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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALEXANDER DINKEL, SEBASTIAN MATZINGER,
KLEMENS ROCH, and PHILIPP SCHALLER

Appeal 2019-002037
Application 15/111,826
Technology Center 3700

Before EDWARD A. BROWN, MICHAEL J. FITZPATRICK, and
JEREMY M. PLENZLER, *Administrative Patent Judges*.

BROWN, *Administrative Patent Judge*.

DECISION ON APPEAL

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner's decision to reject claims 13–27.² 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(b). Appellant identifies the real party in interest as BSH
Bosch und Siemens Hausgeräte GmbH. Appeal Br. 3.

² Claims 1–12 are cancelled. Appeal Br. 16 (Claims App.).

CLAIMED SUBJECT MATTER

Claims 13, 21, and 24 are independent. Claim 13 illustrates the claimed subject matter.

13. A surface heater for a household appliance, comprising:

an electrically insulating insulation layer having a permittivity which changes as a function of temperature.

at least one strip-shaped heat conductor applied to the electrically insulating insulation layer, and

at least one measuring electrode electrically insulated in relation to the at least one heat conductor and applied on a same side of the insulation layer as the heat conductor.

Appeal Br. 16 (Claims App.).

REJECTIONS

1. Claims 13 and 15–19 are rejected under 35 U.S.C. § 103 as unpatentable over Blatchford (US 3,694,627, issued Sept. 26, 1972), Ikeda (US 3,902,040, issued Aug. 26, 1975), and Sadahira (US 2011/0278285 A1, published Nov. 17, 2011).

2. Claim 14 is rejected under 35 U.S.C. § 103 as unpatentable over Blatchford, Ikeda, Sadahira, and Netzer (US 5,751,071, issued May 12, 1998).

3. Claims 15 and 20 are rejected under 35 U.S.C. § 103 as unpatentable over Blatchford, Ikeda, Sadahira, and Pastor (US 6,278,158 B1, published Aug. 21, 2001).

4. Claims 21, 22, and 24–26 are rejected under 35 U.S.C. § 103 as unpatentable over Blatchford, Ikeda, Sadahira, and McWilliams (US

5,961,867, issued Oct. 5, 1999) or Schwenke (US 7,567,183 B2, published July 28, 2009).

5. Claims 22, 23, 26, and 27 are rejected under 35 U.S.C. § 103 as unpatentable over Blatchford, Ikeda, Sadahira, McWilliams or Schwenke, and Pastor.

ANALYSIS

Rejection 1

In rejecting claim 13, the Examiner relies on Ikeda as teaching a heat conductor (electrically conductive film 1c) and a measuring electrode (dew drop detecting electrode 2) applied on the same side of an insulation layer (window glass 10). Final Act. 3; *see also* Ikeda, Fig. 2.

Non-Analogous Art

Appellant contends that Ikeda does not qualify as analogous prior art to the claimed subject matter, and thus, cannot be applied in the obviousness rejection. Appeal Br. 8. The test for determining whether a prior art reference is analogous art is: “(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” *In re Clay*, 966 F.2d 656, 658–659 (Fed. Cir. 1992). A reference is “reasonably pertinent” to the problem faced by the inventor if it “logically would have commended itself to an inventor’s attention in considering his problem.” *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379–80 (Fed. Cir. 2007) (citation omitted). Appellant contends that Ikeda is neither

within Appellant's field of endeavor nor reasonably pertinent to the particular problem with which Appellant was concerned. Appeal Br. 8.

Field of Endeavor Prong

As for the field of endeavor prong of the analogous art test, the Examiner finds that Ikeda is "deemed to be in the same field of endeavor, which is in the field of electrically heated surface plates." Final Act. 8. Appellant contends that Ikeda's field of endeavor is "the automobile window art." Appeal Br. 8, 11 ("Ikeda's field of endeavor is, broadly, automobiles and, more narrowly, automobile windshields."). Appellant contends that its field of endeavor is the "hot plate or cooktop art." *Id.* at 8. Appellant asserts that one of ordinary skill in the art in the field of hot plates would not have looked to Ikeda, because Ikeda is directed to the unrelated field of automobile windows. *Id.*

First, we disagree with Appellant's position that Ikeda's field of endeavor is limited to "the automobile window art," or even more broadly the field of automobiles. Ikeda describes, "[t]his invention relates to *a moisture preventive device for glass* which device automatically eliminates the moisture deposited on the surface of glass *such as windows of an automobile.*" Ikeda col. 1, ll. 5–8 (emphasis added). Ikeda further emphasizes that the moisture preventive device is not limited to automobile windshields:

While description has been thus far directed to the window glass of an automobile, it should not be construed that present invention is limited to the aforesaid embodiments. The invention may be applied to window glass in any type of vehicle or building for the prevention of moisture thereon.

Id. at 6, ll. 6–11. Appellant appears to have overlooked this disclosure, which contradicts Appellant’s position.

Second, the Examiner points out Appellant’s Specification discloses that “*the surface heater is not restricted to a cooking appliance such as a cooktop* but includes laundry care appliances, dishwashers, water boilers, coffee machines, hair straighteners, and kitchen machines.” Ans. 8–9 (citing Spec. ¶¶ 30, 31 (emphasis added)). The Examiner determines that this disclosure indicates that the claimed surface heater is not limited to hot plate or cooktop art, as implied by Appellant, but would be applicable to other fields that use heated surfaces. *Id.* at 9.

Appellant replies that, even if its field of endeavor were broadened from the hot plate or cooking art, “at most it would broaden to household cooking appliances.” Reply Br. 3. Appellant contends that automobile windows, such as in Ikeda, are not household cooking appliances. *Id.* Appellant also contends Ikeda is not in the same field of endeavor because an automobile window and a household cooking appliance are not structurally similar and an automobile window cannot be used as a household cooking appliance because it cannot withstand the associated high temperatures. *Id.* at 4.

These contentions are unpersuasive. First, claim 13 recites “[a] surface heater *for a household appliance.*” Appeal Br. 16 (Claims App. (emphasis added)). The body of claim 13 does not recite any limitation relating to the household appliance. We construe the phrase “for a household appliance” to merely recite an intended use of the surface heater. That is, claim 13 is directed to a surface heater having an intended use, and not to a combination of the surface heater and a household appliance.

Second, Ikeda's field of endeavor is not limited to the field of automobile windows. As noted, Ikeda discloses that the heating system can be applied to glass more generally.³

Third, we disagree that Appellant's field of endeavor is limited to the hot plate or cooktop art, or even household cooking appliances. Indeed, the Specification describes multiple appliances and devices other than household cooking appliances in which the surface heater can be used. *See* Spec. ¶ 31. This disclosure shows clearly that Appellant's characterization of the field of endeavor is overly narrow. Accordingly, Ikeda is not required to disclose that its heating system is used in household cooking appliances to qualify as analogous prior art.

Fourth, Appellant's contention that Ikeda is not in the same field of endeavor because an automobile window is not structurally similar to a household cooking appliance and cannot be used as one (Reply Br. 4) is premised on Appellant's unsupported characterization of both Ikeda's and Appellant's field of endeavor, as well as on overlooking that claim 13 is directed to a surface heater, generally.

Accordingly, Appellant has not apprised us of error in the Examiner's finding that Ikeda meets the field of endeavor prong of the analogous art test, and thus, qualifies as analogous prior art to the subject matter recited in claim 13.

³ We note that Appellant's Specification describes that the insulating layer can be made, for example, of a glass plate. *See* Spec. ¶ 22.

Problem Prong

Although Ikeda is not required to also satisfy the problem prong of the analogous art test, the Examiner submits that “applying a conductor with a measuring electrode on the same layer of the heated plate is reasonably pertinent to the problem which the applicant was concerned of that would effectively measure a parameter/temperature of the surface plate heated by the heat conductor.” Final Act. 8.

Appellant contends that it was concerned with “the problem of providing an improved possibility of temperature measurement without an additional temperature sensor on a surface heater for a household appliance” (Appeal Br. 9 (citing Spec. ¶ 5)), whereas Ikeda is concerned with the unrelated problem of eliminating moisture deposited on an automobile window (*id.* (citing Ikeda, col. 1, ll. 5–8)). Appellant asserts that one of ordinary skill in the art concerned with the particular problem that Appellant addressed would not have referred to Ikeda, because Ikeda is not reasonably pertinent to that problem. *Id.* at 9–10.

Appellant’s contentions are unpersuasive at least because they are premised on an overly-narrow characterization of Ikeda’s teachings. As for the scope of analogous art:

The Supreme Court’s decision in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), directs us to construe the scope of analogous art broadly, stating that “*familiar items may have obvious uses beyond their primary purposes*, and a person of ordinary skill often will be able to fit the teachings of multiple patents together like pieces of a puzzle.”

Wyers v. Master Lock Co., 616 F.3d 1231, 1238 (Fed. Cir. 2010) (citation omitted). Even if Ikeda does not describe using its heating system for a

household appliance, in light of Ikeda's disclosure that the heating system can be used for heating glass plates, we are not persuaded that one skilled in the art would not have looked at Ikeda for this purpose.

Hindsight

Appellant contends that the Examiner also relies on hindsight in applying Ikeda. Appeal Br. 12–13. This contention is not persuasive because it seems to be premised essentially on the position that Ikeda fails to qualify as analogous art. *See, e.g., id.* at 12 (“Applicants submit that the Examiner did not locate Ikeda during a search for relevant art that was within the field of Applicants’ endeavor or reasonably related to the particular problem with which Applicants were concerned.”).

For the foregoing reasons, we sustain the rejection of claim 13 and its dependent claims 15–19 under 35 U.S.C. § 103 as unpatentable over Blatchford, Ikeda, and Sadahira.

Rejections 2–5

For each of the Rejections 2–5, Appellant merely contends that Ikeda is non-analogous art, and thus, cannot be used as a reference. Appeal Br. 13–15. As we disagree with this contention, we sustain the rejections under 35 U.S.C. § 103 of: claim 14 as unpatentable over Blatchford, Ikeda, Sadahira, and Netzer; claims 15 and 20 as unpatentable over Blatchford, Ikeda, Sadahira, and Pastor; claims 21, 22, and 24–26 as unpatentable over Blatchford, Ikeda, Sadahira, and McWilliams or Schwenke; and claims 22, 23, 26, and 27 as unpatentable over Blatchford, Ikeda, Sadahira, McWilliams or Schwenke, and Pastor.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
13, 15–19	§ 103 Blatchford, Ikeda, Sadahira	13, 15–19	
14	§ 103 Blatchford, Ikeda, Sadahira, Netzer	14	
15, 20	§ 103 Blatchford, Ikeda, Sadahira, Pastor	15, 20	
21, 22, 24–26	§ 103 Blatchford, Ikeda, Sadahira, McWilliams or Schwenke	21, 22, 24–26	
22, 23, 26, 27	§ 103 Blatchford, Ikeda, Sadahira, McWilliams or Schwenke, Pastor	22, 23, 26, 27	
Overall Outcome		13–27	

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

AFFIRMED