

Title (en)
LIQUID PRODUCT DISPENSER

Title (de)
ABGABEVORRICHTUNG FÜR FLÜSSIGE PRODUKTE

Title (fr)
DISTRIBUTEUR DE PRODUIT LIQUIDE

Publication
EP 1315579 A1 20030604 (FR)

Application
EP 01967449 A 20010907

Priority
• FR 0102781 W 20010907
• FR 0011470 A 20000908

Abstract (en)
[origin: WO0220171A1] The invention concerns a liquid product dispenser comprising a reservoir (R1, R2) provided, in its upper part, with a discharge orifice (V) closed by an intake valve (a) and emerging into a metering chamber (10) with variable volume communicating via an exhaust valve (e) with an discharge conduit (c) provided in the dispensing head (T). The invention is characterised in that said metering chamber (10) is delimited by the wall of a bellows (1) at least partly elastically deformable.

IPC 1-7
B05B 11/00

IPC 8 full level
B65D 83/76 (2006.01); **B05B 11/00** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)
B05B 11/0064 (2013.01 - EP US); **B05B 11/1035** (2023.01 - EP US); **B05B 11/1067** (2023.01 - EP US)

Citation (search report)
See references of WO 0220171A1

Cited by
WO2021206254A1; US11660627B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0220171 A1 20020314; AT E267055 T1 20040615; AU 8782801 A 20020322; BR 0113885 A 20030715; BR 0113885 B1 20100309; CA 2422136 A1 20020314; CN 1181929 C 20041229; CN 1452516 A 20031029; DE 60103411 D1 20040624; DE 60103411 T2 20050317; DK 1315579 T3 20040927; EP 1315579 A1 20030604; EP 1315579 B1 20040519; ES 2223909 T3 20050301; FR 2813863 A1 20020315; FR 2813863 B1 20030321; HK 1061373 A1 20040917; JP 2004508175 A 20040318; MX PA03001980 A 20040910; PT 1315579 E 20041029; US 2004094578 A1 20040520; US 6805267 B2 20041019

DOCDB simple family (application)
FR 0102781 W 20010907; AT 01967449 T 20010907; AU 8782801 A 20010907; BR 0113885 A 20010907; CA 2422136 A 20010907; CN 01815215 A 20010907; DE 60103411 T 20010907; DK 01967449 T 20010907; EP 01967449 A 20010907; ES 01967449 T 20010907; FR 0011470 A 20000908; HK 04102980 A 20040428; JP 2002524638 A 20010907; MX PA03001980 A 20010907; PT 01967449 T 20010907; US 36297103 A 20030306