

Title (en)

Electromagnetic valve actuator in an internal combustion engine

Title (de)

Elektromagnetischer Hubventilaktuator in einer Brennkraftmaschine

Title (fr)

Perfectionnements apportés à un actionneur électromécanique de soupape de moteur à combustion interne

Publication

EP 1561914 A3 20080903 (FR)

Application

EP 05300062 A 20050126

Priority

FR 0450202 A 20040203

Abstract (en)

[origin: EP1561914A2] The actuator has two polarized electromagnets (18, 26), each with a permanent magnet. A permanent magnet (22) of the electromagnet (18) permits to maintain a magnetic chuck (10) of a valve in a closed position in the absence of current in a coil (24) of the electromagnet (18). The electromagnet (26) is such that it requires a non-zero current in its coil (32) for maintaining the valve in open position. An independent claim is also included for an engine comprising an inlet and/or exhaust 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] DE 3928066 A1 19910228 - BINDER MAGNETE [DE]
- [X] EP 0405191 A1 19910102 - FEV MOTORENTECH GMBH & CO KG [DE]
- [XY] EP 1174595 A1 20020123 - PEUGEOT CITROEN AUTOMOBILES SA [FR]
- [Y] US 2003080306 A1 20030501 - YOEDA KEIJI [JP], et al
- [X] EP 1010866 A2 20000621 - TOYOTA MOTOR CO LTD [JP]

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 1561914 A2 20050810; EP 1561914 A3 20080903; EP 1561914 B1 20100825; AT E479014 T1 20100915; DE 602005023085 D1 20101007; ES 2350186 T3 20110119; FR 2865764 A1 20050805; FR 2865764 B1 20080111; US 2005166873 A1 20050804; US 7047919 B2 20060523

DOCDB simple family (application)

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