

Title (en)
Manual/magnetic electrical switches.

Title (de)
Handbetätigter magnetelektrischer Schalter.

Title (fr)
Commutateur manuel/électromagnétique.

Publication
EP 0088172 A1 19830914 (EN)

Application
EP 82301114 A 19820304

Priority
EP 82301114 A 19820304

Abstract (en)
A switch (10) for controlling an electrical circuit has a sealed housing (12) and a slidable actuator (30) mounted therein for external manual operation of the switch through a diaphragm (40). A switch mechanism, mounted within the housing, has an electromagnet (60), a plurality of pairs of contacts (110) for controlling external electrical circuits, a pair of control contacts (70) for controlling the electromagnet, and an armature (92) movable in response to energizing and deenergizing of the electromagnet. When the actuator is pulled outwardly, a projection (55) thereon closes the control contacts (70), energizing the electromagnet, and causing the armature (92) to close the remaining contacts (110) and hold closed the control contacts. Pushing the actuator inwardly opens the control contacts, which deenergizes the electromagnet and thereby opens the other contacts. If any contact pair tacks together upon deactivation of the switch, movement of the actuator will cause a corresponding additional projection (54) to engage and separate the tacked pair. After movement of the actuator (30) in either direction, it returns to a center rest position.

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H01H 3/28; H01H 9/04; H01H 50/00

IPC 8 full level
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CPC (source: EP)
H01H 3/001 (2013.01); **H01H 50/326** (2013.01)

Citation (search report)
• [A] US 4264886 A 19810428 - NETTRO RONALD L
• [A] DD 18331 U
• [A] EP 0030651 A1 19810624 - SIEMENS AG [DE]
• [AD] US 3622925 A 19711123 - ROSE ROBERT H

Designated contracting state (EPC)
DE FR GB

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