

Title (en)

CHILD SAFETY CLOSING DEVICE WITH FIRST OPENING INDICATOR SCREW AND RING

Title (de)

KINDERSICHERE VERSCHLUSSVORRICHTUNG MIT ERSTÖFFNUNGSANZEIGESCHRAUBE UND RING

Title (fr)

DISPOSITIF DE FERMETURE À SÉCURITÉ ENFANT, À VIS ET À BAGUE TÉMOIN DE PREMIÈRE OUVERTURE

Publication

**EP 2148822 A1 20100203 (FR)**

Application

**EP 08760146 A 20080528**

Priority

- EP 2008056551 W 20080528
- FR 0703803 A 20070529

Abstract (en)

[origin: WO2008145674A1] The invention relates to a child safety closing device (1) associated with a container (2), operating according to a design of two plugs (3, 4) embedded into each other, and allowing a vertical translation movement of the outer plug (4) relative to the inner screw-threaded plug (3) providing an unscrewing possibility and fitted with a first-opening indicator ring (5) connected by breakable bridges (8) to the outer plug (4) capable of vertical translation movement, characterised in that: a) said ring (5) has on its inner surface notches (9) for preventing its rotation when unscrewing the device by interaction with corresponding notches (10) formed on the neck of the associated container inside a peripheral groove (11) outside said collar, in order to induce the braking of the bridges by shearing; b) the upper wall of the groove (11) defines a guiding shoulder (12) for said ring (5) during the vertical translation movement of the ring (5) when connected to the outer plug; c) the notches (10) inside the groove (5) have a height such that they interact with the notches (9) inside the inner face of said ring (5) whatever the position of said ring (5) during the vertical translation movement thereof when connected to the outer plug (4).

IPC 8 full level

**B65D 50/04** (2006.01); **B65D 41/34** (2006.01); **B65D 51/30** (2006.01)

CPC (source: EP US)

**B65D 41/3409** (2013.01 - EP US); **B65D 50/041** (2013.01 - EP US); **B65D 51/30** (2013.01 - EP US); **B65D 2215/02** (2013.01 - EP US)

Citation (search report)

See references of WO 2008145674A1

Cited by

US9975673B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**FR 2916741 A1 20081205**; **FR 2916741 B1 20090828**; AT E506275 T1 20110515; DE 602008006383 D1 20110601; EP 2148822 A1 20100203; EP 2148822 B1 20110420; US 2010288765 A1 20101118; US 9586738 B2 20170307; WO 2008145674 A1 20081204

DOCDB simple family (application)

**FR 0703803 A 20070529**; AT 08760146 T 20080528; DE 602008006383 T 20080528; EP 08760146 A 20080528; EP 2008056551 W 20080528; US 60163108 A 20080528