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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WEI ZHANG

Appeal 2015-006672
Application 13/478,033
Technology Center

Before JEAN R. HOMERE, BRUCE R. WINSOR, and
MICHAEL J. ENGLE, *Administrative Patent Judges*.

WINSOR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the final rejection of claims 18–20, which constitute all the claims pending in this application.

We have jurisdiction under 35 U.S.C. § 6(b). Claims 1–17 are cancelled.

App. Br. 3.

We affirm and designate our affirmance as a new ground of rejection within the provisions of 37 C.F.R. § 41.50(b) (2014).

STATEMENT OF THE CASE

Appellant's application

relates to . . . using [a] mobile communication device, for example a mobile phone, to improve home safety, and in particular, to using a mobile communication device to accept [an] RF (Radio Frequency) signal sent by [a] home appliance component having [a] status sensor incorporated therewith and to alert [a] user for [a] potential safety issue following the acknowledgement of the RF signal.

Spec ¶ 3. Claim 18, which is illustrative, reads as follows:

18. A burner switch knob embodying a control circuit comprising a position sensor and a RF transmitter, whereby, in operation, the knob is used for control of a cooking apparatus and said control circuit detects a position change of the knob by using said position sensor and causes said RF transmitter to send out a RF signal in accordance with said position change.

Claims 18 and 20 stand rejected under 35 U.S.C. § 103(a)¹ as being unpatentable over Volodarsky (US 2006/0202848 A1; Sept. 14, 2006), Gorman et al. (US 2008/0047672 A1; Feb 28, 2008) (“Gorman”), and Gagas et al. (US 2007/0028912 A1; Feb. 8, 2007) (“Gagas”). *See* Final Act. 2–4.

Claim 19 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Volodarsky, Gorman, Gagas, and Coronel et al. (US 2008/0164995 A1; July 10, 2008). *See* Final Act. 4–5.

Rather than repeat the arguments here, we refer to the Briefs (“App. Br.” filed Dec. 5, 2014; “Reply Br.” filed July 6, 2015) and the Specification (“Spec.” filed May 22, 2012) for the positions of Appellant and the Final Office Action (“Final Act.” mailed June 13, 2014) and Answer (“Ans.”

¹ All rejections are under the provisions of 35 U.S.C. in effect prior to the effective date of the America Invents Act of 2011. Final Act 2.

mailed May 8, 2015) for the reasoning, findings, and conclusions of the Examiner.

Only those arguments actually made by Appellant have been considered in this decision. Arguments that Appellant did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2014).

ISSUE

Based on Appellant’s arguments, we discuss the appeal by referring to claim 18. The issue presented by Appellant’s contentions is whether the Examiner errs in finding the combination of Volodarsky, Gorman, and Gagas teaches or suggests a “burner switch knob embodying a control circuit comprising a position sensor and a RF transmitter,” as recited in claim 18.

ANALYSIS

Appellant’s arguments for the patentability of claim 18 boil down to a contention that one of ordinary skill in the art would not have put an RF transmitter in Volodarsky’s range knob 102 (Volodarsky Figs. 1, 3). *See generally* App. Br. 5–12; Reply Br. 2–13. Volodarsky’s Figure 1 is reproduced below:

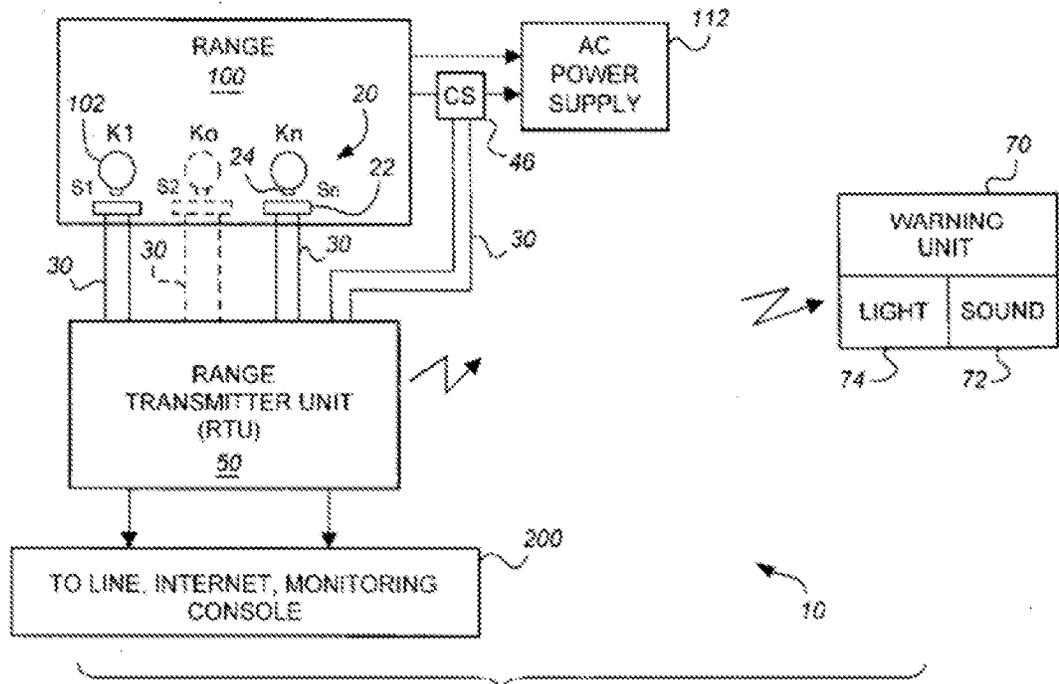


Fig. 1

Volodarsky Figure 1 illustrates a “block diagram of a portable warning system for cooking appliances.” Volodarsky ¶ 14.

Appellant argues that Volodarsky only teaches a *single* range transmitter unit (RTU) 50 receives signals from a plurality of sensors 22 (collectively part of sensor assembly 20) associated with a plurality of range knobs 102. *See* App. Br. 6 (citing Volodarsky ¶¶ 26, 32, Figs. 1, 3, 4, 6).

Appellant continues as follows:

The range transmitter unit 50 is an equivalent of the RF transmitter of the claimed invention of this application and is actually doing the same intended function as the RF transmitter of the claimed invention, which is to send out a wireless signal to notify on/off change of burner knob. **But**, Volodarsky's disclosure teaches the range transmitter unit 50 clearly [is] not embodied by any burner knob and actually [is] impossible to be embodied by any burner knob because the range transmitter unit

50 is used to handle signals of status changes of multi[ple] burner knobs (see Fig. 1, 3, 4).

App. Br. 6.

We find Appellant's arguments unpersuasive because they fail to address Volodarsky's teachings in their entirety. In paragraph 35 (cited at Final Act. 3) Volodarsky teaches "[t]he sensor assembly 20 is configured to connect to the range knob 102 by any suitable connection means, including mechanically, electrically, magnetically, optically, or *the assembly 20 can be integrated as part of the range knob 102*" (italics added, boldfacing omitted). The Examiner correctly finds that this passage teaches "[a] burner switch knob embodying a control circuit comprising a position sensor." Final Act. 3. The same paragraph further teaches the following: "The switch 22 is preferably connected to the range transmitter unit 50 by an electrical contact or connection, such as electrical wires 30, and is positioned adjacent to the range knob[s] 102. Alternatively, *the range transmitter unit 50 can be in wireless communication with the sensor assembly 20.*" Volodarsky ¶ 35 (italics added, boldfacing omitted); *see also* ¶ 25 ("The communication between the range transmitter unit 50 and the sensor assembly 20 *can be wireless.*") (italics added, boldfacing omitted). In other words, Volodarsky teaches that the wired connections 30 between the sensor assembly 20 (comprising the plurality of sensors 22) and the RTU 50 may be replaced with a wireless signal.

Appellant admits that wireless communication can be accomplished using an RF transmitter. *See* App. Br. 6 ("The range transmitter unit 50 is an equivalent of the RF transmitter of the claimed invention of this application and is actually doing the same intended function as the RF transmitter of the claimed invention, which is to send out a wireless signal"). Therefore,

Volodarsky teaches or suggests both that the sensor assembly 20 may include wireless (e.g., RF) transmitters, and that the assembly 20 may be incorporated into the range knobs 102. It would have been obvious to one of ordinary skill in the art to combine the feature of including the wireless transmitter in the sensor assembly 20 and incorporating the sensor assembly 20, including the wireless transmitters, into the range knobs 102. Such a combination is no more than “[t]he combination of familiar elements according to known methods . . . [that] does no more than yield predictable results,” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007), i.e., “a predictable variation” that can be implemented by a person of ordinary skill in the art, *id.* at 417.

We note that it is of no import that certain of the teachings of Gorman and Gagas relied on by the Examiner may be cumulative of the teachings of Volodarsky. *See In re Bush*, 296 F.2d 491, 496 (CCPA 1961) (sustaining a multiple reference rejection under 35 U.S.C. § 103(a) by relying on one reference alone); *In re Boyer*, 363 F.2d 455, 458 n.2 (CCPA 1966); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983) (“[A] disclosure that anticipates under § 102 also renders the claim invalid under § 103, for ‘anticipation is the epitome of obviousness.’”) (quoting *In re Fracalossi*, 681 F.2d 792, 794 (CCPA 1982)).

Accordingly, we sustain the rejection of claim 18, and claims 19 and 20, which depend from claim 18 and were argued relying on the arguments made for claim 18 (*see* App. Br. 5, 13). Although the overall thrust of our analysis is the same as the Examiner’s reasoning, we have provided additional explanation not provided by the Examiner. Accordingly, in the

interests of giving Appellant a full and fair opportunity to respond, we designate our affirmance as a new ground of rejection.

DECISION

The decision of the Examiner to reject claims 18–20 is affirmed and the affirmance is designated as a new ground of rejection within our authority under 37 C.F.R. § 41.50(b).

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides that “[a] new ground of rejection . . . shall not be considered final for judicial review.”

Section 41.50(b) also provides that Appellant, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same Record.

37 C.F.R. § 41.50(b).

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). *See* 37 C.F.R. §§ 41.50(f), 41.52(b) (2013).

AFFIRMED
37 C.F.R. § 41.50(b)