

Title (en)

Injector for injecting fluid

Title (de)

Injektor zum Einspritzen von Flüssigkeit

Title (fr)

Injecteur pour injection de fluides

Publication

EP 2511515 A1 20121017 (EN)

Application

EP 11162447 A 20110414

Priority

EP 11162447 A 20110414

Abstract (en)

An injector for injecting fluid comprises: - a valve needle (6), being axially moveable and being operable to prevent a fluid injection in a closing position and to permit the fluid injection in further positions, - an armature (3) being mechanically coupled to the valve needle (6), - a valve body (4) that comprises a recess (5) which takes in the valve needle (6), - a first valve spring (9) that is mechanically coupled to the armature (3) with a first end (12) and mechanically coupled to a damping element (11) with an opposed second end (13); - a second valve spring (10) that is mechanically coupled to the damping element (11) with a first end (14) and mechanically coupled to the valve body (4) with an opposed second end (15).

IPC 8 full level

F02M 51/06 (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP)

F02M 51/0671 (2013.01); **F02M 51/0685** (2013.01); **F02M 51/061** (2013.01); **F02M 2200/304** (2013.01); **F02M 2200/306** (2013.01)

Citation (search report)

- [X] DE 19948238 A1 20010419 - BOSCH GMBH ROBERT [DE]
- [A] WO 2006008208 A1 20060126 - BOSCH GMBH ROBERT [DE], et al
- [A] WO 8910478 A1 19891102 - SIEMENS BENDIX AUTOMOTIVE ELEC [US]

Cited by

US2018291851A1; CN108138715A; KR20180066223A; US10731614B2; WO2017063977A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2511515 A1 20121017

DOCDB simple family (application)

EP 11162447 A 20110414