United States Court of Appeals for the Federal Circuit

2008-1169

WELKER BEARING COMPANY,

Plaintiff-Appellant,

v.

PHD, INCORPORATED,

Defendant-Appellee.

Jeffrey A. Sadowski, Howard & Howard Attorneys, P.C., of Bloomfield Hills, Michigan, argued for plaintiff-appellant. With him on the brief were Brad A. Rayle and Melanie T. Frazier.

D. Randall Brown, Barnes & Thornburg LLP, of Fort Wayne, Indiana, argued for defendant-appellee. With him on the brief were Dawn R. Rosemond and Gregory S. Cooper.

Appealed from: United States District Court for the Eastern District of Michigan

Judge Gerald E. Rosen

United States Court of Appeals for the Federal Circuit

2008-1169

WELKER BEARING COMPANY,

Plaintiff-Appellant,

v.

PHD, INCORPORATED,

Defendant-Appellee.

On appeal from the United States District Court for the Eastern District of Michigan in Case No. 06-CV-13345, Judge Gerald E. Rosen

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DECIDED: December 15, 2008

Before RADER, SCHALL, and PROST, Circuit Judges.

RADER, Circuit Judge.

The United States District Court for the Eastern District of Virginia granted summary judgment of noninfringement of Welker Bearing Co.'s U.S. Patent Nos. 6,786,478 ("'478 patent") and 6,913,254 ("'254 patent") in favor of PHD, Inc. Welker Bearing Co. v. PHD, Inc., 528 F. Supp. 2d 683 (E.D. Mich. 2007) ("SJ Opinion"). Because the district court correctly construed the critical claim element of the '254 patent as a means-plus-function limitation subject to 35 U.S.C. § 112 ¶ 6, and correctly found that PHD had not infringed the '478 patent after the issuance of that patent, this court affirms the district court's grant of summary judgment.

I

Welker Bearing's '478 and '254 patents, which share identical specifications, claim pin clamps that hold a work piece securely in place during welding and other

manufacturing processes. The disclosed pin clamps feature a bullet-shaped locating pin (32 in Fig. 1A below) that is inserted into a hole in a work piece. Fig. 1B below shows the disclosed pin clamp holding a work piece in place. An actuator (52 in Fig. 1A) propels the locating pin through the hole in the work piece. As the locating pin slides through the work piece's hole, clamping fingers (60 in Fig. 1B) emerge out of the pin clamp. These fingers hold the work piece firmly in place against an annular ring that sits below the locating pin. The actuator provides a clamping force between the fingers and the work piece.

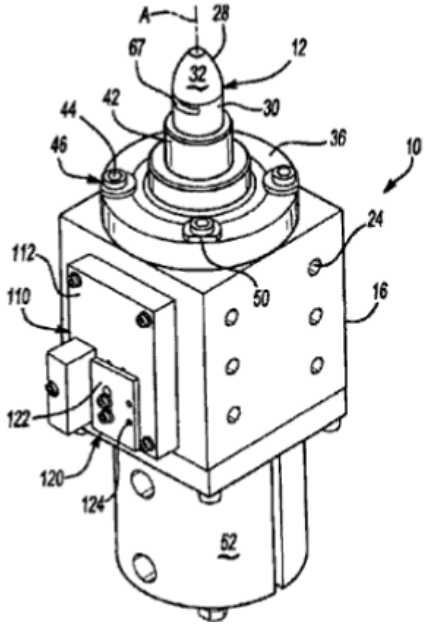

Fig-1A

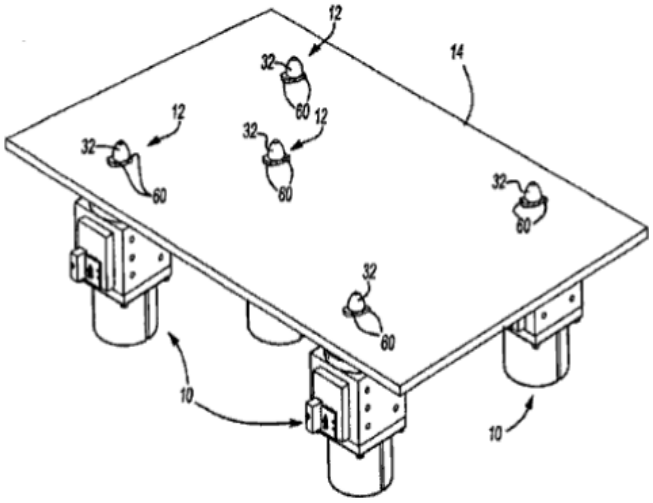

Fig-1B

On July 9, 2003 Welker Bearing filed the application that later issued as the '478 patent on September 7, 2004. Claim 1 of the '478 patent reads:

A locating and clamping assembly comprising:

a body defining an internal cavity and an opening from said cavity to the exterior of said body;

a locating pin disposed in said cavity and extending along an axis A out of said opening to a distal end;

an actuator for moving said locating pin rectilinearly along said axis A into and out of said opening;

at least one finger supported by said locating pin adjacent said distal end for movement radially into and out of said locating pin transversely to said axis A of said locating pin;

said assembly characterized by a mechanism for rotating in response to said rectilinear movement of said locating pin for moving said finger radially.

'478 patent col.7 l.60-col.8 l.7 (emphasis added). This claim explicitly requires a rotational movement mechanism for extending and retracting the fingers. However, the PTO allowed the claims of the '478 patent without any focus on rotational movement as a required limitation for allowance over the prior art. Welker Bearing took the PTO's lack of comment on the rotational characteristic as an invitation to file a continuation application with broader claims. These later claims recite a finger mechanism that does not explicitly include rotational movement. This '254 patent issued on July 5, 2005. Claim 1 of the '254 patent reads:

A locating and clamping assembly comprising:

a body defining an internal cavity and an opening from said cavity to the exterior of said body;

a locating pin disposed in said cavity and extending along an axis A out of said opening to a distal end;

an actuator for moving said locating pin rectilinearly along said axis A into and out of said opening;

at least one finger supported by said locating pin adjacent said distal end;

said assembly characterized by a mechanism for moving said finger along a straight line into and out of said locating pin perpendicular to said axis A in response to said rectilinear movement of said locating pin.

'254 patent col.8 ll.12-25 (emphasis added).

II

Before the district court, Welker Bearing accused two PHD products, the "Clamp I" and "Clamp II" devices, of infringement. The chronology of PHD's development of its Clamp I and II devices is relevant to this appeal. In early 2004, PHD engaged in discussions with General Motors ("GM") regarding the design of a new pin clamp for its assembly lines. At one meeting, PHD officials met with GM officials in a GM room where one of Welker Bearing's pin clamps was on display. The parties dispute whether PHD saw the internal workings of Welker Bearing's clamp at that time. Later, PHD developed prototypes of its Clamp I device, which uses a rotational mechanism to move clamping fingers into and out of the pin clamp.

In October 2004, shortly after the September 7, 2004 issuance of the '478 patent, Welker Bearing learned from GM that PHD had developed the Clamp I device. Soon thereafter, Welker Bearing notified PHD in writing that it believed Clamp I infringed the '478 patent. Officials from the two companies met to discuss the dispute in November 2004. PHD asked for a license to sell Clamp I. Welker Bearing refused. After this meeting, PHD developed a modified design, Clamp II, which lacks a rotating central post for moving clamping fingers in and out of the locating pin.

The '254 patent, without explicit language about rotational finger movement, issued on July 5, 2005. Welker Bearing filed suit against PHD on July 25, 2006, asserting infringement of both the '478 and '254 patents. Before the district court, Welker Bearing conceded that Clamp II does not infringe the '478 patent because it lacks a rotational mechanism for clamping fingers. Thus, the trial court limited its inquiry

to Clamp I's possible infringement of the '478 patent and Clamp II's possible infringement of the '254 patent.

With regard to the '478 patent, the district court determined that the record did not show that PHD made, used, sold, or offered for sale the Clamp I device at any time after issuance of the patent. SJ Opinion at 706-07. Thus, it awarded summary judgment of noninfringement to PHD on the '478 patent. Id. at 709. With regard to the '254 patent, the district court construed claim 1's "mechanism for moving said finger" as a means-plus-function limitation. As a means-plus-function claim element, this limitation thus required a corresponding structure in the specification for its broad functional language. The only structure for this mechanism was the rotating central post identified in Column 6 of the written description. Id. at 699. Because PHD's Clamp II device lacks such a rotating central post, the district court granted summary judgment of noninfringement of the '254 patent. Id. at 705-06. Welker Bearing now appeals those rulings. This court has jurisdiction under 28 U.S.C. § 1295.

III

This court reviews a district court's grant of summary judgment without deference. Conroy v. Reebok Int'l, Ltd, 14 F.3d 1570, 1575 (Fed. Cir. 1994). Summary judgment is appropriate only "if the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). In reviewing a summary judgment ruling, this court draws all reasonable inferences in favor of the non-movant. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986).

"[The patentee] may of course obtain damages only for acts of infringement after the issuance of the [] patent . . . ." Hoover Group, Inc. v. Custom Metalcraft, Inc., 66 F.3d 299, 304 (Fed. Cir. 1995). "Mere possession of a product which becomes covered by a subsequently issued patent does not constitute an infringement of that patent until the product is used, sold, or offered for sale in the United States during the term of the patent." Johns Hopkins Univ. v. Cellpro, Inc., 152 F.3d 1342, 1366 (Fed. Cir. 1998).

The record does not contain any evidence that PHD engaged in any activity that infringed the '478 patent after September 7, 2004 (the day the '478 patent issued). Instead the record shows that PHD only created around ten prototype units of the Clamp I device. Although PHD provided GM one of these sample units for assessment some time in late 2003 or early 2004, that prototype never entered production or commercial use. The record is also devoid of any evidence that PHD ever sold any units to GM at any time.

Welker Bearing's only theory for infringement of the '478 patent was that "[PHD] had an affirmative duty at the point in time the patent issued to take the product off the market and they didn't do that." Summ. J. Tr. 59:3-5, Nov. 29, 2007. The record, however, presents no admissible evidence to show that PHD continued to offer its product for sale (to the extent it ever was for sale) beyond September 7, 2004. Moreover, PHD did not have any burden to prove it retracted any putative offer for sale. Rather the burden remains with the patentee to prove infringement, not on the defendant to disprove it. In any event, this court observes that the district court properly concluded, "Defendant's flat denial, backed by evidence, of any commercial activity

after September 7, 2004 stands uncontradicted by anything in the record." SJ Opinion at 708. For that reason, this court holds that the district court did not err in granting summary judgment of noninfringement of the '478 patent.

IV

The district court construed the "mechanism for moving said finger" limitation in claim 1 of the '254 patent as a means-plus-function limitation subject to 35 U.S.C. § 112 ¶ 6. The district court's claim construction is a question of law reviewed without deference. See Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc); see also Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed. Cir. 2004) ("The task of determining whether the limitation in question should be regarded as a means-plus-function limitation, like all claim construction issues, is a question of law . . . .").

A

This court has consistently held that "[m]eans-plus-function claiming applies only to purely functional limitations that do not provide the structure that performs the recited function." Phillips v. AWH Corp., 415 F.3d at 1311 (Fed. Cir. 2005). Further, a patentee's use of the word "means" in a claim limitation creates a presumption that 35 U.S.C. § 112 paragraph 6 applies. TriMed, Inc. v. Stryker Corp., 514 F.3d 1256, 1259 (Fed. Cir. 2008).

In this instance, the '254 patent's claim language does not include the word "means," but instead the similar word "mechanism." This court has had several prior occasions to consider the applicability of means-plus-function treatment in the context of the claim term "mechanism." In Massachusetts Institute Of Technology v. Abacus

Software, 462 F.3d 1344, 1354 (Fed. Cir. 2006) ("MIT"), this court considered the applicability of means-plus-function treatment to the term "colorant selection mechanism." This court noted that "[t]he generic terms 'mechanism,' 'means,' 'element,' and 'device,' typically do not connote sufficiently definite structure [to avoid means-plus-function treatment] . . . The term 'mechanism' standing alone connotes no more structure than the term 'means.'" Id. (emphasis added). Although "[c]laim language that further defines a generic term like 'mechanism' can sometimes add sufficient structure to avoid 112 ¶ 6," the adjectival modifier "colorant selection" was not defined in the specification and did not carry any generally understood structural meaning in the art. Id. Thus, this court read "colorant selection mechanism" as invoking treatment as a functional claim because it did not contain sufficient structure. Id.

By contrast, in Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580 (Fed. Cir. 1996), this court held that paragraph 6 did not apply to the term "detent mechanism," because "the noun '[d]etent' denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms." Id. at 1583. This court examined several definitions of "detent," such as "[a] catch or checking device, the removal of which allows machinery to work such as the detent which regulates the striking of a clock." Id. Because these definitions connoted adequate structure that was reasonably well understood in the art, this court concluded that "detent mechanism" was not a mere functional placeholder. Id.

This court must assess the meaning of "mechanism for moving said finger" in light of this case law. In that context, the "mechanism for moving said finger" language includes even less structural context than the "colorant selection mechanism" in MIT.

No adjective endows the claimed "mechanism" with a physical or structural component. Further, claim 1 provides no structural context for determining the characteristics of the "mechanism" other than to describe its function. Thus, the unadorned term "mechanism" is "simply a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term 'means for.'" Lighting World, 382 F.3d at 1360. Unlike the "detent mechanism" in Greenberg which had a known structural meaning, one of skill in the art would have no recourse but to turn to the '254 patent's specification to derive a structural connotation for the generically claimed "mechanism for moving said finger . . . ."

The applicant for the '254 patent could have supplied structural context to claim 1 in any number of ways. If claim 1 of the '254 patent had recited, e.g., a "finger displacement mechanism," a "lateral projection/retraction mechanism," or even a "clamping finger actuator," this court could have inquired beyond the vague term "mechanism" to discern the understanding of one of skill in the art. If that artisan would have understood such language to include a structural component, this court's analysis may well have turned out differently. Instead the applicant chose to express this claim element as "a means or step for performing a specified function without the recital of structure, material, or acts in support thereof." 35 U.S.C. § 112 ¶ 6. Therefore, this court must agree with the district court, which properly applied means-plus-function treatment to this term.

B

Because "mechanism for moving said finger" is a means-plus-function limitation, this court must next examine the trial court's identification of "the corresponding

structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. § 112 ¶ 6. In doing so, "a court may not import functional limitations that are not recited in the claim, or structural limitations from the written description that are unnecessary to perform the claimed function." Wenger Mfg., Inc. v. Coating Mach. Sys., Inc., 239 F.3d 1225, 1233 (Fed. Cir. 2001).

The district court adopted PHD's proffered construction of "mechanism for moving":

> a central post having two helical cam slots each receiving a cam follower fixed to the clamp's body; the central post moves linearly in concert with the locating pin causing the cam followers to travel along the helical cam slots thereby rotating the central post; two dowels extend axially from the top end of the rotating central post, and offset from axis A; the finger setting [sic] on the end of the central post and including a slot that receives one of the dowels; the rotating central post moves the dowels along an arcuate path and along the finger's slot causing the finger to move radially at a right angle to the axis A in and out of the locating pin.

SJ Opinion at 698 (emphasis added). On appeal, Welker Bearing argues that this construction is erroneous because the specification teaches that a "rotating central post" is not necessary to accomplish the claimed function of "moving said finger along a straight line into and out of said locating pin perpendicular to said axis A in response to said rectilinear movement of said locating pin."

The '254 patent's specification fully supports the district court's analysis. The specification repeatedly identifies a rotating central post as the disclosed structure for performing the claimed function of "moving said finger . . . ." Referring to Figure 7 (displayed below), the specification states: "[a] mechanism 68, to be described in detail below, rotates in response to the rectilinear movement of the locating pin 12 to move the fingers radially." '254 patent col.5 l.66-col.6 l.2.

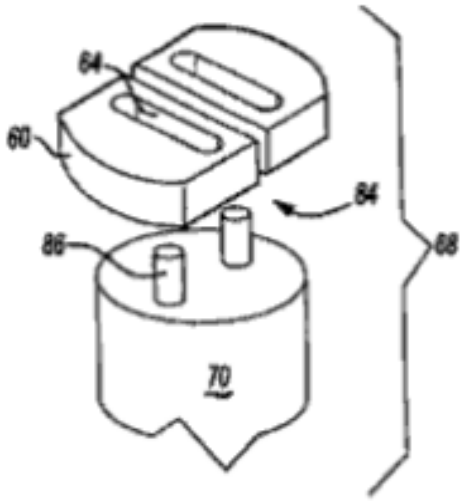

Fig-7

Figure 7 describes the rotation of the central post 70. The dowels 86 on that post interlock into the finger slot 64. Thus, the post and dowels rotate to move the fingers inward and outward. At all times, the specification unambiguously teaches that the mechanism for moving the fingers requires a central post 70 rotating in response to an actuator's rectilinear movement. See id. at col.6 ll.10-11 ("The central post 70 rotates in response to the rectilinear movement."); id. at col.6 ll.11-13 ("The surface 76 of the coupler plate 56 in contact with the central post 70 functions as a thrust bearing to facilitate the rotational movement of the central post 70."); id. at col.6 ll.13-16 ("The central post 70 extends through and is independent from the piston 54 for separating the rotational movement of the central post 70 from the rectilinear movement of the locating pin 12."); id. at col.6 ll.26-27 ("A motion converter 84 converts the rotational movement of the central post 70 into radial movement of the fingers 60."); id. at col.6 ll.31-33 ("The dowels 86 are offset from the axis A for radially moving the fingers 60 in response to rotational movement of the central post 70."); id. at col.6 ll.37-38 ("The rotational movement of the central post 70 moves the dowels 86 along an arcuate

path."); id. at col.6 ll.47-50 ("Referring to FIG. 2B, a pair of cams 90 and corresponding cam followers 92 interconnect the central post 70 and the body 16 for rotating the central post 70 in response to the rectilinear movement of the locating pin 12."); id. at col.6 ll.52-55 ("The pair of cams 90 and corresponding cam followers 92 stabilize the central post 70 to allow the central post 70 to rotate smoothly within the cavity 18."). Nothing in the specification suggests any other structure for moving the claimed fingers.

Other claim construction doctrines like claim differentiation, ordinary meaning, and clear disavowal of claim scope do not compel a different construction. With regard to claim differentiation, this court is aware that claim 1 of the '478 patent recites a rotating element, while claim 1 of the '254 patent does not. This difference between claims in different patents does not change the meaning of these means-plus-function limitations. By statute, this court must follow the directive to construe these limitations according to § 112 ¶ 6. Because both terms share the same specification with the same structure corresponding to the claimed function, this court cannot give these terms any different scope. This court finds no error in the district court's identification of corresponding structure, which includes a rotating central post.

C

As determined above, the district court properly held that PHD did not make, use, sell, or offer for sale its Clamp I product after the issuance date of the '478 patent. This necessarily means that Clamp I cannot infringe the '254 patent because that patent issued almost ten months after the '478 patent. Thus, the question of PHD's infringement of the '254 patent is confined to infringement by the Clamp II device.

Literal infringement of a claim limitation in means-plus-function format "requires that the relevant structure in the accused device perform the identical function recited in the claim and be identical or equivalent to the corresponding structure in the specification." Applied Med. Research Corp. v. United States Surgical Corp., 448 F.3d 1324, 1333 (Fed. Cir. 2006). In this case, construing "means for moving said finger" in claim 1 of the '254 patent as a means-plus-function element compels summary judgment of noninfringement in favor of PHD. Welker Bearing effectively concedes this point in its brief by arguing that "once claim 1 of the '254 patent is construed as not requiring any rotating mechanism, PHD's Clamp II reads on claim 1 of the '254 patent . . . ." Reply Br. 21. Welker Bearing's Rule 30(b)(6) designate made a similar admission during discovery:

> Q. Do you agree with me that if the mechanism for moving the finger that is referenced in Claim 1 of the 254 patent is determined by the Court to include or mean the rotating mechanism that you have described in the patent, that PHD's PLC Series II Clamp would not infringe the 254 patent?
>
> A. Yes, if they read that, the body of 254.

Pavlik Dep. 119:20-120:4, Apr. 18, 2007.

The record shows that PHD's Clamp II propels clamping fingers in and out of the locating pin without any rotational movement. Instead Clamp II's linear-moving mechanism for finger movement and the claimed "mechanism for moving said finger" with a rotating central post are "substantially different." SJ Opinion at 704.

Welker Bearing's argument that Clamp II might infringe under the doctrine of equivalents is equally unavailing. Indeed this case does not present a case for equivalents under the doctrine of equivalents at all. This case presents only the question of structural equivalents under §112 ¶ 6. Structural equivalents and the

doctrine of equivalents are "closely related." See, e.g., Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc., 145 F.3d 1303, 1309 (Fed. Cir. 1998). They are related in the sense that both § 112 ¶ 6 and the doctrine of equivalents apply "similar analyses of insubstantiality of the differences" between a disclosed structure and an accused infringing structure. Id. at 1310. However, an important difference between the two inquiries "involves the timing of the separate analyses for an 'insubstantial change.'" Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1320 (Fed. Cir. 1999). Namely, an equivalent structure under § 112 ¶ 6 "must have been available at the time of the issuance of the claim," whereas the doctrine of equivalents can capture after-arising "technology developed after the issuance of the patent." Id.

The record demonstrates that PHD's linear-moving mechanism for finger movement was well known in the prior art and cannot be classified as after-arising technology. SJ Opinion at 706. Thus, where, as here, a proposed equivalent has arisen before patent issuance, "a § 112 ¶ 6 structural equivalents analysis applies and any analysis for equivalent structure under the doctrine of equivalents collapses into the § 112 ¶ 6 analysis." Al-Site, 174 F.3d at 1321 n.2. Under any analysis, Welker Bearing cannot show equivalence between its disclosed mechanism and the Clamp II mechanism. Indeed, Welker Bearing's inventor and Rule 30(b)(6) designate testified that he expressly contemplated linear moving alternatives such as those in Clamp II, but rejected them in favor of a rotating central post because a rotational design provided both economic and performance benefits. SJ Opinion at 705-06. The '254 patent itself states that a rotational mechanism for moving the fingers allows the device to work "faster, more efficiently, more precisely, and more uniformly." '254 patent col.2 ll. 25-30.

As the district court aptly stated, "[t]his evidence of the distinct advantages purportedly offered by a rotating central post undermines any claim of 'insubstantial' differences between this structure and its linear-motion counterpart in Defendant's Clamp II." SJ Opinion at 706. As part of the §112 ¶ 6 analysis, the district court's structural equivalents analysis is part of the literal meaning of the functional claim term. In any event, this court affirms the district court's grant of summary judgment of noninfringement of the '254 patent.

V

The district court properly interpreted the disputed claim limitation of the '254 patent under the sixth paragraph of 35 U.S.C. § 112. The district court also properly found no material issues of fact regarding whether PHD had committed infringing acts after the issuance date of the '478 patent. Accordingly, this court affirms the district court's grant of summary judgment.

AFFIRMED

COSTS

Each party shall bear its own costs.