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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte UDO SCHUETZ

Appeal 2015-001073
Application 12/787,458
Technology Center 3700

Before JAMES P. CALVE, WILLIAM A. CAPP, and
ARTHUR M. PESLAK, *Administrative Patent Judges*.

PESLAK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Udo Schuetz (“Appellant”) appeals under 35 U.S.C. § 134(a) from the Examiner’s final decision rejecting claims 1–12.¹ We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Appellant submits the real party in interest is Schuetz GmbH & Co. KGaA. Appeal Br. 1.

THE CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A bung stopper closure for bung-type containers, in particular for bung-type barrels made of plastic for liquids, said bung stopper closure comprising:

a cup-shaped bung stopper made of plastic or metal, which can be screwed into a bung connecting piece of the container, implemented as a threaded connecting piece, and

a sealing cap made of plastic, which can be snapped onto the bung stopper, for detection of manipulations, the bung stopper having a cylindrical outer wall having an external thread, on whose internal circumference socket engagement eyes for a socket are situated concentrically to the stopper central axis, which extend radially and axially in a stopper depression of the bung stopper, said sealing cap including a central, delimited elastic clamping sleeve, attached using tear-off webs to an inner side of the sealing cap disc, which extends axially in a stopper depression and has an annular detent element on its inner end protruding radially into the stopper depression for locking with counter detent elements, which are in the form of ring segments and protrude radially into the stopper depression, on the lower section of outwardly curved inner walls, in the form of cylinder segments, of the socket engagement eyes, an external diameter of the annular detent element on the clamping sleeve of the sealing cap being approximately equal to a diameter of the inner walls of the socket engagement eyes of the bung stopper in such a manner that when the sealing cap is snapped onto the bung stopper, which is screwed into a bung connecting piece, the annular detent element on the inner end of the clamping sleeve of the sealing cap is guided by the inner walls of the socket engagement eyes before locking with the counter detent elements on the inner walls of the socket engagement eyes of the bung stopper.

REJECTIONS

- 1) Claims 1–3, 5, 7–9, and 11 are rejected under 35 U.S.C. § 103(a) as unpatentable over Shera (US 1,997,203, iss. Apr. 9, 1935) and Dwinell (US 6,726,048 B2, iss. Apr. 27, 2004).
- 2) Claims 4 and 10 are rejected under 35 U.S.C. § 103(a) as unpatentable over Shera, Dwinell, and Buckley (US 6,968,968 B2, iss. Nov. 29, 2005).
- 3) Claims 6 and 12 are rejected under 35 U.S.C. § 103(a) as unpatentable over Shera, Dwinell, and Baughman (US 2006/0102583 A1, pub. May 18, 2006).

DISCUSSION

Rejection 1

The Examiner finds Shera discloses the limitations of independent claims 1 and 7 except for a sealing cap made of plastic and the recited socket engagement eyes. Final Act. 2–3. The Examiner finds that Dwinell discloses a sealing cap made of plastic, socket engagement eyes “having outwardly curved inner walls (16) in the form of cylindrical segments with counter detent elements (undercuts forming groove 17) disposed on a lower section of said curved inner walls,” and “the socket engagement eyes guide an overseal or sealing cap into secure engagement with the counter detent elements.” *Id.* at 3. The Examiner reasons it would have been obvious “to form the sealing cap of Shera with plastic in order to utilize material suitable for providing a sealing cap with breakaway portions” and “to modify Shera with the socket engagement eyes of Dwinell to provide suitable counter detent elements or undercuts capable of engaging an annular detent element while using less material, thereby reducing production cost.” *Id.* at 4.

Appellant contends that neither Shera nor Dwinell discloses the limitation in claim 1 that

“an external diameter of the annular detent element on the clamping sleeve of the sealing cap being approximately equal to a diameter of the inner walls of the socket engagement eyes of the bung stopper in such a manner that when the sealing cap is snapped onto the bung stopper, . . . , the annular detent element on the inner end of the clamping sleeve of the sealing cap is guided by the inner walls of the socket engagement eyes.”

Appeal Br. 3–4.

Appellant also contends that a similar limitation in claim 7 is not disclosed by either Shera or Dwinell. *Id.* Appellant argues that Shera does not disclose socket engagement eyes. *Id.* Appellant also argues that Shera’s “annular detent element . . . engages, and is compressed by, inner walls of the counter detent elements 27, and is not guided by the inner wall of the bung stopper.” *Id.* Appellant also argues that in Shera, “the diameter of the inner walls of the counter detent elements is clearly smaller than the external diameter of the annular detent element on the clamping sleeve of the sealing cap.” *Id.* at 5. Appellant admits that Dwinell discloses socket engagement eyes but argues that “the external diameter of the annular detent element on the clamping sleeve of the sealing cap disclosed in Dwinell et al. is not approximately equal to a diameter of the inner walls of the socket engagement eyes, as required in the pending claims. Instead . . . [it] is necessarily greater than the diameter of the inner walls of the socket engagement eyes.” *Id.* Appellant refers us to Figure 1 of Dwinell, which Appellant argues shows that the annular detent element is received in a recess “past the diameter of the socket engagement eye inner wall.” *Id.* Appellant also argues that Dwinell does not disclose the inner wall of the

socket engagement eyes guiding the annular detent elements before locking of the counter detent elements. *Id.* at 6. With respect to dependent claims 5 and 11, Appellant contends that the cited references do not disclose “both a tear-off web and tear-off tab integrated in the sealing cap disc” as required by the claims. *Id.*

The Examiner responds that Dwinell, not Shera, discloses socket engagement eyes as recited in claims 1 and 7. Ans. 6. The Examiner compares Dwinell’s Figure 1 and Appellant’s Figure 1 in support of the finding that Dwinell discloses annular detent elements with approximately the same diameter as the inner wall of the socket engagement eyes. *Id.* at 7–8. With respect to claims 5 and 11, the Examiner responds that Appellant’s argument concerning the recited “tear-off tab” is based on a typographical error in the Final Action. *Id.* at 10. The Examiner corrects the typographical error and finds that “Shera’s tear-off tab (23) reads on the functional limitations of dependent claim 5 by working with tear-off webs (22) to connect the clamping sleeve (16) to the disc cap (19).” *Id.* For the following reasons, we sustain the rejection.

Appellant attempts to distinguish Shera by referring to Shera’s Figure 1 and arguing that the “the diameter of the inner walls of the counter detent elements [27] is clearly smaller than the external diameter of the annular detent element [24a] on the clamping sleeve of the sealing cap.” Appellant makes the same argument with respect to Dwinell, i.e., the external diameter of the annular detent element 24 is greater than the diameter of the inner walls of the socket engagement eyes 16. We initially note that, like Shera and Dwinell, the diameter of Appellant’s annular detent element 18 does not precisely equal the diameter of the inner walls of

Appellant's socket engagement eyes 10. *See* Ans. 7 comparing Appellant's Fig. 1 to Dwinell's Fig. 1. However, Appellant's arguments for distinguishing Shera and Dwinell on this basis are not commensurate in scope with claim 1 which recites that "an external diameter of the annular detent element . . . being *approximately equal* to a diameter of the inner walls of the socket engagement eyes." It is well settled that such words of approximation are descriptive terms commonly used in patent claims to avoid a strict numerical boundary to the specified parameter. *See Anchor Wall Sys. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1311 (Fed.Cir. 2003). Appellant's argument is, thus, not persuasive because it fails to address why Shera and Dwinell do not disclose diameters of the annular detents elements *approximately equal* to the diameter of the inner walls of the socket engagement eyes.

Shera discloses bung stopper 16 which includes lugs 18. Shera, col. 1, ll. 16–18, 29–34, Fig. 2. Lugs 18 include plug lug ledges 27. *Id.* at col. 2, ll. 20–26. Shera also discloses that lugs 18 "guide the cap and its member 24 into the position indicated." *Id.* at ll. 33–35. As sealing cap 19 will be placed on top of bung stopper 16 from the top, annular detent elements 24a will be guided by the walls of plug lug 18 above ledge 27 prior to engagement under ledge 27. *See id.* Fig. 2. The Examiner's finding that Shera discloses the annular detent element "is guided by the inner walls . . . before locking with the counter detent elements on the inner walls of the socket engagement eyes of the bung stopper" (Final Act. 3) is, thus, supported by a preponderance of the evidence.

Dwinell discloses socket engagement eyes 12 with inner walls 16. Dwinell, Fig. 2, 3. Dwinell discloses overseal 20 with "radially outward

projecting foot **24** having a bottom cam surface **25**.” *Id.* at col. 3, ll. 20–28. Further, “the segment feet move axially along the lug guide surfaces 16, the skirt free edge contacts the neck bead **5** causing skirt enlargement **22a** to expand thereover. In fully seated position the segment feet **25** snap into the wrench engaging lug grooves **17**.” *Id.* at col. 3, ll. 52–56, Fig. 1, 2, 4. As sealing cap 20 will be placed on bung stopper 9 from the top, the annular detent elements 25 will be guided by inner walls 16 prior to engagement in counter detent element 17. The Examiner’s finding that Dwinell discloses “the socket engagement eyes guide an overseal or sealing cap into secure engagement with the counter detent elements” (Final Act. 3) is, thus, supported by a preponderance of the evidence.

Appellant fails to persuasively apprise us of error in the Examiner’s factual findings or rationale, quoted above, for the combination of Shera and Dwinell, which we determine to be reasonable and supported by rational underpinnings. *See KSR Intern. Co. v Teleflex Inc.*, 550 U.S. 398, 416 (2007) (“[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.”). We thus, sustain the rejection of claims 1 and 7 under 35 U.S.C. § 103(a).

Claims 5 and 11 each recite “the clamping sleeve of the sealing cap is connected to the sealing cap disc via tear-off webs and a tear-off tab, which is integrated in the sealing cap disc.” Appeal Br. A-2, A-4 (Claims App.). The Examiner finds that Shera discloses tear-off webs 22 and tear-off tab 23 integrated into sealing cap 19. Final Act. 4; Ans. 9–10; *see* Shera Fig. 2, 3. Appellant does not persuasively apprise us of error in this finding. Appeal Br. 6. We sustain the rejection of claims 5 and 11 under 35 U.S.C. § 103(a).

Appellant does not argue separately for the patentability of claim 2, 3, 8, and 9 that are dependent on claim 1² or claim 7. Appeal Br. 6. We sustain the rejection of claims 2, 3, 8, and 9 under 35 U.S.C. § 103(a).

Rejections 2 and 3

Claims 4 and 10 are dependent on claim 1 and claim 7 respectively. The Examiner rejected claims 4 and 10 as unpatentable over Shera, Dwinell and Buckley. Final Act. 4. Appellant argues that claims 4 and 10 are allowable because Buckley does not cure the deficiencies of Dwinell and Shera as to claims 1 and 7 from which claims 4 and 10 depend, respectively. Appeal Br. 7. Because we sustain the rejection of claims 1 and 7 over Dwinell and Shera, there are no deficiencies for Buckley to cure. We sustain the rejection of claims 4 and 10.

Claims 6 and 12 are dependent on claim 1 and claim 7 respectively. The Examiner rejected claims 6 and 12 as unpatentable over Shera, Dwinell and Baughman. Final Act. 5. Appellant argues that claims 6 and 12 are allowable because Baughman does not cure the deficiencies of Dwinell and Shera as to claims 1 and 7 from which claims 6 and 12 depend, respectively. Appeal Br. 7. Because we sustain the rejection of claims 1 and 7 over Dwinell and Shera, there are no deficiencies for Baughman to cure. We sustain the rejection of claims 6 and 12.

DECISION

The Examiner's decision rejecting claims 1–12 is affirmed.

² Claim 1 recites, *inter alia*, “socket engagement eyes *for a socket*.” If prosecution in this case continues, the italicized recitation should be reviewed as it appears unrelated to the claimed subject matter.

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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