Title (en)

Method for recognising the closing point of an injection valve body in a fuel injection valve and fuel injection valve

Title (de)

Verfahren zur Erkennung des Schließzeitpunktes eines Einspritzventilgliedes in einem Kraftstoffeinspritzventil sowie Kraftstoffeinspritzventil

Title (fr)

Procédé de reconnaissance du moment de fermeture d'un élément de soupape d'injection dans une soupape d'injection de carburant et soupape d'injection de carburant

Publication

EP 2357353 B1 20170809 (DE)

Application

EP 11150104 A 20110104

Priority

DE 102010001960 A 20100216

Abstract (en)

[origin: EP2357353A2] The method involves controlling an injection valve member by a solenoid valve whose anchor bolt is axially and displaceably mounted on a spring element (4). The anchor bolt is made to impact by axial force that is directly proportional to hydraulic pressure in a control chamber (3). The spring element and coils (7) of magnetic circuits are coupled by a coupling unit (6). Detectable parameters change such as change of coil voltage or coil current are caused in the magnetic circuits during elastic deformation of the spring element over the coupling unit. An independent claim is also included for a fuel injection valve for injecting fuel into a combustion chamber of an internal combustion engine.

IPC 8 full level

F02M 51/00 (2006.01); **F02D 41/20** (2006.01); **F02M 47/02** (2006.01); **F02M 57/00** (2006.01); **F02M 63/00** (2006.01); **F02M 65/00** (2006.01)

CPC (source: EP)

F02D 41/20 (2013.01); **F02M 47/027** (2013.01); **F02M 51/005** (2013.01); **F02M 57/005** (2013.01); **F02M 63/0017** (2013.01); **F02M 63/0073** (2013.01); **F02M 65/005** (2013.01); F02D 2041/2055 (2013.01); F02D 2200/063 (2013.01)

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EP 2357353 A2 20110817; **EP 2357353 A3 20150826**; **EP 2357353 B1 20170809**; DE 102010001960 A1 20110818

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