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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KIMBERLEY KING, BIJAL PATEL, VIET QUOC TO,
PHILIP MICHAEL GONZALES, and JOSEPHINE S. LEE

Appeal 2015-000793
Application 11/742,890
Technology Center 3600

Before JOHN C. KERINS, WILLIAM A. CAPP, and
SEAN P. O'HANLON, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the final rejection of claims 1–18 as unpatentable under 35 U.S.C. § 103(a) over Ikeda (US 5,595,064, iss. Jan. 21, 1997) and Kimura (US 6,816,759 B2, iss. Nov. 9, 2004). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

Appellants' invention relates to powering vehicle accessories.

Spec. 1. Claim 1, reproduced below with emphasis added, is illustrative of the subject matter on appeal.

1. A system for powering a power consuming vehicle accessory of a hybrid electric vehicle having a vehicle on state and a vehicle off state, the system comprising:

at least one of a mechanical power plant and a chemical power plant to move the vehicle;

a traction battery, having a state of charge, to power the power consuming vehicle accessory during the vehicle off state;

an electric motor to operatively couple the at least one power plant and traction battery; and

a traction battery controller electrically connected with the traction battery to *set a threshold state of charge for the traction battery such that as a stand time of the traction battery during the vehicle off state increases, the threshold state of charge increases and as the stand time of the traction battery during the vehicle off state decreases, the threshold state of charge decreases*, to periodically monitor the state of charge of the traction battery during the vehicle off state, and to enable the traction battery to power the power consuming vehicle accessory, if the state of charge of the traction battery is greater than *the threshold*, in response to a command signal received during the vehicle off state.

OPINION

Procedural Posture of this Appeal

Appellants' application was previously before us on an appeal that resulted in our affirmance of the Examiner's rejection of all pending claims over the same art, Ikeda and Kimura, that the Examiner uses in the instant rejection on appeal. *Ex parte King*, No. 2011-009205, 2013 WL 4456135 (PTAB, July 31, 2013) (hereinafter the "Prior Decision"). After we issued

the Prior Decision, Appellants filed a Request for Continued Examination on October 1, 2013 (“RCE”) and amended both independent claims. *See* RCE and accompanying Amended Claims. Appellants amended claim 1 by inserting the language italicized above. *Id.*¹

The Examiner, once again, rejected all claims over Ikeda and Kimura. Nov. 7, 2013 Office Action. Appellants then argued against the rejection in a Reply, but made no more amendments to the claims. *See* February 7, 2014 Reply. The Examiner entered a Final Rejection on February 27, 2014. This appeal follows.

Unpatentability of Claims 1–10

Appellants argue claims 1–10 as a group. Appeal Br. 3–4. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2015). In light of our Prior Decision, we address only the issues raised by Appellants’ RCE Amendment.

The Examiner acknowledges that the proposed combination fails to teach that a threshold is increased with an increased stand time of the battery and is decreased with a decreased stand time of battery. Final Action 3. However, the Examiner states that it is well understood that battery capacity decreases with increasing stand time. *Id.* at 4–5 (citing exemplary art).² The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to increase the threshold as

¹ Appellants also deleted “*a minimum state of charge of the traction battery necessary to start the at least one power plant*” immediately after the insertion of “the threshold.” RCE Claim Amendment.

² Pritchard (US 6,087,808, iss. July 11, 2000), Chen (US 6,181,103 B1, iss. Jan. 30, 2001), and Nakane (US 6,191,554 B1, iss. Feb. 20, 2001). Final Action 5; *see also* November 7, 2013 Office Action 5.

stand time increases. *Id.* at 4. According to the Examiner, a person of ordinary skill in the art would have done this because the battery has a reduced delivery capacity with increased stand time. *Id.*

Appellants do not dispute the Examiner's position that Prichard, Chen, and Nakane demonstrate that the relationship between battery capacity and stand time is well known. Appellants argue, nevertheless, that Prichard, Chen, and Nakane predate the instant application by almost a decade. Appeal Br. 4. Appellants reason that, if the claimed subject matter is obvious, one would expect to find earlier references combining the teachings of Ikeda with references like Pritchard, Chen, or Nakane. *Id.* ("The absence of such references is evidence that the claimed invention is not obvious over the prior art."). Appellants conclude, therefore, that the Examiner's rejection is the product of impermissible hindsight. *Id.*

In response, the Examiner points out, among other things, that Appellants' argument regarding the age of the references is not impressive absent a showing that the art tried and failed to solve the same problem notwithstanding knowledge of the references. Ans. 4. We agree with the Examiner that Appellants' argument regarding the passage of time is not persuasive. "Absent a showing of long-felt need or the failure of others, the mere passage of time without the claimed invention is not evidence of nonobviousness." *In re Kahn*, 441 F.3d 977, 990-991 (Fed. Cir. 2006).

We sustain the rejection of claims 1–10.

Unpatentability of Claims 11–18

Claim 11 is an independent claim. Claims App. In the RCE, Appellants amended claim 11 by inserting the following language after "during the vehicle off state:"

setting a threshold state of charge for the traction battery such that as a temperature of the traction battery increases, the threshold state of charge decreases and as the temperature of the traction battery decreases, the threshold state of charge increases.

Claims App.; RCE Claim Amendment.³ The Examiner acknowledges that Ikeda and Kimura fail to specifically teach that the threshold is decreased with increasing temperature and increased with decreasing temperature. Final Action 4. However, the Examiner finds that it is well understood that battery capacity increases with increasing temperature. *Id.* at 4–5 (citing exemplary art).⁴ Consequently, according to the Examiner, a state of charge threshold can be lowered with increasing temperature. *Id.* The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to reduce the threshold in view of the battery having a greater power delivery capacity with increasing temperature. *Id.* at 4.

In traversing the rejection, Appellants rely on the same reasoning applied to the claim 1 rejection regarding the passage of time. Appeal Br. 4. In so doing, Appellants note that Chiku predates their date of invention by almost 35 years. *Id.* Appellants' argument regarding the passage of time is

³ Appellants also deleted the phrase “determining whether a current state of charge of the traction battery is greater than a minimum state of charge necessary to start the engine.” RCE Claim Amendment. Appellants also substituted the term “threshold” for “minimum” in the final claim limitation. *Id.*

⁴ Chiku (US 3,886,442, iss. May 27, 1975), Vanderslice (US 5,362,942, iss. Nov. 8, 1994), and Dougherty (US 5,488,283, iss. Jan. 30, 1996). Final Action 5; *see also* November 7, 2013 Office Action 5.

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equally unpersuasive here. *Kahn*, 441 F.3d at 990-991 (mere passage of time is not evidence of nonobviousness).

We sustain the rejection of claims 11–18.

DECISION

The decision of the Examiner to reject claims 1–18 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