

Title (en)

LIQUID-DISPENSING DEVICE INCLUDING A BEARING SURFACE FOR A SPRING

Title (de)

VORRICHTUNG ZUM VERSPRÜHEN VON FLÜSSIGKEITEN, DIE EINE AUFLAGEOBERFLÄCHE FÜR EINE FEDER UMFASST

Title (fr)

DISPOSITIF DE DISTRIBUTION DE LIQUIDE COMPRENANT UNE SURFACE D'APPUI POUR UN RESSORT

Publication

**EP 3090957 B1 20230809 (FR)**

Application

**EP 16175337 A 20100909**

Priority

- FR 0956278 A 20090911
- EP 10768998 A 20100909
- FR 2010051877 W 20100909

Abstract (en)

[origin: WO2011030062A1] The invention relates to a liquid dispensing device (10) including a valve (16) comprising: a flap-forming portion (54) that can prevent or allow the release of liquid from the device; and an attachment edge (50) for permanently attaching the valve (16) to a container (13), said attachment edge including a tubular attachment wall (50) sandwiched between an inner tubular wall (60) and an outer tubular wall (30).

IPC 8 full level

**B05B 11/00** (2023.01); **B65D 47/20** (2006.01)

CPC (source: BR EP US)

**B05B 11/00444** (2018.08 - BR EP US); **B65D 47/2031** (2013.01 - BR EP US); **B65D 47/2081** (2013.01 - EP US); **B65D 47/2081** (2013.01 - BR); **Y10T 29/49826** (2015.01 - EP US)

Citation (opposition)

Opponent : [Aptar Radolfzell GmbH](#)

- DE 10157423 A1 20030605 - KNAUER ROLAND [DE], et al
- WO 2008015505 A1 20080207 - MRP MEDICAL RES & PROMOTION ES [LI], et al
- US 2003029890 A1 20030213 - OLECHOWSKI GREGORY M [US], et al
- US 6371340 B1 20020416 - PATEMAN DAVID DENNIS [GB], et al

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 SE SI SK SM TR

DOCDB simple family (publication)

**WO 2011030062 A1 20110317**; BR 112012005428 A2 20160412; BR 112012005428 B1 20190709; CN 102712395 A 20121003; CN 102712395 B 20150211; EP 2475585 A1 20120718; EP 2475585 B1 20180117; EP 3090956 A1 20161109; EP 3090957 A1 20161109; EP 3090957 B1 20230809; EP 4147990 A1 20230315; ES 2961272 T3 20240311; FR 2950036 A1 20110318; FR 2950036 B1 20111216; IN 2150DEN2012 A 20150807; JP 2013504496 A 20130207; JP 5739890 B2 20150624; PL 3090957 T3 20240103; US 2012223106 A1 20120906; US 8863998 B2 20141021

DOCDB simple family (application)

**FR 2010051877 W 20100909**; BR 112012005428 A 20100909; CN 201080048219 A 20100909; EP 10768998 A 20100909; EP 16175332 A 20100909; EP 16175337 A 20100909; EP 22201129 A 20100909; ES 16175337 T 20100909; FR 0956278 A 20090911; IN 2150DEN2012 A 20120312; JP 2012528426 A 20100909; PL 16175337 T 20100909; US 201213418159 A 20120312