

Title (en)

PERMANENT MAGNET LINEAR PISTON PUMP

Title (de)

LINEARE KOLBENPUMPE MIT EINEM DAUERMAGNETEN

Title (fr)

POMPE À PISTON À MOUVEMENT LINÉAIRE ET À AIMANTS PERMANENTS

Publication

EP 2878818 B1 20170816 (EN)

Application

EP 12881862 A 20121015

Priority

- CN 201220368590 U 20120727
- CN 2012082961 W 20121015

Abstract (en)

[origin: EP2878818A1] A permanent magnet linear piston pump comprises a piston body (1), a cylinder body (2), a permanent magnet assembly (6) and an electromagnetic coil (3). The piston body is arranged in a piston cavity (201) by a liquid sealing movable fit mode. An inner magnetic body (603) and an outer magnetic body (604) are disposed on at least one side surface of the cylinder body (2). An electromagnetic coil (3) is axially and distributively wound around a coil supporting member which is disposed at an outside surface of the cylinder body (2). The electromagnetic coil (3) is disposed between the inner magnetic body (603) and the outer magnetic body (604) . By the above structure, the pump needs not subject the electromagnetic coil (3) to a sealing treatment, thereby attaining a simple structure, more convenient manufacture, lower costs, a reliable operation and convenient maintenance.

IPC 8 full level

F04B 17/04 (2006.01); **F04B 53/14** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP US)

F04B 17/042 (2013.01 - EP US); **F04B 17/044** (2013.01 - EP US); **F04B 53/14** (2013.01 - EP US); **F04B 53/16** (2013.01 - EP US)

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 2878818 A1 20150603; **EP 2878818 A4 20160511**; **EP 2878818 B1 20170816**; CN 202789501 U 20130313; ES 2644928 T3 20171201; US 2015125321 A1 20150507; WO 2014015566 A1 20140130

DOCDB simple family (application)

EP 12881862 A 20121015; CN 2012082961 W 20121015; CN 201220368590 U 20120727; ES 12881862 T 20121015; US 201214389651 A 20121015