

Title (en)
Pumping head

Title (de)
Pumpkopf

Title (fr)
Tête de pompe

Publication
EP 2492492 A1 20120829 (EN)

Application
EP 11156276 A 20110228

Priority
EP 11156276 A 20110228

Abstract (en)
A pumping head (100; 200) for a high-pressure fuel pump is disclosed. The pumping head comprises a head housing (101; 201) having a bore (106), a pumping element (104) slidably received within the bore (106) and arranged for reciprocal linear movement along a pumping axis (A), a pumping chamber (110) defined in part by the pumping element (104) and in part by the bore (106), wherein a forward stroke of the pumping element (104) causes a reduction in volume of the pumping chamber (110), and a return stroke of the pumping element (104) causes an increase in volume of the pumping chamber (110), inlet means (130; 230) for delivering fluid at relatively low pressure to the pumping chamber (110) during the return stroke. and outlet means (114) for receiving fluid at relatively high pressure from the pumping chamber (110) during the forward stroke and for delivering the relatively high-pressure fluid to an outlet (128) of the pumping head. The pumping element (104) cooperates with the inlet means (130; 230) to restrict the flow of fluid between the inlet means (130; 230) and the pumping chamber (110) during at least a part of the forward stroke so that the inlet means is not exposed to the relatively high-pressure fluid. Preferably, the outlet means (114, 124) is arranged to convey fluid from the pumping chamber (110) to the outlet (128) in a fluid flow direction that is substantially coaxial with the pumping axis (A).

IPC 8 full level
F02M 59/20 (2006.01); **F02M 59/26** (2006.01); **F02M 59/34** (2006.01); **F02M 59/46** (2006.01)

CPC (source: EP)
F02M 59/205 (2013.01); **F02M 59/34** (2013.01); **F02M 59/462** (2013.01); **F02M 2700/1352** (2013.01)

Citation (applicant)
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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 2492492 A1 20120829; WO 2012116959 A1 20120907

DOCDB simple family (application)
EP 11156276 A 20110228; EP 2012053284 W 20120227