

**Keywords:** Claim construction; anticipation; broadest reasonable interpretation

**General:** Claim construction and anticipation in view of loosely defined prior art elements.

***Homeland Housewares, LLC v. Whirlpool Corporation***

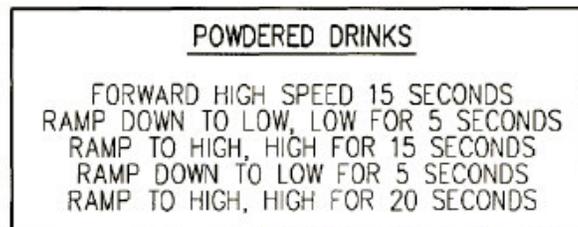
U.S. Court of Appeals for the Federal Circuit

No. 2016-1511

Decided: August 4, 2017

**I. Background**

Whirlpool Corporation was issued U.S. Patent No. 7,581,688 (“the ‘688 patent”) directed to household blenders. The ‘688 patent describes a pre-programmed, automatic blending cycle to blend items by repeatedly dropping and raising the speed of the blades. The independent claims of the ‘688 patent generally recite a pulsing of the cutter assembly that includes a constant speed phase where the blades spin at an operating speed, a deceleration phase to a “settling speed”, and an acceleration phase from the “settling speed” to the operating speed. The “settling speed” of the ‘688 patent is described as slow enough to allow the blender contents to settle around the cutter assembly. Additionally, the ‘688 patent states that it was well-known that a user could manually pulse between high and low speeds to achieve “a pattern of movement that introduces the entire contents of the reservoir into contact with the rotating blades” for efficient mixing.



**FIG. 25 of Wulf**

In 2014, Homeland petitioned the Patent and Trial Appeal Board (“Board”) for an *inter partes* review of the claims of the ‘688 patent, requesting a construction of “settling speed”. Homeland argued that the claims at issue are anticipated by FIG. 25 of Wulf which also describes an advantage of pulsing the motor of the blender for efficient mixing of contents inside the reservoir of the blender. Wulf notes that this manual pulsing of a motor at high and low speeds to permit materials being blended to fall back into a cutting knife region to improve blending or mixing “can be frustrating,” and, thus, teaches “a blender ... that is programmed to [automatically] accomplish predetermined [blending] functions and routes.” The Board declined to provide a construction of “settling speed” and concluded that Homeland had “not shown, by a preponderance of the evidence, that any claim of the

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‘688 patent is anticipated by Wulf.” Homeland proceeded to appeal the Board’s decision to the Federal Circuit.

## **II. Issue**

- Did the Board err in determining that Wulf does not anticipate the claims of the ‘688 patent?

## **III. Discussion**

Yes. The Federal Circuit determined that Wulf anticipates claim 1 based on their construction of “settling speed.” Whirlpool proposed that “a predetermined settling speed” means “a speed, greater than zero, which indicates that items have settled around the cutter assembly.” Whirlpool argued that empirical testing is required to establish a settling speed. Moreover, empirical testing would require determining the settling speed for each individual blender and its content load. It is undisputed that the plain meaning of “pre-determined” is to determine beforehand. This plain language definition does not require that a predetermined speed be empirically determined before each use, depending on the particular blender or the individual contents of the blender. However, claims must be read in view of the specification. While the specification discloses that “predetermined settling speed” is empirically determined and varies depending on blender user, the process for empirically determining a settling speed is neither taught in the specification nor a part of the claims. Additionally, Whirlpool appeared to contradict that the settling speed requires empirical testing in a brief. The Federal Circuit adopted a definition that best fits with the claim language and specification<sup>2</sup>. 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.

The Federal Circuit then compared this construction of “settling speed” to what is taught in Wulf. FIG. 25 of Wulf recites a “low” and a “high” speed. The term “low speeds” appears in the specification, where the background teaches pulsing the motor on/off at high and the low speeds to permit the blended material to fall back into the cutting knives thereby improving blending or mixing of the material. This is consistent with the testimony of the Whirlpool expert, who generally stated slower speeds will tend to allow items to settle, while higher speeds will tend to keep items suspended. Because Wulf uses “low speeds” to refer to speeds which blending ingredients fall back to the cutters, the Federal Circuit concluded that FIG. 25’s use of that the “low speeds” of Wulf is analogous to the “settling speed” of ‘688.

Further, Wulf’s specification uses the term “low” or “lower” in the context of motor speeds in four additional places. In each discussion, Wulf makes clear that “low” speed is discretely and significantly different from a “high” speed. In light of these teachings from the Wulf specification, FIG. 25 discloses a settling speed limitation consistent the Federal Circuit’s construction of “predetermined settling speed.” Thus, the Federal Circuit determined that FIG. 25 of Wulf anticipates the claims of ‘688.

The Federal Circuit also rebutted expert testimony from Whirlpool in which it was argued that Wulf gives no indication of whether any of the lower speeds in Wulf would cause items to settle around the center. The court noted that Wulf was not silent as to whether low speeds permit materials being blended to fall back into a cutting knife region, since Wulf disclosed that manual pulsing operated in this manner. The Federal Circuit also rebutted the expert testimony from Whirlpool in which it was argued that Wulf discloses maintaining a low speed for at least five seconds, a time period argued to be unnecessarily long to accomplish settling of material by noting that the patent itself disclosed that time periods for operation at a settling speed vary for different blenders and provided an example of a 4 second settling speed. The court also rebutted the expert testimony from Whirlpool in which it was argued that the relied upon FIG. 25 of Wulf is directed to blending of powder drinks which would not settle at a blade level (and would instead circulate) when mixed at a low speed by noting that if the structural elements in the prior art are present, the absence of a disclosure to a function does not defeat a finding of anticipation. The court found that the expert testimony from Whirlpool were inconsistent with the intrinsic record and, thus, should be disallowed.

#### **IV. Conclusion**

The broadest reasonable construction of a term should be consistent with the ordinary and customary meaning of the words and with the specification and art that recites a similar term to a claim recitation can be applied as disclosure of a claim element in an anticipation rejection.

#### **V. Dissent**

Judge Newman asserts that the claim construction was too broad and the invention is clearly explained in the specification.

#### **VI. Endnotes**

1. Independent claim 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.