

Title (en)
Universal closing device

Title (de)
Universelle Verschlussvorrichtung

Title (fr)
Dispositif de fermeture universel

Publication
EP 2478961 B1 20150408 (DE)

Application
EP 11178384 A 20110823

Priority
DE 102011000216 A 20110119

Abstract (en)
[origin: EP2478961A1] The universal closure device (1) has a shaft part (6) with end regions, where the shaft part is extended in direction of a longitudinal axis (5) and the end regions are provided at a distance from each other in direction of the longitudinal axis. A supporting element (31) is arranged between a sealing element (12,16) and an outer surface (9) of the shaft part.

IPC 8 full level
B01L 3/00 (2006.01); **B65D 39/00** (2006.01); **B65D 39/04** (2006.01)

CPC (source: EP KR US)
B01L 3/50825 (2013.01 - EP KR US); **B65D 39/0052** (2013.01 - US); **B65D 39/04** (2013.01 - EP US); **B01L 2200/023** (2013.01 - EP US);
B65D 2539/003 (2013.01 - EP US); **B65D 2539/005** (2013.01 - EP US)

Cited by
AT14196U1

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)

EP 2478961 A1 20120725; EP 2478961 B1 20150408; BR 112013018392 A2 20161011; BR 112013018392 B1 20200630;
BR 112013018392 B8 20200901; CN 103415345 A 20131127; CN 103415345 B 20150826; DE 102011000216 A1 20120719;
ES 2541487 T3 20150721; HK 1188178 A1 20140425; JP 2014507342 A 20140327; JP 5827345 B2 20151202; KR 101563296 B1 20151026;
KR 20140035886 A 20140324; US 2014001184 A1 20140102; US 8910818 B2 20141216; WO 2012097396 A1 20120726

DOCDB simple family (application)

EP 11178384 A 20110823; AT 2012050009 W 20120118; BR 112013018392 A 20120118; CN 201280011009 A 20120118;
DE 102011000216 A 20110119; ES 11178384 T 20110823; HK 14101433 A 20140214; JP 2013549674 A 20120118;
KR 20137021822 A 20120118; US 201213980371 A 20120118