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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MARK BULLOCK and SCOTT PROPER

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Appeal 2020-001330  
Application 15/211,582  
Technology Center 3700

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Before PHILLIP J. KAUFFMAN, ANNETTE R. REIMERS, and  
TARA L. HUTCHINGS, *Administrative Patent Judges*.

REIMERS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner’s decision to reject claims 11–15 and 21–34. Claims 1–10 and 16–20 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM IN PART.

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<sup>1</sup> 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 GOJO Industries, Inc. Appeal Brief (“Appeal Br.”) 4, filed June 24, 2019.

### CLAIMED SUBJECT MATTER

The claimed subject matter “relates generally to liquid dispenser systems, such as liquid soap and sanitizer dispensers and bulk refill units.” Spec. ¶ 2. According to the Specification, “[l]iquid dispensing systems typically have a container for holding dispensable liquid.” *Id.* ¶ 3. “The system may become contaminated . . . if the seal of the container is breached, for example, to refill the container with liquid rather than installing a new, sealed, container.” *Id.*

Claims 11, 21, and 28 are independent. Claim 11 is illustrative of the claimed subject matter and recites:

11. A bulk refill system comprising:
  - a refill container for holding a liquid to be dispensed;
  - a sensor for sensing a parameter indicative of a breach in the integrity of the refill container;
    - wherein the breach in the integrity of the refill unit is indicative of an attempt to refill the refill container;
  - a valve for intermittently permitting fluid to flow out of the container;
  - a refill controller configured to receive one or more signals from the sensor that are indicative of the integrity of the refill container; and
    - wherein the refill controller transmits a signal to open the valve if the integrity of the refill container has not been breached and does not provide a signal to open the valve if the integrity of the refill container has been breached.

## THE REJECTIONS

Claims 11, 12, 14, and 15 stand rejected under 35 U.S.C. § 102(a)(1) as anticipated by Remijn (US 2011/0131714 A1, published June 9, 2011).

Claims 13 and 21–34 stand rejected under 35 U.S.C. § 103 as unpatentable over Remijn and McNulty (US 2016/0184851 A1, published June 30, 2016).

## ANALYSIS

### *Anticipation by Remijn*

#### *Claim 11*

Independent claim 11 recites “[a] bulk refill system” including a refill container and “a sensor for sensing a parameter indicative of a breach in the integrity of the refill container.” Appeal Br. 21 (Claims App.). A refill controller is “configured to receive one or more signals from the sensor that are indicative of the integrity of the refill container.” *Id.*

The Examiner finds that Remijn’s sensor array 535 senses a “parameter indicative of a breach in the integrity of the refill container,” as recited in claim 11. Final Act. 3.<sup>2</sup>

Appellant contends that Remijn fails to describe such a parameter or signal. Appeal Br. 11. In particular, Appellant contends that sensor array 535 merely senses the index of refraction of the fluid in fluid chamber 523 but does not sense a breach of the integrity of the container. Appeal Br. 12–13.

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<sup>2</sup> Final Office Action (“Final Act.”), dated Jan. 11, 2019.

We begin our discussion with a claim interpretation of the term “breach.” An ordinary meaning of the noun “breach” encompasses “[a]n opening, tear, or rupture.” *American Heritage Dictionary of the English Language*, <https://www.thefreedictionary.com/breach> (last accessed Sept. 30, 2020). Thus, a “parameter indicative of a breach in the integrity of the refill container” is a parameter that indicates that the refill container has been opened, torn, or ruptured. Indeed, claim 11 itself indicates that the parameter is indicative of an opening, tear, or rupture of a type calculated to permit the container to be replenished with fluid. Specifically, according to claim 11, the “breach in the integrity of the refill unit is indicative of an attempt to refill the refill container.” Appeal Br. 21 (Claims App.).

Appellant’s Specification does not formally define a “breach in the integrity of the refill container.” Nevertheless, our understanding is that a “parameter indicative of a breach in the integrity of the refill container” is a parameter that indicates that the refill container has been opened, torn, or ruptured in a manner that could permit the container to be refilled, which is consistent with the teachings of the Specification. For example, the Specification explains that the “integrity of the container 110 is breached if the container 110 is opened, cut, ruptured, etc. so that fluid may be added to the container 110.” Spec. ¶ 26; *see also id.* ¶ 35; Appeal Br. 11–12 (citing Spec. ¶ 26).

Remijn describes a fluid dispensing system and explains that a “potential problem with dispensing systems is that they can be refilled with consumable products from another supplier.” Remijn ¶¶ 1, 14; *see also id.*

¶ 28. In order to discourage customers from refilling such systems with fluids from other suppliers, Remijn teaches placing a chemical additive in the genuine fluid to change the index of refraction of the fluid. Remijn ¶¶ 24–25. Light source 531 and sensor array 535 positioned in or near fluid chamber 523 detect the index of refraction of fluid 501. In doing so, sensor array 535 detects the presence or absence of the chemical additive that indicates that fluid 501 is genuine. *Id.*; *see also* Remijn Fig. 3.

If the proprietor of the dispenser initially fills a container within the dispensing system (not shown in Figure 3 of Remijn) with genuine fluid including the chemical additive, and then a purchaser refills the container with another supplier’s fluid, the measured index of refraction likely will change. Furthermore, in order to refill the fluid container, the purchaser will have to “breach the integrity of the container” in the sense of either opening the container using means, such as a cap, designed for that purpose, or by rupturing a container wall. *See* Final Act. 5–6; Ans. 6.<sup>3</sup> Therefore, despite Appellant’s argument to the contrary, we agree with the Examiner’s finding that the index of refraction of the fluid in fluid chamber 523 is a “parameter indicative of a breach in the integrity of the refill container,” as recited in claim 11. Ans. 8.

Accordingly, for the above reasons, we sustain the Examiner’s rejection of claim 11 as anticipated by Remijn.

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<sup>3</sup> Examiner’s Answer (“Ans.”), dated Oct. 9, 2019.

*Claims 12 and 14*

Appellant does not present arguments for dependent claim 14 apart from the arguments presented for dependent claim 12. *See* Appeal Br. 14–15. We select claim 12 as representative, and claim 14 stands or falls with claim 12. *See* 37 C.F.R. § 41.37(c)(1)(iv) (2018).

Dependent claim 12<sup>4</sup> recites “wherein the valve is located on the refill container.” Appeal Br. 22 (Claims App.). Appellant contends that Remijn fails to describe such a valve. *Id.* at 14–15. Remijn describes flow controller 515 as a valve or a pump. Remijn ¶ 18.<sup>5</sup> Therefore, Remijn describes a valve “located on the refill container.” As such, we agree with the Examiner’s finding that Remijn describes flow controller 515 on container 503. Final Act. 3; Ans. 7; *see also* Remijn ¶¶ 15, 18, Fig. 1.

Accordingly, for the above reasons, we sustain the Examiner’s rejection of claim 12 as anticipated by Remijn. We further sustain the rejection of claim 14, which falls with claim 12.

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<sup>4</sup> We note that claim 12, as reproduced in the Claims Appendix to the Appeal Brief and in Appellant’s Response to Final Action, dated Nov. 13, 2018, purports to depend from itself. Should this application undergo further prosecution, Appellant should clarify the dependency of claim 12. For purposes of the subject appeal, we shall presume that Appellant intended claim 12 to depend from claim 11.

<sup>5</sup> The reference to “sensor 515” in paragraph 39 of Remijn is an obvious typographical error. Paragraph 39 of Remijn as a whole, read in view of Figure 6, indicates that “sensor 505” is intended. As such, we look to paragraph 18 of Remijn, and not to paragraph 39, to indicate what component reference numeral 515 identifies.

*Claim 15*

Dependent claim 15 recites the “bulk refill system of claim 12, wherein the refill controller transmits a signal to a dispensing system that is indicative of a particular refill unit.” Appeal Br. 22 (Claims App.). This feature is worded somewhat differently in the Specification. In particular, the Specification describes that “[i]n some embodiments, signal 392 includes an information indicative of the identity of the bulk refill container 310.” Spec. ¶ 40. The Examiner finds the signal transmitted by refill controller 513 of Remijn to flow controller 515 for allowing or impeding flow to be “indicative of a particular refill unit,” as recited in claim 15. Final Act. 4 (citing Remijn ¶¶ 14, 18); *see also* Ans. 7–8.

We acknowledge the Examiner’s position that paragraph 14 of Remijn discloses that “[i]f the sensor signal is within the acceptable range, the controller [will] allow the dispenser to function[ and] [i]f the sensor signal is outside the acceptable range, the controller will cause the dispenser to cease operation” Ans. 7–8; *see also* Final Act. 4. However, the controller’s ability to allow or cease the dispenser’s operation based on the sensor signal being respectively within or outside of an acceptable range is not representative of refill controller 513 transmitting a signal to the dispenser that is “indicative of a particular refill unit,” as required by claim 15. Additionally, paragraph 18 of Remijn merely describes controller 513’s ability to allow or cease the dispenser’s operation based on the sensor signal being respectively within or outside of an acceptable range, which similar to paragraph 14 of Remijn, is not representative of refill controller 513 transmitting a signal to the dispenser that is “indicative of a particular refill unit,” as required by claim 15. Consequently, the Examiner fails to establish adequately by a



preponderance of the evidence that Remijn teaches or suggests the limitation(s) recited in claim 15.

Accordingly, for above reasons, we do not sustain the Examiner's rejection of claim 15 as anticipated by Remijn.

*Obviousness over Remijn and McNulty*

*Claims 13 and 21–34*

Claim 13 recites the “bulk refill system of claim 12, wherein valve is located on a dispenser and the refill controller transmits the signal to a dispenser controller.” Appeal Br. 22 (Claims App.).<sup>6</sup> Independent claims 21 and 28 recite “bulk refill system[s].” *Id.* at 22–23 (Claims App.). Each of the bulk refill systems recited in claims 21 and 28 includes a “refill valve for permitting fluid to flow out of the refill container” and “an inlet valve on the dispenser.” *Id.*

The Examiner finds that a “valve of cleaning mechanism,” depicted in Figure 6 of Remijn, corresponds to the “valve” recited in claim 13 and to the

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<sup>6</sup> We note that the noun “valve,” as it appears in claim 13, lacks antecedent basis. As a result, it is unclear whether the noun “valve,” as it appears in claim 13, refers to the valve recited in claim 11 (which we presume to be the ultimate parent of claim 13) or to a valve distinct from that recited in claim 11. Should this application undergo further prosecution, Appellant should clarify whether the “valve” expressly recited in claim 13 has an antecedent basis in parent claims 11 and 12. For purposes of the subject appeal, we shall presume that the “valve” expressly recited in claim 13, which is located on a dispenser rather than on the refill container, refers to a valve distinct from that recited in parent claims 11 and 12.

“inlet valve” recited in claims 21 and 28. Final Act. 4 (citing Remijn ¶¶ 33–35).<sup>7</sup>

Paragraphs 33 through 35 of Remijn, which reference Figures 4 and 5, describe switches that serve to control the operation of toilet cleaning mechanism 103 but fail to describe any electrically powered valve associated with either dispenser 105 or toilet cleaning mechanism 103 for controlling flow in response to the activation of a switch. *See* Appeal Br. 17–18. Additionally, paragraph 36 of Remijn, which references Figure 6, fails to describe any electrically powered valve associated with either dispenser 105 or toilet cleaning mechanism 103 for controlling flow in response to the activation of a switch. In short, the Examiner has not explained adequately how Remijn teaches or suggests either the “valve” recited in claim 13 or the “inlet valve” recited in claims 21 and 28.

The Examiner relies on the teachings of McNulty for disclosure of the refill controller recited in claims 13, 21, and 28. Final Act. 4, 6; Ans. 8–9. As such, the Examiner does not rely on McNulty to teach or suggest either the “valve” recited in claim 13 or the “inlet valve” recited in claims 21 and 28. Consequently, the Examiner has not established adequately by a preponderance of the evidence how Remijn and McNulty, either alone or in

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<sup>7</sup> We note paragraphs 33 through 35 of Remijn describe Figures 4 and 5 of Remijn. We further note Figure 6 of Remijn includes an illustration of “cleaning mechanism 103.” We also note the Examiner indicates that cleaning mechanism 103 “is located on a dispenser 103.” Final Act. 4. However, reference numeral 103 of Remijn represents the “self-cleaning toilet seat mechanism.” Remijn ¶ 33. For purposes of the subject appeal, we shall interpret the dispenser to be element 105 (i.e., the housing) of Remijn. *See id.* (“The seat cleaning mechanism 103 is normally stored in a housing 105.”).

combination, teach or suggest either the “valve” recited in claim 13 or the “inlet valve” recited in claims 21 and 28.

Accordingly, for the above reasons, we do not sustain the Examiner’s rejection of claims 13 and 21–34 as unpatentable over Remijn and McNulty.

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
11, 12, 14, 15	102(a)(1)	Remijn	11, 12, 14	15
13, 21–34	103	Remijn, McNulty		13, 21–34
<b>Overall Outcome</b>			11, 12, 14	13, 15, 21–34

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 IN PART