

Title (en)  
Pressure pump

Title (de)  
Verdrängerpumpe

Title (fr)  
Pompe volumétrique

Publication  
**EP 2617996 B1 20160914 (DE)**

Application  
**EP 13000028 A 20130104**

Priority  
DE 102012000676 A 20120117

Abstract (en)  
[origin: EP2617996A1] The pump (1) has a guide sleeve (15) passed through openings (13, 14) formed on opposite sides (11, 12) of a magnetic return element (10). A ball-cap-shaped pump chamber (6) formed by a portion of the sleeve is passed through one opening. A portion of the chamber facing away from a stator (17) is passed through another opening. The sleeve and the stator are made of magnetically conductive material and magnetically disconnected from each other by an insulator casing (18). The insulator casing is formed by a portion of the guide sleeve and made of magnetically non-conductive material. The pump comprises a lubricating layer made of PTFE or a molybdenum disulfide layer.

IPC 8 full level  
**F04B 35/04** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01)

CPC (source: EP US)  
**F04B 17/03** (2013.01 - US); **F04B 17/042** (2013.01 - EP); **F04B 35/045** (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US)

Citation (examination)  
DE 102007030311 A1 20090102 - KNF FLODOS AG [CH]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2617996 A1 20130724**; **EP 2617996 B1 20160914**; CN 103206358 A 20130717; CN 103206358 B 20161228;  
DE 102012000676 A1 20130718; JP 2013148083 A 20130801; JP 6099401 B2 20170322; US 2013183173 A1 20130718;  
US 9341172 B2 20160517

DOCDB simple family (application)  
**EP 13000028 A 20130104**; CN 201310128571 A 20130117; DE 102012000676 A 20120117; JP 2013001748 A 20130109;  
US 201313742623 A 20130116