

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 B1 20111130 (DE)**

Application  
**EP 09700255 A 20090109**

Priority  
• CH 2009000010 W 20090109  
• CH 432008 A 20080112

Abstract (en)  
[origin: US8464883B2] A closure device for addition of a liquid substance separately packaged therein into an associated container containing a gas release liquid includes a connector sleeve and a twist cap fitting thereon. The connector sleeve holds a cup inside with the cup bottom extending into the container connector. The cup includes therein a substance container containing the liquid substance, disposed above a piercing and cutting mechanism having upwardly directed cutting tips and a downward arbor, and the cup has an opening at the bottom closed by the arbor. When the twist cap is rotated in the loosening direction, the piercing and cutting mechanism is moved upward, causing piercing of the substance container, and exposing the opening thereby pressure compensation occurs between the cup and container. Further loosening of twist cap causes pressure drop in the container, and the liquid substance is injected through the opening of the cup into the container.

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)

Cited by  
WO2022060751A1; EP2663511A1

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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

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