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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRANKO IVANOVIC, DIETMAR HILDNER, and
REINER HORSTMANN

Appeal 2019-001350
Application 15/117,022
Technology Center 3600

Before KEVIN F. TURNER, DANIEL S. SONG, and
MICHAEL L. HOELTER, *Administrative Patent Judges*.

SONG, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–14 and 16–22. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as Electrolux Appliances Aktiebolag. Appeal Br. 3.

CLAIMED SUBJECT MATTER

The claims are directed to a door opening system for an appliance.

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

1. A domestic appliance comprising:
 - a support structure,
 - at least one pivoting door with a recess, and
 - a door opening system, wherein the door opening system comprises:
 - at least one door hinge including a stationary hinge part and a pivoting hinge part,
 - at least one hook mechanism including a hook element configured to engage with the recess in a closed state of said door, so that the hook element and the recess form a snap-in mechanism,
 - the hook element being configured to disengage from the recess by operating a control element,
 - the stationary hinge part being arranged horizontally inside or at the support structure,*
 - the pivoting hinge part being arranged inside or at the pivoting door,
 - the stationary hinge part comprising a first spring element and a second spring element, the first spring element and the second spring element generating horizontal forces in the mounted state of the door hinge at the domestic appliance,*
 - the first spring element keeping the door balanced within an outer opening angular range of said door,
 - the second spring element generating an opening force for the door within an inner opening angular range, so that the door is pushed into a partially opened state,
 - the inner opening angular range extending between a closed state and the partially opened state of the door, and
 - the outer opening angular range extending between the partially opened state and a completely opened state of the door.

Appeal Br. 20 (dashes omitted, emphasis added).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Hapke	US 2004/0163684 A1	Aug. 26, 2004
Hapke	US 2006/0145485 A1	July 6, 2006
Zanetti	EP 0 632 180 B1	Sept. 25, 1996
Vanini	EP 1 961 901 A2	Aug. 27, 2008
Ciftci	EP 2 527 577 A2	Nov. 28, 2012

REJECTIONS

The Examiner rejects various claims under 35 U.S.C. § 103 as follows:

1. Claims 1–7, 10–14, 16, 17, and 20–22 unpatentable over Zanetti² in view of Ciftci. Final Act. 2.
2. Claims 8 and 9 unpatentable over Zanetti in view of Ciftci and Vanini. Final Act. 4.
3. Claims 18 and 19 unpatentable over Zanetti in view of Ciftci and Hapke '485. Final Act. 4.
4. Claims 18 and 19 unpatentable over Zanetti in view of Ciftci and Hapke '684. Final Act. 5.

OPINION

Rejection 1: Zanetti and Ciftci

The Examiner rejects claims 1–7, 10–14, 16, 17, and 20–22 as unpatentable over Zanetti in view of Ciftci, finding that Zanetti discloses the invention substantially as claimed. Final Act. 2–3. The Examiner finds that Zanetti “does not expressly disclose the door opening system mounted in

² The Examiner misidentifies Zanetti as “Zabettu” throughout the Final Office Action, but this reference is properly referred to in the Answer.

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such a position that the part of the hinge comprising the springs is mounted on the support structure of the appliance as the stationary part.” Final Act. 3. However, the Examiner relies on Ciftci for teaching an appliance with a hinge having a stationary and a pivoting part, wherein the “stationary part has the springs and is mounted in the cabinet/support structure.” Final Act. 3–4. Based thereon, the Examiner concludes that it would have been obvious to a person of ordinary skill in the art to modify the device of Zanetti such that the hinge part with the springs is “in the cabinet as taught by Ciftci as an functional equivalent alternative and since [i]t has been held that a mere reversal of the essential working parts of a device involves only routine skill.” Final Act. 4, citing MPEP § 2144.04.

As to independent claims 1 and 22, the Appellant argues that “[n]othing in Zanetti suggests the claimed configuration where a stationary hinge part comprising spring elements is arranged horizontally.” Appeal Br. 14. However, this argument is unpersuasive because the rejection is based on the combination of Zanetti and Ciftci. Final Act. 4. “Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

The Appellant also argues that although the Examiner surmises that hinge element 7 of Zanetti with its springs is suitable for use in the recited arrangement within the support structure of the appliance, this “is pure conjecture unsupported by any evidence,” and constitutes impermissible hindsight. Appeal Br. 14; *see also* Appeal Br. 17 (“[T]he Examiner does not know that, or at least he has failed to explain how he does. He certainly does not know it from the cited references.”); Reply Br. 2–3.

In response, the Examiner explains that

the structure of Zanetti's hinge does not have any components that rely on gravity or any outside structure (not part of the hinge). In Zanetti's operation the only condition that effects how the hinge (spring forces) operates is the angle between the stationary part and the pivoting part. Therefore the examiner concludes that the hinge will operate the same in a reversed orientation[.]

Ans. 3–4.

We agree with the Examiner and find the Appellant's argument unpersuasive. Zanetti's hinge is a mechanical device and as correctly explained by the Examiner, its operation relies on the provided springs, and the force provided thereby depends on the relative angle between the pivoting part and the stationary part of the hinge. Zanetti's hinge does not rely on gravity so the finding that it would work regardless of orientation is reasonable and supported by preponderance of the evidence. The Appellant's reliance on the fact that Zanetti does not explicitly disclose the capability of operation in the recited horizontal arrangement is unpersuasive because such lack of disclosure does not mean that the hinge is not capable of functioning in a horizontal arrangement, and this argument essentially requires Zanetti to anticipate the claims.

The Appellant also argues that the Examiner's rejection is based on a finding of "obvious design choice,"³ but that such finding is "precluded where the claimed structure and the function it performs are different from

³ Contrary to this assertion, the Appellant also asserts that the Examiner has not set forth a reason for the suggested modification to the Zanetti's appliance. Reply Br. 3. This assertion is not persuasive in view of the Examiner's rejection and response reproduced above. Final Act. 3–4; Ans. 4.

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the prior art.” Appeal Br. 15 (*citing In re Gal*, 980 F.2d 717 (Fed. Cir. 1992)). Specifically, the Appellant argues that “[b]ecause the door opening system of Ciftci and the door opening system of Zanetti function differently to achieve very different ends (i.e.,] slow closing vs. rapid opening), the Examiner’s rejection . . . as an alleged ‘obvious design choice’ is improper.” Appeal Br. 16. According to the Appellant, “the door opening system of Ciftci and the door opening system of Zanetti function so differently that one skilled in the art would not have been motivated [to] modify Zanetti in view of Ciftci.” Appeal Br. 15; *see also* Reply Br. 3.

We initially note that the Examiner did not actually recite “design choice” in rejecting the claims, but rather, stated that such horizontal arrangement is a “functional equivalent alternative” and a “reversal of the essential working parts of a device [that] involves only routine skill.” Final Act. 4. Regardless, we are not persuaded by the Appellant’s argument. It cannot be reasonably disputed that the hinge of Zanetti performs the same function as the claimed invention, and the Appellant does not assert any structural deficiency as to the hinge disclosed in Zanetti, but merely relies on the horizontal arrangement of its hinge part with springs within the support structure in support of patentability. In addition, as the Examiner explains,

Ciftci is only being relied on for the location of the spring inside the cabinet and therefore the functional equivalent is referring to large functional comparisons of an oven door hinge with springs that control the motion of the door. The examiner consider[s] both Ciftci and Zanetti [to] have the same overall function of controlling the motion of the oven door via a hinge with springs.

Ans. 4.

It also cannot be reasonably disputed that Ciftci and Zanetti are both directed to appliance door hinge mechanisms with springs that control the

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motion of the door. Ciftci clearly discloses a horizontal arrangement of the stationary part of a hinge with its springs within the body (i.e., the stationary structure) of the appliance. Ciftci, Figs. 3–6. Accordingly, the recited horizontal arrangement of a stationary hinge part and its springs within the stationary structure for controlling movement of an appliance door is already well known and practiced in the art. In view thereof, one of ordinary skill in the art would have recognized that the part of the hinge with the springs for controlling the movement of the door in Zanetti can likewise be arranged in the support structure 2 of the appliance, that is, the stationary structure.

Although the Appellant asserts that impermissible hindsight is required to reorient the hinge of Zanetti with its vertically oriented spring to be horizontally located in the support structure (Appeal Br. 16; Reply Br. 4), Ciftci clearly discloses the claimed arrangement. Accordingly, the Examiner's rejection is not based on impermissible hindsight, but instead is based on applying the broader teaching of Ciftci as to arrangement of hinges and its associated springs for controlling the movement of the door. The Appellant's view of Ciftci so as to limit its teachings only to slowing down the door as it is closed is unreasonably narrow, and does not consider Ciftci for all that it teaches. *See In re Bode*, 550 F.2d 656, 661 (CCPA 1977) (reference must be evaluated for all its teachings). Such narrow view of Ciftci further overlooks the fact that a person of ordinary skill in the art possesses ordinary skill and creativity. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). In that regard, it is well established that merely altering a position of a component in a device does not render the device patentable. *See In re Japikse*, 181 F.2d 1019, 1023 (CCPA 1950) (specific positioning of a starting switch of a hydraulic power press held unpatentable because shifting the position of the starting switch would not have modified

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the operation of the device); *In re Kuhle*, 526 F.2d 553, 555 (CCPA 1975) (particular placement of a contact in a conductivity measuring device is an obvious matter of design choice).

The Appellant's reliance on *In re Gal* is also unpersuasive as that case is distinguishable. In *Gal*, the Board affirmed the Examiner's rejection of the claims based on a single prior art reference, finding that the single prior art's basic cells may be used as building blocks for either the claimed standard logic cell or fast charge cell, and concluding that such claimed cells would have been an obvious design choice. *In re Gal*, 980 F.2d at 719. The Federal Circuit reversed, finding that

The Commissioner does not explain why or how Matsumura, or the general knowledge of the art, provides a teaching, suggestion, or motivation to modify the Matsumura chip structure in order to produce the Gal chip structure.

Matsumura's semiconductor chip having a large number of basic cells that can be subsequently tailored thus does not render obvious Gal's custom designed standard logic cells.

Id. at 720.

In contrast, in the present case, as discussed above, the secondary reference Ciftci explicitly relied upon by the Examiner clearly establishes that horizontally arranging within the stationary structure of an appliance, the stationary part of the hinge with the springs that control the movement of the door of the appliance, was already well known and practiced in the art. Ciftci, Figs. 3–6. The rejection is not merely based on a naked assertion that such locating of the hinge part and its springs would be a matter of design choice⁴ based on Zanetti alone, but rather, relies on prior art that shows such

⁴ As previously noted, Examiner did not actually recite “design choice” in rejecting the claims.

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arrangement to conclude that the claimed arrangement is a “functional equivalent alternative” and “reversal of the essential working parts of a device,” which “involves only routine skill.” Final Act. 4.

The Appellant also argues that “[i]t is not obvious to move the spring of a hinge from the location in one reference to that in another by ignoring why the spring was placed differently in the first place, or how moving the spring will affect the operation of the modified structure.” Reply Br. 4. However, this line of argument is also unpersuasive because neither Zanetti nor Ciftci discloses why the springs are placed where they are, or suggest that they must be at the disclosed location in order for the hinge with its springs to function as intended. In other words, neither Zanetti nor Ciftci tie or restrict their respective functions of the springs in opening the door, or slowing the door, to the specific arrangement of the hinge part having the springs.

The Appellant further argues that advantages are attained by utilizing the recited design because the spring is horizontal and “would better align the direction of its force generated with the direction of the intended door opening.” Appeal Br. 15–16; *see also* Reply Br. 4. The Appellant argues that in contrast to Zanetti, the claimed horizontal arrangement “generates a high horizontal opening force with a very low spring force, so that the start of the rotation of the door is fast.” Appeal Br. 16.

However, the Appellant’s argument is unpersuasive and appears to simply be unsubstantiated attorney argument. *In re Schulze*, 346 F.2d 600, 602 (CCPA 1965) (“Argument in the brief does not take the place of evidence in the record.”). In that regard, it is not apparent how the Appellant’s assertion is correct considering Zanetti’s operation and the force generated by its springs are based on the angle between the pivoting and

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stationary parts of the hinge. In other words, in the context of the force applied by the springs, it does not matter which of the hinge parts (stationary or pivoting) is angularly pivoted relative to the other. Instead, what matters is that there is pivoting of one hinge part relative to the other.

Moreover, even if the Appellant is correct and arranging the stationary hinge part horizontally does provide an advantage asserted, when the appliance of Zanetti is modified as to orientation of its hinge mechanism in the manner disclosed in Ciftci and applied in the rejection, the asserted alignment as to the direction of the force with the direction of the intended door opening would result. The Appellant is

in effect, arguing that a structure suggested by the prior art, and, hence, potentially in the possession of the public, is patentable to them because it also possesses an [i]nherent, but hitherto unknown, function which they claim to have discovered. This is not the law. A patent on such a structure would remove from the public that which is in the public domain by virtue of its inclusion in, or obviousness from, the prior art.

In re Wiseman, 596 F.2d 1019, 1023 (CCPA 1979).

Therefore, in view of the above considerations, the Appellant's invention of claims 1 and 22 is a predictable variation that would have been obvious to one of ordinary skill. *See KSR*, 550 U.S. at 417. Accordingly, we affirm the Examiner's rejection of independent claims 1 and 22. The Appellant relies on the dependency on claim 1 to assert patentability of claims 2–7, 10–14, 16, 17, 20, and 21. Appeal Br. 17. Having found no deficiency in the Examiner's rejection of independent claims 1 and 22, we affirm the rejection of these dependent claims as well.

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Rejections 2–4: Based on Zanetti, Ciftci, in View of Other References

The Appellant does not submit any arguments directed to the dependent claims that are subject of Rejections 2–4, and instead, relies on their dependency on claim 1 to assert their patentability. Appeal Br. 17–18. Accordingly, having found no deficiency in the Examiner’s rejection of independent claim 1, we affirm Rejections 2–4 as well.

CONCLUSION

The Examiner’s rejections are AFFIRMED.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–7, 10–14, 16, 17, 20–22	103	Zanetti, Ciftci	1–7, 10–14, 16, 17, 20–22	
8, 9	103	Zanetti, Ciftci, Vanini	8, 9	
18, 19	103	Zanetti, Ciftci, Hapke ’485	18, 19	
18, 19	103	Zanetti, Ciftci, Hapke ’684	18, 19	
Overall Outcome			1–14, 16–22	

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TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED