

**United States Court of Appeals
for the Federal Circuit**

HAMILTON BEACH BRANDS, INC.,
Appellant

v.

F'REAL FOODS, LLC,
Appellee

2018-1274

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2016-01107.

Decided: November 16, 2018

WILLIAM STEPHEN FOSTER, JR., Drinker Biddle & Reath LLP, Washington, DC, argued for appellant. Also represented by BRIANNA LYNN SILVERSTEIN.

GUY CHAMBERS, Sideman & Bancroft LLP, San Francisco, CA, argued for appellee. Also represented by TIMOTHY E. BIANCHI, Schwegman Lundberg & Woessner, PA, Minneapolis, MN.

Before REYNA, WALLACH, and TARANTO, *Circuit Judges*.

REYNA, *Circuit Judge*.

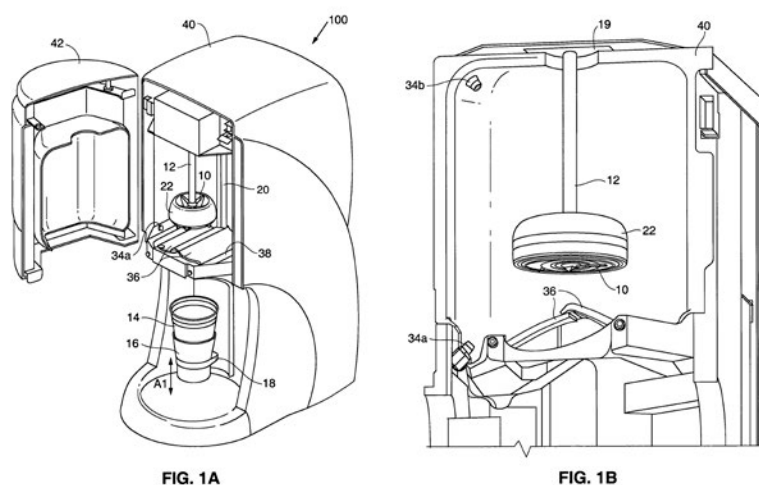
Hamilton Beach Brands, Inc. challenges the Patent Trial and Appeal Board's final written decision upholding the patentability of claim 21 of U.S. Patent No. 7,520,662 under 35 U.S.C. § 103. Because the Board did not err in construing the relevant claim terms and because substantial evidence supports the Board's decision, we affirm.

BACKGROUND

1. The '662 Patent

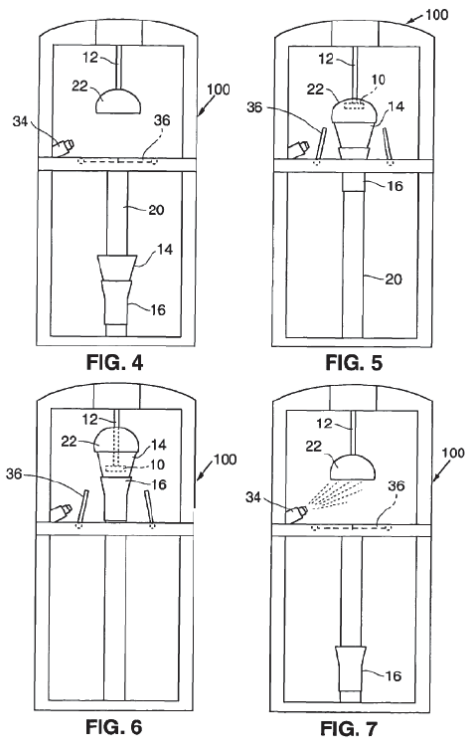
freal! Foods, LLC ("freal") is the assignee of U.S. Patent No. 7,520,662 ("the '662 patent"), entitled "Rinseable splash shield and method of use." The '662 patent discloses a vessel for containing contents to be mixed that is positioned in a mixing machine, and a splash shield that is positioned to shield the opening of the vessel. '662 patent, Abstract. After the material within the vessel is mixed by a mixing element, the splash shield is separated from the vessel and rinsed by a nozzle on the mixing machine. *Id.* The '662 patent describes how the invention "provide[s] a drink mixer having a splash shield that may be automatically rinsed following mixing of each batch or beverage, preferably without disassembly or removal of any components or disposable covers." *Id.* col. 1 ll. 63–67.

Figures 1A and 1B show mixing/blending machine 100, including rotatable mixing blade 10 and splash shield 22, as well as nozzles 34a and 34b for directing rinsing fluid towards the interior of the splash shield. *Id.* col. 3 ll. 63–65.



Id. Figs. 1A, 1B.

Figures 4 through 6 of the '662 patent show the mixing and rinsing mechanism in operation. Figure 4 shows the cup 14 and cup holder 16, which are raised in Figure 5 to be underneath mixing blade 10 and splash shield 22. *Id.* col. 4 ll. 29–49. Hinged doors 36 raise when the cup elevates. *Id.* After mixing, as shown in Figure 7, the cup and cup holder descend back down, the hinged doors close, and nozzle 34 sprays the splash shield clean with water. *Id.* col. 5 ll. 9–36. Also described is fluid trough 38 to catch the rinse water. *Id.*



Id. Figs. 4–7.

Claim 21 is the only challenged claim and recites:

21. A method for rinsing a splash shield on a mixing machine, the method comprising the steps of:

providing a vessel containing material to be mixed, the vessel including an opening;

further providing a mixing machine having a holder for receiving the vessel, a rotatable mixing element extendable into the vessel for mixing the material, a splash shield positionable to shield the opening of the vessel, and a nozzle oriented towards the splash shield;

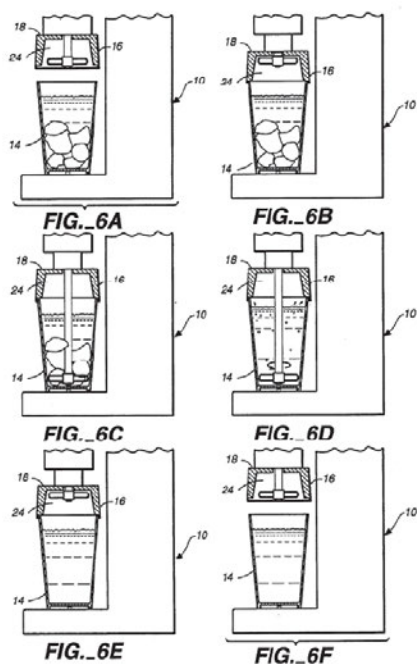
after mixing the material in the vessel using the mixing element and with the

splash shield shielding the vessel opening, unshielding the vessel opening and directing rinsing fluid onto the splash shield using the nozzle while isolating the vessel from the rinsing fluid.

Id. col. 6 l. 64–col. 8 l. 3.

2. Prior Art References

U.S. Patent No. 5,439,289 (“Neilson”) discloses an apparatus for mixing ingredients in a receptacle, as shown below in Figures 6A through 6F. J.A. 105–20.

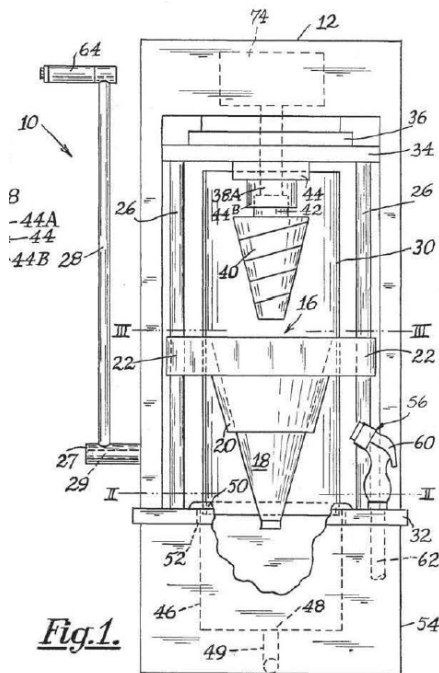


J.A. 111.

During operation, lid 16 descends over receptacle 14 (Figs. 6A and 6B) to create a seal, after which the mixer head descends into the receptacle to mix its contents (Figs. 6C and 6D). J.A. 118. The mixer head and lid then ascend away from the receptacle (Figs. 6E and 6F). Neilson describes this process as occurring automatically

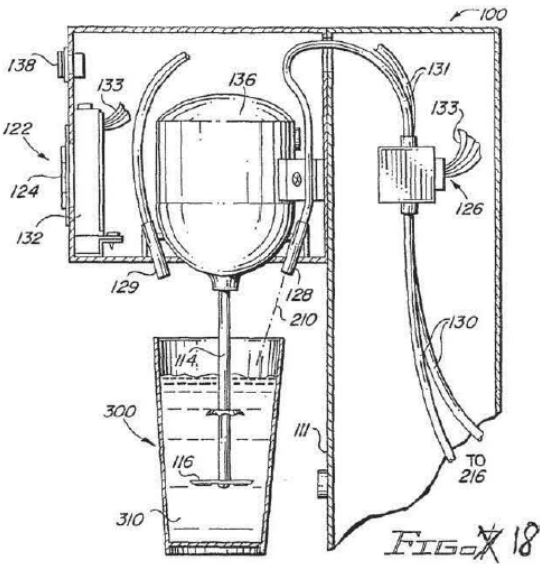
after the machine is activated. *Id.* Neilson also describes an alternate embodiment in which the lid 16 is fixed, and the receptacle itself is raised and lowered into and out of engagement with the lid. J.A. 119.

U.S. Patent No. 4,740,088 (“Kelly”) discloses a frozen confections blending machine allowing for “rapid, frequent and sanitary cleaning operations between product changes.” J.A. 97. Kelly describes having a sink underneath the mixing area to collect runoff and a “[m]eans for delivering water to the auger, the cone and all inside surfaces of the enclosure for cleaning, including hoses, spray devices[,] valves . . . facilitating . . . cleaning, especially, between changes of additives and flavors from one product batch to another.” J.A. 100. The spray device 56 described in Kelly “may be rotatable and tiltable,” and is “adjustable in such a manner so as to clean the interior,” as shown in Figure 1 below. J.A. 101.



J.A. 98.

Prior art reference “Miller” collectively refers to Miller et al., U.S. Patent Application Publication No. 2002/0048626 A1 (“Miller ’626”), and Miller, U.S. Patent No. 5,766,665 (“Miller ’665”). J.A. 121–36. Miller ’626 discloses an apparatus for dispensing a syrup and blending it with a mix held in a disposable serving container. J.A. 132. Miller ’626 describes attaching an open-ended tubular sleeve to the mix-filled container to shield the blender spindle and limit splashing of the mix during blending. *Id.* After blending is completed, the sleeve/shield is removed, and can be washed for reuse. J.A. 134. Miller ’626 discloses cleaning the spindle by delivering sterilizing solution or water through a dedicated nozzle, shown at 129 in Figure 18 below, directed at the spindle and spindle blades and operating the spindle and blades in an empty container to which sterilizing solution has been added. J.A. 135.



J.A. 130.

3. Proceedings Before the Board

On May 27, 2016, Petitioner Hamilton Beach Brands, Inc. (“Hamilton Beach”) petitioned the Patent Trial and Appeal Board (the “Board”) for *inter partes* review of claim 21 of the ’662 patent as obvious under Neilson, Kelly, and Miller. See *Hamilton Beach Brands, Inc. v. f’real Foods, LLC*, IPR2016-01107, 2016 WL 7985447, at *1, *3 (P.T.A.B. Nov. 30, 2016) (“*Institution Decision*”). Prior to institution, neither party sought construction for the “nozzle” terms, and the Board instituted review without construing any terms. *Id.* at *5. After institution, f’real proposed constructions for the “nozzle” terms, which Hamilton Beach disputed, arguing that no express construction was needed. In its Final Written Decision, the Board decided that the “nozzle” terms of the ’662 patent needed construction, and it adopted constructions that were similar, but not identical, to f’real’s proposals. *Hamilton Beach Brands, Inc. v. f’real Foods, LLC*, IPR2016-01107, 2017 WL 6513981, at *2–4 (P.T.A.B. Dec. 19, 2017) (“*Final Written Decision*”). Relevant to this appeal, the Board construed “a nozzle oriented towards the splash shield” to mean “a nozzle pre-positioned such that it points at the splash shield,” and construed “directing rinsing fluid onto the splash shield using the nozzle” to mean “spraying rinsing fluid onto the splash shield from the pre-positioned nozzle.” *Id.* at *3.

In assessing the patentability of claim 21 of the ’662 patent, the Board concluded that Neilson, in view of Kelly and Miller, does not teach or suggest the nozzle limitations of claim 21. *Id.* at *6–8. Specifically, the Board concluded that Neilson does not disclose any sort of rinse nozzle for cleaning a splash shield, and because the parties’ experts agreed that Kelly teaches a manually operated spray device “similar to that commonly found at a kitchen sink,” Kelly only describes a spray device that is not prepositioned to point at the splash shield. *Id.* at *6–7. The Board further concluded that a person of ordinary

skill would not combine Neilson and Kelly with the electronically controlled nozzle of Miller “without relying on the claim as a roadmap for selecting and modifying the teachings.” *Id.* at *7. To meet the limitations of claim 21, Kelly’s nozzle would need to be modified from a manually positionable nozzle to a pre-positioned nozzle pointing at the splash shield. The Board found that Miller does not teach this modification, finding that Miller’s nozzle is directed at the mixing spindle, and not the splash shield, and Miller describes removing the splash sleeve for cleaning. *Id.*

After reviewing the objective indicia of non-obviousness, the Board additionally concluded that evidence of non-obviousness outweighed evidence of obviousness presented by Hamilton Beach. *Id.* at *11. The Board thus concluded that Hamilton Beach had not shown by a preponderance of the evidence that claim 21 would have been obvious in light of Neilson, Kelly, and Miller.

Hamilton Beach appeals both the Board’s claim construction and non-obviousness determination. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A).

PRELIMINARY ISSUE: 35 U.S.C. § 315(b)

Shortly before oral argument, freal submitted a Notice of Supplemental Authority, arguing that the appeal should be dismissed as time barred under 35 U.S.C. § 315(b) in light of our recent decision in *Click-to-Call Technologies, LP v. Ingenio, Inc.*, 899 F.3d 1321 (Fed. Cir. 2018) (en banc in relevant part). Section 315(b) provides that an IPR “may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.” In *Click-to-Call*, we held that the time bar of § 315(b) is implicated “once a party receives notice through official delivery of a complaint in a civil action, irrespective of subsequent events,” such as

the voluntary dismissal without prejudice in that appeal. 899 F.3d at 1330.

The relevant facts of this case are as follows. On October 6, 2014, f'real served Hamilton Beach with a complaint alleging claims for patent infringement of the '662 and other patents, along with claims for trademark infringement, trade dress infringement, and unfair competition. Complaint at 8–15, *f'real Foods, LLC v. Hamilton Beach Brands, Inc.*, No. 1:14-cv-01270 (D. Del. Oct. 3, 2014), ECF No. 1 (J.A. 624–40) (the “2014 action”); *see also* Proof of Service at 2, No. 1:14-cv-01270 (D. Del. Oct. 6, 2014), ECF No. 6 (J.A. 707–08). Over the following year and three months, the parties in the 2014 action proceeded through the early stages of litigation, including discovery and claim construction briefing in preparation for a *Markman* hearing.

On January 26, 2016, f'real moved to voluntarily dismiss its patent infringement claims without prejudice because it did not own the asserted patents, including the '662 patent, when the 2014 action was filed. Plaintiff f'real Foods, LLC's Motion for Voluntary Dismissal at 1, *f'real Foods, LLC v. Hamilton Beach Brands, Inc.*, No. 1:14-cv-01270 (D. Del. Jan. 26, 2016), ECF No. 106. The motion explained that when the 2014 action was initially filed, f'real believed it owned the asserted patents. *Id.* at 2. During the litigation, f'real subsequently discovered that the asserted patents had been assigned to a holding company, Rich Products Corporation, as part of a merger, but inadvertently were never assigned back to f'real. *Id.*; *see also* J.A. 876–77 (declaration of the Intellectual Property Manager at Rich Products). Thus, although Rich Products subsequently assigned the patents back to f'real, an issue was raised as to whether f'real had standing to bring its patent infringement claims when the 2014 action was filed. Thus, to “resolve expeditiously the standing issue,” f'real asked the district court to dismiss its patent infringement claims from the 2014 action without preju-

dice, leaving its other claims pending. *Id.* at 1. On February 26, 2016, the district court granted f'real's motion for voluntary dismissal without directly addressing the standing issue. Order, *f'real Foods, LLC v. Hamilton Beach Brands, Inc.*, No. 1:14-cv-01270 (D. Del. Feb. 26, 2016), ECF No. 120.

On the same day it filed its motion for voluntary dismissal, f'real, joined with Rich Products, filed and subsequently served a new complaint reasserting the same patent infringement action as the 2014 action, including infringement of the '662 patent. Complaint at 12, *f'real Foods, LLC v. Hamilton Beach Brands, Inc.*, No. 1:16-cv-00041 (D. Del. Jan. 26, 2016), ECF No. 1; *see also* Waiver of Service, No. 1:16-cv-00041 (D. Del. Jan. 29, 2016), ECF No. 4. The parties subsequently stipulated and agreed to consolidate the 2014 action with the new complaint. Stipulation and Order for Consolidation at 2, *f'real Foods, LLC v. Hamilton Beach Brands, Inc.*, No. 1:16-cv-00041 (D. Del. Apr. 12, 2016), ECF No. 17.

On May 27, 2016, Hamilton Beach filed its petition for *inter partes* review in this case. *Institution Decision*, 2016 WL 7985447, at *3. Because more than one year elapsed between the filing of the 2014 action and Hamilton Beach's petition, f'real argued to the Board that § 315(b) applied and the petition was time barred. J.A. 590–96. The Board concluded that because f'real lacked standing to file the original complaint, the complaint was not a “proper federal pleading” and thus did not trigger the one-year time bar under § 315(b). *Institution Decision*, 2016 WL 7985447, at *4. The Board declined to revisit the question in its final decision. *Final Written Decision*, 2017 WL 6513981, at *13. Now, in light of our decision in *Click-to-Call*, f'real again contends that the one-year time bar of § 315(b) applies and the Board lacked jurisdiction to institute, and asks the panel to dismiss Hamilton Beach's IPR petition.

Section 315(b) precludes filing of a petition for *inter partes* review of the '662 patent more than one year after Hamilton Beach was “served with a complaint alleging infringement of the patent.” In *Click-to-Call*, we concluded that “a defendant served with a complaint as part of a civil action that is voluntarily dismissed without prejudice remains ‘served’ with the ‘complaint.’” 899 F.3d at 1336. We agree, therefore, that f'real's voluntary dismissal of the 2014 action would not alone preclude application of the one-year time bar. That f'real lacked standing to file its 2014 complaint alleging infringement of the '662 patent involves a circumstance not present, or considered, in *Click-to-Call*. We do not decide that question in this appeal.

It is well-established law that “a party must file a cross-appeal when acceptance of the argument it wishes to advance would result in a reversal or modification of the judgment rather than an affirmance.” *Bailey v. Dart Container Corp. of Mich.*, 292 F.3d 1360, 1362 (Fed. Cir. 2002). Although f'real frames its § 315(b) argument as an alternate basis on which to affirm the Board's decision, its argument, if it had merit, could not support affirmance. It would instead require vacatur of the Board's decision and a remand for dismissal of Hamilton Beach's petition entirely. See *Click-to-Call*, 899 F.3d at 1325, 1341–42; *Luminara Worldwide, LLC v. Iancu*, 899 F.3d 1303, 1305–06, 1308 (Fed. Cir. 2018). Accepting f'real's § 315(b) argument thus would require that we modify the Board's decision, which means that a cross-appeal was required. Because f'real did not file a cross-appeal, we do not reach the § 315(b) issue.¹

¹ f'real suggests no basis for excusing non-compliance with the cross-appeal requirement in this case.

DISCUSSION

Hamilton Beach challenges both the Board's claim construction and its conclusions regarding obviousness under 35 U.S.C. § 103. We will address each issue in turn.

1. Claim Construction

Hamilton Beach argues that the Board violated the Administrative Procedure Act ("APA") by changing claim construction theories midstream without providing the parties an opportunity to respond, and additionally erred in construing the "nozzle" terms so as to require that the nozzles be repositioned.

As formal administrative adjudications, IPRs are subject to the APA. *See Dell Inc. v. Accelaron, LLC*, 818 F.3d 1293, 1298, 1301 (Fed. Cir. 2016). Under the APA, we must "hold unlawful and set aside agency action . . . not in accordance with law [or] . . . without observance of procedure required by law." 5 U.S.C. § 706(2). The Board must inform the parties of "the matters of fact and law asserted." 5 U.S.C. § 554(b)(3). It also must give the parties an opportunity to submit facts and arguments for consideration. *Id.* § 554(c). Each party is entitled to present oral and documentary evidence in support of its case, as well as rebuttal evidence. *Id.* § 556(d). Pursuant to these provisions, the Board may not change theories midstream without giving the parties reasonable notice of its change. *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1080 (Fed. Cir. 2015).

In making its APA challenge, Hamilton Beach argues that the Board violated *SAS Institute, Inc. v. ComplementSoft, LLC*, 825 F.3d 1341 (Fed. Cir. 2016), *reversed on other grounds*, *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348 (2018), which held that, under § 554(b)(3) of the APA, the Board may not change theories midstream by adopting a construction in its final written decision that

neither party requested nor anticipated. *Id.* Hamilton Beach contends that the Board violated the APA by adopting a construction not proposed by either party without giving an opportunity to respond.

In *SAS*, the parties had agreed to the construction adopted by the Board at institution, and without *any* further discussion during briefing or at oral hearing, the Board adopted a different claim construction in its Final Written Decision. *SAS Inst.*, 825 F.3d at 1351. We held it was “difficult to imagine either party anticipating that already-interpreted terms were actually moving targets, and it is thus unreasonable to expect that they would have briefed or argued, in the alternative, hypothetical constructions not asserted by their opponent.” *Id.* Here, in contrast, Hamilton Beach received adequate notice in f'real's post-institution response regarding the nozzle terms, as shown by the fact that Hamilton Beach argued against f'real's proposed constructions in its reply brief and during the oral hearing. J.A. 1782–83; J.A. 2076–78. f'real argued in its response that the '662 patent requires the nozzle be positioned to point toward the splash shield, thus providing the requisite notice that, for claim construction purposes, the nozzle's position was contested. *See* J.A. 1330 (arguing that “[t]o give meaning to the two nozzle claim limitations within the context of the '662 patent, rinsing fluid needs to be directed onto the splash shield using the nozzle *from its position of being oriented towards the splash shield*” (emphasis added)). During the oral hearing, the Board asked Hamilton Beach's counsel whether the nozzles were in a fixed position. J.A. 2077 (“And to me, at least in the embodiment that's disclosed, that's telling me that the nozzles are in a fixed position, or prepositioned, as Patent Owner's arguing. Why is that not right in your view?”). And the Board's final adopted construction of the nozzle terms, while not identical to those proposed by f'real, are similar enough to f'real's proposed constructions so as to not constitute changing

theories midstream in violation of the APA.² Accordingly, because Hamilton Beach had notice of the contested claim construction issues and an opportunity to be heard, we reject Hamilton Beach's argument that the Board violated the APA in adopting its own constructions. *See SAS*, 825 F.3d at 1351.

Nor did the Board err in its construction of the nozzle terms. "The ultimate construction of the claim is a legal question and, therefore, is reviewed de novo." *Info-Hold, Inc. v. Applied Media Techs. Corp.*, 783 F.3d 1262, 1265 (Fed. Cir. 2015). Claim construction based solely upon intrinsic evidence, as is the case here, is a matter of law reviewed de novo. *See Microsoft Corp. v. Proxycorn, Inc.*, 789 F.3d 1292, 1297–98 (Fed. Cir. 2015), *overruled on other grounds by Aqua Prods., Inc. v. Matal*, 872 F.3d 1290 (Fed. Cir. 2017) (en banc).

Claim construction seeks to ascribe the meaning to claim terms as a person of ordinary skill in the art at the time of invention would have understood them. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en

² For the claim term "nozzle oriented towards the splash shield," f'real proposed a construction of "having at least one nozzle oriented towards a soiled area of the splash shield." J.A. 1330. The Board construed the term as "a nozzle pre-positioned such that it points at the splash shield." *Final Written Decision*, 2017 WL 6513981, at *3.

For the claim term "directing rinsing fluid onto the splash shield using the nozzle," f'real proposed a construction of "directing rinsing fluid onto a soiled area of the splash shield using the pre-positioned nozzle as oriented towards that soiled area." J.A. 1330–31. The Board construed the term to mean "spraying rinsing fluid onto the splash shield from the pre-positioned nozzle." *Final Written Decision*, 2017 WL 6513981, at *3.

banc). In an IPR proceeding, claims are given their broadest reasonable interpretation in light of the specification.³ *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1279 (Fed. Cir. 2015) (en banc), *aff'd sub. nom., Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131 (2016). In construing terms, “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313. Indeed, the specification is “the single best guide to the meaning of a disputed term” and “[u]sually, it is dispositive.” *Id.* at 1315. Claims must be construed “in view of the specification, of which they are a part.” *Id.*

The Board’s constructions require that the nozzles are pre-positioned—i.e., fixed, without manual adjustment—in a position that points at the splash shield. We begin our analysis with the claim language. *In re Power Inte-*

³ On October 11, 2018, the United States Patent and Trademark Office issued a final rule revising the claim construction standard for interpreting claims in *inter partes* review, post-grant review, and covered business method patent review proceedings before the Board. *Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board*, 83 Fed. Reg. 51,340 (Oct. 11, 2018) (to be codified at 37 C.F.R. pt. 42). The final rule provides that, for these types of proceedings, the Board will apply the same standard applied in federal courts to construe patent claims—i.e., the *Phillips* standard—to all petitions filed on or after the effective date of November 13, 2018. *Id.* Because Hamilton Beach filed its petition for *inter partes* review before the effective date of the rule, we construe the claims under the broadest reasonable interpretation standard.

grations, Inc., 884 F.3d 1370, 1376 (Fed. Cir. 2018) (“[C]laim construction must begin with the words of the claims themselves.” (citation omitted)). The Board relied on two aspects of the claim language in support of this conclusion. First, claim 21 is a method claim that first describes a mixing machine, and then describes a step of directing rinsing fluid. The mixing machine is described as having a “nozzle *oriented towards* the splash shield,” ’662 patent col. 7 l. 5 (emphasis added), and thus the Board concluded that “[t]he nozzle is oriented before it is used to direct rinsing fluid onto the splash shield,” and is thus “pre-positioned.” *Final Written Decision*, 2017 WL 6513981, at *3; see *Becton, Dickinson & Co. v. Tyco Healthcare Grp.*, 616 F.3d 1249, 1257 (Fed. Cir. 2010) (“Claims must be interpreted with an eye toward giving effect to all terms in the claim.”) (internal quotation marks omitted). Second, the Board observed that claim 21 uses the word “positionable” when referring to a mixing machine component “that moves from one position to another when the method is performed,” and noted that “oriented” and “positionable,” as different claim terms, should have different meanings. *Final Written Decision*, 2017 WL 6513981, at *3; see *Bd. of Regents of the Univ. of Tex. Sys. v. BENQ Am. Corp.*, 533 F.3d 1362, 1371 (Fed. Cir. 2008) (“Different claim terms are presumed to have different meanings.” (citation omitted)). Specifically, the Board pointed to claim 21, which describes the splash shield in the mixing machine as “positionable to shield the opening of the vessel,” and that in the method part of the claim, the splash shield is positioned as either shielding or unshielding the vessel opening. ’662 patent col. 7 l. 4–col. 8 l. 1. The Board found support for its construction in the specification, namely in figures showing the nozzles pre-positioned to be pointed at the splash shield, and a portion of the specification describing how the splash shield can rotate within the machine so that all sides of the shield are exposed to the fluid spray from the noz-

zles—i.e., the nozzles are in a fixed position. *Final Written Decision*, 2017 WL 6513981, at *4.

On appeal, Hamilton Beach’s primary assertion on the merits of the claim construction is that the Board’s construction incorporates limitations from the specification that are not present in the claim. We disagree because claim 21 itself contains language that provides support for the Board’s construction. Method claim 21 describes the mixing machine as having “a nozzle *oriented*” towards the splash shield. This limitation is stated as a feature of the “machine”; it is not phrased in “orienting” process terms. This suggests a fixed orientation. Additionally, the Board’s construction properly draws support from the claim’s use of both the terms “positionable” (for the shield) and “oriented towards” (for the nozzle). Were the nozzle also capable of being moved around and positioned in various ways, the word “positionable” could have been repeated. Instead, the patentee chose to use *oriented*, which suggests that the nozzle is pointed at a particular location, i.e., fixed. Notably, Hamilton Beach makes no meaningful arguments against this specific claim-language analysis, instead focusing its efforts on arguing that f’real did not seek construction of “oriented” or contest its meaning.

In light of the foregoing, we conclude that the Board did not err in its construction of the “nozzle” terms requiring the nozzles to be prepositioned, as this construction follows the claim’s plain language read in line with the specification.

2. Obviousness under 35 U.S.C. § 103

Under 35 U.S.C. § 103(a),⁴ a patent may not be obtained “if the differences between the subject matter

⁴ Congress amended § 103 when it passed the Leahy-Smith America Invents Act (AIA). Pub. L. No.

sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.” 35 U.S.C. § 103(a) (2006).

Obviousness is a question of law with underlying factual findings relating to the scope and content of the prior art; the differences between the claims and the prior art; the level of ordinary skill in the pertinent art; and any secondary considerations of nonobviousness. *ZUP, LLC v. Nash Mfg., Inc.*, 896 F.3d 1365, 1371 (Fed. Cir. 2018) (citing *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 427 (2007); *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17–18 (1966)). “We review the [PTAB]’s factual findings for substantial evidence.” *Rambus Inc. v. Rea*, 731 F.3d 1248, 1251 (Fed. Cir. 2013). “Substantial evidence is something less than the weight of the evidence but more than a mere scintilla of evidence,” meaning that “[i]t is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *In re NuVasive, Inc.*, 842 F.3d 1376, 1379–80 (Fed. Cir. 2016) (internal quotation marks omitted). The inherent teaching of a prior art reference is a question of fact. *Par Pharm., Inc. v. TWi Pharm., Inc.*, 773 F.3d 1186, 1194 (Fed. Cir. 2014).

Hamilton Beach argues that the Board erred by relying on hindsight in its finding that there was no sufficiently proved motivation to combine the prior art references. Hamilton Beach contends that Neilson provides motivation to a person of ordinary skill (“POSITA”) “for the combination with Kelly and Miller by (1) identifying the desirability of a mixing apparatus that is easy to clean and (2) the requirement to clean the splash shield.” Appellant’s Br. 33. Hamilton Beach also contends that

112–29, § 3(c), 125 Stat. 284, 287 (2011). Because the priority date of the ’662 patent is before March 16, 2013, the pre-AIA § 103 applies.

Kelly and Miller “provide express motivation to clean components in place with a nozzle after each blending cycle.” *Id.* at 38.

We conclude that substantial evidence supports the Board’s finding that Hamilton Beach did not persuasively establish a motivation to combine the prior art references to arrive at claim 21. Although the prior art recites cleaning the mixing machine,⁵ substantial evidence supports the Board’s finding that Hamilton Beach did not prove that the prior art provides a motivation to clean components in place with a fixed nozzle directed towards the splash shield. See *Final Written Decision*, 2017 WL 6513981, at *6–7. Kelly describes how having the mixing machine being positioned over a sink is beneficial because doing so allows “for the cleaning of all interior parts *in their mounted positions, in fact, if required while in motion*, whereas the cleaning of removed, or removable parts, or those not even belonging to the machine, can be cleaned in the forward portion . . . of the sink 46.” J.A. 101 (emphasis added). But the method of cleaning in the claimed invention is fundamentally different from that of the prior art, in that claim 21 requires the mixing vessel to be isolated from the rinsing fluid cleaning the splash shield. Kelly discloses a spray device that is

⁵ Miller notes the importance of cleaning the spindle after each use. J.A. 135 (disclosing “delivery of the sterilizing solution or fresh water through a dedicated nozzle 129 for flushing and cleaning the spindle 114 after each use in preparing a flavored shake”). Neilson describes a stationary lid, analogous to a splash shield, being “readily detachable for cleaning.” J.A. 119. Kelly emphasizes the importance of cleaning the auger (i.e., the component doing the mixing), and discloses using “at least one spray device” to clean “the entire interior” of the blending device. J.A. 100–01.

“adjustable in such a manner so as to clean the interior of the auger, the mixing cone, and the entire interior”—i.e., the mixing vessel is not isolated. *Id.* And as the Board found, Kelly does not teach a spray device that is fixed in a position to point towards the splash shield. *Final Written Decision*, 2017 WL 6513981, at *7.

Even if the prior art discloses the limitations Hamilton Beach identifies, such as cleaning components in place and a nozzle, the prior art does not identify a reason *why* a POSITA would have been motivated to combine those limitations. *See KSR*, 550 U.S. at 418 (2007) (“[I]t [is] important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”). Rather, substantial evidence supports the Board’s finding that “[t]he combination of Neilson, Kelly, and Miller does not teach or suggest the nozzle limitations of claim 21 without relying on the claim as a roadmap for selecting and modifying the teachings.” *Final Written Decision*, 2017 WL 6513981, at *7.

Nor does Hamilton Beach point to testimony that would compel the Board to find that a POSITA would have been motivated to combine or modify the prior art elements to reach the claimed invention.⁶ For instance, Kelly contemplates that components can be cleaned without necessarily being removed from the machine, but Kelly provides no incentive or motivation or even commentary on why that would be desirable. Hamilton Beach also argues that the Board improperly assumed that the

⁶ While Hamilton Beach’s expert Dr. Slocum testified before the Board that a POSITA would have modified Miller to achieve the claimed invention, the Board discounted his testimony as being inconsistent with Miller’s teachings. *Final Written Decision*, 2017 WL 6513981, at *7.

method of claim 21 involves an automatic rinsing step. Appellant's Br. 34–35. Hamilton Beach disputes that the cleaning has to be done automatically, noting that claim 21 includes no reference to automation, and that claim 2, which claims the method of claim 1 in which the step “directing hot rinsing fluid onto the splash shield using the nozzle” is performed automatically. We disagree. Although the Board noted that the prior art references all disclose manual cleaning of a splash shield,⁷ its findings or conclusions regarding obviousness did not depend on the claimed method being automatic. On the contrary, the Board used language that expressly contemplates that the claimed method may be automatic or manual, and considered the obviousness of the claim in light of the prior art for both. *Final Written Decision*, 2017 WL 6513981, at *7 (“In the Reply Brief, Petitioner argues that, *even if claim 21 were limited to automatic rinsing*, Miller discloses an electronically controlled nozzle 129. . . . We are not persuaded by Petitioner's argument for two reasons.” (emphasis added)).

We have considered Hamilton Beach's other arguments and find them unpersuasive. Thus, in light of the foregoing, we hold that substantial evidence supports the Board's determination that Neilson, Kelly, and Miller do not teach or suggest a method of rinsing a splash shield in which a nozzle is pre-positioned such that it points at the splash shield and rinsing fluid is sprayed onto the splash shield from the pre-positioned nozzle. That is, the Board did not err in its decision that the prior art did “not teach

⁷ Neilson contains no particular cleaning mechanism; Kelly discloses a hose-like nozzle that must be operated and pointed by a user; and Miller discloses a nozzle which is fixed to clean the spindle, but the splash shield/sleeve must be removed and cleaned by hand.

or suggest the nozzle limitations of claim 21.” *Final Written Decision*, 2017 WL 6513981, at *11.

Hamilton Beach also challenges the Board’s determination that f’real’s evidence of secondary considerations supports nonobviousness. *See id.* at *8–11. But since we affirm Board’s findings regarding the failure of the prior art to teach or suggest all limitations of claim 21, we need not address Hamilton Beach’s assertions of error in the Board’s consideration of the objective indicia of nonobviousness.

AFFIRMED

COSTS

No costs.