



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/504,306	10/01/2014	Franco Robolotti	2AA-74-002	9070
105999	7590	09/26/2019	EXAMINER	
Hyster-Yale Group, Inc. 4000 NE Blue Lake Road Fairview, OR 97024			KEENAN, JAMES W	
			ART UNIT	PAPER NUMBER
			3652	
			NOTIFICATION DATE	DELIVERY MODE
			09/26/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPdocketing@schwabe.com
jeff.woller@hyster-yale.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte FRANCO ROBOLOTTI and RICCARDO APPIANI

Appeal 2017-010910
Application 14/504,306
Technology Center 3600

Before BRADLEY B. BAYAT, FREDERICK C. LANEY, and
PAUL J. KORNICZKY, *Administrative Patent Judges*.

KORNICZKY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Pursuant to 35 U.S.C. § 134(a), Appellant² appeals from the Examiner's decision, as set forth in the Final Office Action, rejecting claims 1, 2, 6, and 8–14.³ We have jurisdiction under 35 U.S.C. § 6(b). A hearing was held on September 12, 2019.

We AFFIRM-IN-PART.

THE CLAIMED SUBJECT MATTER

The claims are directed to “a reach truck for the movement of goods on pallets in a factory, warehouse, supermarket and the like.” Spec. 1:6–7. Claim 1, the only independent claim on appeal, is reproduced below:

1. A reach truck, comprising:
 - a main body;
 - at least one load arm that protrudes from the main body;
 - a mast trolley that is supported at the at least one load arm, wherein the mast trolley is shift-able along a longitudinal axis of the reach truck relative to the main body;
 - a mast that is attached to the mast trolley;
 - a linear actuator configured to shift the mast trolley along the longitudinal axis of the reach truck relative to the main body;
 - wherein the linear actuator is attached at a first end thereof to the main body and at a second end thereof to the mast trolley;and

¹ In this Decision, we refer to (1) the Examiner's Final Office Action dated September 27, 2016 (“Final Act.”) and Answer dated May 30, 2017 (“Ans.”) and (2) Appellant's Appeal Brief dated April 6, 2017 and Reply Brief dated July 19, 2017 (“Reply Br.”).

² We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Hyster-Yale Group, Inc. Appeal Br. 3.

³ Claim 7 is objected to. Appeal Br. 3–4; Final Act. 2. The rejection of claims 3–5 is withdrawn. Ans. 2.

the linear actuator is arranged inclined to the longitudinal axis of the reach truck and defines a first angle between the extension direction of the linear actuator and the longitudinal axis of the reach truck, wherein the first angle changes depending on the position of the mast trolley relative to the main body; and the reach truck further comprises a sensor communicating with a control unit, wherein the control unit is configured to determine the angular position of the linear actuator.

REJECTIONS

The Examiner made the following rejections:

1. Claims 8–10 stand rejected under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.
2. Claims 1, 6, and 8–12 stand rejected under 35 U.S.C. § 103 as being obvious over Eriksson (US 5,346,356, issued September 13, 1994) and Yahner (US 9,206,024 B2, issued December 8, 2015).
3. Claim 2 stands rejected under 35 U.S.C. § 103 as being unpatentable over Eriksson and Yahner, and further in view of Blakeslee (US 4,182,126, issued January 8, 1980) or Trego (US 6,135,694, issued October 24, 2000).
4. Claims 13 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Erickson, Yahner, and further in view of Retzlaff (US 6,945,745 B2, issued September 20, 2005) or Passeri (US 7,599,777 B2, issued October 6, 2009).

Appellant seeks our review of these rejections.

DISCUSSION

Rejection 1: Claims 8–10 as Being Indefinite

The Examiner rejects claims 8–10 as being indefinite. Because Appellant does not address the substance of the rejection, the Examiner’s rejection is summarily affirmed.

Rejections 2–4: Claims 1, 2, 6, and 8–14

Claim 1

The Examiner rejects independent claim 1 as being obvious over Eriksson and Yahner. Final Act. 4–6. Independent claim 1 recites, in part, “a sensor communicating with a control unit, wherein the control unit is configured to determine the angular position of the linear actuator.” The Examiner finds that this limitation is disclosed by Yahner’s truck, which has (a) linear actuator 55 “for moving the fork carriage along a longitudinal axis of the truck is inclined to the longitudinal axis such that it defines an angle between its extension direction and the longitudinal axis which changes depending on the position of the fork carriage relative to the main body of the truck,” and (b) sensor 80 for communicating with “control unit 100 which is configured, at least some extent, to determine an angular position of the linear actuator (i.e., by virtue of the sensor determining whether marker 70 is in arc section C1, C2 or R, the control unit knows roughly the angular position of the linear actuator.”). *Id.* at 4–5 (citing Yahner, Fig. 5, 6:38–57). The Examiner explains that the “sensor, in conjunction with the control unit, provides for a gradual speeding up or slowing down of the reach carriage as it approaches its fully extended or fully retracted positions, thereby

providing greater control of a load supported by the forks.” *Id.* at 5 (citing Yahner, 1:34–44, 2:3–19).

The Examiner further explains that Yahner discloses a control unit configured to determine the angular position of the linear actuator. Ans. 2–3. According to the Examiner,

as long as there is at least one instance when Yahner’s sensor knows that the linear actuator is at a particular location (such as when it transitions from sensing the marker 70 to not sensing the marker, and vice-versa), then it is capable of determining **an angular position** of the actuator at **a particular instant in time**, which is all that the claim requires.

Id. at 3. The Examiner states that “Yahner determines a distance rather than an angle, but in order to determine the distance, the angle at which that distance occurs would have to be known, even if it was merely preprogrammed to know this,” and “[d]etermining an angle is not the same as calculating an angle.” *Id.*

Appellant argues that the Examiner’s rejection is erroneous because Yahner’s control unit is not “configured to determine the angular position of the linear actuator.” Reply Br. 1. We agree.

Yahner discloses reach truck 20 having a reach carriage 24. Yahner, 4:30–35. Two scissors-like mechanisms form extension arm 25 to adjust the distance between forked lift assembly 24 and mast 22 of reach truck 20. *Id.* at 4:52–55. Yahner discloses sensor apparatus 64 to detect whether extension arm 25 is near its extension or retraction limits. *Id.* at 5:41–44, 6:9–37; Fig. 5. Yahner’s sensor apparatus 64 is a mechanism to detect marker 70 as it passes through an arcuate path in front of sensor 80. *Id.* When marker 70 is within the sensor 80’s range R, sensor 80 communicates

an active signal to control unit 100. *Id.* at 7:4–5. When marker 70 is outside of sensor 80’s range R, sensor 80 communicates an inactive signal to the control unit 100. *Id.*

Both Appellant and the Examiner agree that the ordinary meaning of an “angular position” is the angle at a particular instant in time that an object makes with respect to a fixed reference axis. Appeal Br. 7; Ans. 2. To determine the position of the arm, however, Yahner is configured to determine whether marker is in front of sensor 80. Yahner, 5:55–6:37. Yahner does not recognize the existence of an angular position of any structural component or disclose actually determining an angular position. The Examiner’s assertion that determining whether the marker is in front of the sensor is makes Yahner “capable of determining an angular position” is merely a theoretical possibility.

For these reasons, the Examiner’s rejection of claim 1 is not sustained.

Claims 2, 6, and 8–14

In rejections 2–4, the Examiner’s reliance on the other cited prior art (Eriksson, Blakeslee, Trego, Retzlaff, and Passeri) does not remedy the deficiencies of Yahner. Thus, the rejections of claims 2, 6, and 8–14, which depend from claim 1, are not sustained.

CONCLUSION

In summary:

Claims Rejected	Basis (35 U.S.C.)	Affirmed	Reversed
8–10	§ 112(b)	8–10	
1, 6, 8–12	§ 103 Eriksson, Yahner		1, 6, 8–12
2	§ 103 Eriksson, Yahner, Blakeslee, Trego		2
13, 14	§ 103 Eriksson, Yahner, Retzlaf, Passeri		13, 14
Overall Outcome		8–10	1, 2, 6, 11–14

For the above reasons, we AFFIRM the Examiner’s rejection of claims 8–10 under 35 U.S.C. § 112(b).

We REVERSE the Examiner’s rejections of claims 1, 2, 6, 8–14 under 35 U.S.C. § 103.

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-IN-PART