

Title (en)
Pumping head

Title (de)
Pumpkopf

Title (fr)
Tête de pompage

Publication
EP 2492506 B1 20190410 (EN)

Application
EP 11156280 A 20110228

Priority
EP 11156280 A 20110228

Abstract (en)
[origin: EP2492506A1] A pumping head (200;300) for a high-pressure fuel pump is disclosed. The pumping head comprises a head housing (204) having a bore (206), a pumping element (202) arranged for reciprocal linear movement along a pumping axis (Q), a first pumping chamber (240) and a second pumping chamber (242), inlet means (290;314) for delivering fluid to the first pumping chamber (240), outlet means (246,248) for conveying fluid from the second pumping chamber (242) to an outlet (244) of the pumping head, and transfer means (260,262) for conveying fluid from the first pumping chamber (240) to the second pumping chamber (242). Each forward stroke of the pumping element (202) increases a volume of the first pumping chamber (240) and decreases a volume of the second pumping chamber (242), thereby to cause fluid to flow into the first pumping chamber (240) from the inlet means (290;314) and to cause fluid to flow out of the second pumping chamber (242) to the outlet means (246,248). Each return stroke of the pumping element (202) decreases the volume of the first pumping chamber (240) and increases the volume of the second pumping chamber (242), thereby to cause fluid to flow from the first chamber (240) to the second chamber (242) through the transfer means (260,262).

IPC 8 full level
F04B 53/16 (2006.01); **F02M 59/10** (2006.01); **F04B 1/04** (2006.01); **F04B 53/12** (2006.01)

CPC (source: EP)
F04B 1/0421 (2013.01); **F04B 1/0452** (2013.01); **F04B 53/12** (2013.01); **F04B 53/16** (2013.01); **F02M 59/102** (2013.01)

Citation (examination)
• US 6109896 A 20000829 - SCHULLER WOLFGANG [DE], et al
• US 2009269227 A1 20091029 - ALAZE NORBERT [DE], et al

Cited by
KR20180132755A; US2019093615A1; EP3239514A1; GB2549745A; WO2017174405A1; WO2017174402A1; US10859049B2

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)
EP 2492506 A1 20120829; EP 2492506 B1 20190410; CN 102654093 A 20120905; CN 102654093 B 20141001

DOCDB simple family (application)
EP 11156280 A 20110228; CN 201210097084 A 20120228