

Title (en)
BALLISTIC UNIPOLAR BISTABLE ACTUATOR

Title (de)
BALLISTISCHER UNIPOLARER BISTABILER AKTUATOR

Title (fr)
ACTIONNEUR BISTABLE UNIPOLAIRE DE TYPE BALISTIQUE

Publication
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Application
EP 19808628 A 20191016

Priority
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• FR 2019052441 W 20191016

Abstract (en)
[origin: WO2020084220A1] The invention relates to an actuator for controlling the movement of an element between two stable positions with pulsed electrical control without a change in polarity, having: • a ferromagnetic mobile mass (2), • at least one electrically controlled wire coil (6, 6a, 6b) that is fixed with respect to the mobile mass (2), • at least two ferromagnetic poles (15a, 15b) that are fixed with respect to said mobile mass (2) and on either side of said mobile mass (2). Said actuator comprises at least one permanent magnet (3a, 3b) that attracts said mobile mass (2) in order to achieve the two stable positions, said mobile mass (2) defining, with said ferromagnetic poles (15a, 15b), at least two variable air gaps (11a, 11b, 12a, 12b) during the movement of the mobile apparatus, the magnetic flux of said permanent magnet (3a, 3b) opposing the magnetic flux generated by said at least one coil (6, 6a, 6b) regardless of the position of the mobile mass (2).

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