

Title (en)  
FLUID PRODUCT DISPENSING PUMP

Title (de)  
AUSGABEPUMPE FÜR MEDIEN

Title (fr)  
POMPE DE DISTRIBUTION DE PRODUIT FLUIDE

Publication  
**EP 1444046 B1 20080416 (FR)**

Application  
**EP 02785589 A 20021106**

Priority  
• FR 0203797 W 20021106  
• FR 0114407 A 20011107

Abstract (en)  
[origin: WO03039756A2] The invention concerns a fluid product dispensing pump, comprising a pump body (10) including a metering chamber (20) defined between an upper piston (30) sliding in an upper part (11) of the pump body (10) and a lower piston (40) sliding in a lower part (12) of the pump body (10), said lower piston (40) co-operating with a spring (50) arranged in said lower part (12) of the pump body (10). The invention is characterized in that the spring (50) is isolated from any contact with the fluid product, the lower part (12) of the pump body comprising air recycling means (15) enabling air intake and/or discharge when the pump is actuated, isolating means (60) being provided to prevent the fluid products from penetrating into said air recycling means. (15).

IPC 8 full level  
**B05B 1/00** (2006.01); **F04B 9/14** (2006.01); **B05B 11/00** (2006.01); **B65D 47/34** (2006.01)

CPC (source: EP US)  
**B05B 11/1019** (2023.01 - EP US); **B05B 11/104** (2023.01 - EP US); **B05B 11/1074** (2023.01 - EP US)

Citation (examination)  
DE 2838613 A1 19800313 - SELTMANN HANS JUERGEN

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**WO 03039756 A2 20030515; WO 03039756 A3 20031002**; AU 2002350878 A1 20030519; CN 1281464 C 20061025; CN 1578748 A 20050209; DE 60226163 D1 20080529; DE 60226163 T2 20081113; EP 1444046 A2 20040811; EP 1444046 B1 20080416; FR 2831876 A1 20030509; FR 2831876 B1 20040423; JP 2005507986 A 20050324; US 2005079072 A1 20050414; US 7172097 B2 20070206

DOCDB simple family (application)  
**FR 0203797 W 20021106**; AU 2002350878 A 20021106; CN 02821745 A 20021106; DE 60226163 T 20021106; EP 02785589 A 20021106; FR 0114407 A 20011107; JP 2003541640 A 20021106; US 49448304 A 20040430