

Title (en)
HIGH-PRESSURE PUMP HAVING A FLUID DAMPER

Title (de)
HOCHDRUCKPUMPE MIT EINEM FLUIDDÄMPFER

Title (fr)
POMPE HAUTE PRESSION COMPRENANT UN AMORTISSEUR DE FLUIDE

Publication
EP 3430261 A1 20190123 (DE)

Application
EP 17701506 A 20170126

Priority
• DE 102016204128 A 20160314
• EP 2017051651 W 20170126

Abstract (en)
[origin: WO2017157554A1] The invention relates to a high-pressure pump, having a pump housing (2), on which a pump cylinder head (4) having a pump cylinder (3) is arranged, wherein a pump push rod (26) is arranged in a pump cylinder guide (27) of the pump cylinder (3), which pump push rod interacts with a pump working chamber (36) and with a drive unit compartment (8) arranged in the pump housing (2), and wherein the pump working chamber (36) is fluidically connected to the drive unit chamber (8) by means of an electromagnetically actuatable suction valve (6) and the high-pressure pump has a fluid damper. According to the invention, a high-pressure pump is provided which is improved with respect to damping of the pressure fluctuations or pressure pulsations of a fluid to be conveyed. This is achieved in that the fluid damper is designed as at least one membrane (38a, 38b), which is inserted into a damper chamber (19) recessed into the pump housing (2).

IPC 8 full level
F04B 11/00 (2006.01); **F02M 37/00** (2006.01); **F02M 55/04** (2006.01); **F04B 53/16** (2006.01)

CPC (source: EP KR)
F02M 55/04 (2013.01 - EP KR); **F02M 59/102** (2013.01 - EP KR); **F04B 11/0016** (2013.01 - EP KR); **F04B 53/16** (2013.01 - EP KR);
F02M 37/0041 (2013.01 - EP KR); **F02M 2200/31** (2013.01 - EP KR)

Citation (search report)
See references of WO 2017157554A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102016204128 A1 20170914; CN 108779766 A 20181109; CN 108779766 B 20200717; EP 3430261 A1 20190123;
EP 3430261 B1 20220126; KR 20180121982 A 20181109; WO 2017157554 A1 20170921

DOCDB simple family (application)
DE 102016204128 A 20160314; CN 201780017487 A 20170126; EP 17701506 A 20170126; EP 2017051651 W 20170126;
KR 20187029149 A 20170126