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APPENDIX A

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

HOMELAND HOUSEWARES, LLC,
Appellant

v.

WHIRLPOOL CORPORATION,
Appellee

2016-1511

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2014-00877.

Decided: August 4, 2017

RAYMOND JOSEPH TROJAN, Trojan Law Offices, Beverly Hills, CA, argued for appellant. Also represented by DYLAN C. DANG, FREDRICK S. TSANG.

RICHARD HUNG, Morrison & Foerster LLP, San Francisco, CA, argued for appellee. Also represented by ESTHER KIM CHANG, PETER J. YIM; BRIAN ROBERT MATSUI, Washington, DC.

Before PROST, *Chief Judge*, NEWMAN, and
DYK, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* DYK.

Dissenting Opinion filed by *Circuit Judge* NEWMAN.
DYK, *Circuit Judge*.

Homeland Housewares, LLC (“Homeland”) petitioned the United States Patent and Trademark Office Patent Trial and Appeal Board (“Board”) for an inter partes review of claims 1-16 of U.S. Patent No. 7,581,688 (“688 patent”), which is assigned to Whirlpool Corporation (“Whirlpool”). The Board did not construe the key term “settling speed” found in the claims and determined that the claims were not invalid as anticipated by prior art reference U.S. Patent No. 6,609,821 (“Wulf”). Homeland appeals. We reverse.

BACKGROUND

The ’688 patent relates to household blenders. The invention claimed in the ’688 patent is a pre-programmed, automated blending cycle designed to blend items “quickly and reliably—by repeatedly dropping to a speed slow enough to allow the blender contents to settle around the cutter assembly, and then returning to a [higher] speed suitable for processing the contents.” Appellee Br. 4.

As admitted in the ’688 patent itself, it was well-known that a user could manually pulse between a high speed and a low speed to “achieve[] . . . a pattern of movement that introduces the entire contents of the

reservoir into contact with the rotating blades” for efficient mixing. ’688 patent, col. 1 ll. 20-23; *see also id.* at col. 6 ll. 46-50. Thus, the claimed automatic blending routine was, in the prior art, done manually. There were also blenders on the market which allowed “pre-program[ing] ‘on-off’ sequence[s] [to] enable[] hands-free operation of the blender.” *Id.* at col. 1 ll. 38-39.

An independent claim at issue, claim 1, provides:

A cycle of operation for a blender comprising a motor, a container for holding items for processing, and a cutter assembly located within the container and operably coupled to the motor whereby the motor effects the rotation of the cutter assembly, the cycle comprising:

automatically controlling a rotational speed of the cutter assembly to effect a pulsing of the speed of the cutter assembly wherein each pulse comprises:

(A) a constant speed phase, where the operating speed of the cutter assembly is maintained at a predetermined operating speed,

(B) a deceleration phase, where the *speed of the cutter assembly is reduced from the operating speed to a predetermined settling speed indicative of the items in the container having settled around the cutter assembly*, which is less than the operating speed and greater than zero, and

(C) an acceleration phase, where the speed of the cutter assembly is increased from the settling speed to the operating speed.

Id. at col. 7 ll. 4-23 (emphases added). Claim 1 is representative and there are no patentability distinctions offered here with respect to the other claims of the '688 patent.¹

On June 2, 2014, Homeland petitioned the Board for an *inter partes* review of claims 1-16 of the '688 patent, seeking a construction of “settling speed,” and arguing, *inter alia*, that the claims at issue are invalid due to anticipation by Wulf. Like the '688 patent, Wulf noted that it was well-known that manually “[p]ulsing the motor . . . at high and then low speeds permits the material being blended to fall back to the region of the cutting knives[,] thereby improving the blending or mixing of the material.” Wulf, col. 1 ll. 36-39. Wulf notes that this manual “process can be very frustrating,” *id.* at col. 2 l. 20, and thus teaches “a blender . . . that is programmed to [automatically] accomplish predetermined [blending] functions and routines,” *id.* at col. 2 ll. 25-27.

In its Final Written Decision, the Board declined to provide a construction of “settling speed” and concluded that Homeland had “not shown, by a

¹ The other independent claim, claim 9, is a method claim for what is claimed in claim 1. The dependent claims cover minor features, including the cycle being repeated (claims 2 and 10), maintaining the operating speed for an unspecified, predetermined time period (claims 3, 4, 5, 11, 12, 13, and 14), decelerating the cutter in a continuous manner (claims 6 and 15), reducing operating speed of the cutter to allow settling (claim 8), and decelerating the cutter by terminating the power to the motor (claims 7 and 16).

preponderance of the evidence, that any claim of the '688 patent is anticipated by Wulf.” J.A. 7, 14.

Homeland appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4).

In appeals from inter partes reviews, we review the Board’s conclusions of law *de novo* and the Board’s findings of fact for substantial evidence. *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1297 (Fed. Cir. 2015). Claim construction is an issue of law that we review *de novo* where, as here, there is no relevant extrinsic evidence. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015).

DISCUSSION

I

Anticipation is a two-step analysis. The first step is properly interpreting the claims. *Beachcombers v. WildeWood Creative Prods., Inc.*, 31 F.3d 1154, 1160 (Fed. Cir. 1994). The second step is determining whether the limitations of the claims, as properly interpreted, are met by the prior art. *Id.* The Board determined that Wulf did not anticipate the '688 patent because its disclosures did not meet the “settling speed” limitation. J.A. 14. However, the Board did “not adopt any explicit construction of the term for [its] Final Written Decision,” J.A. 7, even though the parties disagreed as to claim construction.² Just as district

² The dissent urges that the Board adopted a construction of “settling speed” in its Institution Decision as “a speed at which

courts must, “[w]hen the parties raise an actual dispute regarding the proper scope of . . . claims, . . . resolve that dispute,” *02 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008), the Board also must resolve such disputes in the context of IPRs. *See CSR, PLC v. Skullcandy, Inc.*, 594 F. App’x 672, 678 (Fed. Cir. 2014) (holding that “[t]he Board erred by failing to construe ‘threshold value’ as it is used in claims 1-6 before finding that [prior art reference] Smith failed to disclose a ‘threshold value’” in anticipation). Given that the Board did not rely on extrinsic evidence here as to claim construction, we can determine the correct construction of “settling speed” and then determine whether the Board correctly held that Wulf does not meet the limitations of claim 1. *Teva*, 135 S. Ct. at 841.

“[T]he claim construction inquiry . . . begins and ends in all cases with the actual words of the claim.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998) (citations omitted). Here, the relevant language of claim 1 provides that during pulsing, “the speed of the cutter assembly is reduced from the operating speed to *a predetermined settling speed.*” ’688 patent, col. 7 ll. 15-17 (emphasis added).

Whirlpool proposes that “a predetermined settling speed” means “a speed, greater than zero, that

the cutter assembly has slowed enough to allow the blender contents to be processed again.” Dissenting Op. 2-3. However, in its Final Written Decision, the Board specifically held that it did not adopt any explicit construction of the term “settling speed.” *See* J.A. 7.

indicates that items have settled around the cutter assembly.” Appellee’s Br. 43. At times on appeal, Whirlpool argues that empirical testing is required to establish a settling speed. Whirlpool recognizes that empirical testing would require determining the settling speed for each individual blender and its content load, “[b]ecause so many factors affect the settling speed.” Appellee’s Br. 9; *see also id.* at 45; Oral Arg. 18:16-25 (skilled artisans looking at the ’688 patent would “perform tests to determine . . . at what point in time [the blender ingredients] settles to arrive at the predetermined settling speed”).³ We conclude that a construction that would require empirical testing is incorrect. Indeed, the dissent also does not endorse a claim construction that requires empirical testing.

The words of a claim are generally given their ordinary and customary meaning. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005). In some cases, the ordinary meaning of claim language may be readily apparent and claim construction will involve little more than the application of the widely accepted meaning of commonly understood words. *Id.* at 1314.

Here, it is undisputed that the plain meaning of “predetermined” is to determine beforehand. This

³ Whirlpool also took this position that empirical testing is required before the Board. *See* Appellant Br. 18 (Whirlpool counsel arguing that “[t]he patent does talk about this concept of needing to empirically test and determine what the settling speed is for a specific blender and it’s specifically depending in part on the shape of the container, the type of blender it is and the contents, the expected contents as an example”).

plain language definition does not require that a predetermined speed be empirically determined for each use, depending on the particular blender or the individual contents of the blender.

Claims must also be read in view of the specification, of which they are a part. *Phillips*, 415 F.3d at 1315. While the specification refers to an embodiment of the invention in which “a predetermined settling speed” is empirically determined and varies depending on blender use, the process for empirically determining a settling speed is neither taught in the specification nor a part of the claims. The claim language only requires “a predetermined settling speed,” and does not require empirically determining a particular settling speed for a particular blender or a particular blender load.

Whirlpool argues that “a predetermined settling speed” should be defined in light of the specification because the specification suggests that settling speed can be empirically determined. The specification states that the

predetermined settling speed . . . [is a] function[] of the blender motor size, the cutter assembly configuration, the container size and configuration, the properties such as hardness and viscosity of the items to be processed in the blender, and the like. . . . Thus, these speeds and time periods will vary for different blenders, and *must be determined empirically* for a particular blender.

'688 patent, col. 5 ll. 18-27 (emphasis added). But this suggestion cannot define the scope of the claim, since it provides no meaningful definition of an empirically determined settling speed other than with respect to a single example (relating to crushed ice). Of course, “particular embodiments appearing in the written description will not be used to limit claim language that has broader effect.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004). And Whirlpool in its brief at one point appeared to concede that settling speed does not require empirical testing. *See* Appellee Br. 45 n.8 (“Although Homeland argues that Whirlpool’s construction requires that the settling speed be determined empirically for a particular blender, Whirlpool’s construction does no such thing.” (quotation marks and citation omitted)).

The definition proposed by Homeland is also incorrect. Homeland proposes that “settling speed” means any comparative low speed less than the operating speed. But not every lowering in speed will cause settling. By way of example, as the appellee points out, if the operating speed is 6000 rpm and it was lowered to 5900 rpm, the contents will not necessarily settle.

Under these circumstances, we, of course, may adopt a definition not proposed by either party that best fits with the claim language and specification. *See Exxon Chem. Patents, Inc. v. Lubrizol Corp.*, 64 F.3d 1553, 1556 (Fed. Cir. 1995) (“[T]he judge’s task is not to decide which of the adversaries[’ constructions] is correct. Instead the judge must independently assess

the claims, the specification, . . . and declare the meaning of the claims.”).

The broadest reasonable construction of “a predetermined settling speed” is a speed that is slower than the operating speed and permits settling of the blender contents. This is consistent with the ordinary and customary meaning of the words of the claim, as discussed above, and with the specification. *Phillips*, 415 F.3d at 1312, 1315. For example, this is in accord with the specification, which refers to the illustrative settling speed at 1120 rpm as a “speed that slows significantly enough to allow the contents to reach the ‘settled’ condition to be processed again.” ’688 patent, col. 6 ll. 16-18. This is also the correct construction because it is “the broadest reasonable interpretation consistent with the written description.” *In re NTP, Inc.*, 654 F.3d 1268, 1274 (Fed. Cir. 2011) (quoting *In re Baker Hughes, Inc.*, 215 F.3d 1297, 1301 (Fed. Cir. 2000)). Here, unlike in *Exxon*, 64 F.3d at 1556, our claim construction is not new, but simply represents a midpoint between the two opposing constructions now urged by the parties. Significantly, this construction is also practically identical to the construction utilized by the Board in its Institution Decision, *see* J.A. 314, and the overall construction urged by the patentee’s expert, *see* J.A. 406, 412, apart from the requirement for empirical testing.

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II

Based on this construction of “settling speed,” we conclude that the Board erred in finding that Figure 25 of Wulf does not anticipate the '688 patent.

Figure 25 of Wulf discloses the following automated blender routine:

FIG. 25

<p style="text-align: center;"><u>POWDERED DRINKS</u></p> <p style="text-align: center;">FORWARD HIGH SPEED 15 SECONDS RAMP DOWN TO LOW, LOW FOR 5 SECONDS RAMP TO HIGH, HIGH FOR 15 SECONDS RAMP DOWN TO LOW FOR 5 SECONDS RAMP TO HIGH, HIGH FOR 20 SECONDS</p>

The Board found that Homeland’s anticipation theory “is not without appeal,” but also found that Homeland failed to present evidence showing Figure 25 of Wulf anticipates the '688 patent. J.A. 13-14. In order to evaluate whether Figure 25 anticipates, we must determine what Figure 25’s “low” speed means. For this, we look to Wulf’s specification, which teaches two relevant characteristics of “low” speeds. “[W]hen a patentee uses a claim term throughout the entire patent specification, in a manner consistent with only a single meaning, he has defined that term ‘by

implication.’” *Bell Atl. Network Servs., Inc. v. Covad Comm’ns Grp., Inc.*, 262 F.3d 1258, 1271 (Fed. Cir. 2001).

First, in Wulf, the term “low speeds” appears only once in the specification, where the background teaches that “[p]ulsing the motor on/off or at high and then low speeds permits the material being blended to fall back to the region of the cutting knives thereby improving the blending or mixing of the material.” Wulf, col. 1 ll. 36-39. This is consistent with the testimony of the Whirlpool expert, who stated that “slower speeds will tend to allow items to settle, while higher speeds will tend to . . . keep [] items suspended above the cutter assembly.” J.A. 409-10. Because Wulf uses “low speeds” to refer to speeds at which blending ingredients fall back to the cutters, we conclude that Figure 25’s use of that same term should be understood in the same manner.

Second, Wulf’s specification uses the term “low” or “lower” in the context of motor speed discussions in four additional places. *See* Wulf, col. 1 ll. 27-31; col. 1 ll. 41-43; col. 15 ll. 32-46 (discussing Figs. 28-30); col. 19 ll. 57-60. In each discussion, Wulf makes clear that a “low” speed is discretely and significantly different from a “high” speed. For example, Figure 30 shows that there are only two buttons—low and high—that a user may press. J.A. 153. In another example, Wulf teaches that “speeds in a low range [in the prior art] are obtained by applying only half . . . voltage to the motor.” Wulf, col. 1 ll. 28-29. Therefore, we conclude that Figure 25’s use of “low” should also be understood to indicate

a speed that is significantly different from a “high” speed.

In light of these teachings from the Wulf specification, Figure 25 discloses a settling speed limitation consistent with our construction, as well as the other elements of the pulsing cycle in claim 1. Specifically, claim 1’s “constant speed phase, where the operating speed of the cutter assembly is maintained at a predetermined operating speed,” is found in Wulf Fig. 25’s “forward high speed 15 seconds.” Claim 1’s “deceleration phase, where the speed of the cutter assembly is reduced from the operating speed to a predetermined settling speed indicative of the items in the container having settled around the cutter assembly, which is less than the operating speed and greater than zero,” is found in Wulf Fig. 25’s “ramp down to low, low for 5 seconds.” And Claim 1’s “acceleration phase, where the speed of the cutter assembly is increased from the settling speed to the operating speed” is found in Wulf Fig. 25’s “ramp to high, high for 15 seconds.” Figure 25 thus contains every limitation found in the ’688 patent’s claim 1.

III

The Board also found that Homeland “left the testimony of Patent Owner’s witness, Mr. Faerber, un rebutted. Under such circumstances, [it was] unwilling to discount Mr. Faerber’s testimony that Wulf” does not anticipate. J.A. 14. However, we must disregard the testimony of an expert that is plainly inconsistent

with the record, *NantKWest, Inc. v. Lee*, No. 15-2095, 2017 WL 1735330, at *9 (Fed. Cir. 2017), or “based on an incorrect understanding of the claim[s],” *Cordis Corp. v. Boston Sci. Corp.*, 658 F.3d 1347, 1357 (Fed. Cir. 2011). That is the situation here, where Faerber makes several incorrect statements with respect to the record, and in one respect, adds an additional claim requirement.

Faerber first states that “Wulf gives no indication of whether any of these speeds . . . would cause items to settle around the cutter,” and that Wulf “only discloses items settling when the motors stops.” J.A. 430-31. This is clearly contradicted by the record, as Wulf teaches that “[p]ulsing the motor . . . at high and then low speeds permits the material being blended to fall back to the region of the cutting knives.” Wulf, col. 1 ll. 36-38.

Faerber then states that with respect to the routine disclosed in Figure 25, the “low” speed cannot be the settling speed because it “is maintained for at least five seconds . . . [and] there is no reason to maintain a settling speed for so long.” J.A. 430. The ’688 patent claims do not contain any limitations with respect to how long the settling speed needs to be maintained. The specification teaches that these “time periods will vary for different blenders, and must be determined empirically for a particular blender.” ’688 patent, col. 5 ll. 25-27. In fact, in the sole example provided, “4 seconds represents a predetermined deceleration time period during which solid particles have accumulated into the ‘settled’ condition.” *Id.* at col. 4 ll. 23-25.

Faerber thus incorrectly imports a limitation into the claims.⁴

Faerber finally states that because Figure 25 is entitled “Powdered Drinks,” “even very low speeds will cause the blender contents to circulate, rather than settle. Thus, one of ordinary skill would not expect Figure 25 to disclose a settling speed.” J.A. 430-31. When all of “the structural limitations recited in [the claims] are all found in the [prior art] reference[,] . . . the absence of a disclosure relating to [intended] function does not defeat . . . [a] finding of anticipation.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). That Figure 25 contains all of the structural limitations of claim 1, according to the correct construction, completes the anticipation analysis, regardless of intended use.

“[A] court should discount any expert testimony that is clearly at odds with . . . the written record of the patent.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) (quotation marks omitted). Here, we conclude that at least these portions of Faerber’s expert testimony are inconsistent with the intrinsic record and therefore should be discounted.

⁴ Contrary to the dissent, in holding that Wulf does not anticipate, the Board never made any findings with respect to the length of the settling speed as a part of the claimed invention, nor approved that aspect of the Faerber opinion.

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IV

Having concluded that all the claims of the '688 patent are invalid as anticipated by Wulf, we need not address the Board's obviousness determination with respect to the Kolar prior art reference, U.S. Patent No. 6,364,522.

REVERSED

COSTS

No costs.

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

HOMELAND HOUSEWARES, LLC,
Appellant

v.

WHIRLPOOL CORPORATION,
Appellee

2016-1511

Appeal from the United States Patent and Trade-
mark Office, Patent Trial and Appeal Board in No.
IPR2014-00877.

NEWMAN, *Circuit Judge*, dissenting.

The court today rewrites the claims of the '688 patent, adopting a "claim construction" that states the invention more broadly than did the patentee. The court then holds its broadened claims anticipated by the prior art, on which the patentee has provided an improvement that is not shown in the prior art.

The court errs in its analysis of the subject matter that is claimed, and strays from the substantial evidence standard of review of PTAB findings of fact. From the court's finding of invalidity based on "anticipation," overturning the finding of the Board, I respectfully dissent.

DISCUSSION

The court's rejection of the Board's finding that the claims are not anticipated is based on an incorrect understanding of the claims, coupled with an unwarranted enlargement of the references. The '688 patent is directed to an improvement in blender technology, an improvement explained in the specification and by unrebutted expert testimony. My colleagues make their own findings, construe the claims to broadly include the prior art, and then invalidate the claims based on their unduly broad claim construction.

The description in the specification, and the guidance of the prosecution history, negate the majority's construction of the claims to include the prior art. The process described and claimed in the '688 patent is not shown in the prior art. The Board's findings are supported by substantial evidence, and require

affirmance. My colleagues' *de novo* findings are contrary to the record, overstep our appellate role, and are incorrect in fact and law.

The claimed subject matter, including the settling speed and the blender sequence, are not shown in the prior art

My colleagues criticize the absence of “construction” of the term “settling speed” in the Board’s final decision.¹ Maj. Op. 5. The Board did not err in holding that this term did not require “construction.” Such a holding by the expert PTO Board is not grounds for discarding the Board’s findings and ignoring the expert and documentary evidence presented to and discussed by the Board.

The Board also stated that: “Our decision ultimately does not hinge on the precise contours of a construction of ‘settling speed.’” Board Op. 7. In its initial act to institute review, the Board described the settling speed “in accordance with the patent’s disclosure, i.e., as a speed at which the cutter assembly has slowed enough to allow the blender contents to be processed again.” *Homeland Housewares, LLC v. Whirlpool Corp.*, IPR2014-00877, 2014 WL 5585266, at *5. My colleagues do not ascribe error to this finding, but simply discard it in favor of their own definition of settling speed based upon generalized blender operations of the prior art, particularly prior art from 1972 as discussed in Wulf, through which my colleagues reach

¹ *Homeland Housewares, LLC v. Whirlpool Corp.*, No. IPR2014-00877 (P.T.A.B. Oct. 21, 2015) (“Board Op.”).

their ultimate finding of invalidity based on “anticipation.”

No error has been shown in the Board’s treatment of “settling speed” in the ’688 patent, a treatment based on the specification, the prior art, and unrebutted expert testimony. My colleagues do not discuss the substantial evidence that supports the Board’s ruling. *Contra* 5 U.S.C. § 706(2) (the appellate task is to “hold unlawful and set aside agency action, findings, and conclusions found to be . . . unsupported by substantial evidence.”). Here, the Board’s findings are plainly supported by substantial evidence.

The Board correctly found that the Wulf reference does not anticipate the ’688 claims

“Anticipation under 35 U.S.C. § 102 is a question of fact,” and “[w]e review the Board’s factual findings for substantial evidence,” *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376, 1381 (Fed. Cir. 2015).

The panel majority finds that “[i]n light of [] teachings from the Wulf specification, Figure 25 discloses a settling speed limitation consistent with our construction, as well as the other elements of the pulsing cycle in claim 1” and thus finds anticipation. Maj. Op. 11. The panel majority omits the specific limitations of the claim, and restates the ’688 invention in generalized terms that do not distinguish it from Wulf. However, the blender systems in Wulf and in the ’688 patent are not the same, and the Wulf method is distinguished in

the '688 claims. The Board recognized the distinction, and the Board's finding that the '688 claims are not anticipated by Wulf is supported by substantial evidence in the record before the Board.

In finding that Wulf anticipates, the panel majority ignores the limitations in the '688 claims, and also violates "[t]he requirement that the prior art elements themselves be 'arranged as in the claim' means that claims cannot be 'treated . . . as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning." *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010) (quoting *Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1459 (Fed. Cir. 1984)).

Wulf indeed shows some automation of blender action, and the Board cited the unrebutted expert testimony in finding that Wulf lacked the automated pulsing of the '688 patent. The majority does not acknowledge the basis of the Board's decision, and instead cites Wulf's discussion of a 1972 Swanke patent as background information to fill any anticipatory gaps in Wulf. The Board found that "the manual process described by Wulf as background information does not anticipate the independent claims, which require 'automatically controlling a rotational speed of the cutter assembly' to effect the recited pulsing." Board Op. 13. That finding is supported by substantial evidence.

My colleagues do not explain where the procedure claimed in the '688 patent is shown in Wulf, including

in the discussion of the Swanke patent and the general operation of blenders in 1972. The panel majority instead imputes to Wulf's general reference to high and low motor speeds, the hindsight knowledge of the advance described and claimed in the '688 patent. As the Board discussed, Wulf does not show the '688 method whereby each pulse includes a predetermined operating speed, a deceleration phase to the settling speed, and an acceleration from the settling speed to the operating speed—all limitations in claim 1. Nor does Wulf show "automatically controlling a rotational speed of the cutter assembly to effect a pulsing," in claim 1. The distinctions from Wulf were found and relied upon by the Board and are not disputed by my colleagues; instead, they are ignored. However, "[t]he standard for lack of novelty, that is, for 'anticipation,' is one of strict identity." 1-3 Chisum on Patents § 3.02 (citing sources).

"A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference." *Crown Operations Int'l, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375 (Fed. Cir. 2002). The majority's reliance on general background of blender operation does not establish anticipation of the claims, whose limitations are not shown in either Wulf or the background references cited in Wulf. The Board's finding that the blender operation claimed in the '688 patent is not described in the prior art, is supported by substantial evidence.

Wulf's Figure 25 does not show the method of the '688 claims

My colleagues focus on Figure 25 of Wulf, stating that the functions marked in the figure anticipate the '688 claims. The Board received expert testimony on Figure 25, with Mr. Faerber testifying that “Wulf gives no indication of whether any of these speeds . . . would cause items to settle around the cutter,” and that Wulf “only discloses items settling when the motor stops.” J.A. 430-31 (citing Wulf, col. 2, ll. 15-19 (“[t]he user may have to stop the blending process to dislodge the ice or to assure the ice is coming into contact with the blades.”)). The Board observed that the expert testimony was “unrebutted.” The testimony remains unrebutted.

Instead, the panel majority mischaracterizes the expert testimony. Wulf's Figure 25 shows both a “ramp down to low” and then “low for 5 seconds,” and Mr. Faerber testified that “the ‘low’ speed cannot be the settling speed because it “is maintained for at least five seconds . . . [and] there is no reason to maintain a settling speed for so long.” J.A. 430. The majority states that the specification contradicts Mr. Faerber; that is incorrect, as shown in the Board's discussion.

The Board found that the specification teaches deceleration to the settled condition via the settling speed, not deceleration *and* operation at the settled condition via the settling speed. Mr. Faerber explained that “[i]t would not be useful to maintain the settling speed for any significant length of time,” J.A. 420-21,

since “speeds typical of settling speeds do not efficiently comminute the blender contents,” J.A. 412. Mr. Faerber explained that where a speed is maintained in accordance with Wulf, it is “likely too high to be considered a settling speed.” J.A. 420-21. Mr. Faerber’s testimony and the Board’s findings are not in conflict with the specification; it is the majority’s finding that is in conflict with the specification.

The panel majority also brushes aside Mr. Faerber’s testimony regarding the relative slow and high speeds of a blending program for powdered drinks. Maj. Op. 12-13. The inability of powdered drink mix to settle “even [at] very low speeds” reinforces his testimony that the “low” speed in Figure 25 is not a “settling speed” since nothing would “settle.” This is not merely an absence of an intended function; it is lack of a structural limitation, as the Board found.

The Board’s findings are supported by substantial evidence; the majority does not show otherwise.² As reiterated in *Apple Inc. v. Samsung Electronics Co., Ltd.*, “such fact findings are indisputably the province of the [fact-finder].” 839 F.3d 1034, 1039 (Fed. Cir. 2016). The

² The majority also states that [c]ontrary to the dissent, in holding that Wulf does not anticipate, the Board never made any findings with respect to the length of the settling speed as a part of the claimed invention, nor approved that aspect of the Faerber opinion.” Maj. Op. 13 n.4. The majority does not explain how these aspects affect the substantial evidence supporting the Board’s decision. The question on appeal is not whether the Board discussed the majority’s selected issues; the question is whether the Board’s findings in support of its decision are supported by substantial evidence. The record demonstrates that they are.

structure of the post-grant administrative process assigns to this court the traditional “appellate function . . . limited to deciding the issues raised on appeal by the parties, deciding these issues only on the basis of the record made below, and . . . requiring appropriate deference be applied to the review of factfindings.” *Id.*; see also *Cutter v. Wilkinson*, 544 U. S. 709, 718, n.7 (2005) (“[W]e are a court of review, not first view.”). The panel majority does not discuss the substantial evidence on which the Board’s decision was based, ignores the unrebutted expert evidence, and in general oversteps the appellate role.

CONCLUSION

Substantial evidence supports the Board’s finding of no anticipation. The ’688 patent embodies a novel distinction not shown in any cited reference, as the Board recognized. My colleagues present a flawed analysis and incorrect conclusion. I respectfully dissent.

APPENDIX B

Paper 18

Entered: October 21, 2015

UNITED STATES PATENT
AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL
AND APPEAL BOARD

HOMELAND HOUSEWARES, LLC,
Petitioner,

v.

WHIRLPOOL CORPORATION,
Patent Owner.

Case IPR2014-00877
Patent 7,581,688 B2

Before PHILLIP J. KAUFFMAN, WILLIAM V. SAIN-
DON, and PATRICK M. BOUCHER, *Administrative
Patent Judges*.

BOUCHER, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background*

Homeland Housewares, LLC (“Petitioner”) filed a corrected Petition (Paper 5, “Pet.”) pursuant to 35 U.S.C. §§ 311-19 to institute an *inter partes* review of

claims 1-16 of U.S. Patent No. 7,581,688 B2 (“the ’688 patent”). The Board instituted trial on October 30, 2014. Paper 10 (“Dec.”).

During the trial, Patent Owner timely filed a Patent Owner Response (Paper 13, “PO Resp.”), and Petitioner timely filed a Reply to the Patent Owner Response (Paper 14, “Reply”). An oral hearing was held on June 9, 2015. Paper 17 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). 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. Based on the record before us, Petitioner has not demonstrated, by a preponderance of the evidence, that any claim of the ’688 patent is unpatentable.

B. Related Proceedings

Both parties assert that they are not aware of any related action or proceeding concerning the ’688 patent. Pet. 1; Paper 9, 2¹.

C. The ’688 Patent (Ex. 3001)

The ’688 patent “relates generally to household blenders, and more particularly to a household blender having a crushed ice functionality.” Ex. 3001, col. 1, ll. 7-9. A blender is described as including a container

¹ The pages of this paper are not numbered and we count the cover page as page 1.

that defines a chamber adapted to hold a food item and a motor-driven rotating cutter assembly mounted in an aperture in a bottom wall of the container. *Id.* at col. 3, ll. 3-11. Blender contents are assumed to include a liquid fraction and solid particles. *Id.* at col. 3, ll. 60-62. A “settled condition” is described in which the “solid particles . . . accumulate at the bottom of the chamber around the cutter assembly.” *Id.* at col. 3, ll. 63-64 (reference numbers omitted).

Figure 6 of the '688 patent is reproduced below.

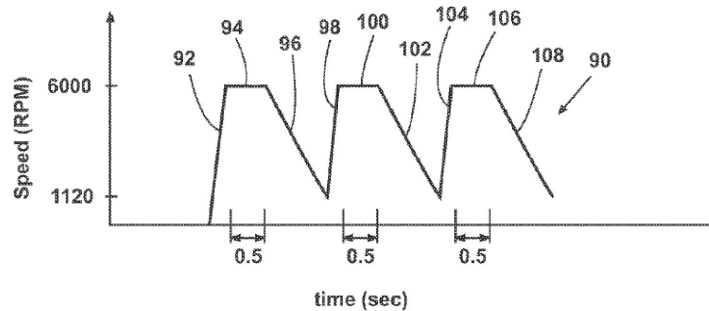


Figure 6 is a graphical representation of motor speed for a loading condition of food items in the container. *Id.* at 2:49-50. “For illustrative purposes,” 6000 RPM represents a predetermined “operating speed” and 1120 represents a predetermined “settling speed.” *Id.* at col. 4, ll. 17-21. Ice crushing is achieved by cycling through the motor-speed profile shown in Figure 6 until an ice-crush switch or on/off switch “is actuated to terminate the process.” *Id.* at col. 5, ll. 13-17. Each cycle includes acceleration of the motor speed to the operating speed, maintaining the operating speed for a predetermined operating time period, and decelerating

the motor speed to the settling speed. *Id.* Deceleration results from deactivation of the motor, and a maximum time for deceleration to the settling speed may be imposed when the contents do not sufficiently impede rotation of the cutter speed—if the motor speed continues to exceed the settling speed at the expiration of a “predetermined deceleration time period,” the cycle is re-initiated by acceleration of the motor speed to the operating speed. *See id.*, Fig. 5; col. 4, ll. 35-44.

D. Illustrative Claim

Independent claim 1 is illustrative of the claims at issue:

1. A cycle of operation for a blender comprising a motor, a container for holding items for processing, and a cutter assembly located within the container and operably coupled to the motor whereby the motor effects the rotation of the cutter assembly, the cycle comprising:

automatically controlling a rotational speed of the cutter assembly to effect a pulsing of the speed of the cutter assembly wherein each pulse comprises:

(A) a constant speed phase, where the operating speed of the cutter assembly is maintained at a predetermined operating speed,

(B) a deceleration phase, where the speed of the cutter assembly is reduced from

the operating speed to a predetermined settling speed indicative of the items in the container having settled around the cutter assembly, which is less than the operating speed and greater than zero, and

(C) an acceleration phase, where the speed of the cutter assembly is increased from the settling speed to the operating speed.

E. Grounds of Unpatentability

Petitioner relies on the following prior-art references.

Kolar	US 6,364,522 B2	Apr. 2, 2002	Ex. 1001
Wulf	US 6,609,821 B2	Aug. 26, 2003	Ex. 1003

We instituted this proceeding based on the following grounds.

Reference	Basis	Claims Challenged
Kolar	§ 102(b)	1-16
Kolar	§ 103(a)	1-16
Wulf	§ 102(b)	1-16

II. ANALYSIS

A. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, at 1277-79 (Fed. Cir. 2015),

reh'g en banc denied, 793 F.3d 1297 (Fed. Cir. 2015); Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

1. *Claim Terms Previously Construed*

In the Institution Decision, we construed claim terms as reproduced below. Dec. 5-9.

Claim Term	Construction in the Institution Decision
“cycle”	a series of events, with or without repetition
“phase”	encompasses any nonzero span of time
“settling speed”	a speed at which the cutter assembly has slowed enough to allow the blender contents to be processed again
“continuously reducing”	achieving reduction to a lower value without increasing or maintaining any intermediate value

During the trial, Patent Owner disputed our construction of “settling speed.” PO Resp. 6-14. Neither party contests our constructions of “cycle,” “phase,” or “continuously reducing”; we see no reason to modify the construction of those terms based on the record developed during the trial, and, accordingly, adopt them for this Final Written Decision.

2. *“settling speed”*

Patent Owner contends that “[w]hile the Board’s provisional construction of ‘settling speed’ comports with the specification, it is incomplete” because “it does

not reflect the mechanism which allows the blender contents to be processed again. . . .” *Id.* at 14. According to Patent Owner, the independent claims themselves define “settling speed” by reciting that “the speed of the cutter assembly is reduced from the operating speed to a predetermined settling speed indicative of the items in the container having settled around the cutter assembly, which is less than the operating speed and greater than zero.” *Id.* at 6. Patent Owner further contends that whether items in the container are in a “settled” condition, as differentiated from a “suspended” condition, is determined by whether “the larger particles are near enough to the blades of the cutter assembly that they will be struck by the blades when it spins.” Patent Owner supports its position with un rebutted testimony by Paul Faerber, who served as the Director of Engineering of a blender producer from July, 2006, to June, 2013. Ex. 2001 ¶¶ 5, 36.

Our decision ultimately does not hinge on the precise contours of a construction of “settling speed.” Thus, we do not adopt any explicit construction of the term for this Final Written Decision.

3. “to effect a pulsing”

Patent Owner proposes that “to effect a pulsing,” which is recited in each of the independent claims, should be construed to mean “to effect a series of repeated pulses.” PO Resp. 14-20. Patent Owner contends that the specification supports a distinction between “pulsing” and “pulses,” and that it would be

unreasonable to construe “pulsing” to include only one pulse. *Id.* Patent Owner supports its position with uncontroverted testimony by Mr. Faerber. Ex. 2001 ¶¶ 46-53.

Petitioner responds in its Reply that “a ‘pulsing’ that includes only one pulse is still a reasonable interpretation which the Board should adopt.” Reply 6. But Petitioner recanted that position in its argument at oral hearing:

JUDGE BOUCHER: . . . You seem to indicate that a “pulsing” implie[s] that there would be multiple pulses. Is that a correct understanding of Petitioner’s position?

MR. TROJAN: That’s correct, that—right.

Tr. 7:12-16.

We adopt Patent Owner’s proposed construction of “to effect a pulsing” as “to effect a series of repeated pulses.”

4. “to the operating speed”

Each of the independent claims recites that, during the “acceleration phase,” the speed of the cutter assembly is increased from the settling speed “to the operating speed.” Patent Owner proposes that “to the operating speed” should be construed to mean “up to, but not past, the operating speed.” PO Resp. 20-21. Patent Owner reasons that one of ordinary skill in the art “would not describe an acceleration, *e.g.*, from 5000 to 7000 RPM as an acceleration ‘to 6000 RPM.’” *Id.* at 21.

Patent Owner supports its position with unrebutted testimony by Mr. Faerber. Ex. 2001 ¶ 57.

Petitioner responds that “[i]t is noteworthy that the limitation . . . is at the very end of claim 1,” contending that “what happen[s] after the blade reaches the operating speed is not covered by the claims.” Reply 6. We are not persuaded by this contention because the “pulsing” recited in the independent claims requires multiple pulses, each of which has the recited “constant speed phase,” “deceleration phase,” and “acceleration phase.” We also are unpersuaded by Petitioner’s argument that the cutter assembly may have multiple operating speeds. *See id.* at 7-8. Even acknowledging that the recitation of “a predetermined operating speed” in the “constant speed phase” allows for the possibility that the cutter assembly may have more than one predetermined operating speed, the relevant limitation refers to increasing the speed of the cutter assembly “to *the* operating speed” (emphasis added). Petitioner’s argument is not supported by the claim language nor by any evidence presented by Petitioner.

We adopt Patent Owner’s construction of “to the operating speed” as “up to, but not past, the operating speed.”

B. Anticipation of Claims 1-16 by Kolar

Petitioner challenges claims 1-16 as anticipated under 35 U.S.C. § 102(b) by Kolar. Pet. 24-27, 34-48.

Kolar “pertains to food and drink blenders having a plurality of programmable blend operations.” Ex. 1001, col. 1, ll. 12-14. An exemplary blender includes a housing and a blending assembly, including a motor. *Id.* at col. 3, ll. 61-65. Figure 6 of Kolar is reproduced below.

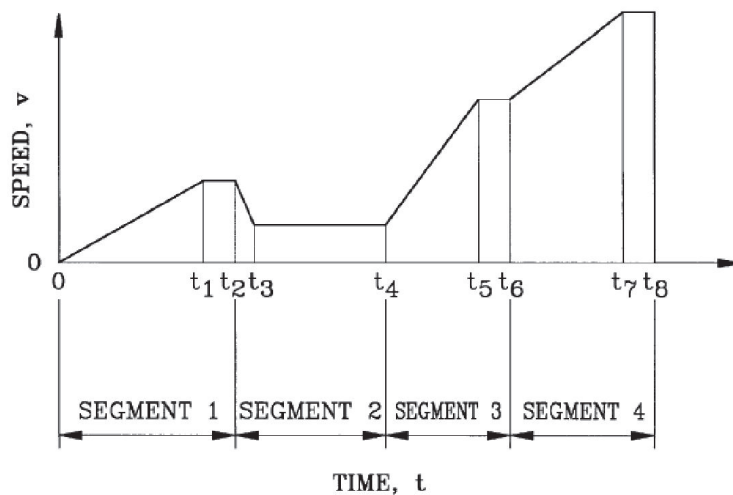


FIG-6

Figure 6 is a graph of blender motor speed versus time for an exemplary drink program. *Id.* at col. 4, ll. 41-42. Petitioner identifies a “constant speed phase” between t_1 and t_2 , a “deceleration phase” between t_2 and t_3 , and an “acceleration phase” between t_4 and t_5 . Pet. 26. Petitioner also identifies disclosure in Kolar that a user may customize drink programs, suggesting that “[o]ne type of blend program is called ‘pulse blend cycle.’” *Id.* at 18 (citing Ex. 1001, col. 8, ll. 13-15, Fig. 9).

We agree with Patent Owner that Kolar does not disclose “automatically controlling a rotational speed of the cutter assembly to effect a pulsing,” wherein each pulse comprises the recited “constant speed phase,” “deceleration phase,” and “acceleration phase.” *See* PO Resp. 26-31. First, Patent Owner observes that the “pulse blend” routine identified by Petitioner executes separately from automatically controlled user drink programs as a manual pulse in which the blender motor runs only as long as the user is pushing the pulse button. *Id.* at 27-28. Patent Owner supports its position with unrebutted testimony by Mr. Faerber. Ex. 2001 ¶ 74. Thus, the “pulse blend” routine described by Kolar does not “automatically” control a rotational speed of the cutter assembly to effect a pulsing as required by the independent claims. Second, as Mr. Faerber testifies, Figure 6 of Kolar “depicts a set of different, non-repeating steps. No part of the drink program is repeated.” Ex. 2001 ¶ 75. The illustrated sequence, for example, has only a single deceleration phase, and, therefore, does not disclose “effect[ing] a pulsing” by effecting a series of repeated pulses that each have a constant speed phase, a deceleration phase, and an acceleration phase. *See* PO Resp. 31.

We also agree with Patent Owner that Kolar does not disclose an acceleration phase, where the speed of the cutter assembly is “increased from the settling speed to the operating speed,” as recited in each of the independent claims. *See id.* at 32-33. Patent Owner supports its position with unrebutted testimony by Mr. Faerber. Ex. 2001 ¶¶ 77-83. The acceleration phase identified

by Petitioner between t_4 and t_5 in Figure 6 of Kolar does not increase “to the operating speed,” as we have construed the phrase, but instead increases to a speed greater than the operating speed.

For these reasons, we conclude that Petitioner has not shown, by a preponderance of the evidence, that any claim of the '688 patent is anticipated by Kolar.

C. Obviousness of Claims 1-16 Over Kolar

Petitioner challenges claims 1-16 as unpatentable under 35 U.S.C. § 103(a) over Kolar. Pet. 26-27, 34-48. Petitioner contends that “it would have been obvious within the skill in the art to duplicate what is disclosed in Figure 6 of Kolar, such as the period from 0 to t_4 , to make the constant speed phase, acceleration and deceleration repetitive.” *Id.* at 26-27 (citing *In re Harza*, 274 F.2d 669, 671 (CCPA 1960)).

As Petitioner observes, the Board has found the rule of *Harza* inapplicable where duplicating components would have rendered the claimed subject matter unsuitable for its intended purpose. PO Resp. 43 (citing *Ex parte Efremova*, No. 2010-003842, 2011 WL 1131352, at *3 (BPAI Mar. 28, 2011)). We agree with the reasoning of the panel in *Efremova*. Mr. Faerber testifies that “it would not have been obvious to repeat the drink program of Figure 6, in whole or in part” because “[r]epeating a program would risk overmixing the blender contents, and would defeat the purpose of having a set program to produce consistent and

complete results.” Ex. 2001 ¶ 89. We credit the testimony of Mr. Faerber, which is uncontroverted.

Accordingly, we conclude that Petitioner has not shown, by a preponderance of the evidence, that any claim of the '688 patent is unpatentable under 35 U.S.C. § 103(a).

D. Anticipation of Claims 1-16 by Wulf

Petitioner challenges claims 1-16 as anticipated under 35 U.S.C. § 102(b) by Wulf. Pet. 28-30, 34-48. Wulf discloses a blender having each of the components recited in the preamble of claim 1, as illustrated in Figure 3 of Wulf. *See generally* Ex. 1003, col. 5, l. 20—col. 8, l. 65. Petitioner observes that Wulf describes a method for chopping ice as background information: “a user may hit a slow button, wait a while, hit a faster speed, wait, hit yet a faster speed, etc.” Pet. 28 (citing Wulf, col. 2, ll. 15-17). In addition, Wulf discloses a memory preprogrammed with various motor commands that are designed to achieve particular results. Ex. 1003, col. 14, ll. 7-10. In advancing its challenge of claims 1-16 as anticipated by Wulf, Petitioner focuses on a specific one of these routines, disclosed as suitable for making powdered drinks. Pet. 28. Figure 25 of Wulf is reproduced below.

FIG. 25

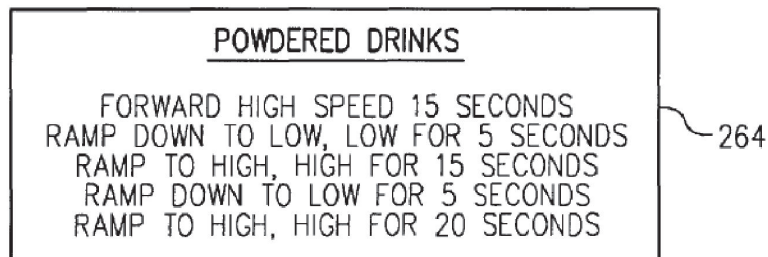


Figure 25 provides an example of a routine for making powdered drinks that includes repeated operation of the blender at high speed for 15 seconds followed by operation at low speed for 5 seconds.

Petitioner contends that “the high speed in Wulf’s Figure 25 is equivalent to the operating speed in the [’]688 [p]atent claims while the low speed in Wulf’s Figure 25 is equivalent to the settling speed in the [’]688 [p]atent claims.” Pet. 28. Petitioner reasons that the “constant speed phase” of claim 1 corresponds to the 15-second operation at high speed; that the “deceleration phase” corresponds to the “ramp down” to low speed; and that the “acceleration phase” corresponds to the “ramp up” to high speed. *Id.* at 28-29.

First, the manual process described by Wulf as background information does not anticipate the independent claims, which require “*automatically* controlling a rotational speed of the cutter assembly” to effect the recited pulsing (emphasis added). “[A]bsence from the reference of any claimed element negates anticipation.” *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986). In addition, the manual

process described by Wulf specifically teaches increasing the speed of each pulse, not increasing from the settling speed “to the operating speed,” as we have construed the phrase.

Second, Petitioner draws inferences from the described manual process to inform understanding of operation of the automated process illustrated by Figure 25. *See* Pet. 29-30; Reply 9-10. In particular, Petitioner contends that Wulf recognizes that chopping of ice may benefit from repeatedly reducing the speed of the cutter assembly. Pet. 29; Reply 9-10. Petitioner further contends that settling of items around the cutter assembly is “merely an inherent property when a blender is operating at a ‘low speed.’” Pet. 28.

Petitioner’s inferential argument is not without appeal. But Petitioner provides *no* evidence to support its position. It provides no testimonial evidence by any witness for us to consider, and it has left the testimony of Patent Owner’s witness, Mr. Faerber, unrebutted. Under such circumstances, we are unwilling to discount Mr. Faerber’s testimony that Wulf’s description of the manual process “is not relevant to the ‘settling speed’ limitation.” Ex. 2001 ¶ 97. The unsupported attorney argument presented by Petitioner cannot take the place of evidence. *See In re Cole*, 326 F.2d 769 (CCPA 1964).

We conclude that Petitioner has not shown, by a preponderance of the evidence, that any claim of the ’688 patent is anticipated by Wulf.

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, based on a preponderance of the evidence, claims 1-16 of U.S. Patent No. 7,581,688 B2 have not been shown to be unpatentable; and

FURTHER ORDERED that, because this is a final written decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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APPENDIX C

NOTE: This order is nonprecedential.

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

HOMELAND HOUSEWARES, LLC,
Appellant

v.

WHIRLPOOL CORPORATION,
Appellee

2016-1511

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2014-00877.

**ON PETITION FOR PANEL REHEARING AND
REHEARING EN BANC**

Before PROST, *Chief Judge*, NEWMAN, LOURIE, DYK,
MOORE, O'MALLEY, REYNA, WALLACH, TARANTO, CHEN,
HUGHES, and STOLL, *Circuit Judges*.

PER CURIAM.

ORDER

Appellee Whirlpool Corporation filed a combined petition for panel rehearing and rehearing en banc. A response to the petition was invited by the court and filed by appellant Homeland Housewares, LLC. The petition was referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on December 13, 2017.

December 6, 2017
Date

FOR THE COURT
/s/ Peter R. Marksteiner
Peter R. Marksteiner
Clerk of Court
