

Title (en)
Electromagnetic actuator for valve drive in an internal combustion engine

Title (de)
Elektromagnetischer Aktuator 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)
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