

Title (en)
Discharge device

Title (de)
Austragvorrichtung

Title (fr)
Dispositif de sortie

Publication
EP 1987888 A3 20100602 (DE)

Application
EP 08007090 A 20080410

Priority
DE 102007021415 A 20070430

Abstract (en)
[origin: EP1987888A2] The device (10) has a pump device (32) with a variable volume pump chamber (34), and a discharge opening (54) provided for the liquid medium. A feed path (40) is positioned between the pump device and the discharge opening. An outlet valve is designed to open the discharge opening as a function of the pressure in the feed path. A gas-permeable and liquid-tight air outlet (80) connects the pump chamber or the feed path to an external environment, where the air outlet is provided in a region of the feed path.

IPC 8 full level
B05B 11/00 (2006.01); **B67D 7/58** (2010.01)

CPC (source: EP US)
B05B 11/0067 (2013.01 - EP US); **B05B 11/1023** (2023.01 - EP US); **B05B 11/1061** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US);
B05B 11/0044 (2018.07 - EP US)

Citation (search report)

- [XAI] WO 9613334 A1 19960509 - YOSHINO KOGYOSHO CO LTD [JP], et al
- [XA] EP 0500249 A1 19920826 - PILKINGTON VISIONCARE INC [US]
- [XA] EP 0696480 A1 19960214 - SOFAB [FR]
- [X] US 5711461 A 19980127 - FOSTER DONALD D [US], et al
- [XA] EP 0701950 A2 19960320 - CANYON CORP [JP]
- [E] EP 1914006 A2 20080423 - REXAM DISPENSING SYS [FR]
- [A] US 4830284 A 19890516 - MAERTE LEO [DE]

Cited by
EP3243571A1; CN107352152A; JP2017202875A

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 1987888 A2 20081105; EP 1987888 A3 20100602; EP 1987888 B1 20110525; AT E510628 T1 20110615; DE 102007021415 A1 20081106;
ES 2364786 T3 20110914; US 2008264975 A1 20081030; US 8038036 B2 20111018

DOCDB simple family (application)
EP 08007090 A 20080410; AT 08007090 T 20080410; DE 102007021415 A 20070430; ES 08007090 T 20080410; US 15055908 A 20080429