

Title (en)

ELECTROMAGNETIC ACTUATOR WITH TWO ELECTROMAGNETS COMPRISING MAGNETS HAVING DIFFERENT FORCES AND METHOD OF CONTROLLING AN INTERNAL COMBUSTION ENGINE VALVE USING SAME

Title (de)

ELEKTROMAGNETISCHER AKTOR MIT ZWEI ELEKTROMAGNETEN MIT UNTERSCHIEDLICH STARKEN MAGNETEN UND VERFAHREN ZUR STEUERUNG EINES VERBRENNUNGSMOTORVENTILS DAMIT

Title (fr)

ACTIONNEUR ELECTROMAGNETIQUE AVEC DEUX ELECTROAIMANTS COMPORTANT DES AIMANTS DE FORCES DIFFERENTES, ET PROCEDE DE GESTION D'UNE SOUPE DE MOTEUR A COMBUSTION INTERNE FAISANT APPLICATION.

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Application

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Priority

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Abstract (en)

[origin: WO2007063222A1] The invention relates to an electromagnetic actuator comprising: an actuation member which is associated with a vane (4) and which can move between two end positions under the action of an elastic member; and two electromagnets which are designed to attract the vane to one of the end positions respectively, each electromagnet comprising a coil (3), a core (2) which is designed to channel the magnetic flux such that it is contained within the vane and one or more permanent magnets (13) which are associated with the core. According to the invention, the permanent magnet(s) (13) of one of the electromagnets (1) are designed to exert a force on the vane (4) that is sufficient to retain the vane in the end position, while the permanent magnet(s) (113) of the other electromagnet (101) are designed to exert a force on the vane (4) that is not sufficient to retain the vane in the end position.

IPC 8 full level

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