

Title (en)
EASY-TO-OPEN VALVE CLOSURE

Title (de)
LEICHT ZU ÖFFNENDER VENTILVERSCHLUSS

Title (fr)
FERMETURE À VALVE FACILE À OUVRIR

Publication
EP 2646335 A1 20131009 (DE)

Application
EP 11794436 A 20111125

Priority
• DE 102010062223 A 20101130
• EP 2011071076 W 20111125

Abstract (en)
[origin: WO2012072521A1] The invention relates to an easy-to-open valve closure (10) for bottles, having a stationary valve inner part (1), which can be placed onto a bottle neck and has a valve stopper (2) and devices (22, 23) for sealed-off fixing to the bottle neck, and having an axially movable valve outer part (11), which has a head plate (14) having a valve opening (12) for engagement with the valve stopper (2) and a screw cap (13) which is connected to the head plate (14) and has an internal thread (18) having a nominal radius (r) and is engaged with the external thread (8) of a threaded connection piece (4) which is permanently connected to the valve stopper (2). In order to provide a corresponding valve closure which can be used in the usual manner as a push/pull closure and which sits firmly and tightly on a valve inner part even during the shaking which usually occurs, but also enables simple and rapid opening with only one hand, according to the invention the screw cap (13) is rigidly connected to an actuation lever (16, 15; 16'), which extends radially outwards from the screw cap (13) so that the lever radius (R) defined by the radially outer end (15, 16b) of the actuation lever (16, 15; 16') has a distance from the axis of the screw cap which is at least 20% greater than the nominal radius (r) of the internal thread (14).

IPC 8 full level
B65D 47/24 (2006.01)

CPC (source: EP US)
B65D 47/242 (2013.01 - EP US); **B65D 47/249** (2013.01 - US); **B65D 2251/023** (2013.01 - EP US)

Citation (search report)
See references of WO 2012072521A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102010062223 A1 20120531; BR PI1106157 A2 20130326; BR PI1106157 B1 20191224; EP 2646335 A1 20131009; US 2013270306 A1 20131017; WO 2012072521 A1 20120607

DOCDB simple family (application)
DE 102010062223 A 20101130; BR PI1106157 A 20111128; EP 11794436 A 20111125; EP 2011071076 W 20111125; US 201113989625 A 20111125