United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/478,277	05/23/2012	Suad Elkasevic	2011P04000US	1023
	7590 10/02/201	9	EXAMINER	
100 Bosch Bou	levard		O BRIEN, JEFFREY D	
NEW BERN, N	IC 28562		ART UNIT	PAPER NUMBER
			3677	
			NOTIFICATION DATE	DELIVERY MODE
			10/02/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MBX-NBN-IntelProp@bshg.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SUAD ELKASEVIC

Appeal 2018-001099 Application 13/478,277 Technology Center 3600

Before CHARLES N. GREENHUT, MICHAEL J. FITZPATRICK, and ANNETTE R. REIMERS, *Administrative Patent Judges*.

REIMERS, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Appellant² appeals under 35 U.S.C. § 134(a) from the Examiner's decision to reject claims 37 and 38 under 35 U.S.C. § 112, first paragraph, for lack of written description and to reject claims 19–38 under 35 U.S.C.

¹ The subject application was previously before the Patent Trial and Appeal Board in Appeal No. 2014-008204. *See* Decision dated October 21, 2016. In that Decision, the adverse decision of the Examiner was AFFIRMED. Following that Decision, Appellant reopened prosecution and further amended the claims.

² We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as BSH Home Appliances Corporation. Appeal Brief ("Appeal Br.") 2, filed July 24, 2017.

§ 103(a) as unpatentable over Hopkins (US 3,450,125, issued June 17, 1969), White (US 2011/0017191 A1, published Jan. 27, 2011), and Priddy (US 7,017,232 B1, issued Mar. 28, 2006). Claims 1–18 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

The claimed subject matter relates to "a hinge assembly used with a door of a domestic appliance." Spec. ¶ 2, Fig. 2. Claims 19, 25, and 31 are independent.

Claim 19 is illustrative of the claimed subject matter and recites:

19. A hinge assembly for pivotably attaching a door to a domestic appliance having an appliance body, the hinge assembly comprising:

a hinge body;

a damper having a central longitudinal axis and including a damper cylinder attached to the hinge body, the damper cylinder having a rod partially located inside the cylinder and partially located outside the cylinder, and a coil spring located inside the cylinder and around the rod such that the rod extends through a center of a coil of the coil spring, the damper damping the movement of the rod relative to the cylinder, and the rod extending along the central longitudinal axis of the damper;

a pair of linkage members coupled to the damper and forming a slot therein to receive a linkage member pin;

a foot pivotably attached to the pair of linkage members and having a pivot end, the foot operable to engage a foot receiving portion of the appliance body such that the hinge body and the door pivot relative to the appliance body; and a shoulder bushing attached to the pivot end of the foot and to a pivot point of the hinge body such that the foot pivots relative to the hinge body around the pivot point, the shoulder bushing having a large diameter portion and a small diameter portion,

wherein the pivot end of the foot is fixed to the shoulder bushing at a fixing area of the small diameter portion such that a side surface of the pivot end of the foot is in contact with a side surface of the large diameter portion.

ANALYSIS

Written Description

The Examiner determines that "[c]laims 37 and 38 require that 'the slot has a substantially uniform width[.]' There is not description of this limitation in the originally filed disclosure" and that "original Figure 2 shows the slot from an angled view [or an isometric view], which does not show the slot in enough detail to know if it has a substantially uniform width. This limitation therefore amounts to new matter." Final Act. 2–3; see also Ans. 2–4.3

Compliance with the written description requirement set forth in the first paragraph of 35 U.S.C. § 112 does not require that the claimed subject matter be described identically in the Specification, but the disclosure as originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed. *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983). The drawings in an application can be relied upon to show that an inventor was in possession of the claimed invention as of the

³ Final Office Action ("Final Act."), dated Apr. 24, 2017; Examiner's Answer ("Ans."), dated Sept. 15, 2017.

filing date. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1565 (Fed. Cir. 1991) ("[D]rawings alone may be sufficient to provide the 'written description of the invention' required by § 112, first paragraph.").

When a word of degree, such as the term "substantially," is used in a claim, we look to the specification to determine whether the specification provides some standard for measuring that degree. *See Seattle Box Co. Inc.*, *v. Industrial Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984). In addition, the term "substantially," which is often used in conjunction with another term to describe a particular characteristic of the claimed invention, is a broad term. *In re Nehrenberg*, 280 F.2d 161, 165 (CCPA 1960). In this case, the qualifying term "substantially" modifies the term "uniform" to include widths that are approximately uniform. In other words, a width that is "substantially uniform" includes widths that are absolutely uniform as well as widths that are approximately uniform.

Upon review of Appellant's Figure 2, we determine slots 710, 810 are approximately uniform in width. *See* Fig. 2; *see also* Spec. ¶ 20; Appeal Br. 5; Reply Br. 2–3.⁴ Hence, Appellant's Figure 2 conveys with reasonable clarity to a skilled artisan that each of the slots have a "substantially uniform width." As the original Figure 2 clearly discloses a slot having a "substantially uniform width," we are of the opinion that the originally filed Specification and drawings fully and clearly disclose a device which

_

⁴ Reply Brief ("Reply Br."), filed Nov. 14, 2017.

⁵ The Examiner states that "Figure 2 actually appears to show the slots (710, 810) narrowing at their ends." Ans. 3; *see also id.* at 4 (The Examiner's modified version of Figure 2 of the subject invention). However, as discussed above, a width that is "substantially uniform" includes widths that are absolutely uniform and widths that are approximately uniform.

demonstrates that Appellant was in possession of the claimed subject matter at the time the application was filed. We, therefore, determine that the original disclosure satisfies the written description requirement.

Accordingly, we do not sustain the Examiner's rejection of claims 37 and 38 for lack of written description.

Obviousness over Hopkins, White, and Priddy

Independent claim 19 is directed to a hinge assembly including "a pair of linkage members coupled to the damper and forming a slot therein to receive a linkage member pin." Appeal Br. 12 (Claims App.). The Examiner finds that Hopkins⁶ discloses the hinge assembly of claim 19 substantially as claimed except, among other things, that Hopkins "does not disclose wherein the pair of linkage members forms a slot therein to receive the link member pin" and instead, Hopkins discloses "the link member pin engages a curved surface of the pair of linkage members (as seen in Figure 2)." Final Act. 4–5. The Examiner finds that Priddy⁷ discloses "a hinge having a link member (28) having a curved slot (32)." *Id.* at 5. The Examiner reasons that it would have been obvious "to replace the curved surface in the link member of [Hopkins] with the curved slot of [Priddy] in order to slow movement speed of the link member pin with respect to the link members during movement of the hinge." *Id.*

Appellant contends that "one of ordinary skill would not be motivated to look at Priddy and combine Priddy with the link members of Hopkins because Hopkins would be rendered inoperable for its intended purposes."

⁶ The Examiner refers to the Hopkins reference as ('125). See Final Act. 4.

⁷ The Examiner refers to the Priddy reference as ('232). *See* Final Act. 5.

Appeal Br. 8; *see also* Reply Br. 4–6. In particular, Appellant contends that "[t]he purpose of Hopkins is to help ease closure of the door," that "[t]he slot in Priddy narrows at the distal end to grip the shank of the fastener to prevent the door from closing" and that the door of Priddy "is designed to stay open, and the holding of the door in the open position is made possible by the narrowing slot in Priddy. In other words, the function of the slot [in Priddy] is to hold the door open and prevent closure of the door." Appeal Br. 8 (citing Hopkins 1:41–44; Priddy 3:11–17). Appellant concludes that "[i]f, as suggested by the Office Action, the curved surface in the link member of Hopkins were replaced with the slot of Priddy, the door [of the modified Hopkins' device] would not be able to close and function properly." *Id*.

Appellant has the better position here. Hopkins discloses that an object of the invention is "to provide a counterbalanced hinge arm arrangement to assist in closing oven doors." Hopkins 1:41–43. Hopkins further discloses

While the weight of the door 12, overpowering the tension of spring. 22, holds it open, the spring tension remains a counterbalancing force for when the door is to be closed. Because the hook end 25 connection of spring 22 and the pivotal connection of link 20, at 21, are aligned over the roller 28, the spring exerts a lifting effort on the roller and assists in the closing of door 12.

To close the door 12, from either the intermediate or fully opened positions, the door is moved by either the handle, or pushing against it, towards the closed position. The link 20 moves through its tension-relieving arc as the door swings on its pivot 18 and the intermediate stop 31 is passed over without other than normal effort. In the course of such movement, the spring works as mentioned

to counterbalance the major weight of the door and to assist in the closing.

Hopkins 3:13–28 (emphases added), Fig. 2.

Priddy discloses that under normal operation, "[t]he slider bar **68** and its tension spring **78** serve to counteract the weight of an open drop down door, weakly biasing the door to the closed position and *thus facilitating lifting the door for closure*." Priddy 5:42–45 (emphasis added); *see also id.* at 6:4–5, 8–11, Fig. 2A. Priddy further discloses that when utilizing hinge plate 28 with slot 32, "[t]he narrower width of slot **32** toward its second end **96***b* bears against the fastener **42**, thereby slowing the rotational movement of the hinge plate **28** and thus slowing the drop of the door arm **54** and door attached thereto," which "also tends to *jam* the hinge plate **28** into position as shown in FIG. 2D, which *lessens the ability* of the tension spring **78** to rotate the assembly (and door) back to its original [closed] position." *Id.* at 9:38–45 (emphases added), Figs. 2D, 4; *see also id.* at 3:10–16 (Explaining that frictionally gripping the shank of a fastener within the narrowed slot of the hinge plate *prevents* the door from swinging upwardly by means of the balance spring and slider mechanism incorporated therewith).

In this case, according to Priddy, frictionally gripping the shank of fastener 42 within narrowed slot 32 of hinge plate 28 (1) *prevents* the oven door from swinging upwardly by means of balance/tension spring 78 and (2) *lessens the ability* of balance/tension spring 78 to rotate the oven door back to its closed position (i.e., lessens the ability of balance/tension spring 78 to facilitate lifting the oven door for closure). *See* Priddy 3:10–16, 9:38–45, Figs. 2D, 4; *see also* Reply Br. 6 ("The slot of Priddy narrows specifically to grip the pin such that the door cannot swing upward by means

of the spring."). This is contrary to the teachings of Hopkins, which require spring 22 to *exert a lifting effort* on roller/fastener 28 and *assist in* the closure of door 12. *See* Hopkins 3:16–19; *see also id.* at 3:25–28 (Explaining that in the course of closing door 12, spring 22 works to counterbalance the major weight of door 12 and to *assist in* the closing of door 12).

Additionally, as correctly pointed out by Appellant, frictionally gripping the shank of fastener 42 within narrowed slot 32 of hinge plate 28 tends to *jam*⁸ (wedge) hinge plate 28 into position. *See* Reply Br. 5–6; *see also* Priddy 9:38–43. We agree with Appellant that "hinge plate 28 [being] jammed [wedged] into position, [would] indicate[] that a larger force than normal [would be] needed to unjam the hinge plate 28 [of Priddy] to close the door." *See* Reply Br. 5. In other words, closing the oven door of Priddy when incorporating hinge plate 28 would require "a large[r] degree of force beyond a normally closing force." *See id.* at 6. This is also contrary to the teachings of Hopkins, which require link member 20 to move door 12 towards the closed position "without other than normal effort" (i.e., without a larger than normal force). *See* Hopkins 3:20–25 (emphasis added). As such, we agree with Appellant that "the slot of Priddy is not used in the hinge under normal circumstances where the hinge can open and close without any issues, as in Hopkins." Reply Br. 4

Based on the foregoing reasons, modifying Hopkins' device to replace the curved surface in link member 20 of Hopkins with the curved slot of

_

⁸ An ordinary and customary meaning of the term "jam" is "to become blocked, wedged, or stuck fast." https://www.merriam-webster.com/dictionary/jam (last accessed Sept. 16, 2019).

Priddy would defeat the purpose of spring 22 of Hopkins of *exerting a lifting effort* on roller/fastener 28 and *assisting in* the closure of door 12 as well as the purpose of link member 20 of Hopkins to move door 12 towards the closed position "*without other than normal effort*." *See* Hopkins 3:13–28 (emphasis added). Where the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, the proposed modification would not have been obvious. *See Tec Air, Inc. v. Denso Mfg. Michigan, Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999); *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). Hence, the modification proposed by the Examiner would not have been obvious to a person of ordinary skill in the art.

Independent claims 25 and 31 include language directed to "a pair of linkage members coupled to the damper and forming a slot therein to receive a linkage member pin." Appeal Br. 13, 14 (Claims App.). The Examiner relies on the same unsupported findings in Hopkins and Priddy as those discussed above for claim 19. *See* Final Act. 4–5. Thus, the Examiner's findings with respect to Hopkins and Priddy are deficient for claims 25 and 31 as well.

Accordingly, for these reasons, we do not sustain the Examiner's rejection of claims 19–38 as unpatentable over Hopkins, White, and Priddy.

DECISION

We REVERSE the decision of the Examiner to reject claims 37 and 38 for lack of written description.

Appeal 2018-001099 Application 13/478,277

We REVERSE the decision of the Examiner to reject claims 19–38 as unpatentable over Hopkins, White, and Priddy.

REVERSED