

Title (en)

NEEDLE VALVE PUMP FOR DISPENSING LIQUID PRODUCT

Title (de)

NADELVENTILPUMPE ZUR ABGABE EINES FLÜSSIGEN PRODUKTS

Title (fr)

POMPE A POINTEAU POUR LA DISTRIBUTION DE PRODUIT LIQUIDE

Publication

EP 1881872 A1 20080130 (FR)

Application

EP 06743777 A 20060509

Priority

- FR 2006001029 W 20060509
- FR 0551308 A 20050520

Abstract (en)

[origin: US7780044B2] The invention is a pump for dispensing liquid or semi-liquid product, designed and intended to be used in particular in the pharmaceutical or cosmetic field. The pump has a needle valve and a dispensing head manually movable on a pump housing between an inactive position and a dispensing position. The head includes a first cylinder forming a metering chamber for the pump, which draws in fluid from a container's reservoir by an intake tube and a check valve. A piston sealingly secured to the metering chamber pushes fluid through a passage into a second dosage chamber that is sealed from the dispensing orifice by a biased needle valve that is biased by a spring that is sealingly isolated from the second dosage chamber, the chamber that holds the elastic spring has a conduit that allows a user to test and verify that the second dosage chamber does not leak.

IPC 8 full level

B05B 11/00 (2006.01)

CPC (source: EP US)

B05B 11/1004 (2023.01 - EP US); **B05B 11/1016** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US); **B05B 11/1067** (2023.01 - EP US); **Y10T 137/85978** (2015.04 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2885887 A1 20061124; FR 2885887 B1 20101105; AT E517696 T1 20110815; CN 101180133 A 20080514; CN 101180133 B 20100519; EP 1881872 A1 20080130; EP 1881872 B1 20110727; HK 1112676 A1 20080912; JP 2008540008 A 20081120; JP 5011280 B2 20120829; US 2008115845 A1 20080522; US 7780044 B2 20100824; WO 2006125880 A1 20061130

DOCDB simple family (application)

FR 0551308 A 20050520; AT 06743777 T 20060509; CN 200680017548 A 20060509; EP 06743777 A 20060509; FR 2006001029 W 20060509; HK 08107777 A 20080715; JP 2008511745 A 20060509; US 94280607 A 20071120