

Title (en)
ELECTROMAGNETICALLY ACTIVATED VALVE

Title (de)
ELEKTROMAGNETISCH BETÄTIGBARES VENTIL

Title (fr)
SOUPAPE À ACTIONNEMENT ÉLECTROMAGNÉTIQUE

Publication
EP 2205853 B1 20151209 (DE)

Application
EP 08804800 A 20080926

Priority
• EP 2008062923 W 20080926
• DE 102007050819 A 20071024

Abstract (en)
[origin: WO2009053211A1] The invention relates to an electromagnetically activated valve, particularly a fuel injection valve for fuel injection systems of internal combustion engines. The valve comprises an electromagnetic activating element having a magnetic coil (1), a stationary core (2), a valve casing (5), and a movable armature (17) for activating a valve closing body (19) which interacts with a valve seat surface (16) provided on a valve seat body (15). The valve further comprises a return spring (25) for returning the valve closing body (19) until said body rests on the valve seat surface (16). The return spring (25) and an inner longitudinal bore (23) of the armature (17) are matched with each other such that the armature (17) is guided during the axial movement thereof exclusively along the return spring (25). The valve is suitable as a fuel injection valve, particularly for use in fuel injection systems of mixture-compressing, spark-ignited internal combustion engines.

IPC 8 full level
F02M 51/06 (2006.01); **F02M 61/12** (2006.01)

CPC (source: EP US)
F02M 51/0667 (2013.01 - EP US); **F02M 61/12** (2013.01 - EP US); **F02M 2200/50** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102007050819 A1 20090430; BR PI0818382 A2 20150422; CN 101835970 A 20100915; CN 101835970 B 20120711;
EP 2205853 A1 20100714; EP 2205853 B1 20151209; JP 2011501036 A 20110106; JP 5114571 B2 20130109; US 2010301247 A1 20101202;
US 8646749 B2 20140211; WO 2009053211 A1 20090430

DOCDB simple family (application)
DE 102007050819 A 20071024; BR PI0818382 A 20080926; CN 200880112908 A 20080926; EP 08804800 A 20080926;
EP 2008062923 W 20080926; JP 2010530384 A 20080926; US 73420408 A 20080926