

Title (en)

Electromagnetic valve actuator in an internal combustion engine

Title (de)

Elektromagnetischer Hubventilaktuator in einer Brennkraftmaschine

Title (fr)

Actionneur électromécanique de soupape de moteur à combustion interne

Publication

**EP 1561915 A3 20080903 (FR)**

Application

**EP 05300063 A 20050126**

Priority

FR 0450201 A 20040203

Abstract (en)

[origin: EP1561915A2] The actuator has two polarized electromagnets (18, 26), each with a permanent magnet to maintain a magnetic chuck of a valve when the valve is in closed position in the absence of current in a coil of the electromagnet. A defluxing current opposing the effect of the permanent magnet is applied to the coil of either of the electromagnets to move the valve from open to closed position or inversely. A spring permits switching of the valve. An independent claim is also included for an engine comprising a valve actuator.

IPC 8 full level

**F01L 9/20** (2021.01)

CPC (source: EP US)

**F01L 9/20** (2021.01 - EP US)

Citation (search report)

- [X] EP 1010866 A2 20000621 - TOYOTA MOTOR CO LTD [JP]
- [XY] EP 1174595 A1 20020123 - PEUGEOT CITROEN AUTOMOBILES SA [FR]
- [Y] US 2003080306 A1 20030501 - YOEDA KEIJI [JP], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06 30 April 1998 (1998-04-30)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

**EP 1561915 A2 20050810; EP 1561915 A3 20080903; EP 1561915 B1 20110105;** AT E494459 T1 20110115; DE 602005025706 D1 20110217; ES 2359250 T3 20110519; FR 2865763 A1 20050805; FR 2865763 B1 20100820; US 2005199198 A1 20050915; US 7111596 B2 20060926

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