

Title (en)
ELECTOMAGNETIC ACTUATING DEVICE

Title (de)
ELEKTROMAGNETISCHE STELLVORRICHTUNG

Title (fr)
DISPOSITIF DE POSITIONNEMENT ÉLECTROMAGNÉTIQUE

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Application
EP 11735400 A 20110629

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Abstract (en)
[origin: WO2012007279A2] The invention relates to an electromagnetic actuating device, in particular camshaft adjustment device, having an armature unit (14) which can be driven in the axial direction or parallel thereto in reaction to energization of a stationary, axially orientated coil unit (10) and is designed to interact with a slide and/or plunger unit (16) which extends in the axial direction, in particular a plunger unit which brings about camshaft adjustment of an internal combustion engine, wherein permanent magnet means (14) are provided on and/or in the armature unit and/or the slide or plunger unit, and the coil unit and armature unit are accommodated at least partially in a housing unit or carrier unit. According to the invention there is provision that the carrier unit is assigned stationary magnetic-field-detection means (22), which are designed to interact magnetically in a contactless fashion with the permanent magnet means, and are designed in such a way that in an energized state and in a non-energized state of the coil unit an axial position of the armature unit and/or of the slide or plunger unit can be determined electronically by evaluating a magnetic field detection signal of the magnetic field detection means, and magnetic flux-directing means (30, 32; 34; 36; 38; 40, 42) or assigned to the coil unit in such a way that they deflect a magnetic coil field, generated by the coil unit, from the magnetic field detection means and/or attenuate said coil field with respect to said detection means.

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