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Petroleum Geo-Services, Inc.
West Memorial Place 1
15375 Memorial Drive Suite 100
Houston, TX 77079

EXAMINER

BAGHDASARYAN, HOVHANNES

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM THOMAS RICKERT, JR. and
STIG RUNE LENNART TENGHAMN

Appeal 2015-002221
Application 13/073,832
Technology Center 3600

Before LINDA E. HORNER, LYNNE H. BROWNE, and
BRENT M. DOUGAL, *Administrative Patent Judges*.

BROWNE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

William Thomas Rickert, Jr. and Stig Rune Lennart Tenghamn
(Appellants) appeal under 35 U.S.C. § 134 from the rejection of claims 1–
21. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A geophysical survey streamer segment that comprises:
 - at least one group of geophysical survey sensors that operate underwater to provide one or more signals; and
 - a hub that converts the one or more signals into digital data, wherein the hub communicates wirelessly with other hubs to convey the digital data to a recording system.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Robbins	US 6,374,913 B1	Apr. 23, 2002
Strack	US 2006/0186887 A1	Aug. 24, 2006
Barakat	US 2008/0219094 A1	Sept. 11, 2008
Muyzert	US 2008/0291779 A1	Nov. 27, 2008
Welker	US 2009/0147619 A1	June 11, 2009
Ray	US 2009/0225629 A1	Sept. 10, 2009
Sun	US 8,325,922 B1	Dec. 4, 2012

REJECTIONS

- I. Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as indefinite.
- II. Claims 1, 2, and 4–6 stand rejected under 35 U.S.C. § 102(b) as anticipated by Barakat.¹

¹ Although not labeled as a new ground of rejection, this rejection appears for the first time in the Examiner's Answer. Ans. 3.

- III. Claims 1, 2, 4–6, 8, 9, 11–13, 15, 16, 19, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Barakat and Muzert.²
- IV. Claims 3, 10, and 18 stand rejection under 35 U.S.C. § 103(a) as unpatentable over Barakat, Muzert, and Ray.³
- V. Claim 7 stands rejection under 35 U.S.C. § 103(a) as unpatentable over Barakat, Muzert, and Welker.
- VI. Claim 14 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Barakat, Muzert, and Robbins.
- VII. Claim 17 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Barakat, Muzert, and Sun.
- VIII. Claim 21 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Barakat, Muzert, and Strack.

DISCUSSION

Rejection I

The Examiner determines that claim 3 is indefinite. Final Act. 2. Appellants do not contest this rejection. Accordingly, we summarily sustain the Examiner's decision rejecting claim 3 as indefinite.

² Although, the statement of this rejection in the Final Action does not include Muzert, the explanation of the rejection includes Muzert. Accordingly, we understand claims 1, 2, 4–6, 8, 9, 11–13, 15, 16, 19, and 20 to stand rejected based on the combination of Barakat and Muzert. We hold the omission of Muzert from the statement of the rejection to be harmless error.

³ In the interest of brevity we address claims subject to the same ground of rejection together.

Rejection II

Appellants argue claims 1, 2, and 4–6 together. *See* Reply Br. 3. We select independent claim 1 as the representative claim, and claims 2 and 4–6 stand or fall with claim 1.

The Examiner finds that Barakat discloses each and every limitation of claims 1, 2, and 4–6. Ans. 3. In particular, the Examiner finds that Barakat discloses “a hub that converts the one or more signals into digital data[0025], wherein the hub communicates wirelessly with other hubs to convey the digital data to a recording system[0063-0064, 0071].” *Id.*

Appellants contend that “Barakat does not provide an enabling disclosure with regard to a marine survey streamer or streamer segment with wireless communication features as is recited in the claims.” Reply Br. 2. In support of this contention, Appellants argue that

Barakat’s discussion mentions both marine and wireless variations, it does not follow that Barakat provides an enabling disclosure of a marine survey streamer or streamer segment with wireless communication features. To whatever extent Barakat could be interpreted as teaching wireless communications along a marine survey streamer, such an interpretation is speculative and not enabled. Especially in view of marine survey streamers being notoriously well known to include electrical conductors and optical fibers, mere naming of a marine streamer and wireless communications is insufficient to provide an enabling disclosure.

*Id.*⁴ Appellants further argue that “[a]t the time of the invention, the effect of the underwater environment on wireless communications along a marine

⁴ Appellants repeat this contention in the arguments pertaining to the obviousness rejection of claims 1, 8, and 13 discussed *infra*. *See* Reply Br. 4. In the interest of brevity, we do not repeat our discussion of this argument. Appellants’ argument is no more indicative of error with respect

survey streamer was unknown and experimentation would have been viewed as undue expense due to the prominence and availability of wired communications along a marine survey streamer.” *Id.* at 3.

A prior art reference provides an enabling disclosure and thus anticipates a claimed invention if the reference describes the claimed invention in sufficient detail to enable a person of ordinary skill in the art to carry out the claimed invention; “proof of efficacy is not required for a prior art reference to be enabling for purposes of anticipation.” *Impax Labs. Inc. v. Aventis Pharm. Inc.*, 468 F.3d 1366, 1383 (Fed. Cir. 2006). Here Appellants do not contest the ability of one skilled in the art to carry out the claimed invention. Rather, Appellants argue that one skilled in the art would not do so because of undue expense and the availability of other suitable methods. Undue expense is not evidence of undue experimentation, nor is the availability of other suitable methods. Thus, Appellants do not apprise us of error.

Appellants further contend that “[o]ne of ordinary skill in the art would not have applied Barakat’s sensor arrangement (see FIG. 1) or mesh network arrangements (see FIGS. 3 and 4) to a marine survey streamer, where sensor positioning is restricted and wired communications are available.”⁵ Reply Br. 2. Appellants’ contention is not well taken, because Barakat explicitly states that its wireless system is applicable to marine survey streamers throughout its disclosure. *See, e.g.*, Barakat ¶ 94. Thus, Appellants do not apprise us of error.

to the rejections based on obviousness discussed *infra*, as it is to the rejection based on anticipation.

⁵ As with the argument discussed in note 4, Appellants repeat this argument in contesting of the rejection of claims 1, 8, and 13 based on obviousness. We do not further address this argument for the reasons discussed *supra*.

For these reasons, we sustain the Examiner's decision rejecting claim 1, and claims 2 and 4–6 which fall therewith as anticipated by Barakat.

Rejection III

Claims 1, 2, and 4–6

Having determined that Barakat anticipates claims 1, 2, and 4–6, as discussed *supra*, we also find that these claims are unpatentable over Barakat as “anticipation is the ultimate of obviousness.” *In re Baxter Travenol Labs*, 952 F.2d 388, 390, 391 (Fed. Cir. 1991).

Claims 8 and 11

Appellants argue claims 8 and 11 together. *See* Appeal Br. 10–11. We select independent claim 8 as the representative claim, and claim 11 stands or falls with claim 8.

The Examiner finds that Barakat discloses all of the limitations of claim 8, except for “[a] geophysical survey streamer segment.” Final Act. 3. The Examiner further finds that “Muyzert teaches a geophysical survey streamer segment.” *Id.* (citing Muyzert ¶¶ 36 and 40) (emphasis omitted). Based on these findings, the Examiner determines that it would have been obvious “to modify apparatus by Barakat using teachings taught by Muyzert in order to make up the streamer.” *Id.*

Appellants argue that:

to whatever extent Barakat could be interpreted as teaching wireless communications along a marine survey streamer, one of ordinary skill in the art would disregard such an interpretation as speculative as there is no motivation provided in Barakat other than an attempt to broaden the application of the clock drift update technique to all data acquisition system variations.

Appeal Br. 11.

Appellants argument is foreclosed by *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), in which the Court rejected the rigid requirement of a teaching or suggestion or motivation, much less a requirement for a motivation in the primary reference, to combine known elements in order to show obviousness. *KSR*, 550 U.S. at 415. The Court noted that an obviousness analysis “need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418. Moreover, in the rejection at issue the Examiner does not rely on an obviousness analysis to meet the limitation at issue. Rather, as the Examiner correctly finds, Barakat states that the “[s]ystems and methods of the invention may be ‘completely wireless’, wherein all wires, cables, and fibers for communication between vibrators, seismic sensors, base stations, and the recording station are substantially eliminated.” Barakat ¶ 63. Moreover, Barakat addresses the use of a wireless communication system in a marine system stating, “[i]n marine systems, [use of a wireless communications system] does not rule out towing cables[,] distance cables, and the like, required to deploy the seismic sources and sensors, deflectors, and the like.” *Id.* Thus, Appellants’ argument is unconvincing.

We sustain the Examiner’s decision rejecting claim 8, and claim 11 which falls therewith, as unpatentable over Barakat and Muyzert.

Claim 9

Appellants’ arguments with respect to the rejection of claim 9 refer to the arguments for the separate patentability of claim 2. Appeal Br. 11. These arguments essentially repeat Appellants’ argument that Barakat’s

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teachings are speculative. *See id.* at 10. This argument is unconvincing for the reasons discussed *supra*.

We sustain the Examiner’s decision rejecting claim 9 as unpatentable over Barakat and Muyzert.

Claims 13, 15, 16, 19, and 20

Appellants again repeat essentially the same arguments that Barakat’s teachings are speculative. *See* Appeal Br. 11–12. These arguments are unpersuasive for the reasons discussed *supra*.

We sustain the Examiner’s decision rejecting claims 13, 15, 16, 19, and 20 as unpatentable over Barakat and Muyzert.

Rejection III

Claim 3

Appellants argue that “Ray would not overcome the deficiencies of Barakat and Muyzert with regard to the previously discussed limitations of claim 1.” Appeal Br. 12. As we find no deficiencies in the anticipation rejection of claim 1, Appellants’ argument is unconvincing.⁶

We sustain the Examiner’s decision rejecting claim 3 as unpatentable over Barakat, Muyzert, and Ray.

Claims 10 and 18

Appellants argue that “claims 10 and 18 are allowable over Barakat, Muyzert, and Ray for much the same reasons as given for claim 3.” Appeal Br. 12. As discussed *supra*, Appellants arguments regarding claim 3 are

⁶ We note that Appellants’ arguments with respect to claim 1 only address Barakat whether raised in the context of the anticipation rejection or the obviousness rejection. *See generally*, Appeal Br.; *see also, generally*, Reply Br. Accordingly, Appellants’ do not apprise us of any deficiencies in Muyzert.

unconvincing. Accordingly, we sustain the Examiner’s decision rejecting claims 10 and 18, for the same reasons.

Rejection IV

Appellants argue that “Welker would not overcome the deficiencies of Barakat and Muzert with regard to the previously discussed limitations of claim 1.” Appeal Br. 12. As discussed *supra*, we find no deficiencies in the anticipation rejection of claim 1. Thus, Appellants’ argument is unconvincing.⁷

We sustain the Examiner’s decision rejecting claim 7 as unpatentable over Barakat, Muzert, and Welker.

Rejection V

Appellants argue that “Robbins would not overcome the deficiencies of Barakat and Muzert with regard to the previously discussed limitations of claim 13.” Appeal Br. 13. As we find no deficiencies in Barakat and Muzert, we sustain the Examiner’s decision rejecting claim 13 as unpatentable over Barakat, Muzert, and Robbins.

Rejection VI

Appellants argue that “Sun would not overcome the deficiencies of Barakat and Muzert with regard to the previously discussed limitations of claim 13.” Appeal Br. 13. As we find no deficiencies in Barakat and Muzert, we sustain the Examiner’s decision rejecting claim 17 as unpatentable over Barakat, Muzert, and Sun.

Rejection VII

Appellants argue that “Strack would not overcome the deficiencies of Barakat and Muzert with regard to the previously discussed limitations of

⁷ See note 6.

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claim 13.” Appeal Br. 14. As we find no deficiencies in Barakat and Muzert, we sustain the Examiner’s decision rejecting claim 21 as unpatentable over Barakat, Muzert, and Strack.

DECISION

The Examiner’s rejections of claims 1–21 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED