

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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HOMELAND HOUSEWARES, LLC,  
Petitioner,

v.

WHIRLPOOL CORPORATION,  
Patent Owner.

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Case IPR2014-00877  
Patent 7,581,688 B2

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Before PHILLIP J. KAUFFMAN, WILLIAM V. SAINDON, 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, 2<sup>1</sup>.

### *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.”

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

Ex. 3001, col. 1, ll. 7–9. A blender is described as including a container 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.

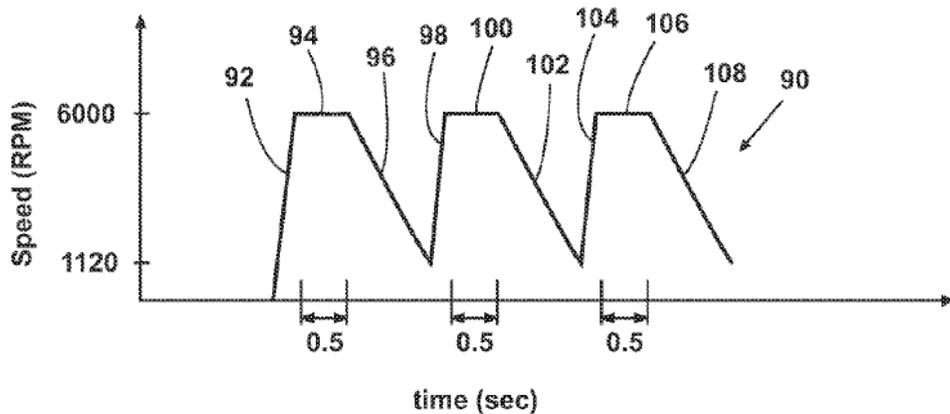


Figure 6 is a graphical representation of motor speed for a loading condition of food items in the container. *Id.* at 2:49–50. “For illustrative purposes,” 6000 RPM represents a predetermined “operating speed” and 1120 represents a predetermined “settling speed.” *Id.* at col. 4, ll. 17–21. Ice crushing 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
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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 unrebutted 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” imp[li]e[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”

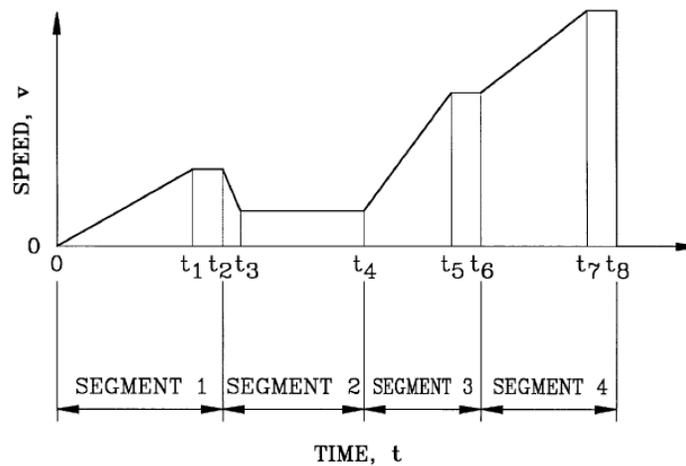
Each of the independent claims recites that, during the “acceleration phase,” the speed of the cutter assembly is increased from the settling speed “to the operating speed.” Patent Owner proposes that “to the operating speed” should be construed to mean “up to, but not past, the operating speed.” PO 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

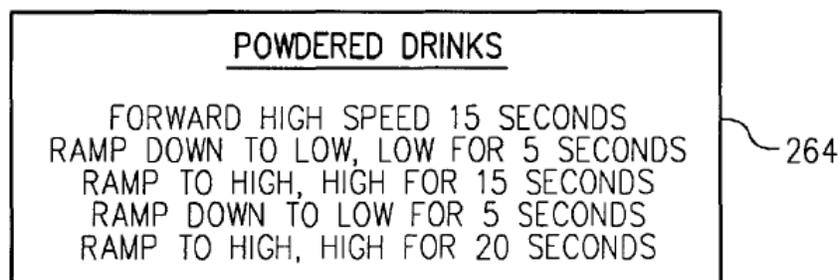


Figure 25 provides an example of a routine for making powdered drinks that includes repeated operation of the blender at high speed for 15 seconds followed by operation at low speed for 5 seconds.

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.

IPR2014-00877  
Patent 7,581,688 B2

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