

Title (en)
MAGNETIC ACTUATOR AND ELECTROMAGNETIC RELAY

Title (de)
MAGNETISCHER ANTRIEB UND ELEKTROMAGNETISCHES RELAIS

Title (fr)
ACTIONNEUR MAGNÉTIQUE ET RELAIS ELECTROMAGNÉTIQUE

Publication
EP 3678158 A1 20200708 (EN)

Application
EP 19398001 A 20190104

Priority
EP 19398001 A 20190104

Abstract (en)
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.

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Citation (applicant)
EP 16398001 A 20160223

Citation (search report)
• [XAI] WO 2018050861 A1 20180322 - FLUID AUTOMATION SYST [CH]
• [AD] EP 3211653 A1 20170830 - TYCO ELECTRONICS COMPONENTES ELECTROMECHANICOS LDA [PT], et al
• [A] JP H06283088 A 19941007 - MATSUSHITA ELECTRIC WORKS LTD
• [A] US 3621419 A 19711116 - ADAMS ANDREW O, et al
• [A] JP S5268952 A 19770608 - MATSUSHITA ELECTRIC WORKS LTD

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