

Title (en)

PUMP, DISPENSER AND CORRESPONDING PROCESS FOR DISPENSING A LIQUID OR VISCOUS MASS

Title (de)

PUMPE, SPENDEAPPARAT UND ENTSPRECHENDES VERFAHREN ZUR ENTNAHME VON FLÜSSIGKEIT ODER PASTÖSER MASSE

Title (fr)

POMPE, APPAREIL DE DISTRIBUTION ET PROCEDE CORRESPONDANT POUR EXTRAIRE DU LIQUIDE OU UNE MASSE PATEUSE

Publication

**EP 1744834 B1 20070919 (DE)**

Application

**EP 05739530 A 20050406**

Priority

- EP 2005003592 W 20050406
- DE 102004024471 A 20040514

Abstract (en)

[origin: WO2005110620A1] In order to achieve an improved sealing effect in a pump for dispensing a liquid from a reservoir (1) and to reduce the residual quantity in the reservoir (1), the pump has a cylinder (5), a hollow piston (6) arranged inside the cylinder (5), an outer auxiliary tube (7) arranged at least in part inside the hollow piston (6) and an inner application tube (8) arranged at least in part inside the outer auxiliary tube (7), the inner application tube (8) being movable relative to the outer auxiliary tube (7) and the outer auxiliary tube (7) being movable relative to the hollow piston (6).

IPC 8 full level

**B05B 11/00** (2006.01); **A47K 5/12** (2006.01)

CPC (source: EP US)

**A47K 5/1207** (2013.01 - EP US); **B05B 11/0059** (2013.01 - EP US); **B05B 11/1023** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US); **B05B 11/1001** (2023.01 - 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 MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005110620 A1 20051124**; AT E373522 T1 20071015; DE 102004024471 B3 20051222; DE 502005001543 D1 20071031; EP 1744834 A1 20070124; EP 1744834 B1 20070919; US 2007172369 A1 20070726; US 7628294 B2 20091208

DOCDB simple family (application)

**EP 2005003592 W 20050406**; AT 05739530 T 20050406; DE 102004024471 A 20040514; DE 502005001543 T 20050406; EP 05739530 A 20050406; US 56893405 A 20050406