

Title (en)  
ELECTROMAGNETIC ACTUATOR WITH INTERMEDIATE POSITION

Title (de)  
ELEKTROMAGNETISCHE STELLVORRICHTUNG MIT ZWISCHENPOSITION

Title (fr)  
ACTIONNEUR ÉLECTROMAGNÉTIQUE AVEC POSITION INTERMÉDIAIRE

Publication  
**EP 4070346 A1 20221012 (DE)**

Application  
**EP 20828528 A 20201204**

Priority

- DE 102019133333 A 20191206
- EP 2020084694 W 20201204

Abstract (en)  
[origin: WO2021110944A1] The invention relates to an electromagnetic actuator (10) having stationary energizable coil means (1) with a paired stationary core region (2) and having an armature unit (3), which can be moved relative to the coil means (1) and the core region (2) and which comprises permanent magnet means (4) and a tappet (5) that is preferably arranged at one end and has a free end section (5a) for engaging into an actuating partner, in particular a guide groove (11a, 11b) of a camshaft (11), wherein the armature unit can be moved along a longitudinal movement axis (L) into at least two actuation positions (A, B), in particular a first retracted actuation position (A) and a second extended actuation position (B), and the actuator (10) has holding means (7) which conduct the flux of a permanent magnet and are arranged at a distance from the core region and which are designed to interact with the permanent magnet means (4) of the armature unit (3) in a third actuation position (C) between the first and second actuation position (A, B) such that the armature unit is held in a third actuation position (C) between the first and second actuation position (A, B) and/or a specified force potential is exerted in the direction of the actuating partner.

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