## (12)

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 92301866.7

(22) Date of filing: 04.03.92

(51) Int. CI.<sup>5</sup>: **B65D 43/04**, B65D 39/04,

B65D 39/08, B65D 39/16

(30) Priority: **05.03.91 US 664658** 

(43) Date of publication of application: 09.09.92 Bulletin 92/37

(84) Designated Contracting States: AT BE CH DE DK ES FR GB GR IT LI LU MC NL PT SE

(88) Date of deferred publication of search report: 30.08.95 Bulletin 95/35

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## (54) Spout fitment closure plug.

For tent-type paperboard containers as well as other containers, a fitment (41) is attached surrounding a hole (22) in the container (21). The spout (42) has internal threads (44) and an external flange (47) which seals around the hole (22) and is fixed to the container (21) by thermal means, adhesive or the like. The cap (51) has a top disk (52) from which an externally threaded skirt (54) depends. The exterior of the skirt (54) has gripping ribs (56) to assist in screwing and unscrewing the cap (51). The lower edge (66) of the skirt (54) seals against a sealing membrane (48) on the spout (42). Surrounding the skirt (54) is a tamper-evident band (61) attached to the lower edges of the ribs (56) by frangible bridges (62). The tamper-evident band (61) has locking means (63) engaging complementary locking means (46) on the spout (42). Thus the cap (51) cannot be unscrewed without removing the tamper-evident band (61). By unique design, the spout (42) and cap (51) may be molded in one mold cavity.

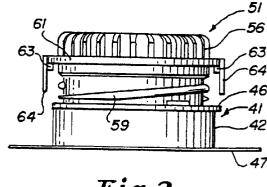
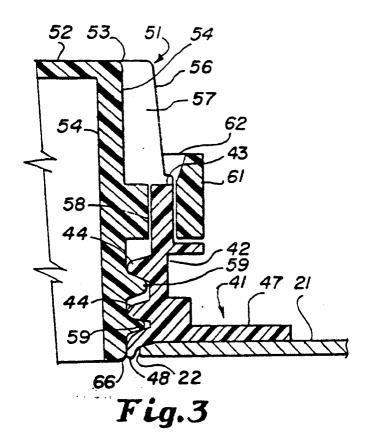


Fig.2





## EUROPEAN SEARCH REPORT

Application Number

| DOCUMENTS CONSIDERED TO BE RELEVANT                                  |  |   | EP 92301866.7  |  |
|--|--|---|--|--|
| Category   | Citation of document with indication, where of relevant passages   | e appropriate,  | Relevant<br>to claim   | CLASSIFICATION OF THE APPLICATION (Int. Cl.5)                |
| A  | US - A - 3 966 080 (BITTEL)  * Totality, especially fig.   | 1-5 *   | 1-18   | B 65 D 43/04<br>B 65 D 39/04<br>B 65 D 39/08<br>B 65 D 39/16 |
| A  | US - A - 3 998 354 (SONG)  * Totality, especially fig.   | 1-5 *   | 1-18   |  |
| A  | DE - A - 2 849 681 (NOROPLAST-VERPACKUNG * Totality, especially fig.   |   | 1-18   |  |
| A  | DE - A - 2 923 785<br>(SUPERFOS EMBALLAGE)<br>* Totality,<br>especially fig.   | 1-6 *   | 1-18   |  |
|  |  | <u>.</u> .  |  | TECHNICAL FIELDS<br>SEARCHED (Int. Cl.5)                     |
|  |  |   |  | B 65 D 17/00<br>B 65 D 39/00<br>B 65 D 41/00<br>B 65 D 43/00 |
| Pi   |  | of completion of the search   |  | Examiner   |
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| X : particul<br>Y : particul<br>docume<br>A : technol<br>O : non-wri | TEGORY OF CITED DOCUMENTS  Itarly relevant if taken alone  Itarly relevant if combined with another  ent of the same category  ogical background  itten disclosure  diate document | E: earlier patent after the filin D: document cite L: document cite | ciple underlying the<br>document, but publis<br>g date<br>ed in the application<br>d for other reasons<br>e same patent family | shed on, or  |