

Title (en)
ELECTROMAGNETIC LINEAR ACTUATOR

Title (de)
ELEKTROMAGNETISCHER LINEARAKTUATOR

Title (fr)
ACTIONNEUR LINÉAIRE ÉLECTROMAGNÉTIQUE

Publication
EP 3583615 B1 20201104 (DE)

Application
EP 18708591 A 20180206

Priority
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• EP 2018052935 W 20180206

Abstract (en)
[origin: WO2018149694A1] An electromagnetic linear actuator comprises a housing (1) having a casing section (6) and an end piece (5), a coil arrangement (2) which is arranged therein and has two coils (19, 20) which extend about a common axis (A), are wound in opposite directions and are offset axially with respect to one another, and an armature arrangement (3) which is mounted so as to be displaceable in the housing (1), along the axis (A) between two end positions, and has a shaft (8), which passes through the end piece (5), and a permanent magnet arrangement (9) which is arranged at the end of said shaft (8) and has an axially magnetized permanent magnet (10) and two disc-shaped flux conducting pieces (11) which are arranged on the front side thereof. The first coil (19) which faces away from the free end of the shaft (8) has, at its end facing away from the free end of the shaft (8), a region (27) with a reduced internal diameter. A core (28) made of a magnetically active material is held in said coil (19). In each of the two end positions of the armature arrangement, at least 50% of the axial length of the permanent magnet arrangement is overlapped by one of the two coils (19, 20).

IPC 8 full level
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