

Title (en)

A FUEL INJECTION VALVE ARRANGEMENT FOR INTERNAL COMBUSTION ENGINE

Title (de)

KRAFTSTOFFEINSPRITZVENTIL FÜR VERBRENNUNGSMOTOR

Title (fr)

AGENCEMENT DE SOUPAPE D'INJECTION DE CARBURANT POUR MOTEUR À COMBUSTION INTERNE

Publication

EP 3180510 A1 20170621 (EN)

Application

EP 14755107 A 20140815

Priority

FI 2014050626 W 20140815

Abstract (en)

[origin: WO2016024038A1] Invention relates to a fuel injection valve arrangement (10) comprising a fuel injector body (12), a nozzle needle (14) arranged longitudinally movably in a first end of the fuel injector body (12) and surrounded at least partially by a needle chamber (16), the fuel injection valve arrangement (10) further comprises a flow fuse valve unit (20) having an inlet (22) in flow communication with a high-pressure accumulator (30) and an outlet (24) in flow communication with the needle chamber (16), and the flow fuse valve unit (20) is arranged to allow predetermined amount of fuel to flow in a direction from the inlet (22) of the flow fuse valve unit (20) to the outlet (24) of the flow fuse valve unit (20) wherein at least one one-way valve element (40) is integrated with the flow fuse valve unit (20) and arranged to allow fuel to flow in a direction from the outlet (24) of the flow fuse valve unit (20) to the inlet (22) of the flow fuse valve unit (20) in response to a pressure difference between the outlet (24) and the inlet (22) of the flow fuse valve unit (20).

IPC 8 full level

F02M 47/02 (2006.01); **F02M 63/00** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

F02M 47/027 (2013.01); **F02M 63/005** (2013.01); **F02M 63/0215** (2013.01); **F02M 2200/40** (2013.01)

Citation (search report)

See references of WO 2016024038A1

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)

WO 2016024038 A1 20160218; CN 106574591 A 20170419; CN 106574591 B 20181228; EP 3180510 A1 20170621; EP 3180510 B1 20181017

DOCDB simple family (application)

FI 2014050626 W 20140815; CN 201480081037 A 20140815; EP 14755107 A 20140815