

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit: 2689

Examiner: Mahase, Pameshanand

Confirmation No.: 3101

In Re: Spencer D. Miller
Case: P1173
Serial No.: 13/925,063
Filed: June 24, 2013
Subject: Dispensing Device

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Response A

In the Claims

All of the claims standing for examination are reproduced below with appropriate status indication.

1. (Currently amended) A dispensing device comprising:

a housing including a front face, a back face, a top face, a bottom face and two opposing side faces, the back face of the housing mounted to a common wall with a door for entering and exiting a room or building;

~~a downward facing~~ an outlet on the bottom side for dispensing a sanitizing material;

a mechanism causing the sanitizing material to be dispensed;

a first sensor on the front face facing oriented in a first horizontal direction, adapted to detect a person approaching the dispensing device; ~~and~~

a second sensor on one of the opposing sides facing the door; and

an alert mechanism;

wherein the first sensor, detecting an approaching person, activates the alert mechanism, signaling the approaching person of the presence of the dispensing device and the second sensor detects the person departing through the door.

2. (Currently amended) The dispensing device of claim 1 further comprising an electronically-activated valve controlling the ~~downward facing~~ outlet and a ~~second~~ third sensor positioned to sense a user's hands in position to accept material dispensed, wherein the ~~second~~ third sensor, detecting the person's hands, activates ~~the~~ an electronically-activated valve, dispensing a preset amount of the sanitizing material via the outlet.

3. (Cancelled)

4. (Currently amended) The dispensing device of claim [[3]] 2 further comprising a processor with a coupled data repository, the processor coupled to the ~~valve-controlled~~

~~outlet~~ electronically-activated valve, to all of the sensors, and to the alert mechanism, wherein the processor executes one or more coded instructions to sense approach of the person, activate the alert mechanism, activate the valve-controlled outlet to dispense material for a pre-set time in an event the person activates the third sensor, whether or not the person activates the second sensor, records these events if and as they occur, and activates the data-reporting mechanism to report the recorded events to the remote destination.

5. (Currently amended) The dispensing device of claim 4 wherein the processor, executing the instructions, in the event a person is sensed by the ~~third~~ second sensor passing without having activated the ~~second~~ third sensor, activates an audio or visual alarm, or both, and reports the event to the remote destination.

6. (Original) The dispensing device of claim 5 wherein the processor, following the coded instructions, records events as they occur, and periodically transfers data regarding the events by a network interface.

7. (Original) The dispensing device of claim 6 wherein the network interface is a local area network (LAN) interface, a wide area network (WAN) interface, or a wireless interface.

8. (Currently amended) A system comprising:

a dispensing device comprising a housing including a front face, a back face, a top face, a bottom face and two opposing side faces, the back face of the housing mounted to a common wall with a door for entering and exiting a room or building, a downward-facing valve-controlled outlet on the bottom face for ~~dispensing~~ dispensing a sanitizing material, a first sensor facing in a first horizontal direction from the front face, adapted to detect a person approaching the dispensing device, a second sensor facing in a second horizontal direction, from a side face pointing towards the door, at a right angle to the

first horizontal direction, adapted to sense the person passing by the dispensing device while exiting through the door, a third sensor on the bottom face facing directed downward, adapted to sense the person's hands in position to accept material dispensed from the dispensing device via a valve-controlled outlet, an alert mechanism, a data repository adapted to store data and instructions, a data-reporting mechanism adapted to send data to a destination remote from the dispensing device, and a processor coupled to the valve-controlled outlet, to the sensors, to the alert mechanism and to the data repository;

~~wherein the processor~~, wherein the processor executes one or more coded instructions to sense approach of the person, activate the alert mechanism, activate the valve-controlled outlet to dispense material for a pre-set time in an event the person activates the third sensor, whether or not the person activates the second sensor, records these events if and as they occur, and activates the data-reporting mechanism to report the recorded events over a network connection to a remote server having a coupled data repository.

9. (Original) The system of claim 8 wherein the remote server, executing coded instructions from a non-transitory physical medium, prepares reports regarding the recorded events, and makes the reports available for download by authorized persons.

10. (Currently amended) A sensing and processing device comprising:

a first sensor facing in a first horizontal direction, adapted to detect a person approaching the processing device;

a second sensor positioned, with the sensing and processing device joined to a dispensing device, to sense a user's hands in position to accept material dispensed;

a side-facing third sensor facing in a second horizontal direction at a right angle to the first horizontal direction, adapted to sense a person passing by the device to one side;

an alert mechanism; and

an attachment interface adapted to join the processing device to a dispensing

device;

wherein the first sensor, detecting an approaching person, activates the alert mechanism, signaling the approaching person of the presence of the dispensing device.

11-12. (Canceled)

13. (Currently amended) The sensing and processing device of claim 12 further comprising a processor with a coupled data repository, the processor coupled to the valve-controlled outlet, to all of the sensors, and to the alert mechanism, wherein the processor executes one or more coded instructions to sense approach of the person, activate the alert mechanism, activate the valve-controlled outlet to dispense material for a pre-set time in an event the person activates the ~~third~~ second sensor, whether or not the person activates the ~~second~~ third sensor, records these events if and as they occur, and activates the data-reporting mechanism to report the recorded events to the remote destination.

14. (Original) The sensing and processing device of claim 13 wherein the processor, executing the coded instructions, in the event a person is sensed by the third sensor passing without having activated the second sensor, activates an audio or visual alarm, or both.

15. (Original) The sensing and processing device of claim 14 wherein the processor, following the coded instructions, records events as they occur, and periodically transfers data regarding the events by a network interface.

16. (Original) The sensing and processing device of claim 15 wherein the network interface is a local area network (LAN) interface, a wide area network (WAN) interface, or a wireless interface.

17. (Currently amended) A method for influencing hand cleaning behavior, comprising:

(a) providing a dispensing device having a downward-facing outlet for dispensing a material, a mechanism causing material to be dispensed, a first sensor facing in a forward horizontal direction, adapted to detect a person approaching the dispensing device, a second sensor detecting when a person's hands are in position to receive the material, a third sensor facing in a direction ninety degrees from the forward horizontal direction adapted to detect when the person passes by the dispensing device and an alert mechanism;

(b) placing the dispensing device in a position to direct the first sensor to sense an approaching person; and

(c) sensing an approaching person, activating the alert mechanism, signaling the approaching person of the presence of the dispensing device;

(d) detecting if the person passes by the dispensing device via the second sensor and whether or not the third sensor was activated; and

(e) in the event that the second sensor detects the person passes by the dispensing device without activating the third sensor, activates an audio or visual alarm, or both.

REMARKS

This response is to the Office Action mailed on 02/23/2015.

Claim Rejections - 35 USC § 112

3. Claims 2, 3, 8, 10, 11, and 12 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Specifically, the applicant has labeled a horizontal sensor a third sensor in claim 3 and a second sensor as a downward sensor in claim 2 all while claiming a second sensor as downward sensor and a third sensor as a horizontal sensor in claims 8, 11, and 12. Clarification is requested.

Applicant's Response

Applicant herein amends the claims to more clearly point out the patentable features of applicant's invention and renames the sensors to be consistent throughout the claims.

From the Office

Claims 1-3 are rejected under 35 U.S.C. 103 as being unpatentable over Ophardt [U.S. Patent Publication 2011/0017769] in view of Sweeny [U.S. Patent Publication 2007/0222622]. Claims 4-8 and 10-17 are rejected under 35 U.S.C. 103 as being unpatentable over Ophardt [U.S. Patent Publication 2011/0017769] in view of Sweeny [U.S. Patent Publication 2007/0222622], and in further view of Taneff [U.S. Patent Publication 2011/0057799].

Applicant's Response

Applicant herein amends the independent claims to clarify the main utility of the invention which is to detect a person approaching a hand sanitizing device, audibly alert

the person of the presence of the device, and detect whether or not the person actually dispensed the sanitizing material prior to exiting the room or leaving the vicinity of the dispensing device.

Regarding claim 1, the Examiner states that Ophardt teaches, "a first sensor facing in a first horizontal direction, adapted to detect a person approaching the dispensing device [a sensor directed at an angle to detect a user's fingers approaching a dispensing device (figure 2, item 46a and paragraph 0043)]". The Examiner seems to be attempting to show applicant's first sensor in the art of Ophardt , which is clearly not the case.

Applicant argues this is an important distinction for applicant to make because the Examiner's case for obviousness seems much stronger when these types of statements are left unchallenged by applicant. Applicant points out that the independent claims recite three specific sensors, first for detecting the approaching person, second for detecting if the person activates the dispenser actually dispensing material and a third for detecting if the person leaves the vicinity without dispensing the material. Ophardt only teaches a palm reader which avoids the need for contact between the user's hand and the dispenser yet provides opportunity for the monitoring of usage including determining the identities of users (Abstract). Applicant strongly points out that Ophardt determines usage, and cannot determine when a person *does not use the device*.

Applicant also argues that Ophardt fails to teach or suggest that the first sensor is positioned to detect in a horizontal direction. Ophardt actually teaches away from applicant's limitation in that the figures and descriptions all show the sensor at the position of dispensing; i.e. under the device.

Continuing with the art of Ophardt, the Examiner states Ophardt teaches: an alert mechanism [an alarm signal being sent to security personnel (paragraph 0075)]. Applicant argues that applicant claims an alert mechanism that alerts the approaching person. Ophardt [0075] teaches the self-contained electronic thermometer 246 shown in the third embodiment of FIGS. 10 to 12 may have various other mechanisms for signaling that temperature exceeding a threshold temperature has been located. For example, the electronic reader 246 could include a Wi-Fi transmitter as, for example, to

transmit a simple signal. This signal might be received by a receiver held by a security personnel. The signal might also be received by a separate camera or security system to record an image of the person or otherwise activate some form of more substantial alarm. Applicant argues that Ophardt teaches away from the claimed limitation that the alert mechanism is to alert the approaching person of the presence of the device. Ophardt teaching is clear that the person is in the act of using the dispensing device when the alert is activated.

The Examiner does finally admit that Ophardt fails to disclose of a first sensor detecting an approaching person and activates the alert mechanism thereby signaling the approaching person of the presence of the dispensing device. The Examiner relies upon Sweeney to teach the alert mechanism.

Applicant argues that applicant's claim language clearly recites a dispensing device including an alert mechanism *on the device*. Sweeney teaches a sensor on a car seat and an alert mechanism at a remote location (receiver). Therefore, applicant argues one would not be motivated to combine Ophardt and Sweeney because there is no benefit in the combination if the sensor is not at the same device as the alert.

Regarding original claim 2, now incorporated into claim 1 by amendment, the Examiner states Sweeney teaches a side-facing third sensor adapted to sense a person passing by the device to one side [a proximity sensor inside of a transmitter unit used for determining if a person is at a predetermined distance from a seat where said transmitter unit faces an outside area (paragraphs 0017 and 0022, figure 1, item 42)]. Applicant respectfully disagrees. Applicant argues that a transmitter is on one device and a receiver is on a separate device in the art of Sweeney. Applicant points out that one with skill in the art does not interpret a transmitter as a sensor, or a receiver as a sensor, as taught and claimed in applicant's invention.

Further, applicant argues that the present invention detects if a person passes by. Sweeney is capable of communicating between a transmitter and receiver and does not include a sensor for detecting if a person *passes by*. There is a distinguishable difference and the Examiner errs when not interpreting applicant's claim limitation, as written.

Regarding the art of Taneff, applicant points out that Taneff's system incorporates RFID tags worn by the person where the individual is identified by a sensor on the door (RFDU) in communication with the user's RFID [0181]. Applicant claims that all sensors are on the dispensing unit, therefore, no elaborate system need be installed in the room and there would be no benefit in combining the sensors of Taneff.

Applicant believes claim 1, as amended, is patentable over the art of record. Independent claims 8, 10 and 17 are amended in a similar manner as claim 1 and are patentable at least based on arguments provided for claim 1. Claims 2, 4-7, 9, and 13-16 are patentable on their own merits, or at least as depended from a patentable claim. Claims 3 and 11-12 are herein canceled.

Summary

As all of the claims, as amended and argued above, have been shown to be patentable over the art presented by the Examiner and over the 101 rejection, applicant respectfully requests reconsideration and the case be passed quickly to issue.

If any fees are due beyond fees paid with this amendment, authorization is made to deduct those fees from deposit account 50-0534. If any time extension is needed beyond any extension requested with this amendment, such extension is hereby requested.