

Title (en)

ELECTROMAGNETIC FUEL-INJECTION VALVE

Title (de)

ELEKTROMAGNETISCHES BRENNSTOFFEINSPRITZVENTIL

Title (fr)

VALVE ÉLECTROMAGNÉTIQUE D'INJECTION DE CARBURANT

Publication

EP 2570648 B1 20170315 (EN)

Application

EP 11780515 A 20110427

Priority

- JP 2010112352 A 20100514
- JP 2011060244 W 20110427

Abstract (en)

[origin: EP2570648A1] In the disclosed electromagnetic fuel-injection valve: a non-magnetic or weakly magnetic guide bush (19) is affixed at the inner periphery of an immobile core (6); the front end of the guide bush (19) protrudes from the suction surface (6a) of the immobile core (6); during excitation of a coil (37), by means of a mobile core (16) being caused to contact the front end of the guide bush (19), the opening boundary of a valve body (15) is defined, and an air gap (g) is formed between the immobile core (6) and the mobile core (16); and a sliding member (20) that is slidably borne at the inner peripheral surface of the guide bush (19) is provided to a valve assembly (V). As a result, a structure-simple electromagnetic fuel injection valve is provided wherein the opening/closing postures of the valve body can be effectively stabilized, and moreover at the time of demagnetization of the coil, valve closing responsiveness can be favorably obtained.

IPC 8 full level

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CPC (source: EP)

F02M 51/0675 (2013.01); **F02M 61/12** (2013.01); **F02M 61/188** (2013.01); **F02M 2200/9069** (2013.01)

Cited by

CN107850021A; US9334842B2; US10330062B2; US10309356B2; US10941739B2; US10808662B2; US10107243B2; DE112014007115B4

Designated contracting state (EPC)

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EP 2570648 A1 20130320; **EP 2570648 A4 20131218**; **EP 2570648 B1 20170315**; CN 102893016 A 20130123; CN 102893016 B 20150121; JP 2011241701 A 20111201; JP 5623784 B2 20141112; MX 2012013236 A 20130124; WO 2011142258 A1 20111117

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