

Title (en)  
Electromagnetic valve control

Title (de)  
Elektromagnetische Ventilbetätigung

Title (fr)  
Commande électromagnétique de soupape

Publication  
**EP 0793004 B1 19981223 (DE)**

Application  
**EP 97103181 A 19970227**

Priority  
DE 19608061 A 19960302

Abstract (en)  
[origin: EP0793004A1] The device has an armature fastened to the gas exchange valve. Two spring elements are arranged on opposite sides of the armature. The spring force of the springs is used to move the armature between an open and a closed position. Two switch magnets are arranged on opposite sides of the armature. These hold the valve in the open or closed position. The first switch magnet (9) associated with the open position is formed as a characteristic curve magnet with an increased remote effect relative to the second switch magnet (8) associated with the closed position. A flux line element may be arranged at end of the magnet core of the first switch magnet (9) nearest the armature (12) and/or the side of the armature nearest the first switch magnet. The core of the first magnet is preferably hollow cylindrical, as is the flux line element. The latter is preferably arranged coaxial to the valve shaft.

IPC 1-7  
**F01L 9/04**; **H01F 7/13**

IPC 8 full level  
**F01L 9/20** (2021.01); **H01F 7/13** (2006.01)

CPC (source: EP)  
**F01L 9/20** (2021.01); **H01F 7/13** (2013.01)

Cited by  
EP0977213A1; US6125803A; EP0903472A3; US6230674B1; WO2009056223A1; WO2007135528A1; WO2008090452A3

Designated contracting state (EPC)  
DE ES FR GB IT

DOCDB simple family (publication)  
**EP 0793004 A1 19970903**; **EP 0793004 B1 19981223**; DE 19608061 A1 19970904; DE 19608061 C2 20000323; DE 59700054 D1 19990204; ES 2127649 T3 19990416

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