

Title (en)  
ELECTROMAGNETIC ACTUATOR

Title (de)  
ELEKTROMAGNETISCHER AKTUATOR

Title (fr)  
DISPOSITIF DE COMMANDE ELECTROMAGNETIQUE

Publication  
**EP 1214721 B1 20040609 (DE)**

Application  
**EP 00960670 A 20000915**

Priority  
• DE 19945112 A 19990921  
• EP 0009037 W 20000915

Abstract (en)  
[origin: DE19945112A1] The invention relates to an electromagnetic actuator which actuates a gas exchange valve. Said actuator comprises two electromagnets and an armature which is actuated by the latter and acts upon the gas exchange valve and comprises two spring forces which act in opposing directions upon the armature. The electromagnets have a transformation ratio  $i = I_1/I_2$  of less than 1. The armature and the poles of the electromagnet which are assigned thereto are configured in such a way that the transformation ratio  $i_1$  of the contact magnet is greater than the transformation ratio  $i_2$  of the break magnet.

IPC 1-7  
**H01F 7/14**; F01L 9/04

IPC 8 full level  
**F01L 9/04** (2006.01); **F01L 9/20** (2021.01); **H01F 7/14** (2006.01)

CPC (source: EP)  
**F01L 9/20** (2021.01); **H01F 7/14** (2013.01); **F01L 2009/2109** (2021.01)

Designated contracting state (EPC)  
DE FR

DOCDB simple family (publication)  
**DE 19945112 A1 20010322**; DE 50006761 D1 20040715; EP 1214721 A1 20020619; EP 1214721 B1 20040609; WO 0122442 A1 20010329

DOCDB simple family (application)  
**DE 19945112 A 19990921**; DE 50006761 T 20000915; EP 0009037 W 20000915; EP 00960670 A 20000915