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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSEPH C. LIU

Appeal 2010-008857
Application 11/846,775
Technology Center 2800

Before ROBERT E. NAPPI, LYNNE E. PETTIGREW, and
BARABARA A. PARVIS, *Administrative Patent Judges*.

PARVIS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision finally rejecting claims 1-15 and 17-25. Claim 16 has been cancelled. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

CLAIMED SUBJECT MATTER

Claims 1, 9, 14, and 19 are the independent claims on appeal. Claim 1 is representative of the subject matter on appeal, and recites:

1. A device for use in a wellbore, comprising:
 - an electric submersible pumping system motor comprising:
 - a tubular housing;
 - a stator deployed within the tubular housing;
 - stator winding magnetic wire having an end coil;
 - and
 - a conical structure inserted adjacent to the end coil to support the end coil in a manner that prevents the end coil from collapsing into a stator bore region, the conical structure having a reduced diameter end located at an axially inward position relative to a larger end located at an axially outward position.

REJECTION

Claims 1-15 and 17-25 are rejected under 35 U.S.C. § 103(a) as unpatentable over Howard et al. (US 2,568,548, Apr. 1, 1946; “Howard”) and Inoue (JP-06121482 A, Apr. 28, 1994; “Inoue”).¹ (Answer 3).²

ISSUES

Appellant argues that the Examiner’s rejection of independent claims 1, 9, 14 and 19 under 35 U.S.C. § 103(a) is in error. (App. Br. 6-8).³ These arguments present us with the issues:

¹ The Examiner has withdrawn the rejection of claims 9-13 under 35 U.S.C. § 112, second paragraph. (Answer 5).

² Throughout this opinion we refer to the Examiner’s Answer mailed on March 31, 2010.

- a) Did the Examiner err in finding that the combined teachings of Howard and Inoue teach a conical support structure as recited by claim 1?
- b) Did the Examiner err in finding that the combined teachings of Howard and Inoue teach a support structure that separates an axially outlying portion of the end coil a greater radial distance as recited by claim 9?
- c) Did the Examiner err in finding that the combined teachings of Howard and Inoue teach an end coil adhered to a support structure as recited by claim 14?
- d) Did the Examiner err in finding that the combined teachings of Howard and Inoue teach an insert that supports an end coil against radially inward collapse as recited by claim 19?

Appellant additionally contends that the skilled artisan would not combine the teachings of Howard and Inoue. This contention presents us with the additional issue:

- e) Does Inoue teach away from combination with Howard because the Inoue reference teaches against contact with a coil end?

Appellant has not presented separate arguments for claims 2-8, 10-13, 15, 17, 18, and 20-25. (App. Br. 7).

³ Throughout this opinion we refer to Appellant's Appeal Brief of January 8, 2010.

ANALYSIS

*Rejection of Independent Claims 1, 9, 14 and 19 under 35 U.S.C.
§ 103(a)*

We have reviewed the Examiner's rejections in light of Appellant's arguments that the Examiner has erred. We disagree with Appellant's conclusion. We adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken and the reasons set forth by the Examiner in the Examiner's Answer in response to Appellant's Appeal Brief. However we highlight and address specific findings and arguments regarding claims 1, 9, 14 and 19 for emphasis as follows.

Did the Examiner err in finding that the combined teachings of Howard and Inoue teach a conical support structure as recited by claim 1?

We agree with the detailed findings and responses presented by the Examiner showing portions of Howard that disclose a structure having a reduced diameter end located at an axially inward position relative to a larger end located at an axially outward position, as called for by claim 1. (Answer 4 through 6). Additionally, we agree with the Examiner that Inoue discloses a conical structure as recited by claim 1 and that the cited references teach this element.

For the reasons noted above and for the reasons discussed *infra* with respect to claims 9 and 19, we sustain the rejection of claim 1.

Did the Examiner err in finding that the combined teachings of Howard and Inoue teach a support structure that separates an axially outlying portion of the end coil a greater radial distance as recited by claim 9?

Appellant did not provide sufficient explanation or analysis in the Appeal Brief regarding claim 9 to persuade us of error in the Examiner's rejection of claim 9. (App. Br. 7). We agree with the Examiner that "the drawings of Howard reference clearly show the tubular sheaths 56 and 57 having an axially outlying portion of the end coil 4 [at] a greater radial distance." (Answer 7). Additionally, we further note that in overcoming a rejection of claim 9 under 35 U.S.C. § 112, second paragraph, Appellant cited the following exemplary embodiment of the Specification: "a conical insert structure 92 is described as supporting the end coil with an increasing diameter as it extends axially from the lamination stack." (App. Br. 5). Thus, for the reasons noted above and for the further reasons noted *supra* with respect to claim 1, we agree with the Examiner that this limitation of the claim is taught by the cited prior art and sustain the rejection of claim 9.

Did the Examiner err in finding that the combined teachings of Howard and Inoue teach an end coil adhered to a support structure as recited by claim 14?

The Examiner did not ignore this element, as Appellant argues. (Reply 6).⁴ Rather the Examiner correctly pointed to Howard's disclosure

⁴ Throughout this opinion we refer to Appellant's Reply Brief of May 28, 2010.

as teaching that “the end coils 4 **are kept in place and protected** by means of **two tubular sheaths 56 and 57.**” (Answer 7, emphasis in original).

Appellant’s Specification provides further support that this element is met by the above-referenced disclosure. Appellant’s Specification states, “[t]he end coils 78 are supported by a support structure 84 that limits or prevents radial collapse of the end coils by preventing undesirable movement of the end turns 77.” (Specification ¶ 17, emphasis added). While Appellant’s Specification refers to glue and epoxy as examples of “adhesive material” (Specification ¶18), we decline to read these examples into the claim from the Specification. “[T]he PTO gives claims their ‘broadest reasonable interpretation.’” *In re Bigio*, 381 F.3d 1320, 1324, (Fed. Cir. 2004) (quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000)). Here, Appellant’s argument is not commensurate with the limitations of claim 14 and we sustain the rejection of claim 14.

Did the Examiner err in finding that the combined teachings of Howard and Inoue teach an insert that supports an end coil against radially inward collapse as recited by claim 19?

Appellant did not provide sufficient explanation or analysis in the Appeal Brief regarding this contention to persuade us of error in the Examiner’s rejection of claim 19. (App. Br. 7). We agree with the detailed findings and responses presented by the Examiner showing portions of Howard and Inoue that teach the claimed support. (Answer 6-8). Appellant argues that “teaching against contact directly teaches against . . . ‘support.’” (Reply 7). Appellant’s argument is not commensurate with the limitations

of claim 19. For these reasons and for the reasons discussed *supra* with respect to motivation to combine, we sustain the rejection of claim 19.

Does Inoue teach away from combination with Howard because the Inoue reference teaches against contact with a coil end?

We are not persuaded by Appellant's contention that Inoue teaches away from the combination of references relied on by the Examiner. Here, the Examiner established that Appellant's invention is no more than the predictable use of familiar prior art elements according to their established functions. (Answer 9). *See KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007).

Appellant has not provided sufficient explanation, argument or evidence to demonstrate that Inoue teaches away from the cited combination, but instead argues that Inoue "directly teaches against the 'support' recited in the subject claims." (Reply 7). As noted above, this argument is not commensurate with the limitations of the claims. We agree with the Examiner's findings and conclusion that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Howard and Inoue to achieve the claimed invention.

Rejection of Claims 2-8, 10-13, 15, 17-18 and 20-25 under 35 U.S.C. § 103(a)

Appellants have not presented additional arguments separately addressing the remaining claims. Thus, for the same reasons noted above, we agree with the Examiner's findings and stated conclusions with respect to

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the remaining claims. Accordingly, we sustain the Examiner's rejection of claims 2-8, 10-13, 15, 17, 18, and 20-25 under 35 U.S.C. § 103(a).

DECISION

We AFFIRM the Examiner's decision to reject claims 1-15 and 17-25 under 35 U.S.C. § 103(a) as unpatentable over Howard and Inoue.

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

AFFIRMED

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