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PARK, VAUGHAN, FLEMING & DOWLER LLP 2820 FIFTH STREET DAVIS, CA 95618			GRANT, ROBERT J	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WENDELL BROWN

Appeal 2015-004884
Application 12/427,892
Technology Center 2800

Before ROMULO H. DELMENDO, DONNA M. PRAISS, and
JENNIFER R. GUPTA, *Administrative Patent Judges*.

GUPTA, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's decision² finally rejecting claims 1–6, 8–18, and 23–28. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellant identifies the real party in interest as Wendell Brown. Appeal Brief filed October 6, 2014 (“Br.”), 1.

² Final Office Action mailed April 15, 2014 (“Final Act.”).

The claims are directed to an apparatus and method for automatically charging or recharging an electrical vehicle. Spec. ¶ 2.

Claims 1, 16, and 23, reproduced below, are illustrative of the claims on appeal.

1. An apparatus for automatically charging an electrically powered vehicle, the apparatus comprising:

a sensor included in the apparatus and configured to:

detect the vehicle's proximity to the apparatus; and

activate a guiding mechanism to assist an operator of the vehicle in positioning the vehicle to permit coupling of the apparatus and the vehicle;

multiple chargers of different current configurations, each of which is configured to automatically mate with and supply electrical power to the vehicle; and

a communication link between the vehicle and the apparatus, wherein information exchanged via the communication link includes:

configuration information received and used by the apparatus to select one of the multiple chargers to activate and to use to charge the vehicle; and

billing information for automatically billing for the charging of the vehicle.

16. An apparatus for automatically charging an electrically powered vehicle, the apparatus comprising:

trigger means configured to:

activate a guiding mechanism to assist an operator of the vehicle in positioning the vehicle to permit coupling of the apparatus and the vehicle; and

initiate automatic charging of the vehicle;

multiple charging means configured to charge the vehicle, each charging means having a different current configuration; and

communication means for exchanging data between the apparatus and the vehicle, wherein the data includes:

configuration information for selecting one of the multiple charging means; and

billing information for automatically billing for the charging of the vehicle;

wherein the trigger means is external to the vehicle and is initiated without communication from the vehicle.

23. A method of automatically charging an electrically powered vehicle, the method comprising:

receiving at a sensor of an automatic charging apparatus a first electronic signal signifying presence of the vehicle in proximity to the automatic charging apparatus;

activating a guiding mechanism to assist an operator of the vehicle in positioning the vehicle to permit coupling of the automatic charging apparatus and the vehicle;

automatically establishing a communication link between the automatic charging apparatus and the vehicle, wherein information transmitted to the automatic charging apparatus from the vehicle via the communication link includes:

configuration information received and used by the apparatus to select one of multiple charger interfaces to activate and use to charge the vehicle, each charger interface having a different current configuration; and

billing information for automatically billing for the charging of the vehicle;

automatically mating the selected charger interface with a corresponding receptacle of the vehicle without action on the part of the operator of the vehicle;

charging an electrical power storage device of the vehicle via the selected charger interface; and

automatically billing for the charging, based on the billing information.

Br. (Claims Appendix) A-1–A-4.

REJECTIONS ON APPEAL

1. Claims 1–5, 8–18, 23, and 26–28 stand rejected under 35 U.S.C. § 103(a) as obvious over Kuki et al. (US 5,821,731, issued October 13, 1998) (hereinafter “Kuki”) in view of Reddy (US 2009/0079388 A1, published Mar. 26, 2009) (hereinafter “Reddy”) and further in view of Buchanan et al. (US 2004/0130292 A1, published Jul. 8, 2004) (hereinafter “Buchanan”);
2. Claim 6 stands rejected under 35 U.S.C. § 103(a) as obvious over Kuki in view of Reddy and further in view of Nor (US 5,594,318, issued Jan. 14, 1997) (hereinafter “Nor”);
3. Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as obvious over Kuki in view of Reddy and Buchanan and further in view of Lara et al. (US 5,461,298, issued Oct. 24, 1995) (hereinafter “Lara”).

DISCUSSION

Appellant’s arguments are substantially the same for independent claims 1, 16, and 23. Appellant presents arguments for patentability of dependent claim 25, discussed separately below, but does not present arguments for patentability of any other dependent claim depending from independent claims 1, 16, and 23. Accordingly, claims 2–6 and 8–15 will stand or fall with claim 1, claims 17 and 18 will stand or fall with claim 16, and claims 24 and 26–28 will stand or fall with claim 23.

Claims 1–6, 8–18, 23, 24, and 26–28

Appellant presents three principal arguments for reversal of the obviousness rejection of claims 1, 16, and 23 discussed below. None of Appellant’s arguments dispute the Examiner’s reasoning for combining Kuki, Reddy, and Buchanan. We address each of Appellant’s arguments in turn.

First, Appellant argues that the Examiner erred in finding that Kuki teaches or suggests an apparatus or method for automatically charging an electrically powered vehicle that includes a guiding mechanism to assist an operator of the vehicle in positioning the vehicle to permit coupling of the apparatus and the vehicle as recited in claims 1, 16, and 23. Br. 2–4.

Kuki teaches a charging system for automatically charging an electric vehicle (Kuki 16:41–46; Fig. 36) that includes primary coil 10 (a charger) installed in the ground of a parking lot, contact pressure sensor 150 (sensor or trigger means) for detecting a contact or load acting from above, and lamp 151 (guiding mechanism) that turns on (activates) when pressure sensor 150 detects a load to notify the driver that the vehicle is in proper charging position (*id.* at 16:47–57 and 16:64–17:4). Thus, a preponderance of the evidence supports the Examiner’s finding that lamp 151 is “a guiding mechanism” in the broadest reasonable sense as used in claims 1, 16, and 23. *See* Final Act. 3. Accordingly, Appellant’s first argument is not persuasive of reversible error in the Examiner’s rejection of claims 1, 16, and 23.

Second, Appellant argues that the Examiner erred in finding that Buchanan teaches or suggests: (1) an apparatus for automatically charging an electrically powered vehicle that includes multiple chargers having different current configurations, each of which is configured to

automatically mate with and supply electrical power to the vehicle (claim 1) or multiple charging means configured to charge the vehicle, each charging means having a different current configuration (claim 16), or (2) a method of automatically charging an electrically powered vehicle that includes selecting multiple charger interfaces to activate and use to charge the vehicle, each charger interface having a different current configuration (claim 23). *Id.* at 4–6.

Buchanan teaches a vehicle charging system (Buchanan ¶¶ 41–43; Fig. 4) including power controller 122, DC modules 124, and secondary power ports (multiple chargers) 128 and 130 (*id.* ¶ 43). Power controller 122 serves as a point of allocation for assignment of available power to individual DC modules 124 based on power requirements (*id.* ¶ 43). Each DC module 124 then regulates the output power to each power port 128 and 130. Thus, Buchanan teaches or suggests that its power ports (multiple chargers) could have different amounts of power and as a result different current configurations. Thus, Appellant’s second argument is not persuasive of reversible error in the Examiner’s rejection of claims 1, 16, and 23.

Lastly, Appellant argues that the Examiner erred in finding that Reddy teaches or suggests: (1) an apparatus for automatically charging an electrically powered vehicle that includes a communication link (claim 1) or a communication means (claim 16) between the apparatus and the vehicle for exchanging information/data that includes billing information for automatically billing for the charging of the vehicle, or (2) a method of automatically charging an electrically powered vehicle that includes automatically establishing a communication link between the automatic

charging apparatus and the vehicle, where information transmitted via the communication link includes billing information for automatically billing for the charging of the vehicle (claim 23). Br. 6–9.

Reddy discloses an automated recharging system to automatically recharge a vehicle (Reddy Abstract; Fig. 1b) that includes charging device 10 and housing 12 with electrical circuitry 20 (*id.* ¶ 26; Fig. 2). Electrical circuitry 20 of charging device 10 includes communication unit 15 that can communicate with the vehicle to be recharged by the recharging device 10, and communication unit 17 that can communicate with central server 67 on a network (*id.* ¶ 32; Fig. 2). Server 67 can receive recharge information from recharging device 10, which can include payment information (billing information) for automatically billing for charging of the vehicle (*id.* ¶¶ 68, 78, 86; Fig. 6, 7, 12). Thus, Appellant’s third argument is not persuasive of reversible error in the Examiner’s rejection of claims 1, 16, and 23.

In view of the foregoing, we sustain the rejection of claims 1–6, 8–18, 23, 24, and 26–28.

Claim 25

Claim 25 depends from claim 23 and requires the method of automatically charging an electrically powered vehicle to further comprise “receiving a second electronic signal signifying likely operation of the vehicle[,] and automatically disconnecting the at least one charger interface from the corresponding receptacle.”

Appellant argues that the Examiner erred in finding Lara teaches or suggests a method of automatically charging an electrically powered vehicle

where the method includes a step in which a sensor receives “a signal that indicates or signifies likely operation of the vehicle.” Br. 9.

Lara teaches a charging station for an electric vehicle (Lara 1:8–11). When vehicle 10 approaches charging station 20, electromagnetic signal 30 is sent from vehicle 10 to charging station 20 to alert the charging system that the vehicle is approaching (*id.* at 3:51–53). Once vehicle 10 is in appropriate proximity to charging station 20, charging probe 40 extends to the proper position and couples with the vehicle’s charging port 50 (*id.* at 3:60–63). Charging station 20 delivers power to vehicle 10 via charging probe 40 (*id.* at 3:67–4:2). “After the vehicle 10 has been fully charged, *or in the event the vehicle is attempted to be driven away*, charging probe retracts to allow vehicle 10 to depart.” *Id.* at 4:19–21 (emphasis added). That disclosure in Lara implies or at least suggests a second signal is sent from vehicle 10 to charging station 20 to alert the charging station that the vehicle is attempting to drive away from the charging station so charging probe 40 can automatically disengage from charging port 50 on the vehicle and retract (*id.* at 4:19–30). Thus, Appellant’s argument is not persuasive of reversible error in the Examiner’s rejection of claim 25.

DECISION

For the above reasons, the Examiner’s rejections of claims 1–6, 8–18, and 23–28 are 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).

AFFIRMED