield is located an elastic rubber wiper strip 24 sitting against the windshield that extends parallel to the longitudinal axis, and on the upper belt surface (**16**) of which a wind deflection strip (**42** or **112**) is located that has an incident surface (**54** or **140**) facing the main flow direction of a driving wind (arrow **52**), said deflection strip extending in the longitudinal direction of the support element, characterized in that the wind deflection strip has two sides (**48**, **50** or **136**, **138**) that diverge from a common base point (**46** or **134**) as seen in a cross section, that the incident surface (**54** or **140**) is located at the exterior of one side (**50** or **138**) and that the profile of the cross section of the wind deflection strip is the same along its entire length, wherein the support element has outer edges, and wherein the sides of the wind deflection strip have respective free ends having thereon respective claw-like extensions that fittingly grip around the outer edges of the support element at least in sections, so that the wind deflection strip can be snapped onto the outer edges or slid onto the outer edges in a longitudinal direction, wherein between the two sides (**48**, **50** or **136**, **138**) of the wind deflection strip (**42** or **112**) there is at least one support means (**58** or **144**) located at a distance from their common base point (**46** or **134**) that stabilizes the sides, wherein the support means is made up of a wall (**58** or **144**) connected to both sides (**48**, **50** or **136**, **138**) that extends in the longitudinal direction of the wind deflection strip (**42** or **112**), and wherein the wall (**58** or **144**) extends along the entire length of the wind deflection strip (**42** or **112**).

Claims 2 and 3 depend from independent claim 1.

B. CLAIM INTERPRETATION

In an *inter partes* review, we interpret the claims of an unexpired patent using the broadest reasonable construction. *See* 37 C.F.R. § 42.100(b).

In our Institution Decision, we stated

> We determine that the "at least one support means" of independent claim 1 is not a means-plus-function limitation governed by 35 U.S.C. § 112 ¶ 6. We emphasize that this claim construction is based on the record to this point, and is preliminary.

Dec. 10.

Neither party challenges this determination or otherwise addresses construction of these terms. We adopt our analysis from the Institution Decision. *See* Dec. 7–9.

We do not expressly construe any other claim terms. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (only those terms which are in controversy need to be construed, and only to the extent necessary to resolve the controversy).

IV. PATENTABILITY

A. SCOPE OF REPLY

Patent Owner contends that portions of Petitioner's Reply are improper, and consequently, the Board should not consider those portions. Paper 54. Petitioner disagrees. Paper 56. The arguments here on this issue do not differ in any meaningful way from those in IPR2016-00039 and we adopt that analysis here. Consequently, Petitioner's arguments are proper.

B. CREDIBILITY OF DR. DAVIS

There is no meaningful distinction between this argument here and that made in IPR2016-00038. *See* PO Resp. 19–23; Pet. Reply. 23–24. As in IPR2016-00038, the factors discussed detract slightly from Dr. Davis's testimony, but not so much to warrant that we give his testimony overall little or no weight. Our analysis below reflects this determination.

C. LEVEL OF SKILL

We do not discern a meaningful difference between the arguments on this issue here and that in IPR2016-00038, and we incorporate that analysis here. *See* PO Resp. 1–2; Pet. Reply 2–4. Here, as in IPR2016-00038, the prior art of record is reflective of the level of skill in the art. We address what was known in the art in our analysis below.

D. CHRONOLOGY

The following generally chronological discussion pertains to all four *Graham* factors, and is applicable to all of the challenged claims and grounds of unpatentability.[10]

1. Prior to the '264 Patent

Conventional wipers were known prior to the critical date of the '264 patent. *See* PO Resp. 12; Ex. 1018 ¶¶ 19–20; Ex. 2003 ¶ 21; Ex. 2007 ¶ 2; *see also* PO Resp. 4 (citing Exs. 2008 and 2009 as examples of known

[10] Much of what Patent Owner labels as "secondary considerations" (*see* PO Resp. 11–19) pertains to all four *Graham* factors and is addressed in this section.

conventional wipers). Conventional wipers, also known as yoke or yoke-style wipers, include a series of flexible rails that distribute force along the wiper blade. Ex. 1018 ¶ 19; PO Resp. 4; Ex. 2003 ¶ 21. Barth is an example of a conventional, yoke wiper, as illustrated in Figure 1 below:

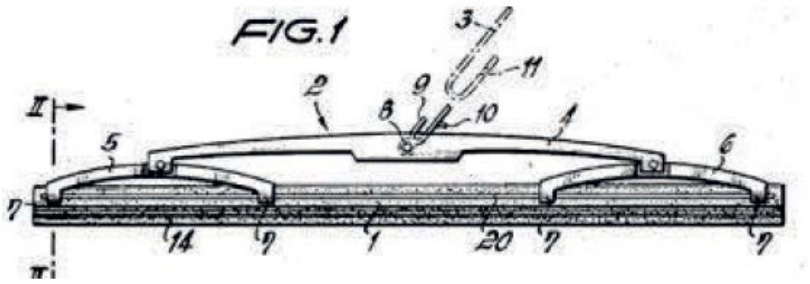


Figure 1 depicts a conventional or yoke-style wiper structure. *See* Ex. 1018 ¶ 19 (including this Figure from Barth).

Beam wipers were known prior to the critical date of the '264 patent. *See* Pet. 15–17 (discussing Kotlarski '383 (Ex. 1007) and Merkel (Ex. 1016)); Pet. Reply 3; PO Resp. 13 ("beam blades were described in paper patents long before the invention at issue here"). Beam wipers, also known as flat wipers, use metal strips adjacent the wiper blade to distribute the load along the length of the wiper blade rather than the yokes. Ex. 1018 ¶ 22. Figure 1 of the '264 patent is reproduced below:

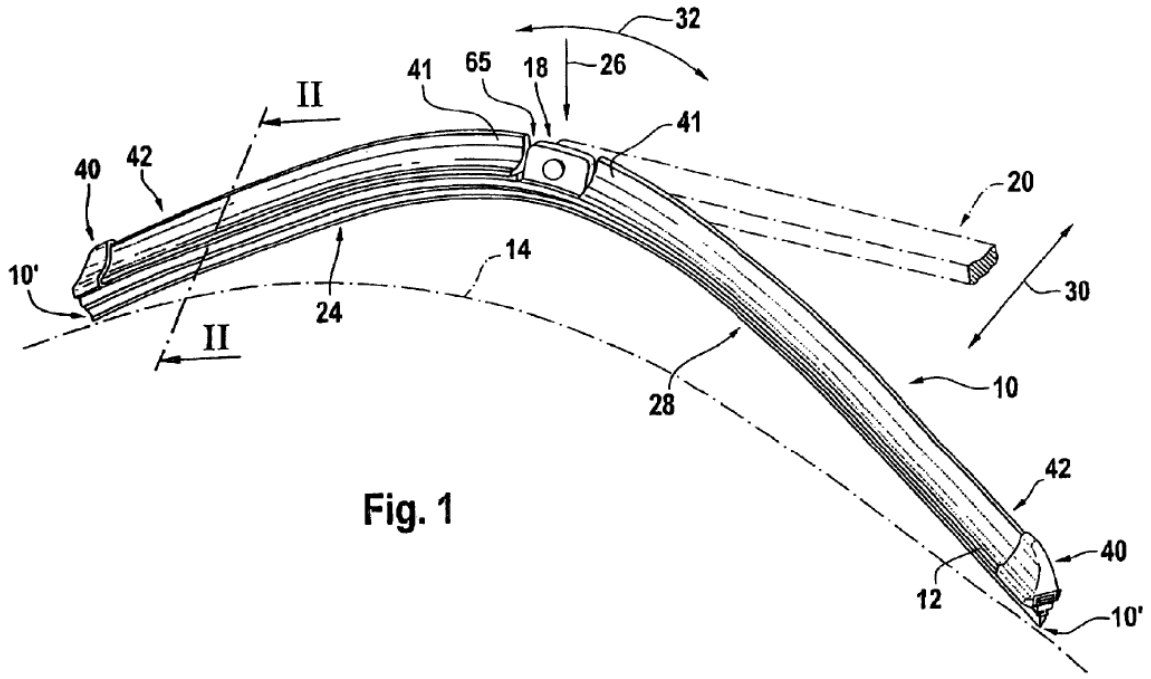


Fig. 1

Figure 1 of the ’264 patent is a perspective view of a beam wiper blade with the wiper arm shown as a dot-dashed outline. Ex. 1001, 3:65–67; *see also* Ex. 1005, Fig. 1; Ex. 1004, Fig. 1.

Patent Owner emphasizes that although beam wipers were known, there were no “commercially viable” beam wipers prior to 2002. PO Resp. 13 (citing Ex. 2007 ¶ 3; 2003 ¶ 23).[11] Even if the beam wipers that were known prior to 2002 were not commercially viable, that does not alter the fact that beam wipers were known prior to the ’264 patent.

Use of a spoiler (wind deflection strip) to counter the lifting force that occurs at high vehicle speeds and ensure reliable contact pressure between the wiper strip and the windscreen was known for both conventional and beam wipers. Pet. 10–12, 15–17, 38; Ex. 1003 (conventional); Ex. 1006

[11] Patent Owner also cites to Exhibit 2005, but we do not consider that evidence here.

(beam); Ex. 1013 (beam); *see also* Ex. 1001, 5–8 (incorporating the application that became the '588 patent).

Use of claw-like extensions to fittingly grip the outer edges of the support element was known. Pet. 12, 31, 34–35; Ex. 1003, 1:68–83, 2:61–70, 80–86, (describing that the spoiler includes downwardly directed elongations having claws, formed either as individual claws or along the entire length of the strip, that attach the spoiler to wiper strip by engaging the longitudinal grooves of the wiper strip), Figs. 1–3.[12]

In sum, prior to the '264 patent, conventional and beam wipers were known. Use of a spoiler to counter lift off in both conventional and beam wipers was known. *See* Pet. 10–18; Pet. Reply 3. Specifically, use of a hollow spoiler on a conventional wiper (*e.g.*, Ex. 1003) and use of a solid spoiler on a beam wiper (*e.g.*, Exs. 1006, 1013) were both known. Pet. 11–12, 15–18; Pet. Reply 3; *see also* Ex. 1001, 1:46–51 (acknowledging in the '264 patent a beam wiper with spoiler as prior art).

2. Patent Owner's Mischaracterizations

Given what was known in the art, Patent Owner's argument that conventional thinking at the time of the '264 patent was to avoid additional components on a beam blade and that beam blades are highly sensitive to such modifications is directly contradicted by the evidence of record. PO Resp. 3–5, 9, 11, 14; Pet. Reply 5–6. We agree with Dr. Peck that the sensitivity of beam blades was a design factor that was understood prior to the '264 patent. *See* Pet. Reply 7 (citing Ex. 1100 ¶ 9).

[12] Although some of this description relates to Figure 1, it is applicable to similar Figure 3. *See* Ex. 1003, 2:56–61.

In association with the argument that the ’264 patent took an unconventional approach, Patent Owner characterizes the ’264 patent as meeting a long-felt but unresolved need, producing unexpected results, and being met with skepticism. PO Resp. 12, 15–16 (citing Ex. 2003 ¶¶ 22–25, 58–60, 65, 73, 77, 79).[13] This evidence applies to a flexible spoiler with diverging legs and not the claims at issue here. Further, the ’264 patent does not explicitly disclose or fairly imply that providing a beam wiper with a spoiler met a long-felt but unresolved need or produced unexpected results. To the contrary, as mentioned above, the ’264 patent itself acknowledges that the prior art included a wiper blade provided with a wind deflection strip. We agree with Petitioner that the proposed modification was not contrary to conventional thinking at the time. *See, e.g.*, Pet. Reply 20 (citing Ex. 1100 ¶¶ 7–8).

3. The ’264 Patent

The ’264 patent discloses a wiper blade having a wind deflection strip that produces a force component directed toward the windshield to counteract the tendency of the wiper blade to lift off the windshield due to airflow at high vehicle speeds. Ex. 1001, 1:46–51.

[13] We note that paragraphs 65, 73, 77, and 79 do not relate to the patent at issue in this case.

Wiper blade 10 includes elongated belt-shaped, flexible spring support element 12 and wind deflector strip 42. *Id.* at 4:9–10, 4:67–5:6; Figs. 1, 2. Wind deflector strip 42 is made of an elastic material such as plastic, and has an essentially triangular cross section formed by sides 48 and 50 diverging from common base point 46 at one end and connected at the opposite ends by a support means such as wall 58. *Id.* at 5:6–34. Figure 2 follows.

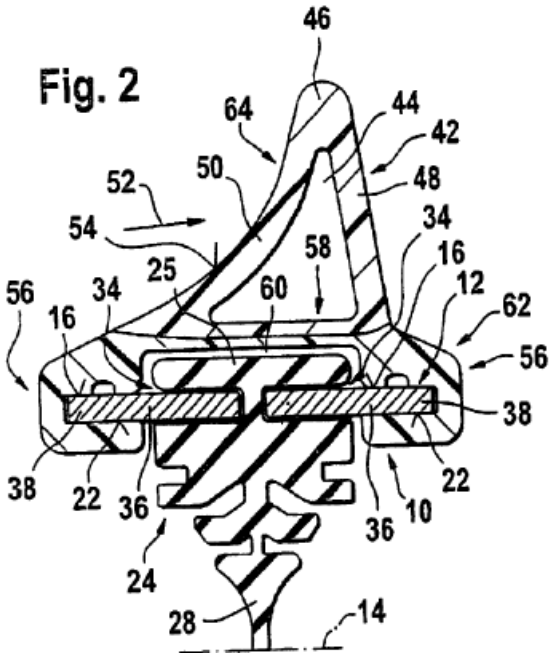


Figure 2 is a cross sectional view of wiper blade 10 through line II-II shown in Figure 1. *Id.* at 4:1–2.

E. OBVIOUSNESS OVER PROHASKA AND EITHER KOTLARSKI ’383 OR MERKEL

Claim 2 follows:

> A wiper blade according to claim **1,** characterized in that the support element **(12)** includes two flexible rails **(36)** each of which sits in a longitudinal notch **(34)** associated with it, respectively, said longitudinal notches being open toward the opposite lateral sides of the wiper strip **(24),** that the outer strip edges **(38)** of each of said flexible rails extend out of these notches, and that the support means **(58 or 144)** are positioned at a distance from the support element **(12)**.

1. Uncontested aspects

Petitioner contends that claims 1 and 2 would have been obvious over Prohaska and either Kotlarski ’383 or Merkel. Pet. 10–12, 15–17, 29–36, 46–51.[14] Specifically, Petitioner contends that Kotlarski ’383 and Merkel each disclose a wiper as claimed, except the wind deflection strip is not hollow. *Id*. at 29–32, 35. Petitioner contends that Prohaska discloses a hollow wind deflection strip as claimed, except that profile of the cross section is not the same along the entire length. *Id*. at 10–12, 30–32, 34–36, 38–43. Petitioner contends that it would have been obvious to substitute Prohaska’s hollow wind deflection strip (spoiler) for either Kotlarski ’383’s or Merkel’s deflection strip, and to form Prohaska’s strip with a cross section that is the same along the entire length. *Id.*

Petitioner’s contentions regarding the claimed limitations are supported by a preponderance of the evidence and we adopt them here. As discussed above, each of the claimed elements was known. Patent Owner

[14] *See also* Exhibit 1019, Declaration of Dr. Kruger, and associated illustrations of claims 1–3 at Exhibits 1026–1028.

does not dispute that the features of the challenged claims are found in the prior art. *See* Paper 17 ¶ 3 (instructing Patent Owner that "any arguments for patentability not raised in the [Patent Owner Response] will be deemed waived"); Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,766 (stating that the Patent Owner Response "should identify all the involved claims that are believed to be patentable and state the basis for that belief").

2. Contested Aspects

Patent Owner contests the obviousness of the combination by arguing that a person of ordinary skill would not have made the proposed modifications, and by submitting secondary indicia of nonobviousness. PO Resp. 2–10.

Petitioner contends that the proposed modification would have predictably yielded a lighter weight blade that provides the benefit of a less powerful drive system. Pet. 38–39 (citing Ex. 1005, col. 2 (evidencing that reduced weight reduces wiper drivetrain stress) (citing Ex. 1021, col. 3–4 (evidencing that a hollow spoiler reduces manufacturing materials)). Petitioner contends that modifying Prohaska's wind deflector strip to have a constant cross section along its length is faster and cheaper to manufacture than a cross section that varies along the length and improves stability. *Id*. at 40 (citing Ex. 1018 ¶ 66 (explaining the benefits of manufacturing with a constant cross section); Ex. 1017, 2:47–49 ("Advantages from a manufacturing standpoint can be obtained if the wiper strip has a constant cross section substantially over its entire length.")). Petitioner contends that such a combination would lead to predictable results. *Id*. at 39–40 (Ex. 1018, Davis Decl. ¶ 55 (explaining that the proposed combination reduces material costs and system weight). Petitioner contends that a person of

ordinary skill would have recognized that Prohaska's claws provide a method of attachment and could have easily been adapted to clip to either Kotlarski '383's or Merkel's spring rails. *Id.* at 41–43.

a) Alleged Hindsight

Patent Owner contends that Petitioner's reasoning for adding Prohaska's spoiler improperly invokes hindsight. PO Resp. 2–3. In particular, Patent Owner emphasizes: (1) fundamental differences between conventional and beam blades, (2) a person of ordinary skill in the art would not have had reason to modify Kotlarski '383 or Merkel, and (3) the disadvantages mentioned by Prohaska of its hollow-shaped Figure 3 conventional spoiler would have led a POSITA to avoid using it, particularly given the highly sensitive beam blade.[15] *Id.* at 3. We analyze these contentions in turn.

(1) Fundamental Differences

According to Patent Owner, conventional and beam blades are so fundamentally different that a person of ordinary skill would not have combined conventional and beam blade teachings. PO Resp. 3–5 (citing Ex. 2003 ¶¶ 21–25, 58–61, 65–67, 77–79). This statement is contradicted by the evidence of record, in that conventional and beam wipers have commonalities. For example, beam and conventional wipers can use the same wiper strip, and can be attached to an actuating arm.[16]

[15] Although there is considerable overlap between the argument and evidence here and in IPR2016-00039, there are enough distinctions so that we cannot simply rely on that analysis there.

[16] Regarding the wiper strip, *see, e.g.*, Ex. 1003, Fig. 1 (conventional strip); Ex. 1006, Fig. 10 (beam strip). Regarding the arm *see, e.g.*, Ex. 1006, 33

Patent Owner contends that conventional blades have several disadvantages, and that beam blades solved these problems by among other things, eliminating the yoke. PO Resp. 4 (citing Ex. 2003 ¶¶ 21–23, 79). In support, Dr. Dubowski opines that because beam blades avoid the high superstructure of a conventional wiper, beam blades "were hoped to perform better in extreme weather conditions" such as ice and snow. Ex. 2003 ¶ 23. Dr. Dubowski opines that beam blades are greatly affected by small changes in beam shape and by attaching additional components. Ex. 2003 ¶ 58. According to Dr. Dubowski, this is caused by the different in pressure distribution in each wiper type, namely, that conventional wipers have a series of yokes to distribute pressure, while beam wipers distribute pressure through a spring-elastic support element that runs the entire length of the wiper strip. *Id*. Dr. Dubowski concludes that conventional thinking at the time of '264 patent was to avoid additional components on a beam blade.[17] *Id*. (citing three patents submitted in these proceedings).[18]

An assertion that conventional wipers were "hoped" to perform better in ice and snow falls short of establishing that beam wipers performed better in ice and snow. *See* Ex. 2003 ¶ 23. More importantly, Patent Owner has

(referring to driven wiper arm 18 for a beam blade); Ex. 2008 (U.S. Pat. No. 2,596,063 to Anderson), 3:6–8 (referring to conventional wiper arm 1), Fig. 2.

[17] Paragraphs 65 and 73 do not relate to the '264 patent, and this evidence adds nothing to Patent Owner's assertion here.

[18] Appel '551 (Ex. 1005 of IPR2016-00038); Appel '770 (Ex. 1006 of IPR2016-00034); Swanepoel '564 (Ex. 1010 of IPR2016-00034).

not explained cogently how the superior ice and snow performance of a beam wiper relates to the modification proposed by Petitioner.

Although the three patents cited by Dr. Dubowski do not have additional components attached, Patent Owner does not identify, nor do we discern, any disclosure in these patents that is critical of increasing wiper profile or adding additional components. At most, these patents illustrate one approach and are silent regarding other approaches. Consequently, to the extent that Patent Owner's argument suggests that these patents teach away from the proposed modification, such is not the case. Further, both Katlarski '383 and Merkel are beam patents that include spoilers. This evidence directly contradicts Patent Owner's contention that conventional thinking was to avoid such additions, yet, Dr. Dubowski's opinion does not address that evidence. Patent Owner's choice of addressing other approaches and not addressing the strongest evidence is unpersuasive.[19]

In sum, we are not persuaded by Patent Owner's contention that conventional thinking at the time of the '264 patent was to avoid additional components on a beam blade. As detailed above, use of a spoiler (additional component) to counter lift off in both conventional and beam wipers was known.

(2) Reason to Modify

Patent Owner makes two contentions in support of the argument that a person of ordinary skill in the art would not have reason to modify either

[19] Patent Owner's reference to the "failure" of the Trico wiper is similarly flawed. *See* PO Resp. 5. This assertion is addressed in greater detail in the secondary considerations analysis that follows.

Kotlarski ’383 or Merkel: one, because each discloses a complete beam solution, and two, because none of the prior art teaches the required changes to the wiper strip, support element, and spoiler attachment mechanism. PO Resp. 5–6; (citing *Plas-Pak Indus., Inc. v. Sulzer Mixpac AG*, 600 F. App’x 755, 759 (Fed. Cir. 2015)). In support, Dr. Dubowski echoes the Response, stating that Kotlarski and Merkel disclose a complete beam blade solution, and that the modification would necessitate changes that the references do not teach. Ex. 2003 ¶¶ 74, 77.

Patent Owner’s contention that a person of ordinary skill would not have made the proposed modification because Kotlarski ’383 and Merkel each disclose a complete solution is unpersuasive. This argument is overbroad and not tied to the facts of this case. As Petitioner observes, this argument would largely render § 103 superfluous. Pet. Reply. 10.

Further, the non-precedential case cited by Patent Owner is distinguishable from the case at hand. *See* PO Resp. 5–6. In *Plas-Pak* the proposed modification would render either fundamentally alter a prior art reference’s principle of operation or would render it inoperable for its intended purpose. *Plas-Pak*, 600 F. App’x at 759–60. We agree with Petitioner’s characterization that the proposed modification here would not fundamentally alter the principle of operation of Katlarski ’383 or Merkel, nor render them inoperable for their intended purpose. Pet. Reply 12–13. Rather, the modified wipers would weigh less and require less material to manufacture, but would otherwise clean windshields and counter wind-lift in the same way as when unmodified. *Id*.

Patent Owner’s contention that the references do not teach the needed changes is also unpersuasive. We agree with Petitioner that Patent Owner

has not gone so far as to assert that the proposed change is beyond the level of skill in the art. Pet. Reply 12. As Petitioner explained and Patent Owner did not contest, a person of ordinary skill includes a degree of ingenuity or problem solving skill. *See* Pet. 21–22; Pet. Reply 1–2; PO Resp. 1–2. Further, given what was known in the art as detailed above, the proposed modification was within the level of skill in the art to make the proposed modification.

(3) Prohaska's alleged disadvantages

Patent Owner contends that Prohaska "taught away from using the Figure 3 hollow spoiler at all" because, as a person of ordinary skill would have understood, that spoiler "would lead to aerodynamically excited, degrading vibrations—which would disturb wiping ability and lead to premature failure." PO Resp. 6–7 (citing Ex. 1003, 3:7–22). According to Patent Owner, Dr. Davis agrees. *Id.* at 7–9 (citing Ex. 2002, 113:15–115:14).

We are not persuaded by Dr. Dubowski's opinion that adding Prohaska's spoiler shown in Figure 3 would "lead to aerodynamically excited, degrading vibrations." *See* Ex. 2003 ¶¶ 66, 73. Dr. Dubowski does not explain the feature or features that cause vibrations. Nor does Dr. Dubowski cite any underlying facts or data. The only portion of Prohaska cited by Dr. Dubowski is the portion describing that Figure 3 has a possible disadvantage.

We consider the cited portion of Prohaska in context. Prohaska discloses several embodiments of a windshield wiper blade assembly. Ex. 1003 [57], 2:56–57. Figures 3 and 6 of Prohaska follow:

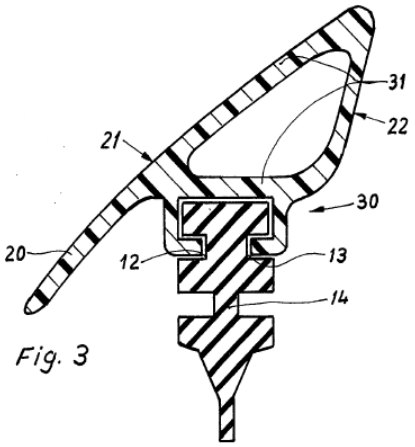


Fig. 3

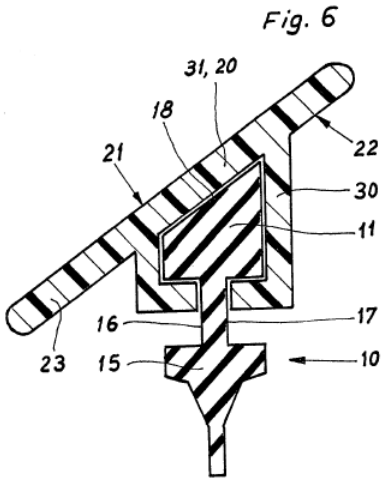


Fig. 6

Figures 3 and 6 are wiper assemblies that each include a flexible strip having a back formed as a spoiler. Ex. 1003, 2:33–34, 49–40. Prohaska describes that the embodiment shown in Figure 3 includes a spoiler in the form of a hollow resilient strip that "possibly might be disadvantageous." *Id.* at 3:2–6. Prohaska describes that this disadvantage is avoided in the embodiment shown in Figure 6 in that head 11 includes inclined surface 18 which closely rests against back 31 of flexible strip 30. *Id.* at 3:7–10.

Prohaska does not expressly state that the embodiment shown in Figure 3 may induce aerodynamic vibrations, that it should not be used, or that it is ineffective. Rather, Prohaska states the embodiment "possibly might be disadvantageous." This language indicates that the negative aspect may or may not be present. Further, the severity of that negative aspect is characterized as a disadvantage, not as a feature that would prohibit effective wiper operation. A person of ordinary skill would understand that the embodiment shown in Figure 3 may or may not have a disadvantage. In contradiction of Dr. Dubowski's assertion, Prohaska indicates that the invention (meaning all embodiments including that of Figure 3) ensures

reliable contact between the wiper element and windscreen. Ex. 1003, 1:38–42, 97–100.

As we stated in our Institution Decision, Prohaska is best characterized as disclosing that the disadvantage of Figure 3 is a tradeoff and not a teaching away. Dec. 15–16. We incorporate that analysis here. Further, we agree with Petitioner that Dr. Davis's testimony is consistent with this interpretation rather than Patent Owner's assertion. Pet. Reply 14 (quoting Dr. Davis's testimony from Ex. 2002, 113:15–115:14) ("[I]t's kind of one of the design trade offs that you would be making . . . and it would certainly be lighter, but there could be a bit of a tradeoff there.")).

(4) Hindsight Summary

Specifically, As detailed above, Petitioner reasons, with uncontested supporting evidence, that modifying Katlarski '383 and Merkel to have a hollow spoiler as taught by Prohaska, would yield a lighter weight blade that provides the benefit of a less powerful drive system, modifying Prohaska's wind deflector strip to have a constant cross section along its length is faster and cheaper to manufacture than a cross section that varies along the length and improves stability. Thus, Petitioner's reasoning has a rationale underpinning. Patent Owner's arguments to the contrary are unpersuasive.

b) Secondary Considerations[20]

We consider Patent Owner's contention that this case involves the secondary considerations of: long-felt but unresolved need, industry praise

[20] We do not consider Patent Owner's citations to the excluded portion of Exhibit 2005 (pp. 210–264). Alternatively, that evidence is unpersuasive for the reasons given in IPR2016-00038, and we incorporate that analysis here.

and awards, failure of others, commercial success, licensing, unexpected results, and copying. PO Resp. 12; *WBIP, LLC v. Kohler Co*., 829 F.3d 1317, 1328 (Fed. Cir. 2016) (when present, secondary indicia of nonobviousness must be considered).

"For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention." *In re Huai-Hung Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (emphasis and internal quotation marks omitted) (cited with approval in *ClassCo, Inc. v. Apple, Inc*, 838 F.3d 1214 (Fed. Cir. 2016). There is a presumption of nexus for objective considerations when the Patent Owner demonstrates that the asserted objective evidence is tied to a specific product and that product is the invention disclosed and claimed in the patent. *WBIP*, 829 F.3d at 1329.

Before addressing the specifics of Patent Owner's secondary considerations, we emphasize that, as discussed above, most of Patent Owner's secondary considerations arguments are based upon mischaracterizations of the scope and content of the prior art.

(1) Lack of Connection between the Products and Challenged Claims

Patent Owner contends that the Aerotwin and Icon blades each "practice the challenged claims." PO Resp. at 15 (citing Ex. 2014, 3; Ex. 2015, 33–57, 59–62; Ex. 2016, 30–43, 45–48; Ex. 2007 ¶ 6; Ex. 2006, 698:19–699:22).[21] Patent Owner describes the Aerotwin and ICON wipers

[21] We do not consider the evidence cited in Ex. 2005.

as having a flexible spoiler with diverging legs mounted on the top of the blade as well as plastic end caps.[22] *Id.*

Most of the cited evidence deals with patents other than the ’264 patent, and does not evidence any connection between the challenged claims and the Aerotwin and ICON wipers. *See* Ex. 2015, 33–57 (relating to the ’905 patent), 59–62 (relating to the ’698 patent); Ex. 2016, 30–43 (relating to the ’905 patent), 45–48 (relating to the ’698 patent); Ex. 2006, 698:19–699:22 (relating to the ’905 patent).

One citation relates to the ’264 patent. In response to interrogatories in the related litigation, Patent Owner asserted that the Aerotwin, ICON Generation 1, and ICON Generation 2 practice at least one claim of a list of patents that includes the ’64 patent. Ex. 2014, 3. This assertion is conclusory and not supported by a cogent explanation. Further, Patent Owner does not explain effectively how the ICON Generation 1 and 2 correspond to an ICON wiper. *See* Pet. Reply 14.

Patent Owner’s proffered evidence may apply to IPR2016-00036 because the features enumerated by Patent Owner are found in claim 13 of the ’905 patent. None of the challenged claims of this proceeding include diverging legs mounted on the top of the blade or plastic end caps. Further,

[22] As mentioned above, at times the same paper is submitted in each of these proceedings without tailoring that paper to the particular case involved. This is perhaps most significant here. Further, we agree with Petitioner, that submitting the same evidence of secondary considerations in each of these proceedings undermines the evidence because the patents involved are directed to different inventions. *See* Pet. Reply 18–19.

the challenged claims do not recite that the spoiler ("wind deflection strip") is flexible. This information has little or no relevance to our inquiry here.

Consequently, Patent Owner is not entitled to a presumption of nexus, because Patent Owner has not demonstrated that the products (the Aerotwin and ICON wipers) are the invention disclosed and claimed in the patent. Indeed, Patent Owner has not demonstrated effectively any connection between these products and the claims of the '264 patent.

(2) Commercial Success and Industry Praise

Patent Owner contends that the Aerotwin wiper won the Pace, Automechankia, and Frost & Sullivan awards. PO Resp. 14, 17–18 (citing Ex. 2007 ¶¶ 3, 8). In support, Mr. Kashnowski states that the Pace award mentioned the use of a flexible spoiler on the Aerotwin blade and that Frost & Sullivan was "one of the more prominent automotive research organizations." Ex. 2007 ¶¶ 3, 8.

Patent Owner does not provide a copy of any award or an explanation of the award criteria. Regarding the Pace award in particular, it appears this evidence may apply to IPR2016-00036 because the spoiler (wind deflection strip 42) of the '905 patent is flexible (made of an elastic material), while none of the challenged claims recite that the component (spoiler) is flexible. *See* Ex. 1001, 7:10–8:20; IPR2016-00036, Ex. 1001, 7:60–8:21. The observation that Frost & Sullivan was a prominent research organization does little to put the award in context. Without context, these awards have little meaning.

As mentioned above, Patent Owner contends that although beam blades were known, Patent Owner's Aerotwin wiper blade was the first commercially successful beam blade in the United States aftermarket. *Id.* 13

(citing Ex. 2007 ¶ 3). In particular, Patent Owner contends that the ICON blade had commercial success and praise as evidenced by: (1) the demand from Bosch customers for the Icon blade was considerably high, even though it was more expensive than conventional blades; and (2) customers expressed a great deal of excitement for the Icon blade. *Id.* at 14–15 (citing Ex. 2007 at ¶ 5; Ex. 2005, 270:14–271:3[23]).

The evidence cited by Patent Owner has numerous shortcomings.

Although Patent Owner contends that the Aerotwin was the first commercially successful beam wiper in the United Sates, the sales figures and awards cited are for the ICON wiper.

Mr. Kashnowski, Director of Product Management for Wiping systems for Patent Owner has more than 20 years of working with wipers. Ex. 2007 ¶ 1. Mr. Kashnowski testified in the Pylon litigation that Patent Owner's wipers having spoilers and end caps had the most success, growth, and value to customers of any product line he could recall. Ex. 2005, 270:14–271:3. Mr. Kashnowski does not explain how the success is tied to features of the challenged claims and appears to relate to the claims at issue in IPR2016-00036.

Mr. Kashnowski states that demand for the ICON blade was "considerably high" despite being more expensive than conventional blades. Ex. 2007 at ¶ 5. *Id.* Here we seek objective indicia of nonobviousness, yet, that demand was "considerably high" is a subjective opinion.
Mr. Kashnowski does not provide gross sales figures in dollars or units sold,

[23] This portion of Exhibit 2005 was not excluded. The record does not reflect why Petitioner sought to exclude Mr. Merkel's testimony from the Pylon litigation, but not Mr. Kashnowski's.

market share, growth in market share, or any objective indication of commercial success.

Similarly, Mr. Kashnowski states that customers were "more exited" for the ICON product than any other automotive product he has been involved with. Ex. 2007 ¶ 5. Presumably, with 20 years of experience in the automotive field, Mr. Kashnowski has been involved with numerous products; however, customer excitement is a subjective observation and not an objective indication of industry praise or commercial success. Even if customer excitement to some extent indicates industry praise or commercial success, Mr. Kashnowski does not provide any explanation that ties customer excitement to claimed features.

Patent Owner presents three years of "sales of the ICON product" (2006 - $17,000,000; 2007 - $24,000,000; 2008 - $28,000,000).[24] PO Resp. 17; Ex. 2007 ¶ 8. This testimony relates to a wiper with ends caps, not the claims of the '264 patent. Even if the ICON wiper corresponds to the challenged claims, this evidence has little persuasive value for several reasons. Patent Owner provides no argument or evidence that attributes this success to claimed features. Patent Owner presents no evidence regarding market share. This information, without market share information, is only weak evidence, if any, of commercial success. *See In re Applied Materials*, 692 F.3d 1289, 1299 (Fed. Cir. 2012). Although we note that sales grew in the period presented, Patent Owner does not address that growth, nor does Patent Owner explain how such growth is tied to claimed features.

[24] Presumably, these figures represent annual gross sales revenue.

Patent Owner argues that products having a flexible spoiler, plastic end caps, and diverging legs mounted on the top of the blade were tested extensively to reduce noise, and this reduced noise was part of the reason for great customer demand. PO Resp. 15–16. This description may apply to the '905 patent at issue in IPR2016-00036, but is not relevant to our inquiry here.

(3) Skepticism

Although Patent Owner does not list skepticism as one of the objective indicia raised, Patent Owner does make such an argument. PO Resp. 12 (not mentioning skepticism), 16, n. 7 (mentioning skepticism). Specifically, Patent Owner argues that a top mounted spoiler ran against the grain of conventional wiper understanding. *Id.* at 15 (citing Ex. 2003 at ¶¶ 22–25, 58–60, 65, 73, 77, 79[25]). This argument is unpersuasive because, as detailed above, a top mount spoiler for a beam blade was known prior to the '264 patent.

(4) Long-felt but unresolved need and Unexpected Results

Patent Owner contrasts the success of ICON wipers to the failure of a competitor's beam-blade product, the Trico Innovision wiper blade that was introduced in 2004 and "failed." PO Resp. 16–17 (Ex. 2007 ¶ 7); *see also* PO Resp. 5 (suggesting that Trico's wiper failed due to lack of a flexible spoiler).

To the extent that Patent Owner contends that Trico's failure is evidence of satisfying a long-felt, but unmet need, such argument and

[25] We note that paragraphs 65, 73, and 79 do not relate to the patent at issue in this case. The other paragraphs are addressed in previous analysis.

evidence is unpersuasive. The Trico product's introduction in 2004 was after the critical date of the '264 patent, and Patent Owner presents no evidence regarding when the Trico product was developed. *See* Pet. Reply 21; *see also Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1332 (Fed. Cir. 2009) (the unmet need must exist on the patent's filing date).

To the extent that Patent Owner is suggesting Trico's lack of commercial success demonstrates the commercial success of ICON wiper, such contention is also unpersuasive. As detailed above, Patent Owner has not demonstrated the connection between the ICON wiper and the challenged claims. Further, Mr. Kashnowski simply presents the subjective conclusion that the Trico wiper "failed in the market place." Ex. 2007 ¶ 7. Mr. Kashnowski does not reveal any factual data underlying that opinion, nor does Patent Owner explain what constitutes failure. The value of that assertion is further reduced by Petitioner's evidence that the Trico wiper achieved enough sales that manufacturing capacity had to be increased. Pet. Reply 17, n. 12 (Ex. 1100 ¶ 15).

(5) Other Alleged Indicia

Patent Owner contends that within a year of introduction of the Aerotwin and Icon products knockoff products appeared having spoilers with diverging legs similar to those shown in the '905 patent, as well as end caps. PO Resp. 18 (Ex. 2007 ¶ 9). This evidence may relate to the '905 patent at issue in IPR2016-00036, but it does relate to the patent at issue here. *See In re GPAC, Inc.* 57 F.3d 1573, 1580 (Fed. Cir. 1995) (evidence that does not detail what aspects of the invention were target by industry copies is entitled to little weight).

Patent Owner contends that the industry is now largely respectful of Patent Owner's beam blade patent rights, and that all of Patent Owner's major competitors have entered licensing agreements for those rights. PO Resp. 19 (citing Ex. 2007 ¶ 11). However, these agreements do not cover the '264 patent, and for that reason this licensing is not evidence of secondary indicia for the '264 patent.

3. Conclusions

Prior to the '264 patent, both conventional and beam wipers were known as well as use of a spoiler to counter lift off in both wiper types. Further, Petitioner has shown by a preponderance of the evidence that the elements of the challenged claims were known, and Patent Owner does not challenge these assertions.

Petitioner reasons that the proposed modification would have predictably yielded a lighter weight blade that provides the benefit of a less powerful drive system, and that modifying Prohaska's wind deflector strip to have a constant cross section along its length is faster and cheaper to manufacture than a cross section that varies along the length and improves stability. These assertions are well supported by the evidence of record. Patent Owner's arguments regarding rationale are unpersuasive, and to not address effectively Petitioner's rationale.

Patent Owner's evidence of secondary considerations may relate to the '905 patent at issue in IPR2016-00036, but not the patent at issue here. Even if this evidence was tied to claimed features, it suffers from additional shortcomings. For example, Patent Owner's evidence of skepticism, unexpected results, and long-felt but unresolved need is contradicted by the evidence of record. The ICON wiper had some success in terms of three

industry awards and gross revenue figures; however, Patent Owner did not provide sufficient information to put this success in perspective and the evidence may relate to the '905 patent, but not the '264 patent.

The '264 patent applied the known technique of adding a hollow spoiler to counter wind lift on a conventional wiper to a beam wiper, and the predictable result was that the spoiler performed as it was known to perform. Further, forming the spoiler with a constant cross sectional profile along its length was a known technique for lowering manufacturing costs.

In light of this, Petitioner has demonstrated by a preponderance of the evidence that claims 1 and 2 would have been obvious over Prohaska and either Kotlarksi '383 or Merkel.

F. OBVIOUSNESS OVER PROHASKA, EITHER KOTLARSKI '383 OR MERKEL, AND KOTLARSKI '090

Claim 3 follows:

> 3. A wiper blade according to claim 1, characterized in that the wind deflection strip (**42**) is designed as a binary component whose longitudinal area provided with the claw-like extensions (**56**) is made of a harder material than a longitudinal area lying closer to the base point (**46**).

Figure 2, annotated, of the ’264 patent follows:

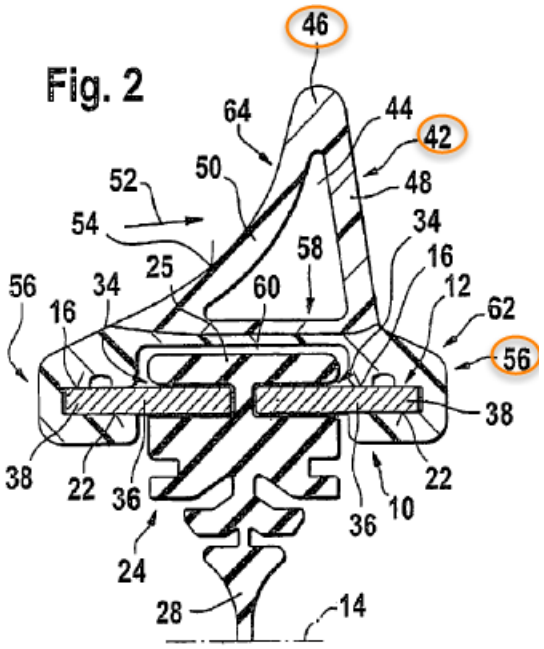


Figure 2 of the ’264 patent depicts a cross section through the wiper blade along the line II-II of Figure 1 with the element number of deflection strip 42, claw-like extensions 56, and base point 46 circled. Ex. 1001, 4:1–2.

Petitioner builds upon the grounds of unpatentability based on (1) Prohaska and Kotlarski ’383 and, (2) Prohaska and Merkel by adding Kotlarski ’090 to each combination.[26] Pet. 51–56. Specifically, Petitioner contends that Kotlarski ’090’s spoiler is a soft flexible material while the claws of the retainers are formed of a relatively stiff material such as plastic. *Id.* at 17–18, 51–52 (citing Ex.1009, 3:11–12, 3:59–62, 4:33–36, 4:43–48, 4:62–64, 5:45–46, Figs. 5, 9; Ex. 1018 ¶¶ 53, 74). Petitioner reasons that a person of ordinary skill in the art would have utilized claw-like extensions formed of a harder material (plastic) than the longitudinal area closer to the

[26] Based on content, in the chart on page 51, reference to claim 15 is meant to be claim 1. Pet. 51.

base of the spoiler (rubber), as disclosed by Kotlarski ’090, in order to grip the spring rails. *Id.* at 52–54; Ex. 1018 ¶ 74. Petitioner contends that the resulting combination retains a flexible spoiler. Pet. 53–54 (noting that Prohaska describes the desirability of a flexible spoiler, Ex. 1003, 3:108–112). Petitioner adds that such an improvement was the use of a familiar element according to a known method to produce predictable results. Pet. 54.

Patent Owner argues that even if Kotlarski ’090’s spoiler and retainer are of a different hardness, that does not meet the requirement of claim 3 of a binary component having two different hardnesses. PO Resp. 10–11.

Patent Owner does not contest Petitioner’s contention that Kotlarski ’090’s spoiler and retainer are of a different hardnesses. This contention is supported by a preponderance of the evidence, and we adopt it here.

Patent Owner’s argument does not address the ground as articulated by Petitioner. Petitioner does not propose to add Kotlarski ’090’s spoiler and retainer to the combination of either Prohaska and Kotlarski ’383 or Prohaska and Merkel. Rather, as explained above, Petitioner contends that Kotlarski ’090 teaches retainers of a greater stiffness than the spoiler and applying this teaching to the combination of either Prohaska and Kotlarski ’383 or Prohaska and Merkel would result in the wind deflector strip corresponding to a binary component as claimed.

As mentioned above, Patent Owner’s evidence of secondary considerations relates to the ’905 patent at issue in IPR2016-00036, not the patent at issue here. Even if this evidence was tied to claimed features, it suffers from additional shortcomings.

Petitioner's reasoning that a person of ordinary skill in the art would have utilized claw-like extensions formed of a harder material (plastic) than the longitudinal area closer to the base of the spoiler (rubber), as disclosed by Kotlarski '090, in order to grip the spring rails is well supported by the evidence of record. The improvement was the use of a familiar element according to a known method to produce predictable results. Patent Owner's arguments do not persuade us otherwise.

In light of this, Petitioner has demonstrated by a preponderance of the evidence that claim 3 would have been obvious over Prohaska, either Kotlarski '383 or Merkel, and Kotlarski '090.

G. OBVIOUSNESS OVER PROHASKA, EITHER KOTLARSKI '383 OR MERKEL, AND MATHUES

Petitioner builds upon the grounds of unpatentability based on (1) Kotlarski '383 and Prohaska, and (2) Merkel and Prohaska by addressing the added limitation of claim 3 in view of Mathues. Pet. 52–56. Specifically, Petitioner contends that Mathues's squeegee 20 includes a retention portion 22 formed of a harder material than blade portion 30. *Id.* at 52 (citing Ex. 1013, 1:56–59, 2:1–7, 2:59–66). Petitioner contends that Mathues teaches making the retention portion of an article harder than the remainder of that article. Pet. 54–55. Petitioner reasons a person of ordinary skill in the art armed with this teaching from Mathues, would have modified the combination of either Prohaska and Kotlarski '383 or Prohaska and Merkel so that the claw-like extensions (retaining portion) were harder the spoiler (the remainder). *Id*. at 55. Petitioner adds that such an improvement was

use of a familiar element according to a known method to produce predictable results. Pet. 55–56.

Patent Owner argues that Mathues discloses a wiper strip made with progressively different hardnesses in different parts of the wiper strip to improve wiping quality, and does not disclose a binary component as recited in claim 3. PO Resp. 11 (citing Ex. 2003 ¶ 80).

Patent Owner does not contest Petitioner's contention that Mathues discloses a wiper strip with a retention portion of greater hardness than the remainder of the wiper strip. This contention is supported by a preponderance of the evidence and we adopt it here. Specifically, Mathues discloses a squeegee for use with windshield wipers (*i.e.*, the wiper strip portion of a windshield wiper). Ex. 1013, 1:9–11. Mathues describes that the wiper strip has two or more strata of hardness. *Id*. at 1:52–60. Specifically, the uppermost portion of that wiper strip (retention portion 22, having for example a Shore A hardness of about 95) is formed of a harder material than the lower portion of the wiper strip (blade portion 30, having a Shore A hardness of about 60). *Id*. at 2:1–5, 2:57–66. Figure 1 of Mathues follows:

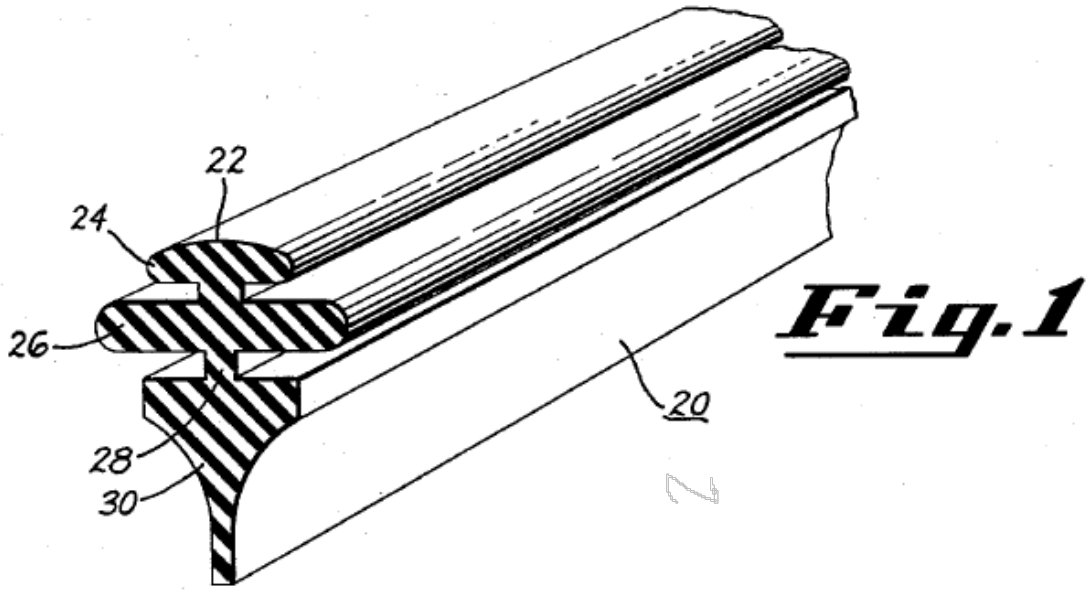


Figure 1 of Mathues depicts a perspective view of the wiper strip. *Id*. at 1:41–42.

Patent Owner's argument does not address the ground as articulated by Petitioner. Petitioner does not propose to add Mathues's wiper strip to the combination of either Prohaska and Kotlarski '383 or Prohaska and Merkel. Rather, as explained above, Petitioner contends that Mathues teaches to make the retaining portion of the greater hardness than the reminder of that component.

As mentioned above, Patent Owner's evidence of secondary considerations may relate to the '905 patent at issue in IPR2016-00036, but it does not relate to the patent at issue here. Even if this evidence was tied to claimed features, it suffers from additional shortcomings.

Petitioner's reasoning that a person of ordinary skill in the art would have utilized claw-like extensions being made of a harder material (plastic) than the longitudinal area closer to the base of the spoiler (rubber), as disclosed by Mathues, in order to grip the spring rails is well supported by

the evidence of record. The improvement was use of a familiar element according to a known method to produce predictable results. Patent Owner's arguments do not persuade us otherwise.

In light of this, Petitioner has demonstrated by a preponderance of the evidence that claim 3 would have been obvious over Prohaska, either Kotlarski '383 or Merkel, and Mathues.

V. ORDER

For the reasons given, it is:

ORDERED that claims 1 and 2 are unpatentable under 35 U.S.C. § 103(a) over Kotlarski '383 and Prohaska;

FURTHER ORDERED that claims 1 and 2 are unpatentable under 35 U.S.C. § 103(a) over Merkel and Prohaska;

FURTHER ORDERED that claim 3 is unpatentable under 35 U.S.C. § 103(a) over Kotlarski '383, Prohaska, and Kotlarski '090;

FURTHER ORDERED that claim 3 is unpatentable under 35 U.S.C. § 103(a) over Merkel, Prohaska, and Kotlarski '090;

FURTHER ORDERED that claim 3 is unpatentable under 35 U.S.C. § 103(a) over Kotlarski '383, Prohaska, and Mathues; and

FURTHER ORDERED that claim 3 is unpatentable under 35 U.S.C. § 103(a) over Merkel, Prohaska, and Mathues;

FURTHER ORDERED that Petitioner's Motion to Exclude is denied-in-part and granted-in-part as outlined herein; and

FURTHER ORDERED that Petitioner's Motion to Strike is denied; and

FURTHER ORDERED that Patent Owner's Motion to Exclude is denied; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements.

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