

Title (en)
BISTABLE MAGNETIC ACTUATOR

Title (de)
BISTABILER MAGNETAKTOR

Title (fr)
ACTIONNEUR MAGNÉTIQUE BISTABLE

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Application
EP 11722720 A 20110406

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Abstract (en)
[origin: WO2011131167A2] The invention relates to a bistable magnetic actuator with a polarized magnetic circuit having parallel working air gaps, wherein a flat permanent magnet is integrated between the outer limbs of a U-shaped soft-iron yoke and carries a soft-iron center limb and acts upon a rocker armature mounted on the center limb leg with a magnetic flux generated by a permanent magnet. According to the invention, a separately actuatable excitation coil provides on each outer limb switching pulses to the rocker armature in order to pass from a permanent-magnetically, self-maintaining switching position to the other position. The magnetic flux generated by the permanent magnet passes via the parallel circuit closed by the rocker armature into the other parallel magnetic circuit having the coil that is not electromagnetically excited when an electromagnetic flux is generated in the opposite direction by the excitation coil of the first magnetic circuit, thereby commutating the rocker armature.

IPC 8 full level
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Cited by
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