

Title (en)

Method for controlling a bistable electromagnetic actuator and device to carry out such method

Title (de)

Verfahren zur Steuerung eines bistabilen elektromagnetischen Stellgliedes und Vorrichtung zur Durchführung dieses Verfahrens

Title (fr)

Procédé de commande d'un actionneur électromagnétique bistable et dispositif pour sa mise en oeuvre

Publication

EP 0662697 B1 19980408 (FR)

Application

EP 94402896 A 19941215

Priority

FR 9400103 A 19940107

Abstract (en)

[origin: EP0662697A1] The procedure enables control of an electromagnetic actuator (1) having two active stable positions and a rest position. The actuator includes a mobile armature (3) linked to the element to be moved, for example an internal combustion engine valve. The armature is arranged in the air gap (e) between two identical electromagnets (11,12). It is held in this rest position by the balanced forces of two identical springs (31,32). Switching is achieved by activating the second electromagnet a predetermined time interval (delta-T) after the cutting of current to the first electromagnet, and vice versa. The excitation of the second electromagnet may be advanced w.r.t. this time (delta-T), with the timing being adjusted for optimum effect according to the speed of operation.

IPC 1-7

H01F 7/18; **F01L 9/04**

IPC 8 full level

F01L 9/20 (2021.01); **H01F 7/18** (2006.01)

CPC (source: EP)

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Cited by

EP1014395A3; DE19832198A1; DE19741570A1; EP0870905A1; DE19836586B4; US6024059A; EP0916814A3; EP1091368A1; FR2799302A1; DE19832196A1; EP1411212A3; DE19821548A1; FR2778786A1; DE19821548C2; US6158715A; US6292345B1; FR2796752A1; US6560088B1; US6363895B1

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