

Title (en)

Spiral lock safety closure.

Title (de)

Sicherheitsverschlusskappe mit Schraubsperrung.

Title (fr)

Fermeture de sécurité à blocage hélicoïdal.

Publication

EP 0001010 A1 19790307 (EN)

Application

EP 78300309 A 19780821

Priority

- US 82649377 A 19770822
- US 93022178 A 19780807

Abstract (en)

A pair of safety closure and container assemblies each including a container (210), cap (216) and combined spring and sealing member. A retention rib is formed on the inner surface of the skirt of the caps. A plurality of retention nibs (224) are formed on the inner surface of the skirt of the other cap (216). Spring and sealing members (225) each have a radially projecting flange (236) that engages the retention rib and the retention nibs (224) to prevent separation of the spring and sealing members (225) from the caps (216). Cap and container locking elements are formed respectively on the inner surfaces of the skirts (220) of the caps (216) and the outer surfaces of the mouths (212) of the containers (210). The cap and container locking elements are engageable with and disengageable from each other by combined axial and rotary motion of the caps (216) relative to the containers (210). The spring and sealing members (225) bias the cap and container locking elements toward locked engagement with each other when the caps (216) are applied to the containers (210). The cap and container locking elements are formed such that the sealing portions (234, 236) of the spring and sealing members are forced into the mouths (212) of the containers (210) into sealing engagement therewith as the caps (216) are rotated relative to the containers (210) so that the operator does not have to apply direct axial force to the caps (216) in order to seal the containers (210).

IPC 1-7

B65D 55/02; **B65D 41/06**

IPC 8 full level

B65D 50/04 (2006.01); **B65D 41/04** (2006.01)

CPC (source: EP)

B65D 50/043 (2013.01)

Citation (search report)

- US 3610454 A 19711005 - MALICK DELL M
- [D] US 4032028 A 19770628 - REISS OSCAR, et al
- [PD] US 4049148 A 19770920 - SUHR DONALD C, et al
- [D] FR 2107839 A1 19720512 - REFLEX CORP CANADA LTD

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CN110316465A; US7434703B2

Designated contracting state (EPC)

BE CH DE FR GB LU NL SE

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EP 0001010 A1 19790307; AU 3914978 A 19800228; IT 1157165 B 19870211; IT 7850813 A0 19780822; JP S54130287 A 19791009

DOCDB simple family (application)

EP 78300309 A 19780821; AU 3914978 A 19780822; IT 5081378 A 19780822; JP 10266278 A 19780822