

Publication

EP 0136594 A3 19850626

Application

EP 84110661 A 19840907

Priority

DE 3336011 A 19831004

Abstract (en)

[origin: US4546339A] An electromagnet is proposed which serves in particular to actuate a fuel injection valve for fuel injection systems in internal combustion engines. The electromagnet includes a first pole piece disposed at one side of a first permanent magnet and a second pole piece disposed at the other side of the first permanent magnet. The pole pieces each have one conduction section bent at an angle, which sections are oriented toward one another and define a gap therebetween. Divided from the first permanent magnet by the conduction sections, a magnet coil is disposed on each pole piece. The first pole piece has a pole oriented toward the armature, and the second pole piece has a pole. When the magnet coils are not excited, the armature is drawn in the direction toward the poles by one component (ϕ_2) of the permanent magnetic flux. If the magnet coils experience a flow through them of a current (i) in such a manner that an electromagnetic flux (ϕ_i) flows through the armature in the opposite direction from the flux (ϕ_2), then the armature drops away from the poles whenever the electromagnetic flux (ϕ_i) becomes equal to the component (ϕ_2) of the permanent magnetic flux.

IPC 1-7

H01F 7/08; **H01F 7/16**

IPC 8 full level

H01F 7/16 (2006.01); **F02M 51/06** (2006.01); **H01F 7/04** (2006.01); **H01F 7/08** (2006.01); **H01F 7/20** (2006.01)

CPC (source: EP US)

F02M 51/0621 (2013.01 - EP US); **F02M 51/0689** (2013.01 - EP US); **H01F 7/04** (2013.01 - EP US); **H01F 7/206** (2013.01 - EP US); **H01F 2007/208** (2013.01 - EP US)

Citation (search report)

- [X] DE 2501629 A1 19751211 - CANON KK
- [A] DE 3046072 A1 19810924 - SCHWERMASCH LIEBKNECHT VEB K [DD]

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Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0136594 A2 19850410; **EP 0136594 A3 19850626**; **EP 0136594 B1 19881207**; AU 3255084 A 19850418; AU 571001 B2 19880331; DE 3336011 A1 19850418; DE 3475583 D1 19890112; JP H045242 B2 19920130; JP S6080206 A 19850508; US 4546339 A 19851008

DOCDB simple family (application)

EP 84110661 A 19840907; AU 3255084 A 19840830; DE 3336011 A 19831004; DE 3475583 T 19840907; JP 15941684 A 19840731; US 64323084 A 19840822