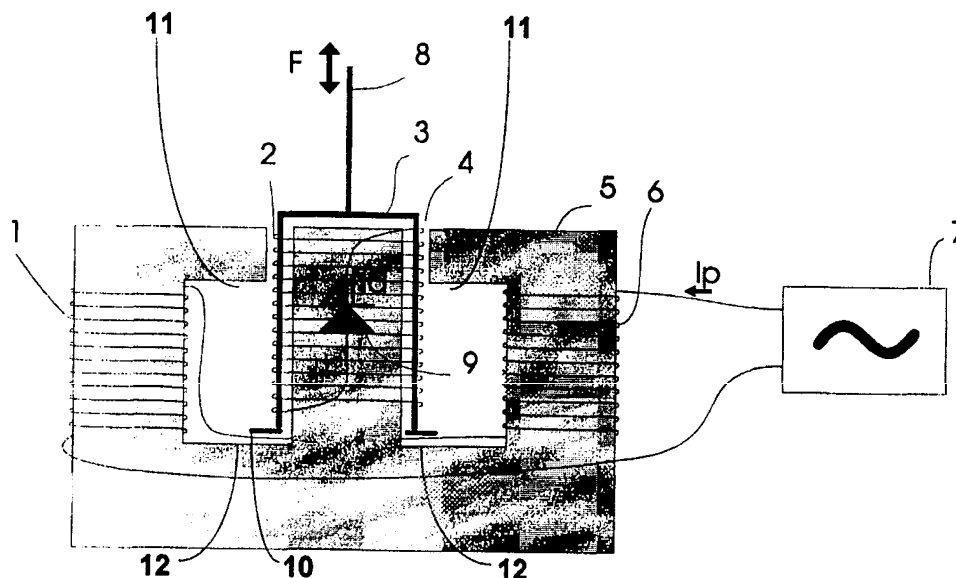




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(54) Title: DOUBLE-ACTING ELECTROMAGNETIC ACTUATOR



(57) Abstract

The invention relates to an electromagnetic actuator for a rapid linear motion with a limited length of stroke. The electromagnetic actuator includes a stationary arranged first coil (1, 6) and a second movable coil (2), with the winding of the stationary coil connected to controllable power source (7) and the winding of the movable coil is short-circuited without any galvanic connection to an external power source. The ends of the winding of the movable coil of the electromagnetic actuator is short-circuited via a rectifier element (9), preferably a diode. The diode allows a current to be developed in one direction only in the winding of the second coil, said current being induced from an electromagnetic field generated by a current through the first coil. In this manner is a double-acting electromagnetic actuator with very low weight obtained, resulting in very rapid response and high reliability, due to the lack of any external electrical connections to the movable coil.