

Title (en)

METHOD AND DEVICE FOR OFFSETTING BOUNCE EFFECTS IN A PIEZO-ACTUATED INJECTION SYSTEM OF AN INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KOMPENSATION VON PRELLEFFEKTEN IN EINEM PIEZOGESTEUERTEN EINSPRITZSYSTEM EINER VERBRENNUNGSKRAFTMASCHINE

Title (fr)

PROCEDE ET DISPOSITIF DE COMPENSATION DES EFFETS DE REBOND DANS UN SYSTEME D'INJECTION A COMMANDE PIEZO-ELECTRIQUE D'UN MOTEUR A COMBUSTION INTERNE

Publication

**EP 1828582 A1 20070905 (DE)**

Application

**EP 05822186 A 20051222**

Priority

- EP 2005013959 W 20051222
- DE 102004062073 A 20041223

Abstract (en)

[origin: WO2006069750A1] The invention relates to a method and a device for offsetting bounce effects in a piezo-actuated injection system of an internal combustion engine using a control valve actuated by a piezoelectric actuator. The inventive method comprises the following steps: detecting an actual bounce behavior of the control valve, and determining and offsetting a deviation between the actual bounce behavior and a desired bounce behavior of the control valve, thereby generating an actuation information for the control valve which influences a speed characteristic of a needle of the control valve. The invention also relates to a device for carrying out the inventive method.

IPC 8 full level

**F02D 41/20** (2006.01); **H01L 41/04** (2006.01)

CPC (source: EP US)

**F02D 41/2096** (2013.01 - EP US); **F02D 2041/2034** (2013.01 - EP US); **F02D 2041/2037** (2013.01 - EP US); **F02D 2041/2051** (2013.01 - EP US)

Citation (search report)

See references of WO 2006069750A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

**WO 2006069750 A1 20060706**; DE 102004062073 A1 20060713; DE 102004062073 B4 20150813; EP 1828582 A1 20070905; EP 1828582 B1 20150225; US 2010063709 A1 20100311; US 8239115 B2 20120807

DOCDB simple family (application)

**EP 2005013959 W 20051222**; DE 102004062073 A 20041223; EP 05822186 A 20051222; US 72232305 A 20051222