

Title (en)

HIGH-PRESSURE FUEL PUMP FOR AN INTERNAL COMBUSTION ENGINE HAVING DIRECT INJECTION

Title (de)

KRAFTSTOFFHOCHDRUCKPUMPE FÜR EINE BRENNKRAFTMASCHINE MIT DIREKTEINSPRITZUNG

Title (fr)

POMPE À CARBURANT À HAUTE PRESSION POUR UN MOTEUR À COMBUSTION INTERNE À INJECTION DIRECTE

Publication

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Application

EP 11791201 A 20111103

Priority

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Abstract (en)

[origin: WO2012059226A1] The invention relates to a high-pressure fuel pump (10) for an internal combustion engine having direct injection of fuel into at least one combustion chamber of the internal combustion engine, wherein the high-pressure fuel pump (10) has the following in succession in the fuel flow direction: a low-pressure connection (12) for a low-pressure fuel for feeding low-pressure fuel to the high-pressure fuel pump (10), a low-pressure fuel pre-flow chamber (14), a pump element (26), and a high-pressure connection (30) for removing fuel from the high-pressure fuel pump (30). The high-pressure fuel pump (10) has a medium-pressure fuel pre-flow chamber (18) and a medium-pressure fuel connection (16), which leads into the medium-pressure fuel pre-flow chamber (18), for feeding medium-pressure fuel to the high-pressure fuel pump (10), wherein a fuel switching valve (20) is disposed and designed such that the fuel switching valve (20) selectively connects the low-pressure fuel pre-flow chamber (14) or the medium-pressure fuel pre-flow chamber (18) in a fluid-conducting manner to the pump element (26).

IPC 8 full level

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Citation (search report)

See references of WO 2012059226A1

Citation (examination)

- DE 102008043930 A1 20100602 - BOSCH GMBH ROBERT [DE]
- US 2011168133 A1 20110714 - PURSIFULL ROSS DYKSTRA [US], et al

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