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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EINAR NIELSEN and KARL PETTER ELVESTAD

Appeal 2015-003019
Application 13/095,395
Technology Center 3600

Before GEORGE R. HOSKINS, MICHAEL L. WOODS, and
SEAN P. O’HANLON, *Administrative Patent Judges*.

WOODS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Einar Nielsen and Karl Petter Elvestad (“Appellants”) seek our review under 35 U.S.C. § 134(a) of the final rejection of claims 1–20. Appeal Br. 5. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

CLAIMED SUBJECT MATTER

“The various embodiments [of Appellants’ disclosure] are directed to a tail buoy for streamers towed behind a survey vessel during a marine survey.” Spec. ¶ 17. Claims 1, 11, and 17 are independent and claim 1 is reproduced below, with emphases added to particular claim terms addressed in this Decision.

1. *A buoy* comprising:
 - an elongated main body *configured to be towed through water* and having a forward portion and an aft portion;
 - a mast system coupled to the elongated main body, the mast system comprising:
 - a forward mast extending from the elongated main body and coupled proximate to the forward portion, *the forward mast defining a first chord*;
 - an aft mast extending from the elongated main body and coupled proximate to the aft portion, *the aft mast defining a second chord parallel to the first chord*;
 - a spanning portion coupled between a distal end of the forward mast and a distal end of the aft mast; and
 - an aperture defined at least in part by the main body, forward mast, aft mast, and spanning portion;
 - wherein the buoy is configured to float in water* such that the water level intersects the forward mast and aft mast, the elongated body is submerged, and the spanning portion is disposed above the water level.

Appeal Br. 37 (Claims App.) (emphases added).

THE REJECTIONS¹

I. Claims 1 and 4–7 stand rejected under 35 U.S.C. § 102(b) as anticipated by Lang (US 3,623,444, issued Nov. 30, 1971). Final Act. 5.

¹ The final rejection of claims 11 and 12 as anticipated by Carapellotti (US 2,790,186, issued Apr. 30, 1957) (Final Act. 7) was withdrawn by the Examiner (Ans. 2).

II. Claim 1 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Rinaldi (US 4,119,052, issued Oct. 10, 1978) and Lang. Final Act. 8.

III. Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Rinaldi, Lang, Nitzki (US 4,069,788, issued Jan. 24, 1978), and McBride (US 2012/0076648 A1, published Mar. 29, 2012). Final Act. 11.

IV. Claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Lang and Solomon (US 5,616,059, issued Apr. 1, 1997). Final Act. 14.

V. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lang and Dolengowski (US 4,890,568, issued Jan. 2, 1990). Final Act. 15.

VI. Claims 11–13 and 16 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lang and Nitzki. Final Act. 16.

VII. Claim 14 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Lang, Nitzki, and Solomon. Final Act. 18.

VIII. Claim 15 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Lang, Nitzki, and Dolengowski. Final Act. 19.

IX. Claims 17 and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Dolengowski and Lang. Final Act. 20.

X. Claims 18 and 19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Dolengowski, Lang, Nitzki, and McBride. Final Act. 24.

ANALYSIS

Rejection I: Claims 1 and 4–7 as Anticipated by Lang

The issue before us is whether Lang’s disclosure of a “high-speed ship” (Lang, Abst.) satisfies the claim term “buoy.”

In rejecting independent claim 1 and its dependent claims 4–7, the Examiner finds that “Lang discloses a buoy.” Final Act. 5 (citing Lang, col. 12, ll. 4–5). In support of this finding, the Examiner asserts that Lang itself “describes suitability of Lang’s design for, e.g., towed sonar, and deployed as such, *the disclosed apparatus is a towed buoy.*” *Id.* (emphasis added) (citing Lang, Fig. 3a, col. 12, ll. 4–5). To illustrate the Examiner’s finding, we reproduce Lang’s Figure 3a, below:

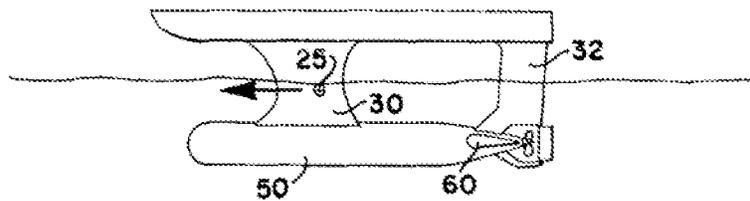


FIG. 3a

According to Lang, Figure 3a discloses “a ship, traveling at a high rate of speed” (Lang, col. 7, l. 1) with tubular hull 50 (*id.* at col. 2, ll. 58–59, col. 4, ll. 2–5).

In contesting the rejection, Appellants assert that “the Office action misreads Lang’s description,” and that “Lang’s ship is not a buoy.” Appeal Br. 16.

In response to Appellants’ argument, the Examiner explains that the claim term “buoy” “is merely the term used in the preamble . . . so that it can later be referenced as ‘the buoy’ in the final, wherein, clause” (Ans. 3) and

further explains that “the term ‘buoy’ has broad meaning, encompassing, in general a floating device” (*id.* at 4).

Notwithstanding the Examiner’s explanation, we find Appellants’ argument persuasive. In maintaining the rejection, the Examiner appears to rely on two different findings in order to satisfy the claim term “buoy,” which we address separately, below.

First, the Examiner takes the position that Lang’s “disclosed apparatus is a towed buoy,” because Lang itself “describes suitability of Lang’s design for, e.g., towed sonar.” Final Act. 5. We disagree with this finding. The particular reference to Lang instead discloses that:

The spatial disposition of the hulls coupled with their location a considerable distance beneath the surface of the water *minimizes wave making and eddy noise and, accordingly, provides an ideal location for carrying backward-looking sonar, towed array sonar, towed whip sonar*

Lang, col. 12, ll. 1–6 (emphasis added). Notably, Lang discloses that the ship’s hull design minimizes “wave making and eddy noise,” which makes the ship ideal for towing sonar arrays. This is not a disclosure that Lang’s hull design itself “is a towed buoy,” as set forth in the final rejection. Final Act. 5 (“the disclosed apparatus is a towed buoy”).

Second, in the Answer, the Examiner takes the position that the claim term “buoy” “recited in the preamble adds no further limitation” (Ans. 3), and that the term “buoy” broadly encompasses any floating device (*id.* at 4). However, a “claim’s preamble may limit the claim when the claim drafter uses the preamble to define the subject matter of the claim” or “when it is necessary to give life, meaning and vitality to the claim *based on the facts of the case at hand and in view of the claim as a whole.*” *August Tech. Corp. v. Camtek, Ltd.*, 655 F.3d 1278, 1284 (Fed. Cir. 2011) (emphasis added)

(internal citations and quotation marks omitted). Further, the USPTO's interpretation of the claimed terms must be consistent with the specification. *In re Prater*, 415 F.2d 1393, 1404–05 (CCPA 1969); *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004).

Here, upon reviewing the facts of this case and the claimed invention as a whole, we find that the claim term “buoy” gives meaning to the claim and properly defines the invention. Notably, the claim recites, “a buoy comprising [] an elongated main body configured to be towed through water” (Appeal Br. 37 (Claims App.)), and the Specification makes clear that the “various embodiments are directed to a tail buoy for streamers *towed behind a survey vessel* during a marine survey” (Spec. ¶ 17 (emphasis added)). In particular, the Specification “first turns to an illustrative marine survey system, and then discusses tail buoys in accordance with various embodiments.” *Id.*; *see also id.* at Figs. 2–7 (illustrating tail buoy 204 towed in direction 200). Accordingly, a person of ordinary skill in the art, when interpreting the claim term “buoy comprising [] an elongated main body configured to be towed through the water” in light of the Specification, would not construe “buoy” so broadly as to encompass any floating device, including self-propelled ships, as the Examiner has done. *See* Final Act 5. Rather, a person of ordinary skill in the art would understand that the claim term “buoy” is limited to towed buoys and excludes self-propelled ships.

Accordingly, we do not sustain the rejection of independent claim 1 and its respective dependent claims 4–7 as anticipated by Lang.

*Rejections IV–X: Claims 8–20 as Unpatentable
Over Lang and Other Cited Art*

The rejections of claims 8–20 as unpatentable over Lang and the other cited art are based on the same unsupportable interpretation of “buoy,” as discussed *supra* with respect to Rejection I. *See* Final Act. 14–15 (Rejection IV), 15–16 (Rejection V), 16–18 (Rejection VI), 18–19 (Rejection VII), 19–20 (Rejection VIII), 20–21 (Rejection IX), and 24–27 (Rejection X). Therefore, we also do not sustain the rejections of claims 8–20 as unpatentable over Lang and the other cited art.

Rejection II: Claim 1 as Unpatentable Over Rinaldi and Lang

There are two issues before us in reviewing this rejection: (1) whether the claim term “buoy” can be interpreted to only require the “capability to float;” and (2) whether the Examiner’s interpretation of the claim term “chord” properly considered a definition of that term provided in the Specification. We address each of these issues separately, below.

With regards to issue (1) and the claim term “buoy,” the Examiner determines that “the only essential generic requirement of a buoy [is the] capability to float.” Final Act. 10. As discussed similarly with respect to Rejection I, the Examiner’s interpretation of “buoy” is unreasonably broad, unsupported by the record, and inconsistent with the Specification.

With regards to issue (2), the Examiner defines the claim term “chord” to include simply “a straight line connecting two points.” Final Act. 9. Based on this interpretation, the Examiner finds that Rinaldi satisfies this limitation as it discloses “at least one point above a waterline and at least one point below the waterline, [and] provides two endpoints for a straight line connecting those two points.” *See id.* at 9–10 (citing Rinaldi, Fig. 4).

In contesting the rejection, Appellants argue that the Examiner’s interpretation of the claim term “chord” ignores the express definition of that term provided in the Specification. Appeal Br. 23–24 (citing Spec. ¶ 12). In particular, Appellants point out that the Specification defines “chord” to “mean an imaginary straight line joining a trailing edge and a leading edge of a fin, stabilizer, or mast.” *Id.* at 24 (citing Spec. ¶ 12). Appellants argue that it was improper for the Examiner to ignore this express definition. *Id.*

Appellants’ argument is persuasive. Although the USPTO applies the broadest reasonable interpretation in construing claim language, the USPTO must take into account any definitions presented in the specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d at 1364 (“[T]he PTO must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification.” (quoting *In re Bass*, 314 F.3d 575, 577 (Fed. Cir. 2002))).

In the present case, the Examiner interprets the claim term “chord” to broadly include “a straight line connecting two points” (Final Act. 9), and, in doing so, ignores the express definition provided in the Specification (Spec. ¶ 12). Importantly, the Specification clearly defines “chord” as “an imaginary *straight line joining a trailing edge and a leading edge of a fin, stabilizer, or mast.*” Spec. ¶ 12 (emphasis added). Furthermore, the Examiner’s interpretation of “chord” to support a finding that Rinaldi’s “apparatus” (disclosed in Figure 4) satisfies the claim limitations is also in error, as we do not see how a simple line connecting points *above and below the waterline* meets the claim terms. *See* Final Act. 9–10 (emphasis added) (“‘chord’ can mean . . . a straight line connecting two points . . . [including] at least one point above a waterline and at least one point below the

waterline, [which] provides two endpoints for a straight line”). In other words, we do not see how a line connecting points above and below the waterline can be construed as satisfying “a straight line joining a trailing edge and a leading edge of a fin, stabilizer, or mast.”

For the foregoing reasons, we do not sustain the rejection of independent claim 1 as unpatentable over Rinaldi and Lang.

*Rejection III: Claims 2 and 3 as Unpatentable
Over Rinaldi, Lang, Nitzki, and McBride*

The rejection of claims 2 and 3 as unpatentable over Rinaldi, Lang, Nitzki, and McBride is based on the same unreasonably broad claim interpretations and unsupportable findings relied on and discussed *supra* with respect to Rejection II. Final Act. 11, 13. Therefore, we also do not sustain the rejection of claims 2 and 3 as unpatentable over Rinaldi, Lang, Nitzki, and McBride.

SUMMARY

The rejection of claims 1 and 4–7 under 35 U.S.C. § 102(b) as anticipated by Lang is reversed.

The rejection of claim 1 under 35 U.S.C. § 103(a) as unpatentable over Rinaldi and Lang is reversed.

The rejection of claims 2 and 3 under 35 U.S.C. § 103(a) as unpatentable over Rinaldi, Lang, Nitzki, and McBride is reversed.

The rejection of claim 8 under 35 U.S.C. § 103(a) as unpatentable over Lang and Solomon is reversed.

The rejection of claims 9 and 10 under 35 U.S.C. § 103(a) as unpatentable over Lang and Dolengowski is reversed.

The rejection of claims 11–13 and 16 under 35 U.S.C. § 103(a) as unpatentable over Lang and Nitzki is reversed.

The rejection of claim 14 under 35 U.S.C. § 103(a) as unpatentable over Lang, Nitzki, and Solomon is reversed.

The rejection of claim 15 under 35 U.S.C. § 103(a) as unpatentable over Lang, Nitzki, and Dolengowski is reversed.

The rejection of claims 17 and 20 under 35 U.S.C. § 103(a) as unpatentable over Dolengowski and Lang is reversed.

The rejection of claims 18 and 19 under 35 U.S.C. § 103(a) as unpatentable over Dolengowski, Lang, Nitzki, and McBride is reversed.

REVERSED