Title (en)

Valve assembly

Title (de)

Ventilanordnung

Title (fr)

Ensemble de soupape

Publication

EP 2687712 B1 20151209 (EN)

Application

EP 12177133 A 20120719

Priority

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Abstract (en)

[origin: EP2687712A1] An inlet valve assembly (14) for a high-pressure fuel pump is disclosed. The inlet valve assembly comprises an inlet valve member (28) moveable between open and closed positions to control the fuel flow from a source (24) of low-pressure fuel to a pumping chamber (16) of the fuel pump, and an electromagnetic actuator (50) comprising a core member (52), a solenoid coil (54), and an armature (58) moveable towards the core member (52) in response to energisation of the coil (54). In a first phase of operation, the armature (58) is decoupled from the valve member (28) to allow movement of the armature (58) towards the core member (52) without movement of the valve member (28) and, in a second phase of operation, the armature (58) is coupled to the valve member (28) to carry the valve member (28) towards its closed position. Because the armature (58) is initially decoupled from the valve member (28), variations in concentricity and part dimensions due to manufacturing tolerances can be accommodated without affecting operation of the valve assembly.

IPC 8 full level

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CPC (source: EP)

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CN107407243A; IT201600121614A1; GB2561189A; EP3179092A1; ITUB20156824A1; WO2016058805A1; WO2017067713A1; WO2016131644A1; WO2017067712A1

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