

Title (en)

CLOSURE DEVICE FOR A CONTAINER USING VISCOSITY

Title (de)

VORRICHTUNG ZUM VERSCHLIESSEN EINES BEHÄLTERS DURCH VISKOSITÄT

Title (fr)

DISPOSITIF DE FERMETURE D'UN RÉCIPIENT PAR VISCOSITÉ

Publication

**EP 2266888 A4 20110406 (EN)**

Application

**EP 09731853 A 20090417**

Priority

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Abstract (en)

[origin: EP2266888A2] The present invention relates to a closure device for a container using viscosity. More specifically, the closure device dispenses only the amount desired for use and can prevent spillage even if a user accidentally turns the container over. The closure device according to the present invention comprises: a main body which is inserted in and combined with a neck portion of the container and includes a solution-discharge opening at a central portion of the container; and a disc-shaped fixed plate mounted on an inner side of the main body, which has at least one through-hole. A flow path with a certain depth from the through-hole to the central portion is formed on an upper side of the fixed plate. The closure device can reduce production costs by minimizing components and alleviate user anxiety about upsetting the container. Since the closure device discharges desired amounts of content, waste due to over-discharging can be reduced.

IPC 8 full level

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**B65D 47/06** (2013.01 - EP US); **B65D 47/18** (2013.01 - KR); **B05B 11/047** (2013.01 - EP US)

Citation (search report)

- [AP] WO 2009046553 A1 20090416 - DELTONA INNOVATIONS AG [CH], et al
- [A] WO 2006119315 A2 20061109 - VERNAY LABORATORIES [US], et al
- See references of WO 2009128680A2

Citation (examination)

US 4460101 A 19840717 - TSENG BANG-TSAI [TW]

Cited by

FR3008394A1; EP2699478A1

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**EP 2266888 A2 20101229**; **EP 2266888 A4 20110406**; AU 2009236761 A1 20091022; BR PI0907358 A2 20150728; CA 2720044 A1 20091022;  
CN 101965299 A 20110202; JP 2011518082 A 20110623; KR 100973645 B1 20100802; KR 20090109989 A 20091021;  
MX 2010011076 A 20101221; RU 2010141717 A 20120420; US 2011031251 A1 20110210; WO 2009128680 A2 20091022;  
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JP 2011504932 A 20090417; KR 20080035533 A 20080417; KR 2009002024 W 20090417; MX 2010011076 A 20090417;  
RU 2010141717 A 20090417; US 93690909 A 20090417