

Title (en)
ELECTROMAGNETIC REGULATING DEVICE

Title (de)
ELEKTROMAGNETISCHE STELLVORRICHTUNG

Title (fr)
DISPOSITIF DE RÉGLAGE ÉLECTROMAGNÉTIQUE

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Abstract (en)
[origin: WO2016037876A1] The invention relates to an electromagnetic regulating device (10) comprising an actuator unit (44) and an actuating unit (46) functioning in an axial direction (L), wherein the actuator unit (44) has a coil (12) generating a magnetic field and with a pole core (13) arranged within the coil (12), at least two permanent magnets (15, 17) are arranged in an axial direction (L) and lying against a front face (48) of the pole core (13), the permanent magnets are designed to be mountable on this pole core and to be displaceable in the axial direction (L), wherein the permanent magnets (15, 17) can be driven independently from each other by the coil (12), the permanent magnets have poles differently aligned in the axial direction and can each be controlled by energizing the coil (12), such that when the coil (12) is energized, at least one of two or more permanent magnets (15, 17) moves in the axial direction (L) counter to the other permanent magnets (15, 17). The actuating unit (46) is arranged in the axial direction (L) lying against the actuator unit (44), wherein the actuating unit (46) comprises at least two actuating elements (22, 24) which can be actuated in the axial direction (L), wherein each actuating element (22, 24) of the actuating unit (46) is respectively assigned to one of the permanent magnets (15, 17) and is actuated by the same in the axial direction (L). The actuator unit (44) and the actuating unit (46) are arranged in a common housing (26) of the regulating device. According to the invention, the actuating elements (22, 24) and the respective permanent magnets (15, 17) are concentrically arranged so that a force effect occurs centrally on the actuating elements (22, 24) which are arranged to be rotatable in the housing (26).

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