

Title (en)

MAGNETIC ACTUATOR AND ELECTROMAGNETIC RELAY

Title (de)

VERBESSERTE DREIPHASIGE RELAISANSÄTZE FÜR AUTOMOBIL- ODER GERÄTEANWENDUNGEN

Title (fr)

APPROCHES DE RELAIS À TROIS ÉTATS AMÉLIORÉES POUR DES APPLICATIONS OU DES APPAREILS AUTOMOBILES

Publication

**EP 3678159 B1 20211013 (EN)**

Application

**EP 19398017 A 20191220**

Priority

EP 19398001 A 20190104

Abstract (en)

[origin: EP3678158A1] The present invention relates to a magnetic actuator for a three-state switching relay, and an electromagnetic using the same. The magnetic actuator comprises an armature and a magnetic system for causing the armature to rotate about its center region from a neutral position to any of a first operating position and a second operating position in response to an input control signal. The magnetic system comprises: an electromagnet to create a magnetic flux field based on an input control signal, a core member, at least two outer poles on an outer side of the electromagnet, and at least two permanent magnets, each permanent magnet arranged in a gap between a respective outer pole and the core. Each permanent magnet is magnetically polarized so as to form a path with the core member and the respective outer pole for the created magnetic flux.

IPC 8 full level

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