# United States Court of Appeals for the Federal Circuit

IN RE: AQUA PRODUCTS, INC.,

Appellant

2015-1177

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2013-00159.

Decided: May 25, 2016

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MEREDITH HOPE SCHOENFELD, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for intervenor Michelle K. Lee. Also represented by NATHAN K. KELLEY, FARHEENA YASMEEN RASHEED, SCOTT WEIDENFELLER.

Before PROST, Chief Judge, REYNA, Circuit Judge, and STARK, Chief District Judge<sup>1</sup>.

REYNA, Circuit Judge.

Aqua Products, Inc. ("Aqua") appeals from the final written decision of the Patent Trial and Appeal Board ("Board") in an inter partes review ("IPR") of U.S. Patent No. 8,273,183 ("183 patent"). The Board denied Aqua's motion to substitute claims 22–24. Aqua challenges the Board's amendment procedures, which require the patentee to demonstrate that the amended claims would be patentable over the art of record. We affirm.

## BACKGROUND

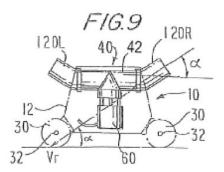
# A. Patented Technology

The '183 patent concerns automated swimming pool cleaners, which are devices used to filter water and scrub pool surfaces. Such cleaners typically propel themselves about a swimming pool using motor-driven wheels, water jets, suction, or some combination thereof. See '183 patent col. 1 ll. 30–48. According to the '183 specification, propelling a cleaner using motor-driven wheels enables the cleaner to move in a controlled pattern, but the technique can be expensive because it requires equipping the cleaner with a drive motor and integrated circuitry. See id. col. 2 ll. 47–56. Cleaners that use suction or water jets do not require a drive motor, but they traditionally move in erratic rather than controlled patterns. Id. col. 2 ll. 57–61.

The '183 patent discloses an automated swimming pool cleaner that uses "an angled jet drive propulsion system" to move in a controlled pattern. Id. col. 1 ll. 1–4,

<sup>&</sup>lt;sup>1</sup> The Honorable Leonard P. Stark, Chief District Judge, United States District Court for the District of Delaware, sitting by designation.

col. 3 ll. 15–20. Rather than using a motor to drive wheels, the disclosed cleaner shoots filtered water backwards at an angle to create both a forward force that propels the cleaner and a normal force that keeps the cleaner's wheels in contact with the pool floor. Id. col. 4 ll. 13–25, 46–49. As shown in Figure 9, the cleaner draws pool water through a bottom opening, filters the water, and shoots the filtered water backwards from elbow 120R or 120L at an angle  $\alpha$  so as to create the forward and normal forces. Id. col. 4 ll. 46–51, col. 10 ll. 47–51.



'183 Patent, Figure 9.

# B. Board Proceedings

Zodiac Pool Systems ("Zodiac") petitioned the Board for IPR of claims 1–14, 16, and 19–21 of the '183 patent. Among the references Zodiac cited were U.S. Patent Nos. 3,936,899 ("Henkin") and 3,321,787 ("Myers"). Henkin discloses a pool cleaner that moves randomly, in part by shooting a water jet from an adjustable nozzle that can be angled "to yield both a downward thrust component (i.e., normal to the vessel surface) for providing traction and a forward component which aides in propelling the car." Henkin at col. 5 ll. 19–22. Unlike the cleaner of the '183 patent, Henkin's cleaner uses three wheels rather than four and moves along a "random" rather than controlled path. *Id.* at Abstract. Henkin's jet is also powered by an external rather than an internal pump, and it shoots unfiltered rather than filtered water. *Id.* col. 5 ll. 15–19.

Myers discloses a prior art cleaner that uses an internal pump to create a filtered water jet for erratic movement. Myers at col. 1 ll. 63–65 ("electric motor"), col. 2 ll. 22–33 (describing an internal filter), col. 3 ll. 6–12 ("water exiting from the unit and into the pool will provide a jet force to move the unit").

The Board instituted trial on all the challenged claims except claims 10-12. Aqua moved to substitute new claims 22-24, which amended claims 1, 8, and 20 to additionally require that (1) the jet creates a downward vector force rear of the front wheels (the "vector limitation"), and (2) the wheels control the directional move-"directional of the cleaner (the limitation"). Substitute claim 23 also added that the cleaner has four wheels (the "four wheel limitation"), and substitute claim 24 added that the jet shoots filtered water (the "filtered water limitation").

In its motion to amend, Aqua argued that the combination of Henkin and Myers does not render the substitute claims obvious because it does not suggest the vector limitation. J.A. 2289–91. Although Aqua referenced the other added limitations, it did not argue that those other limitations would have been non-obvious in light of Henkin and Myers. Regarding objective indicia, Aqua characterized its commercial embodiments as "successful" and it implied that Zodiac may have copied the design, but Aqua did not argue that these objective indicia were tied to the vector limitation or that they otherwise demonstrated that the vector limitation was non-obvious. J.A. 2288.

The Board denied Aqua's motion to amend. It reasoned that the vector limitation would have been obvious because Henkin teaches positioning the jet at an angle that satisfies the vector limitation. J.A. 50–52. Regarding the other new limitations, the Board concluded without analysis or evidence that the limitations were within the ordinary skill. *Id.* In a footnote, the Board also held

without analysis that Aqua's arguments regarding objective indicia of non-obviousness were unpersuasive. *Id.* 

Aqua appeals the Board's denial of its motion to amend. Aqua argues that Board regulations requiring the patentee to demonstrate that an amended claim is patentable over the art of record are unsupported by statute, and that the Board's interpretation of those regulations impermissibly places the burden on the patentee to show non-obviousness. Moreover, Aqua argues that the Board abused its discretion by denying the motion to amend without considering all the new limitations and the objective indicia of non-obviousness, as would be required for invalidating an original claim.

### DISCUSSION

We review the Board's decisions using the standard set forth in the Administrative Procedure Act (APA), 5 U.S.C. § 706. *Dickinson v. Zurko*, 527 U.S. 150, 154 (1999). Under that statute, we set aside actions that are arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. *In re Sullivan*, 362 F.3d 1324, 1326 (Fed. Cir. 2004). "We accept the Board's interpretation of Patent and Trademark Office regulations unless that interpretation is plainly erroneous or inconsistent with the regulation." *Id.* (internal citations omitted).

The America Invents Act ("AIA") provides that a patent holder in an IPR "may file 1 motion to amend," by "propos[ing] a reasonable number of substitute claims." 35 U.S.C. § 316(d)(1). The only statutory requirement is that the amendment "may not enlarge the scope of the claims of the patent or introduce new matter." *Id.* § 316(d)(3). Section 318(b), however, provides that the final written decision may incorporate into the patent any new or amended claim "determined to be patentable."

Pursuant to the statutory framework, the Patent and Trademark Office ("PTO") promulgated 37 C.F.R. §

42.121, which allows the Board to deny a motion to amend if the amendment expands the claim scope or "does not respond to a ground of unpatentability involved in the trial." Because PTO regulations place the burden for any motion on the movant, see 37 C.F.R. § 42.20(c), the Board has interpreted § 42.121 as placing the burden on the patentee to show that the proposed amendments would make the claims patentable over the known prior art. See Idle Free Sys., Inc. v. Bergstrom, Inc., IPR2012–00027, 2013 WL 5947697 (PTAB June 11, 2013).

Our precedent has upheld the Board's approach of allocating to the patentee the burden of showing that its proposed amendments would overcome the art of record. In Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1307–08 (Fed. Cir. 2015), we upheld the Board's interpretation of its regulations, requiring the patentee to establish that proposed amendments would overcome the art of record. See also Prolitec, Inc. v. ScentAir Techs., Inc., 807 F.3d 1353, 1363 (Fed. Cir. 2015). In Nike, Inc. v. Adidas AG, 812 F.3d 1326, 1333–34 (Fed. Cir. 2016), we further held that the Board's regulations concerning motions to amend and its interpretation thereof are consistent with the AIA's statutory framework, even though the framework generally places the burden of proving unpatentability on the IPR petitioner. Given our precedent, this panel cannot revisit the question of whether the Board may require the patentee to demonstrate the patentability of substitute claims over the art of record.

The only issue left open for our consideration is whether the Board abused its discretion by failing to evaluate objective indicia of non-obviousness and various new limitations in the proposed claims, even though Aqua did not argue that those indicia and limitations distinguish the proposed claims over the combination of Henkin and Myers. We find no abuse of discretion. The burden of showing that the substitute claims were patentable rested with Aqua. It therefore follows that the Board's evalua-

tion of Aqua's motion to amend was limited to considering only those arguments that Aqua actually raised. To hold otherwise would require the Board to fully reexamine the proposed claims in the first instance, effectively shifting the burden from the patentee to the Board. Denial of a motion to amend in compliance with the APA only requires that the Board show that it fully considered the particular arguments raised by the patentee and that it provided a reasoned explanation for why those arguments were unpersuasive. Those requirements were satisfied here.

Aqua contends that the Board was "on notice" of its arguments with respect to all four added limitations. Appellant's Reply Br. 5–12. In fact, in its motion, Aqua presented only one reason why the substitute claims might overcome the combination of Henkin and Myers. That reason was that the combination fails to teach the newly added vector limitation. To deny the motion, the Board needed to rebut only this argument.

To be sure, Aqua makes passing references in its motion to the additional limitations. Although Aqua identifies in the record where it described the new limitations and distinguished them from the prior art, none of the descriptions were made in the context of supporting the patentability of the amended claims in light of the combination of Henkin and Myers. Most of the arguments were made in the course of the main IPR proceedings; none of the arguments appeared in the portion of the motion to amend that sought to explain why the "Substitute Claims Are Not Obvious In View of Henkin and Myers." Accordingly, the Board was under no obligation to consider them in evaluating the motion to amend.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Aqua excuses its failure to provide argument for its additional limitations by emphasizing the 15 page

The Board properly rebutted Aqua's argument. The Board explained that Henkin discloses the vector limitation by teaching a jet whose angle "is selected to yield both a downward thrust component (i.e., normal to the vessel surface) for providing traction and a forward component which aids in propelling the car." J.A. 51 (citing Henkin col. 5 ll. 19–22). The Board thus found that Henkin taught the vector limitation explicitly.

Aqua argues that the Board's analysis is unsupported because the purpose of the angled jet in the prior art was to promote random movement rather than stability, as in the '183 patent. That argument is unpersuasive because nothing about the vector limitation precludes random movement, and indeed, the '183 specification teaches that the invention encompasses both controlled and random movement. *See* '183 patent col. 5 ll. 4–9.

We conclude that the Board did not abuse its discretion by denying Aqua's motion to amend. The Board rebutted Aqua's sole argument that the vector limitation made the substitute claims patentable over the combination of Henkin and Myers. Because Aqua's arguments with respect to that combination rested exclusively on the vector limitation, the Board had no obligation to address the other amendments or to consider the issue of objective indicia of non-obviousness, which Aqua did not raise in connection with the Henkin/Myers combination. We affirm.

## **AFFIRMED**

limit under which it operated. The problem here is that Aqua did not ask the Board for additional pages, or any similar relief. As such, we cannot say that the Board abused its discretion by holding Aqua to the thenapplicable page limits.

# Costs

No costs.