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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JEFFREY MORRIS

Appeal 2019-006182
Application 14/756,700
Technology Center 2800

Before CATHERINE Q. TIMM, GEORGE C. BEST, and MICHAEL G. McMANUS, *Administrative Patent Judges.*

TIMM, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claim 21. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] 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 the inventor, Jeffrey Morris, and the company to which he has assigned the '700 Application, Husky Corporation. Appeal Br. 1.

CLAIMED SUBJECT MATTER

The claims are directed to a drum tank gauge device. The gauge device is depicted in Figures 1 to 4. Claim 21, the only pending claim, is reproduced below with reference numerals from the figures to illustrate the structure of the claim:

> 21. A drum tank gauge device of unitary construction for use in measuring the quantity of liquid petroleum products in a steel drum tank, comprising:
>
> a housing [Fig. 1:12] having a level indication display [14], an audible alarm [speaker or buzzer 16], and a visual alarm [LED 18];
>
> a level sensor shaft [20] having a capacitance sensor [24] positioned at a lower end of said shaft when inserted furtherest into a drum tank;
>
> a threaded cap [22] for securing the housing [12] and the level sensor shaft [20] in place within a drum tank;
>
> said level indication display [14] responsive to the detections of said capacitance sensor located at the lower end of said level sensor shaft comprising a first LED [26] for indicating an approximate 90% capacity of liquid petroleum within said drum tank, a second LED [28] for indicating an approximate 75% capacity, a third LED [30] for indicating an approximate 50% capacity, a fourth LED [32] for indicating an approximate 25% capacity, and a fifth LED [34] for indicating an approximate a low 5% capacity of liquid petroleum remaining within the drum tank, said LED's [sic] being vertically aligned;
>
> said level indicator [sic, indication] display [14] and associated alarms [16, 18] provided for alerting an operator that additional petroleum products needs to be added in the event that the low level indicator displays that there is 5% or less capacity remaining in the tank;

said visual alarm [18] is an LED provided at the top of said housing;

said audible alarm is one of a speaker and buzzer [16], and said housing [12] further comprises a switch [Fig. 4:70] for muting the operation of the audible alarm;

said housing [12] further having a pair of sides [Figs. 2–3:38, 42], and each side [38, 42] having a touch sensitive switch [40, 44] connected to an integrated circuit [Fig. 4:50] and when one or both switches [40, 44] are initiated, activating said capacitance sensor [Fig. 1:24] for operating the drum tank gauge device;

a battery [Fig. 4:52] positioned within the housing [12] for electrically powering the drum tank gauge device during application;

the integrated circuit [50] provided within the housing [12] and incorporating a programmable microprocessor and which when initiated, providing for the liquid level indication display [14], the operations of the audible alarm, the operations of the visual alarm, and the capacitance sensor [24] provided at the lower end of said level sensor shaft [20];

said touch sensitive switches [40, 44] connected to the integrated circuit [50], and upon operation of said switches [40, 44] provided for actuating the capacitance sensor [24] for providing a signal to the integrated circuit [50] for the integrated circuit [50] and its microprocessor to determine the level of contents of the liquid petroleum within said drum, and for display of the liquid petroleum content upon the level indication display [14].

Appeal Br. 12–13 (Claims Appendix).

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Shefsky	US 5,065,139	Nov. 12, 1991
Mazurek	US 2002/0166803 A1	Nov. 14, 2002
Ross, Jr.	US 2009/0301190 A1	Dec. 10, 2009

REJECTIONS

The Examiner maintains the following rejections.

Claim 21 is rejected under 35 U.S.C. § 112(a) as failing to comply with the written description requirement. Final Act. 2.

Claim 21 is rejected under 35 U.S.C. § 103 as being unpatentable over Mazurek in view of Shefsky, and further in view of Ross, Jr. Final Act. 3.

OPINION

Written Description

The Examiner maintains the rejection of claim 21 under 35 U.S.C. § 112(a) as failing to comply with the written description requirement, Ans. 3, but Appellant fails to address it. Appeal Br. 7–11. Because Appellant fails to address the rejection, Appellant has failed to identify a reversible error in it. Thus, we sustain the rejection.

Obviousness

In arguing against the Examiner's rejection of claim 21 as obvious over Mazurek in view of Shefsky and Ross, Jr., Appellant highlights differences between the teachings of each of the references and the claimed invention and then contends the Examiner's rejection is based on hindsight because the "claimed invention is of a different structure, which functions

differently, having touch sensitive switches on either side of its control housing, for determining the level of petroleum products remaining within his storage tank, when operating." Appeal Br. 8–9. Appellant further contends that claim 21 is quite detailed in describing the use of all the various components and the prior art, even in combination, does not identify the level of structure provided in Appellant's gauge as set forth in the claim. Appeal Br. 9–10. Appellant, however, does not identify reversible error in the Examiner's specific findings and determinations as presented in the Final Action. Appeal Br. 8–11. Nor does Appellant reply to the Examiner's well-reasoned responses to Appellant's arguments. No reply brief was filed. After considering Appellant's arguments against the Examiner's findings and conclusions, we determine that Appellant has not identified a reversible error in the Examiner's rejection. We adopt the Examiner's findings, reasoning, responses, and conclusion as set forth in the Final Office Action and Answer. We add the following primarily for emphasis.

Appellant's claim is directed to a drum tank gauge device of unitary construction that includes a housing, a level sensor shaft with a capacitance sensor in its lower end, and a threaded cap. *See* claim 21; *see also* Fig. 1 (depicting a gauge with a housing 12, level sensor shaft 20 with capacitance sensor 24, and threaded cap 22).

There is no dispute that all three references, Mazurek, Shefsky, and Ross, Jr., disclose or suggest gauges containing capacitive level sensors for measuring the level of liquid in containers, but the uses of the various sensing devices is different. *Compare* Final Act. 3–8, *with* Appeal Br. 8.

As pointed out by Appellant, Mazurek discloses using the gauge "for gauging the level of grease that accumulates in a grease separator." Appeal

Br. 8; Mazurek ¶ 2. Appellant contends that Mazurek's gauge "is not related to gauging the level of petroleum product, such as gasoline, contained within a tank, to provide for an indication of the various levels of product remaining, and when a significant low level of product remains, and needs to be replenished." Appeal Br. 8. Although that is true, this difference in use alone does not provide evidence that the *structure* of the claimed gauge is patentably distinguishable from the gauges of the prior art. It is the structure that must be different, not the use. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990) ("apparatus claims cover what a device *is*, not what a device *does*."); *In re Michlin*, 256 F.2d 317, 320 (C.C.P.A. 1958) ("It is well settled that patentability of apparatus claims must depend upon structural limitations and not upon statements of function.").

That the differences in uses does not alone patentability distinguish the devices structurally is supported by Ross, Jr. Ross, Jr. provides evidence that using such gauges is for generally sensing the movement of liquid within containers. These containers can be of various types and hold various liquids as evidenced by the prior art. *See* Mazurek ¶ 9 (capacitance sensor senses amount of water of effluent to determine amount of grease in the effluent in a tank); Shefsky col. 1, ll. 6–10 ("The . . . invention relates generally to level sensing devices, and more particularly to devices for sensing the level of fluids in a container and reporting visually and audibly when a desired level is reached."); Ross, Jr. ¶¶ 2, 33 (stating the invention as relating in part to capacitance sensors "for determining relative position or movement between objects, such as movement of liquid within a tank" and a suggested use of measuring fuel and other liquid levels in vehicle tanks).

Contrary to Appellant's argument, the difference in function does not provide persuasive evidence that the structure of Mazurek's gauge is patentably different. This is especially true given the teachings of Shefsky and Ross, Jr.

Appellant's housing includes a level indictor display and two alarm devices responsive to the level of liquid detected by the sensor. Claim 21; *see also* Fig. 1. The level indicator display is a set of five LEDs. Fig. 1 at 26, 28, 30, 32, 34). One alarm device (16) emits an audible alarm and is either a speaker or buzzer. Fig. 1. The other alarm device (18) is a LED on the top of the housing that provides a visual alarm. Fig. 1. The housing has a pair of sides, each side having a touch sensitive switch (40). Figs. 2–3. Within the housing are an integrated circuit that provides signals to and from the display and alarm devices and a battery powering the gauge. Fig. 4 (integrated circuit 50 and battery 52).

The Examiner finds that Mazurek teaches or suggests a number of the display and alarm elements, but acknowledges that Mazurek does not teach a battery positioned within a housing and turns to Shefsky to support a finding of a suggestion within the prior art to include a battery. Final Act. 6. The Examiner also relies on Shefsky as evidence supporting a finding of a suggestion of including a threaded cap for securing the gauge to a drum tank. *Id.*

Appellant points out that Shefsky does not use a series of LEDs and is "just the opposite, functional-wise," from what Appellant claims. Appeal Br. 8. But Appellant's argument does not identify a reversible error in the Examiner's findings as to the series of LEDs. The Examiner did not rely on Shefsky for a teaching of a series of LEDs. The Examiner relied on Mazurek

for that teaching. Final Act. 5; Ans. 5; Mazurek Fig. 8, ¶ 82 (series of five "Level" lights or LEDs 194). As for the argument that Shefsky is "just the opposite functional-wise," the Examiner does not rely on the function of Shefsky nor has Appellant advanced any argument against the combinability of the teachings of Mazurek and Shefsky based on the difference in function.

The Examiner acknowledges that Mazurek and Shefsky do not teach touch sensitive switches on the sides of the housing and turns to Ross, Jr. as evidence to support a finding of a suggestion for using touch sensitive switches. Final Act. 7. Appellant contends that Ross, Jr.'s capacitive sensor has a different structure than that of the claim. Appeal Br. 9. But, again, the Examiner did not rely on Ross, Jr. for the structure of the capacitive sensor, the Examiner relied on Ross, Jr. for its teaching of using touch sensitive switches in gauge devices that rely on capacitive sensors to measure the movement of liquid levels. Final Act. 7; Ans. 5–6. Again, Appellant's argument does not identify a reversible error in the Examiner's findings.

As to Appellant's argument that the claim is quite detailed in describing the use of all the various components and the prior art does not identify to the level of structure provided in Appellant's gauge, this generalized argument does not identify a reversible error in any of the specific findings or the conclusion of the Examiner. The Examiner has provided specific rationales to support each of the findings of reasons for making the modifications. Appellant has not persuaded us of error in those rationales. Nor has Appellant demonstrated that the specific differences between the claimed invention and the prior art would not have been obvious to a person having ordinary skill in the art at the time of the invention.

CONCLUSION

The Examiner's decision to reject claim 21 is AFFIRMED.

DECISION SUMMARY

Claims Rejected	**35 U.S.C. §**	**Reference(s)/Basis**	**Affirmed**	**Reversed**
21	112(a)	Written Description	21	
21	103	Mazurek, Shefsky, Ross, Jr.	21	
Overall Outcome			21	

TIME PERIOD FOR RESPONSE

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) (2018).

AFFIRMED