

Title (en)  
CLOSURE FOR THE METERED ADDITION OF A SEPARATE LIQUID SUBSTANCE

Title (de)  
VERSCHLUSS ZUM ZUDOSIEREN EINER SEPARATEN FLÜSSIGSUBSTANZ

Title (fr)  
FERMETURE POUR LE DOSAGE D'UNE SUBSTANCE LIQUIDE SÉPARÉE

Publication  
**EP 2238043 A1 20101013 (DE)**

Application  
**EP 09700255 A 20090109**

Priority  
• CH 2009000010 W 20090109  
• CH 432008 A 20080112

Abstract (en)  
[origin: WO2009086652A1] The closure is used for the metered addition of a liquid substance packaged separately in this closure in an aseptic manner into a container (26) equipped therewith, which comprises an outgasing liquid. The closure comprises a connector sleeve (1) and a rotary cap (2) fitting thereon from above in an air-tight manner, wherein the connector sleeve (1) forms a cup (7) that fits in the connector (5) of the container to be equipped. In said cup, a liquid substance is accommodated, enclosed in oxygen-tight capsules (17). The cup bottom (8) has an opening (9), which is dimensioned such that when the pressure is the same above and below the opening, the aseptically packaged liquid substance does not flow through said opening (9). In the closed position of the rotary cap (2), the opening (9) is sealingly closed by an arbor (16) on the bottom of the rotary cap (2), wherein the opening (9) can be opened by loosening the rotary cap (2) from the arbor (16), whereby the remaining seal between the rotary cap (2) and connector sleeve (1) is maintained. After further rotating the rotary cap (2), the connector sleeve (1) is entrained by the same and unscrewed from the container connector (5). In this way, pressure equalization takes place between the container inside and ambient air, and as a result the liquid substance flows out through the opening (9) into the container (26).

IPC 8 full level  
**B65D 51/28** (2006.01)

CPC (source: BR EP US)  
**B65D 51/2821** (2013.01 - BR EP US); **B65D 51/2864** (2013.01 - BR EP US)

Citation (search report)  
See references of WO 2009086652A1

Cited by  
WO2022060751A1; EP2663511A1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2009086652 A1 20090716**; AT E535465 T1 20111215; BR PI0905657 A2 20150707; BR PI0905657 B1 20190528; CN 101925521 A 20101222; CN 101925521 B 20120606; EP 2238043 A1 20101013; EP 2238043 B1 20111130; ES 2381624 T3 20120530; JP 2011509221 A 20110324; JP 5356407 B2 20131204; MX 2010007528 A 20110304; PL 2238043 T3 20120831; RU 2010133733 A 20120220; RU 2502657 C2 20131227; UA 98830 C2 20120625; US 2010288766 A1 20101118; US 8464883 B2 20130618

DOCDB simple family (application)  
**CH 2009000010 W 20090109**; AT 09700255 T 20090109; BR PI0905657 A 20090109; CN 200980103313 A 20090109; EP 09700255 A 20090109; ES 09700255 T 20090109; JP 2010541669 A 20090109; MX 2010007528 A 20090109; PL 09700255 T 20090109; RU 2010133733 A 20090109; UA A201008879 A 20090109; US 80847409 A 20090109