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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PIOTR GORNY, GUIDO SATTLER, and GUNTER STEFFENS

Appeal 2014-008494
Application 12/317,275
Technology Center 3700

Before LINDA E. HORNER, MICHAEL L. HOELTER, and
PAUL J. KORNICZKY, *Administrative Patent Judges*.

HOELTER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is a decision on appeal, under 35 U.S.C. § 134(a), from a final rejection of claims 1–12. Claim 13 has been canceled. App. Br. 7. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE CLAIMED SUBJECT MATTER

The disclosed subject matter “relates to a domestic appliance embodied as a tumble drying device with a lifting magnet, in particular a heat pump dryer.” Spec. 1.¹ Claims 1 and 9 are independent claims. Claim 1 is illustrative of the claims on appeal and is reproduced below.

1. A tumble drying device with a heat pump, comprising:
a lifting magnet having a permissible on-time duration; a rinsing valve being switchable to an open state by the lifting magnet; and a PTC resistor with a non-linear resistance curve electrically connected in series with the lifting magnet and controlling a current flow to the lifting magnet, the PTC resistor being heatable by the current flow through said PTC resistor and said lifting magnet and being highly resistive if a predetermined limit temperature is exceeded and being lowly resistive if the pre-determined limit temperature is not exceeded, the pre-determined limit temperature of the PTC resistor being exceeded in an amount of time that is less than the permissible on-time duration of the lifting magnet such that the PTC resistor, being highly resistive, limits the current flow to the lifting magnet before the permissible on-time duration of the lifting magnet is exceeded.

REFERENCES RELIED ON BY THE EXAMINER

Romann	US 4,216,757	Aug. 12, 1980
Goldberg	US 2006/0179676 A1	Aug. 17, 2006
Buck	GB 2087029 A	May 19, 1982
Beck	WO 93/08051	April 29, 1993

¹ Appellants’ Specification does not provide line or paragraph numbering. Accordingly, reference to the Specification will only be made via the page number.

THE REJECTION ON APPEAL²

Claims 1–12 are rejected under 35 U.S.C. § 103(a) as obvious over Goldberg, Buck, Romann, and Beck.

ANALYSIS

Appellants argue all the claims together. App. Br. 7–11, 14–15. Appellants also present separate arguments for claims 1 and 9 together. App. Br. 11–13. We select claim 1 for review (in both instances) with claims 2–12 standing or falling with claim 1. *See* 37 C.F.R. 41.37(c)(1)(iv).

The Examiner explains why each of the references to Goldberg, Buck, Romann, and Beck were combined, and provides reasons for their combination. Final Act. 3–5. Appellants contend that Romann is not analogous art. App. Br. 7–9; Reply Br. 1–6. Appellants contend that “Romann is directed to an electrical control circuit for a fuel supply device of an internal combustion engine” and that, in contrast, “[t]he presently claimed invention is directed to a tumble drying device.” App. Br. 7; *see also* Reply Br. 2, 3. Hence, “Romann is not from the same field of endeavor as the presently claimed invention.” App. Br. 7. Additionally, Appellants identify a problem of “meeting temperature safety requirements in a tumble drying device”³ and contend that Romann’s teaching of “providing

² The Examiner’s rejection of claim 13 under 35 U.S.C. § 112, first paragraph (see Final Act. 2), is moot in view of Appellants’ cancellation of claim 13. App. Br. 7 n2.

³ Appellants’ Specification discusses the known problem of “[e]xceeding the permissible on-time duration” of lifting magnets which “can result in the lifting magnet being damaged” and that a “temperature protector could previously be used” but that “these solutions” are “complicated and expensive.” Spec. 1; *see also* App. Br. 9.

additional fuel during cold starting of an engine is not relevant to the problems faced by the present inventors.” App. Br. 9; *see also* Reply Br. 2.

To be clear, the Examiner relies on Romann for teaching the “concept of using [a] PTC resistor to control an electromagnetic valve.” Final Act. 3. In addressing Appellants’ non-analogous art argument, the Examiner identifies where Appellants’ Specification states “[i]t is thus an object of the present invention to provide a cost-effective and reliable possibility of protecting a lifting magnet against an excessive power supply.” Ans. 5 (referencing Spec. 1). The known need to prevent damage to the lifting magnet has previously been expressed. Spec. 1. In reliance on this passage from Appellants’ Specification directed to providing reliable protection to a lifting magnet against excessive power, the Examiner concludes that “Romann is in the field of [Appellants’] endeavor” as well as “reasonably pertinent to the particular problem with which the [Appellants were] concerned, i.e., [the lifting magnet of the valve.]” Ans. 5. For the reasons that follow, we agree with the Examiner’s findings as to the field of endeavor and the problem facing Appellants at the time of the invention.

Romann teaches an “electrical control circuit [that] includes a temperature-dependent element in the form of a cold conducting (PTC resistor).” Romann Abstract. Romann also states that a circuit “which basically comprises an electromagnetic valve and a thermo-time switch, which limits the opening period of the electromagnetic valve” “is already known.” Romann 1:11–16. The Examiner also references Romann Figure 3 which depicts a “non-linear resistance curve” as claimed. Ans. 6. It is clear from Figure 3 of Romann that the current through the PTC resistor is “dependent on the temperature.” Romann 3:61–63; *see also* 4:5–10.

Romann also teaches that “[c]old conducting resistors are available for this type of control functions for any switch temperatures.” Romann 4:20–23. Hence, as disclosed in Romann, the control circuit has a current “which flows through said PTC resistor . . . which heats said PTC resistor for a specific duration in accordance with the characteristics of said PTC resistor until said predetermined temperature is attained” thereby “causing the current flow to drop-off and the electromagnetic valve **69** to close.” Romann 5:9–17, 4:9–10.

Accordingly, and in view of the teachings of Romann, we do not find fault with the Examiner’s finding that Romann “teaches a concept of using [a] PTC resistor to control an electromagnetic valve.” Final Act. 3. In other words, we are not persuaded that Romann is not in the same field of endeavor as Appellants’ device (i.e., controlling electromagnetic valves), nor are we persuaded that Romann fails to address the known problem “of protecting a lifting magnet against an excessive power supply.”⁴ Spec. 1. Appellants also argue that Romann’s device and Appellants’ device have “different purposes.” Reply Br. 5. Even if this might be the case, a control circuit being used for different purposes is not persuasive that the problems faced by Romann and Appellants (protecting an electromagnetic valve in a circuit) are dissimilar.

Additionally, the preamble to claim 1 recites “[a] tumble drying device” and, as such, Appellants contend that “the field of endeavor for the present claims must consider the preamble because the preamble is

⁴ Romann specifically states that “another advantage of this invention is the fact that a cold conducting resistor (PTC resistor) is also included in the electrical circuit as a temperature-dependent element.” Romann 1:52–58.

limiting.” App. Br. 8; *see also* Reply Br. 3. This is because, according to Appellants, the preamble to claim 1 recites limitations that “are necessary to give life[,] meaning and vitality to the claims.” App. Br. 8; *see also* Reply Br. 4. On this point, we are instructed by our reviewing court that “[p]reamble language that merely states the purpose or intended use of an invention is generally not treated as limiting the scope of the claim.” *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006). However, “[w]hen limitations in the body of the claim rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.” *Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003). In the matter before us, Appellants do not identify, and we do not find, those limitations which “rely upon and derive antecedent basis from the preamble,” or for which the preamble provides the asserted life, meaning or vitality.⁵ Hence, based on the record presented, Appellants’ contention to the effect that the preamble limits the field of endeavor (App. Br. 8–9; Reply Br. 3–4) is not persuasive.

Appellants also argue that the combination of Goldberg and Romann “**Would Not Have Been Obvious**” because “Romann, as discussed above, is directed to internal combustion engine control” and that the Examiner “must provide a reasoned explanation” for the combination. App. Br. 10–11; *see also* App. Br. 13 and Reply Br. 7. The Examiner provided multiple

⁵ The Examiner states there “is no structural relationship between the claimed tumbling drying device and the claimed magnetic valve.” Ans. 6, 11.

reasons for the stated combination. *See* Final Act. 4, 5 and Ans. 6.⁶ In view of these expressed reasons, we disagree with Appellants that the Examiner failed to provide “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); *see also* Ans. 7–9.

Appellants further contend, “**The Applied References Fail To Disclose The Predetermined Limit Temperature Being Exceeded In An Amount of Time Less Than The Permissible On-Time.**” App. Br. 11; *see also* Reply Br. 7–8. Appellants contend, “[t]he Office Action has not specifically addressed these features” and that “Romann does not discuss” them. App. Br. 12; *see also* Reply Br. 8.

The Examiner did not rely on any particular reference for disclosing this limitation but instead relied on “design choice” to the effect that it would have been obvious “to select the PTC resistor with limit temperature-resistance parameters based on the permissible on-time duration of any lifting magnet.” Final Act. 5; *see also* Ans. 6, 10, 12. Accordingly, Appellants focus on Romann for failing to disclose this limitation (App. Br.

⁶ In the Final Office Action, the Examiner states that the combination would have been obvious “in order to control the supply of water to the rinsing water spray nozzle” (Final Act. 4) and also that it would have been obvious “to select the PTC resistor . . . based on the permissible on-time duration of any lifting magnet . . . as a matter of obvious design choice and since applicant has not disclosed that the claimed PTC resistor selection solves any stated problem in a new or unexpected way” (Final Act. 5). In the Examiner’s Answer, the Examiner states that Romann’s device “performs the same functions and serves the same purposes as claimed” and also that it would have been obvious to select a PTC resistor as a “safety protector in order to pursue an intended use, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.” Ans. 6; *see also* Ans. 10, 12.

12; Reply Br. 8) is not persuasive that the Examiner's reliance on "design choice" was improper, or in error.

Appellants also contend the Examiner's combination "**Is Based Upon Impermissible Hindsight**" (App. Br. 14; Reply Br. 9–10), but Appellants do not identify any information that was "gleaned only" from Appellants' disclosure. *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971). Appellants' contention is not persuasive of Examiner error. *See also* Ans. 11.

Appellants further contend that "**Recognition Of A Problem**" is sufficient for patentability, and that "**Simplicity**" "cannot be held against the inventors." App. Br. 14–15; *see also* Reply Br. 10–11. We note that Appellants are not asserting that they are the first to recognize a problem with lifting valves because Appellant's Specification indicates that problems with such valves "[e]xceeding the permissible on-time duration" were known and that "solutions" exist which are "complicated and expensive." Spec. 1. Regarding simplicity of Appellants' solution, the Examiner states that "simplicity is not an issue presented in the current appeal." Ans. 12. Further, Appellants do not indicate where the Examiner held simplicity "against the inventors" as asserted. App. Br. 15; *see also* Reply Br. 11. Appellants' contentions are not persuasive of Examiner error.

Accordingly, and based on the record presented, we are not persuaded the Examiner erred in finding claims 1–12 obvious over Goldberg, Buck, Romann, and Beck. Final Act. 3. We sustain the Examiner's rejection of these claims.

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DECISION

The Examiner's rejection of claims 1–12 is affirmed.

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