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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WHIRLPOOL CORPORATION

Appeal 2013-008232 Reexamination Control No. 90/009,855 Patent 6,082,130 Technology Center 3900

Before STEVEN D. A. McCARTHY, DANIEL S. SONG, and BENJAMIN D. M. WOOD, *Administrative Patent Judges*.

WOOD, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

This proceeding arises from a third-party request from LG Electronics, Inc. ("LG," or "Requestor") for ex parte reexamination of claims 1, 2, 4, 6, 8, and 9 of US Patent 6,082,130 (the "'130 patent"), entitled "ICE DELIVERY SYSTEM FOR A REFRIGERATOR." Req. 1; '130 patent, cover page. The '130 patent issued to Jim J. Pastryk, et al., on July 4, 2000, with claims 1-25, and is assigned to Whirlpool Corporation ("Whirlpool," or "Patent Owner"). '130 patent, cover page; col. 12, 1. 49 – col. 16, 1. 39. In the course of the Reexamination, Patent Owner amended the '130 patent to add claims 26-94. Final Rej. 2. Patent Owner subsequently amended claims 30, 51, 61, 80, 82, 84, 87, 90, 92, and 93; and canceled claims 88, 89, 91, and 94. Id. The Examiner ultimately confirmed the patentability of reexamined claims 2 and 9; deemed patentable claims 26-87, 90, 92, and 93; and finally rejected claims 1, 4, 6, and 8. *Id.* at 10-12. Patent Owner appeals under 35 U.S.C. § 134(b) from the final rejection of claims 1, 4, 6, and 8. An oral hearing in accordance with 37 C.F.R. § 41.47 was held on October 2, 2013. We have jurisdiction under 35 U.S.C. §§ 6(b), 134, and 306.

We reverse.

THE INVENTION

The claims are directed to a refrigerator with a freezer compartment containing an ice delivery system mounted on the freezer door. Col. 1, ll. 6-8. Specifically, an ice maker is mounted above an ice storage bin that is mounted on the freezer door; a motor, also mounted on the freezer door, turns an auger inside the ice storage bin. Col. 4, ll. 2-8; fig. 2. An

embodiment of the claimed arrangement is depicted in Figures 2 and 3 of the '130 patent, reproduced below:

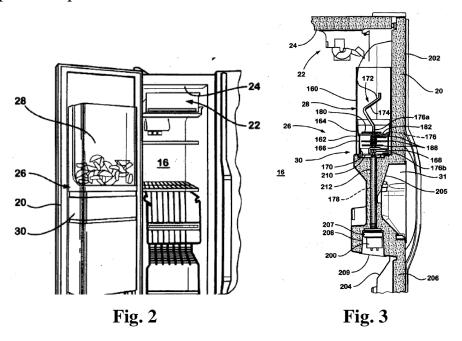


Figure 2, reproduced above left, is a fragmentary perspective view of a refrigerator including the ice maker 22 and the ice storage receptacle or bin 28. Figure 3, reproduced above right, is a fragmentary, side sectional view showing ice maker 22 and bin 28.

As depicted in Figure 2, ice maker 22 is mounted to the inside top wall 24 of freezer compartment 16. '130 patent, col. 4, ll. 1-4. Ice dispensing system 26 includes ice storage bin 28 and ice crushing system 30, both mounted to freezer door 20. *Id.* at col. 4, ll. 4-8; fig. 2. As depicted in Figure 3, ice dispensing system 26 comprises auger 172, disposed within ice storage bin 28, and motor 200, mounted to freezer door 20 via motor mount bracket 207. *Id.* at col. 11, ll. 19-22, 37-40. Motor 200 drives auger 172 via drive shaft 178 to move ice through the door. *Id.* at col. 9, l. 60 – col. 10, l. 14; col. 11, ll. 10-18; fig. 3.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A refrigerator including a freezer compartment having an access opening and a closure member for closing the access opening, the refrigerator comprising:

an ice maker being disposed within the freezer compartment for forming ice pieces;

an ice storage bin mounted to the closure member below the ice maker for receiving ice from the ice maker, the ice storage bin having a bottom opening;

a motor mounted on the closure member; and

an auger disposed within the ice storage bin and drivingly connected to the motor,

wherein upon energization of the motor, the auger moves ice pieces from the ice storage bin through the bottom opening for dispensing from the ice storage bin.

'130 patent, col. 11, ll. 49-63. Claims 4, 6, and 8 depend from claim 1 and add limitations directed to a transparent ice-storage bin (claim 4), and an ice-crushing region (claims 6 and 8). *Id.*, col. 13, ll. 7-10, 16-30, 36-52.

REFERENCES

Goetz et al. ("Goetz")	US 5,056,688	Oct. 15, 1991
Palmon	US 5,240,150	Aug. 31, 1993
Yasukawa	JP S51-21165 U	Feb. 16, 1976 ¹

REJECTIONS

Claims 1, 6, and 8 stand rejected under 35 U.S.C. §103(a) as unpatentable over Yasukawa and Goetz. Ans. 4.

Claim 4 stands rejected under 35 U.S.C. §103(a) as unpatentable over Yasukawa, Goetz, and Palmon. Ans. 4.

ANALYSIS

Claims 1, 6, and 8 – Obviousness – Yasukawa and Goetz Claim 1 – Prima Facie Case

The Examiner found that Yasukawa teaches all of the elements of claim 1 – including an ice storage bin mounted to a freezer closure member – except for an "automatic ice maker" disposed above the ice storage bin. Final Rej. 4 (citing Yasukawa (translation) at 1, ll. 13-17; 2, ll. 5-7; 3, l. 21 – 4. l. 4; fig. 3). The Examiner then found that Goetz "disclose[s] that the ice

References to "Yasukawa" will be to an English-language translation sworn to by Florencia Agote on April 18, 2008 and attached as Exhibit 8 to the Request.

While the Examiner found that that Yasukawa discloses an "ice maker," the Examiner found that Yasukawa "does not disclose whether the ice maker is an automatic ice maker." Final Rej. 4. The Examiner thus interprets the claim term "ice maker" to mean "automatic ice maker," as opposed to "manual ice maker" (i.e., ice cube trays), which would need to be filled and emptied manually. *Id.* at 4-5. We agree that the term "ice maker" does not encompass ice cube trays, and hereinafter use the term "ice maker" to refer to an automatic ice maker.

maker (20) is an automatic ice maker." *Id.* (citing Goetz, col. 4, 1. 13; *see* fig. 1). The Examiner concluded that it would have been obvious to replace Yasukawa's manual ice maker with Goetz's automatic ice maker "to ensure that the dispenser has ice automatically supplied to it." Final Rej. 4.

Patent Owner disputes that the Examiner has established a *prima facie* case of obviousness for claim 1. Patent Owner first argues that an automatic ice maker such as that taught by Goetz would not fit above Yasukawa's ice storage bin. App. Br. 29-31. According to the Patent Owner, too much room would have been consumed by Yasukawa's door mounted ice storage bin 3, so that the bottom of the dispenser would have had to extend below the bottom of the freezer door, which, according to Patent Owner's expert Mr. Greg Hortin, would not have been done unless absolutely necessary. *Id.* at 29 (citing Hortin Decl., ¶¶ 6-9). Patent Owner reasons that "[b]ecause Yasukawa teaches extending the dispenser into the lower refrigerator door, a person of ordinary skill would understand . . . that there was no significant room between the top of the bin and the freezer ceiling," because if there had been such room, "the ice dispensing assembly would have been lifted to avoid the engineering challenges and expense in extending the dispenser to the lower door." *Id.* at 29-30 (citing Hortin Decl., ¶ 9).

We do not find this argument persuasive of Examiner error. This argument is apparently based on two premises: (1) that Yasukawa's ice delivery system requires components – particularly the ice storage bin – of a particular size, installed on a refrigerator freezer of a particular size; and (2) that a person of ordinary skill in the art at the time of the invention would have used Yasukawa without any modification. As to the first premise,

Patent Owner has not identified, and we have been unable to find, any disclosure in Yasukawa that limits the size of the ice storage bin or refrigerator freezer to that specifically depicted. Moreover, the drawings themselves "do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is completely silent on the issue." *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956 (Fed. Cir. 2000).

As to the second premise, a person of ordinary skill is not "compelled to adopt every single aspect of [a reference] without the exercise of independent judgment." *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). The Patent Owner does not show or explain why it would be beyond the skill on an ordinary artisan to make room for an ice maker by, *e.g.*, lowering the entire ice dispensing mechanism (i.e., increasing the size of the notch in the refrigerator door), or reducing the size of Yasukawa's ice storage bin. While designing a refrigerator with a notched refrigerator door may entail certain "engineering challenges and expense," that does not necessarily mean that doing so would have been beyond ordinary skill, or that increasing the size of the notch to accommodate an automatic ice maker would have presented additional difficulties beyond ordinary skill.

Second, Patent Owner argues that a person of ordinary skill in the art at the time of the invention would be led away from adding an ice maker to Yasukawa's freezer because (1) doing so would go against the space-saving advantages of the disclosed door-mounted dispenser system; and (2) Yasukawa's bin is not properly shaped for use with an ice maker. Regarding

the freezer-space issue, Patent Owner notes that "[o]ne indicated advantage of the system described in Yasukawa is that 'volume of the freezer chamber is used relatively efficiently." App. Br. 31. Patent Owner contends that "[t]his statement effectively teaches a person of ordinary skill in the art away from combining Yasukawa with an ice maker above the bin because this space-saving advantage would be eliminated by the traditional ice making systems in existence at the time of the filing of the '130 Patent." *Id.* at 31-32 (citing First Caligiuri Decl., ¶ 30).

We are not persuaded that Yasukawa teaches away from adding an ice maker to its system. While Yasukawa teaches that its system would use freezer space more effectively, and an ice maker would likely have taken up more freezer space than Yasukawa's ice trays, an ice maker would also have enhanced other benefits of Yasukawa's ice dispenser. Specifically, Yasukawa teaches that its door-mounted ice delivery system reduces the loss of cold air from the repeated opening and closing of the freezer door, and reduces the need to directly touch the ice pieces. Yasukawa (translation) at 1. Adding an ice maker to Yasukawa's invention would further reduce or eliminate these problems. *See* Goetz, col. 1, ll. 14-15 (an ice maker "eliminate[s] the need to open the freezer door and let ambient air into the

Yasukawa (translation) at 6.

³ We are unable to find this exact quote in the Yasukawa translation of record. Instead, Yasukawa states regarding saving freezer space that:

By attaching the entire device on the inner side of door 2, among other significant practical effects, the capacity of the freezer compartment can be used more effectively, and the operation of emptying ice cubes 4 from the ice maker tray into the ice storage section 5 is more pleasant.

freezer section"). Our reviewing court has recognized that a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate any or all reasons to combine teachings, much less constitute teaching away from the combination. *See Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n. 8 (Fed. Cir. 2000) ("The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.").

We are also not persuaded that a person of ordinary skill in the art at the time of the invention would have been taught away from combining Yasukawa and Goetz because of the specific shape of Yasukawa's ice storage bin. Patent Owner contends that "the slope of the ramp is not very steep and may not allow ice to fall freely down into the auger section;" that "having sloped sections on both sides (i.e., a necked-down region before the auger) presents the possibility that ice pieces from an ice maker would clump and form a bridge of solid ice over the opening that the auger would not contact;" and that "Yasukawa fails to disclose any structure for moving the ice from the ice maker to the bin or any structure for preventing ice from overflowing the bin." App. Br. 32 (citing Ex. G (First Caligiuri Decl.), ¶¶ 26-29). But, again, a person of ordinary skill is not expected to adopt "every single aspect [of Yasukawa] without the exercise of independent judgment." Lear Siegler, 733 F.2d at 889. Patent Owner has not provided persuasive evidence or argument that an artisan of ordinary skill, exercising independent judgment, would have been unable to adapt the shape of

Yasukawa's ice bin to accommodate an ice maker, or to resolve the other issues that Patent Owner identifies. Indeed, as acknowledged by the Patent Owner and found by the Examiner, it was well known to mount an ice maker above an ice storage bin. '130 patent, col. 1, ll. 12-16; Ans. 6.

Next, Patent Owner argues that Yasukawa does not disclose a motor mounted to a closure member. App. Br. 33. Instead, Patent Owner argues, Yasukawa's motor 13 is connected to speed reducer 12. *Id.* We note, however, that Yasukawa's speed reducer 12 is mounted to the freezer door 2, so the motor is mounted to the freezer door via the speed reducer. We do not interpret the term "motor mounted on the closure member" to require that the motor be directly mounted to the freezer door without any intervening structure; indeed, such a requirement would exclude Patent Owner's preferred embodiment wherein motor 200 is mounted to the freezer door using bracket 207 within a cup-shaped support member or housing 208. '130 patent claim 1, col. 11, ll. 37-40, fig. 3; *see Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (holding that claim interpretation that excludes all preferred embodiments is "rarely, if ever, correct").

Finally, Patent Owner argues that Yasukawa would not have enabled one of ordinary skill to construct a motor that is both mounted to a closure member and able to dispense ice from the ice storage bin. App. Br. 33. Patent Owner contends that "Yasukawa does not describe how the motor 13 would be attached or wired, or how the weight or torque of the motor would be managed." App. Br. 34. According to Patent Owner, the weight, spacing, location, and wiring of the motor and auger "presented substantial"

challenges to the inventors of the '130 Patent, and overcoming those challenges required considerable time and effort." *Id.* at 35 (citing Ex. C (Hortin Decl.), ¶¶ 36-42).

We do not doubt that the named inventors of the '130 patent encountered and overcame a number of engineering challenges. Nor do we disagree that Yasukawa does not teach in exacting detail how to, e.g., successfully mount and wire its ice storage and dispensing system on a freezer door. But we are not convinced that Yasukawa fails to enable a person of ordinary skill to do so. The test for compliance with the enablement requirement is whether the reference is sufficiently complete to enable one of ordinary skill in the art to make the claimed invention without undue experimentation. See In re Gleave, 560 F.3d 1331, (Fed. Cir. 2009)(discussing enablement of a reference under 35 U.S.C. § 102(b)). A reference's failure to provide detailed instructions as to how to make an invention does not, in itself, demonstrate that undue experimentation is required. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384 (Fed. Cir. 1986) ("a patent need not teach, and preferably omits, what is well known in the art."). The fact that the named inventors of the '130 patent overcame a number of engineering challenges does not imply that the solution to those challenges necessarily was beyond the level of ordinary skill in the art or that one of ordinary skill in the art would have had to engage in undue experimentation to meet the same challenges.

Claim 1 – Secondary Considerations

We also consider the issue of obviousness in light of Patent Owner's objective evidence of nonobviousness. *See*, *e.g.*, *Apple Inc. v. Int'l Trade*

Comm'n, 725 F.3d 1356, 1365 (Fed. Cir. 2013). Objective evidence of nonobviousness, i.e., evidence of secondary considerations, can establish that "an invention appearing to have been obvious in light of the prior art was not," and may be "the most probative and cogent evidence in the record." *Id.* at 1366 (internal citations omitted). This evidence "guards against the use of hindsight because it helps turn back the clock and place the claims in the context that led to their invention." *Id.* (internal citations omitted).

Patent Owner has submitted 11 declarations, each with attached exhibits, in an effort to establish that commercial embodiments of its invention: (1) received industry praise; (2) were copied by the Requestor; (3) have been commercially successful; and (4) met a long-felt but unmet need.

In support of its allegations of industry praise, Patent Owner has submitted evidence that Whirlpool's "In-Door-Ice® System" refrigerators (hereinafter, "IDI refrigerators") practice claim 1 of the '130 patent. Ex. A (Reinke Decl.), ¶¶ 3-4, ex. 1 thereto; Ex. B (5/30/12 Caligiuri Decl.), ¶¶ 6-17. Patent Owner's expert witness, Mr. Robert Caligiuri, testified that since 2000, Whirlpool has designed, manufactured and sold "hundreds" of models of IDA refrigerators under the KITCHEN AID, WHIRLPOOL, KENMORE, and MAYTAG brand names. Ex. B (5/30/12 Caligiuri Decl.), ¶ 6; ex. 1 to Ex. B. This includes the KENMORE ELITE 5059 refrigerator, sold in 2000. Ex. A (Reinke Decl.) ¶¶ 1-4. Patent Owner submitted an October 2000 Consumer Reports article that praises the KENMORE ELITE 5059 refrigerator in part because the door-mounted ice storage bin provides "a bit more usable volume within the freezer's main space." Reply Br. 5; Ex. M.

(Hawes Decl.), ex. 1 thereto. Other publications also praised this feature. Ex. M, exs. 2, 3 thereto.

Further, Whirlpool employees Mary Bolger and Dean Martin testified that in 2000, when they were then employed by a competitor of Whirlpool (Amana), they attended a trade show in which an IDI refrigerator was introduced. Ex. D. (Bolger Decl.), ¶¶ 1-9; Ex. E (Martin Decl.), ¶¶ 1-7. Ms. Bolger and Mr. Martin considered the IDI refrigerator to be a "major innovation" because of the IDI feature. Ex. D, ¶ 10; Ex. E, ¶ 8. Another Whirlpool employee, Bruce Kopf, testified that in 2002, his employer at that time, Maytag, considered developing its own "[i]ce in the [d]oor" system in response to Whirlpool's IDI system. Ex. F (Kopf Decl.), ¶¶ 7-8; exs. 1, 2 to Ex. F. Whirlpool acquired Maytag in 2006, which had acquired Amana in 2001. *Id.* at ¶ 4.

Patent Owner also submitted evidence in support of its allegations of copying by LG. For example, Patent Owner presented internal LG presentation documents from 2003 in which LG displayed an image of a Whirlpool IDI refrigerator and described its door-mounted ice bin and dispenser as "[a]dvanced." Ex. M (Hawes Decl.), ex. 8 thereto (translation) at 2. (Mr. Caligiuri testified that Requestor LG had learned of Whirlpool's IDI refrigerators as early as February 2002. Ex. H (5/29/12 Caligiuri Decl.), ¶ 29.) LG also noted in these documents the "[p]ositive customer feedback on Whirlpool's refrigerator with ice-bank attached on door." Ex. M, ex. 8 thereto (translation) at 3. Further, a December 2003 LG document identified the '130 patent as "expected to be problematic" to the development of LG's own in-door ice dispenser. Ex. G (11/5/11 Caligiuri Decl.), ¶ 35. LG stated

that "[s]ince Whirlpool has the uniquely advanced technology and rights in this area, a dispute is expected when product is developed." *Id.* LG determined to design around the '130 patent to avoid such a dispute. *Id.* However, LG was found to have sold refrigerators that infringed, *inter alia*, claim 1 of the '130 patent. Ex. H (5/29/12 Caligiuri Decl.), ex. 3 thereto at 3; ex. 4 thereto at 14-17.

In support of its allegations of commercial success, Patent Owner relies primarily on sales of Whirlpool IDI refrigerators (including those sold under different brand names) from 2000-2005, and the testimony of its expert, Dr. Seth T. Kaplan, interpreting the sales and market data relating to such sales. Ex. J. (Kaplan Decl.), ¶¶ 19-20, 24. Dr. Kaplan testified that the relevant market in which to view sales of IDI refrigerators is the market of household refrigerators with attached freezers. *Id.*, ¶ 21. Dr. Kaplan testified that sales and revenue growth of IDI refrigerators greatly outpaced that of all non-IDI refrigerators over that time period in this market. *Id.*, ¶ 32, table 5. Dr. Kaplan further testified that sales and revenue growth for Whirlpool IDI refrigerators outpaced the growth of Whirlpool's non-IDI refrigerators. According to Dr. Kaplan, IDI refrigerators made significant gains in market share, rising from 0.6% of all household refrigerators sold in 2000 to 4.2% in 2005, despite the fact that IDI refrigerators generally cost more. Id., ¶ 34. Dr. Kaplan asserted that this sales and market share growth occurred even though Whirlpool's per-unit advertising costs declined over much of the relevant time period, indicating that the commercial success of IDI refrigerators was not due to increased marketing. *Id.*, ¶ 50.

The Examiner reviewed Patent Owner's objective evidence of nonobviousness and determined that such evidence does not outweigh the evidence of obviousness for claim 1. Ans. 5. The Examiner explained that such evidence relied "at several places" on elements not found in claim 1, such as the removability of the ice storage bin. *Id.* at 5-6. The Examiner also found that "another point of praise" was "the ice bin on the door," an element found in the prior art. *Id.* Finally, in response to Patent Owner's assertion of long-felt need based on the failure of anyone to commercialize a refrigerator with a door-mounted ice storage system after Yasukawa's publication date, the Examiner stated that "[c]ommercialization is not relevant to patentability." *Id.* at 6.

We view the Examiner's position to be that Patent Owner has not established a nexus between the secondary-considerations evidence and claim 1. "For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the *claimed invention*." *In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (internal citations omitted) (emphasis in original). "Where the offered secondary consideration actually results from something other than what is both claimed and *novel* in the claim, there is no nexus to the merits of the claimed invention." *Id*. (emphasis in original).

We agree with the Examiner that some of Patent Owner's secondary-considerations evidence, particularly praise for the invention found in trade and other journals, refers to features of the IDI refrigerators not found in claim 1, such as the removable ice bin feature. But we disagree that no nexus is therefore shown. An invention may be praised or commercially

successful for reasons other than the claimed invention but a nexus may still exist as long as it can be shown that such praise or success is also due in part to the claimed invention. *See Apple, Inc. v. Int'l Trade Comm'n*, 725 F.3d 1356, 1366 (Fed. Cir. 2013) (finding that Apple presented "compelling secondary considerations evidence," including industry praise received "in part" because of the claimed invention). Here, it is undisputed that while IDI refrigerators may have been praised for features not part of claim 1 – i.e., a removable and transparent ice storage bin – the praise was also due to the claimed door-mounted ice bin. *See*, e.g., Ex. M (Hawes Decl.), exs. 1-3 thereto.

We also disagree with the Examiner that praise for, and commercial success caused by, the door-mounted ice bin lacks a nexus to claim 1 because a door-mounted ice bin was known in the art at the time of the invention. As stated above, the offered secondary consideration must result from "what is both claimed and novel." *Kao*, 639 F.3d at 1068. What is claimed and novel in claim 1 is, at a minimum, the combination of an ice maker mounted above a door-mounted ice storage bin. Evidence that a secondary consideration results from the door-mounted storage bin is indicative of this claimed and novel combination, because, as LG puts it, an "[i]ce-maker is a necessity in the North American [side-by-side] refrigerator market." Ex. M. (Hawes Decl.), ex. 8 thereto at 3. That is, the evidence of record indicates that it is unlikely that a refrigerator with a door-mounted ice storage bin but without an ice maker, such as that taught by Yasukawa, would have been commercially successful because North American consumers greatly preferred refrigerators with ice makers (despite the

corresponding reduction in useable freezer space), and the full advantages of a door-mounted ice storage and delivery system could not have been realized without being combined with an ice maker mounted above the system.

Finally, we disagree with the Examiner that the lack of commercialization of a door-mounted ice storage bin and dispenser after Yasukawa's publication date is irrelevant. Recently our reviewing court held that "[t]he length of the intervening time between the publication dates of the prior art and the claimed invention can also qualify as an objective indicator of nonobviousness." *Leo Pharma., Ltd. v. Rea*, 726 F.3d 1346, 1359 (Fed. Cir. 2013). Here, 24 years passed between Yasukawa's publication and the '103 patent's filing date, a not insubstantial period of time.

We therefore find that Patent Owner has established a nexus between its secondary-considerations evidence and the claimed invention. Further, we find that Patent Owner's evidence of secondary considerations, considered in sum, is probative and substantial, and sufficient to demonstrate non-obviousness of claim 1. Patent Owner has provided evidence that its IDI refrigerators (1) practice claim 1 of the '130 patent, (2) were praised in part for features claimed and novel in claim 1; (3) were commercially successful also as a result of features claimed and novel in claim 1; and (4) satisfied a need that went unfulfilled for 24 years after the concept of a freezer-door-mounted ice storage and dispensing system first became known. Patent Owner's evidence also indicates that LG began its own indoor-ice program in recognition of Whirlpool's commercial success. We

therefore do not sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 103 as unpatentable over Yasukawa and Goetz.

Claims 6 and 8

As stated above, claims 6 and 8 depend from claim 1 and add limitations directed to an ice-crushing region. The Examiner rejected claims 6 and 8 based on the same combination of references as the claim 1 rejection. Ans. 4. Therefore, for the reasons stated above, we do not sustain the Examiner's rejection of claims 6 and 8.

Claim 4 – Obviousness – Yasukawa, Goetz, and Palmon

The Examiner rejected claim 4 on the same combination of references as claim 1, plus an additional reference, Palmon, which is relied on only to teach the additional limitations found in claim 4. Ans. 4. Therefore, for the reasons stated above, we do not sustain the Examiner's rejection of claim 4

DECISION

For the above reasons, the Examiner's rejection of claims 1, 4, 6, and 8 is reversed.

REVERSED

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