

Title (en)

Electromagnetic actuator for valve drive in an internal combustion engine

Title (de)

ElektromagnetischerAktuator zur Betätigung eines Gaswechselventils an einer Kolbenbrennkraftmaschine

Title (fr)

Actionneur électromagnétique de commande de soupape pour moteur à combustion interne

Publication

**EP 1450009 B1 20110727 (FR)**

Application

**EP 04300036 A 20040122**

Priority

FR 0301948 A 20030218

Abstract (en)

[origin: EP1450009A2] The actuator has an electromagnet (108 1) and a magnetic plate (114 1) whose movement controls the movement of a valve of an internal combustion engine. The parameters of the magnetic circuit formed by the magnet and the plate enable a part of the circuit to be in a saturation state when the plate is at proximity of the electromagnet. The plate strangulates a conservative magnetic flux generated by the magnet. An independent claim is also included an internal combustion engine having a valve controlled by an actuator.

IPC 8 full level

**F01L 9/20** (2021.01); **F01L 9/21** (2021.01)

CPC (source: EP US)

**F01L 9/20** (2021.01 - US); **F01L 9/21** (2021.01 - EP); **F01L 2009/2107** (2021.01 - EP); **F01L 2009/2136** (2021.01 - EP US); **F01L 2009/2151** (2021.01 - EP US); **F01L 2820/01** (2013.01 - EP)

Cited by

EP3358582A1; US10693358B2; WO2008090452A3

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 1450009 A2 20040825**; **EP 1450009 A3 20050330**; **EP 1450009 B1 20110727**; AT E518048 T1 20110815; ES 2365916 T3 20111013; FR 2851290 A1 20040820; FR 2851290 B1 20070209; US 2005034690 A1 20050217; US 7111595 B2 20060926

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