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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDREAS STAUB and PERCY LEUE

Appeal 2014-008531
Application 12/658,540
Technology Center 3700

Before EDWARD A. BROWN, GEORGE R. HOSKINS, and
AMANDA F. WIEKER, *Administrative Patent Judges*.

HOSKINS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Andreas Staub and Percy Leue (“Appellants”)¹ appeal under 35 U.S.C. § 134 from the Examiner’s decision rejecting claims 1–15 in this application. The Board has jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART.

¹ The Appeal Brief identifies Sulzer Mixpac AG as the real party in interest. Br. 2.

CLAIMED SUBJECT MATTER

Claim 1 is the sole independent claim on appeal, and it recites:

1. A single use multicomponent cartridge comprising
 - a first supply chamber for a first component;
 - a second supply chamber separate from said first supply chamber for a second component and arranged coaxially within said first supply chamber:
 - a first piston movably arranged in said first supply chamber;
 - a second piston movably arranged in said second supply chamber:
 - a plunger for simultaneously moving said first piston and said second piston to simultaneously discharge the two components:
 - a guide element for guiding said first piston in said first supply chamber and for guiding said second piston in said second supply chamber, said guide element having a discharge opening for discharging the first component out of said first supply chamber,
 - a housing receiving said guide element; and
 - a movement element for moving said guide element relative to said housing to form a gap between said housing and said guide element and to open said discharge opening for passage of the first component out of said first supply chamber into said gap.

Br. 12 (Claims App.).

REJECTIONS ON APPEAL

Claims 1–3, 5, 6, and 13 stand rejected under 35 U.S.C. § 102(b) as anticipated by DE 20 2008 007 801 U1 (pub. Sept. 25, 2008). Final Act. 4. Because the cited reference is in the German language, the Examiner relies on US 2011/0056985 A1 (pub. Mar. 10, 2011) as an “equivalent” “translation” of the German reference. *Id.* Appellants do not object to the

Examiner’s approach in this regard; in fact, they follow the same approach. Br. 3–9. We, therefore, will do likewise, and refer to the German reference as “Bublewitz,” the first-named inventor of the published United States patent application. Our citations to the written description of “Bublewitz” refer to the published United States patent application disclosure.

Claims 9–12 and 14 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Bublewitz.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Bublewitz and Ernst (US 4,771,919, iss. Sept. 20, 1988).

Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Bublewitz and Woodson (US 3,730,394, iss. May 1, 1973).

Claim 15 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Bublewitz and Nicholls (US 3,738,535, iss. June 12, 1973).

ANALYSIS

A. Anticipation by Bublewitz

Claim 1

In rejecting claim 1, the Examiner relies on the embodiment shown in Figures 18–20 of Bublewitz as disclosing, *inter alia*, the claimed “guide element” as housing 2, 12. Final Act. 4–5. The Examiner determines housing 2, 12 guides first piston 16b in first supply chamber 4a, and guides second piston 16a in second supply chamber 4b, and further has discharge opening 9a for discharging a component out of first chamber 4a. *Id.* at 5.

Appellants argue the Examiner errs in finding Bublewitz’s housing 2, 12 corresponds to the claimed guide element, because Figure 20 “appears to

illustrate a cylindrical separating wall 12 *independent from* the housing 2,” and there is no written description of item 12 illustrated in Figures 18–20 of Bublewitz. Br. 6 (emphasis added). Appellants also argue Bublewitz illustrates “chamber” 9a rather than the claimed “opening,” and there is no written description of item 9a illustrated in Figures 18–20 of Bublewitz. *Id.*

We determine the Examiner’s finding that Bublewitz’s housing 2, 12 corresponds to the claimed guide element is supported by a preponderance of the evidence. It is apparent from the “sectional” views of Bublewitz Figures 19 and 20 (Bublewitz ¶¶ 46–47) that cylindrical wall 12 is formed as one piece with the exterior wall of housing 2, rather than being independent from housing 2. Figures 19 and 20 show the portion of cylindrical wall 12 traversed by lead line 4b being integrally connected to the exterior wall of housing 2 by a shoulder portion. Further, Bublewitz Figure 18 does not show cylindrical wall 12 being independent from the exterior wall of housing 2, as one would expect from an exploded view such as shown in Figure 18, if they were independent elements.

As to the claimed “discharge opening” of the guide element, Bublewitz describes the embodiment of Figures 21–23 as having “discharge openings 9a, 9b.” Bublewitz ¶ 77. In this regard, there is no structural difference between the elements 9a and 9b in the respective embodiments of Figures 18–20 and Figures 21–23. *Id.* ¶¶ 75–77. Instead, the differences are that sealing plunger 11 in Figures 18–20 is replaced with two separate sealing plungers 11 in Figures 21–23, and discharge tube 8a can be displaced relative to housing 2 in Figures 21–23 but is non-displaceably fixed to housing 2 in Figures 21–23. *Id.* Appellants’ conclusory argument that

element 9a in Figures 18–20 is a “chamber” and not an “opening” (Br. 6) is rebutted by Bublewitz’s description of element 9a as an “opening.”

The Examiner also determines Bublewitz discloses the claimed “housing” as discharge tube 8a that receives guide element 2. Final Act. 5. Appellants argue the Examiner errs in so finding, because tube 8a can be displaced relative to guide element 2 and “is not described as a housing receiving” guide element 2. Br. 6. Appellants’ arguments are not persuasive. Claim 1 itself specifies “a movement element *for moving said guide element relative to said housing*” (emphasis added), so the relative movement between tube 8a and guide element 2 is consistent with tube 8a being the housing of claim 1. Further, tube 8a is “receiving” guide element 2 as claimed, because tube 8a receives the extension of guide element 2 from which mixer helix 8b protrudes, in between spring arms 26. Bublewitz, Figs. 18–20. This is consistent with Appellants’ Specification, which discloses housing 2 “receiving” guide element 11, despite end region 37 of guide element 11 extending outside of housing 2. Spec., Fig. 1, 14:9–11.

The Examiner further determines Bublewitz discloses the claimed “moveable element” as “the side grips next to the catch recesses [28b]” on discharge tube 8a. Final Act. 5. The Examiner finds those side grips function to move guide element 2 relative to housing 8a to form a gap between guide element 2 and housing 8a, thereby opening discharge opening 9a. *Id.* (citing Bublewitz ¶ 76). The Examiner determines a broadest reasonable interpretation of “moveable element can be anything that enables the change of position of the guide element,” and Bublewitz’s side grips do that. *Id.* at 2.

Appellants argue the Examiner errs in finding the side grips on Bublewitz's housing 8a are "for moving" guide element 2, as claimed, because there is no disclosure in Bublewitz that guide element 2 "is moved" by the side grips. Br. 7. Instead, according to Appellants, Bublewitz merely discloses relative movement between guide element 2 and housing 8a as permitted by catch hooks 27, and by projection 28a respectively engaging two catch recesses 28b. *Id.* Appellants further assert the Examiner's claim construction is not consistent with their Specification. *Id.* at 8.

Appellants do not specify in what manner the Examiner's claim construction is allegedly inconsistent with their Specification, or assert the claimed "movement element" should be construed under 35 U.S.C. § 112, ¶ 6. Br. 3, 7–8. Thus, we need only determine whether a preponderance of the evidence supports the Examiner's finding that "the side grips next to the catch recesses [28b]" on housing 8a are capable of performing the moving function recited in claim 1. Final Act. 2, 5. We determine it does.

Bublewitz indicates housing 8a "can be displaced in the axial direction relative to" mixer helix 8b and guide element 2 "to open" chambers 4a, 4b, so the contents stored within chambers 4a, 4b may flow towards mixer helix 8b within housing 8a. Bublewitz ¶¶ 24, 76, Figs. 19–20. Such opening of chambers 4a, 4b involves forming a gap between housing 8a and guide element 2. *Id.* ¶ 76, Figs. 19–20. This is consistent with Appellant's disclosed embodiment, in which the user must grasp housing 2 and rotate it around guide element 11 to form gap 51. Spec., 14:12–15:4, Figs. 1, 3, 5.

For the foregoing reasons, we sustain the rejection of claim 1 as anticipated by Bublewitz.

Claim 6

Claim 6 depends from claim 1 to add “a housing element receiving said plunger and formed as one piece with said plunger.”² Br. 13 (Claims App.). The Examiner relies on Bublewitz’s lid 3 as corresponding to the housing element, which “receiv[es]” plunger 14 “and [is] formed as one piece” with plunger 14, because they “are flush with one another, thus form[ing a] uniform structure preventing accidental actuation.” Final Act. 6 (citing Bublewitz ¶ 16); *see also* Ans. 3–4 (“To be formed as one piece means to bring together parts as one piece or to shape something as one piece as described in the Merriam Webster Dictionary.”).

Appellants argue the Examiner errs in finding Bublewitz’s lid 3 and plunger 14 are formed as one piece, because Bublewitz Figure 18 “illustrates the lid 3 and plunger 14 to be separate pieces.” Br. 9. We agree. The Examiner applies an overly broad claim construction of “one piece.” Our reviewing court has instructed that:

[U]nder the broadest reasonable interpretation, the Board’s construction “cannot be divorced from the specification and the record evidence,” *In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011), and “must be consistent with the one that those skilled in the art would reach,” *In re Cortright*, 165 F.3d 1353, 1358 (Fed. Cir. 1999). A construction that is “unreasonably broad” and which does not “reasonably reflect the plain language and disclosure” will not pass muster.

Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1298 (Fed. Cir. 2015) (quoting *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010)).

² The “housing” recited in claim 1 and the “housing element” recited in claim 6 are different housings. *See, e.g.*, Spec., Fig. 1 (exemplary embodiment includes housing 2 and housing element 17).

Appellants' Specification representatively illustrates a "one piece" housing element 17 and plunger 5 including breaking point 50, which "is severed at the beginning of the discharge of the filling material." Spec., 12:12–19, Figs. 1, 4. By contrast, Bublewitz's lid 3 and plunger 14 are always separate pieces within the operation of Bublewitz's device, and are therefore never "one piece" as required by claim 6. Thus, we do not sustain the rejection of claim 6 as anticipated by Bublewitz.

Claims 2, 3, 5, and 13

Claims 2, 5, and 13 depend from claim 1, and claim 3 depends from claim 2. Br. 12–14 (Claims App.). Appellants do not argue for the patentability of these dependent claims separately from claim 1. *Id.* at 8–9. Therefore, we sustain the rejection of these claims as anticipated by Bublewitz for the reasons provided in connection with claim 1.

B. Obviousness based on Bublewitz

Claim 9 depends from claim 6, and claims 10–12 depend directly or indirectly from claim 9. Br. 13–14 (Claims App.). The Examiner's consideration of claims 9–12 does not cure the deficiency of Bublewitz with respect to claim 6 noted above. *See* Final Act. 6–7. We, therefore, do not sustain the rejection of claims 9–12 as unpatentable over Bublewitz.

Claim 14 depends from claim 1 to add "said guide element includes a vent element." Br. 14 (Claims App.). The Examiner relies on Bublewitz Figure 24 as providing vent 29 "for venting" guide element 2. Final Act. 8 (citing Bublewitz ¶ 79). Appellants argue the Examiner errs because Bublewitz "describes the *discharge plungers 17* to be configured with a ventilation opening 29," rather than guide element 2 as required by claim 14.

Br. 9–10 (emphasis added). We agree. *See* Bublewitz, Fig. 24, ¶ 79. In reciting that the guide element “includes” the vent element, claim 14 requires the vent element to be formed within the structure of the guide element, not within the structure of some other element (such as a plunger) to vent a space within the guide element. We note, additionally, that the Examiner’s rejection is based on “Bublewitz” DE 20 2008 007 801 U1, which does not include Figure 24 of US 2011/0056985 A1. Thus, we do not sustain the rejection of claim 14 as unpatentable over Bublewitz.

C. Obviousness based on Bublewitz and Ernst

Claim 4 depends from claim 1 to add “said movement element includes an external thread on said guide element and an interengaging inner thread on said housing.” Br. 13 (Claims App.). The Examiner finds the embodiment of Bublewitz Figures 18–20 lacks such threading. Final Act. 8. The Examiner cites Ernst as disclosing “internal and external engaging threads on the movement element (Col. 2, lines 28–31, external threads that engage internal threads).” *Id.*; *see also id.* at 2–3. The Examiner determines it would have been obvious to modify the embodiment of Bublewitz Figures 18–20 to include “interfacing threads on the guide element [2] and the housing [6a]” to “provide[] a firm attachment between parts, which is important to withstand the rough handling during shipping and while in use.” *Id.* at 8.

Appellants argue the embodiment of Bublewitz Figures 18–20 “requires the discharge tube to carry a sealing plunger 11 that projects into the discharge openings and that is **pushed or pulled forward** to free the discharge openings.” Br. 10 (citing Bublewitz ¶ 76). Appellants contend the rotary movement provided by modifying guide element 2 and housing 8a

to have interengaging threads “would be prevented by the sealing plunger 11 that projects into the discharge openings.” *Id.* Thus, in Appellants’ view, a person of ordinary skill in the art would not have modified Bublewitz to include interengaging threads as recited in claim 4. *Id.*

Appellants’ argument is not persuasive of Examiner error. As the Examiner points out, the test for obviousness considers “what the combined teachings of the references would have suggested to those of ordinary skill in the art.” Ans. 4. Ernst discloses a structure whereby two chambers 14, 16 formed within body 12 may be initially closed by nozzle 36 (Ernst, Fig. 2), and then opened by a threaded rotation (*id.* Fig. 1) so the stored components may be mixed. Ernst, 2:18–3:4. In light of these teachings, it would have been well within the ability of a person of ordinary skill to modify Bublewitz to incorporate a rotational engagement while still providing an appropriate seal in the closed position, even if such modification would entail modifying the specific structure of sealing plunger 11 disclosed by Bublewitz. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.”). Appellants do not challenge the Examiner’s determination that a rotational threading engagement in Bublewitz would provide a firm attachment between parts to withstand rough handling.

D. Obviousness based on Bublewitz and Woodson

Claim 7 depends from claim 6 to add “a predetermined breaking point between said plunger and said housing element.” Br. 13 (Claims App.). The Examiner finds the embodiment of Bublewitz Figures 18–20 lacks such a

breaking point. Final Act. 9. The Examiner cites Woodson as disclosing a multicomponent cartridge including “a breaking point (221d) between the housing and the plunger that breaks upon force applied to the plunger (Col. 6, lines 30–33, actuation of plunger breaks the frangible connection).” *Id.* The Examiner determines it would have been obvious to modify the embodiment of Bublewitz Figures 18–20 to include “the breaking point that is broken upon force applied to [the] plunger as taught by Woodson” to “protect[] against inadvertent activation of the cartridge as well as simplifying the use of the cartridge to a single movement.” *Id.* at 9.

In opposition, Appellants rely in part on their arguments against the rejection of parent claim 6. Br. 11. As discussed above, we do not sustain the rejection of claim 6 as anticipated by Bublewitz, on the basis that Bublewitz fails to disclose a “one piece” housing element and plunger. The rejection of claim 7 relies on Bublewitz as disclosing such a one piece combination, and then determines it would have been obvious to add a breaking point to Bublewitz’s one piece combination, in light of Woodson. That is, the rejection does not assert any obviousness of modifying Bublewitz to include a one piece housing element and plunger. *See* Final Act. 9. Thus, the rejection of claim 7 rests upon the same faulty finding as the rejection of claim 6. The Examiner’s consideration of claim 8, which depends from claim 7, likewise does not cure the deficiency of Bublewitz with respect to claim 6. *See* Final Act. 9. We, therefore, do not sustain the rejection of claims 7 and 8 as unpatentable over Bublewitz and Woodson.

E. Obviousness based on Bublewitz and Nicholls

Claim 15 depends from claim 1. Br. 14 (Claims App.). Appellants do not argue for the patentability of claim 15 separately from claim 1. *Id.* at 11.

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Therefore, we sustain the rejection of claim 15 as unpatentable over Bublewitz and Nicholls for the reasons provided in connection with claim 1.

DECISION

The Examiner's decision to reject claims 1–15 is affirmed as to claims 1–5, 13, and 15, and reversed as to claims 6–12, and 14.

No time period for taking any subsequent action in connection with this appeal may be extended, under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART