

Title (en)  
ELECTROMAGNET WITH A MAGNET ARMATURE

Title (de)  
ELEKTROMAGNET MIT MAGNETANKER

Title (fr)  
ELECTROAIMANT DOTE D'UNE ARMATURE BATTANTE

Publication  
**EP 1348221 A1 20031001 (DE)**

Application  
**EP 01990347 A 20011220**

Priority  
• DE 0104833 W 20011220  
• DE 10065016 A 20001223

Abstract (en)  
[origin: US2003160671A1] In an electromagnet having an armature, in particular for use in a solenoid valve, which includes a solenoid coil (1), a magnet core (2) which passes through the solenoid coil (1) and has at least one pole face (22), an armature (3) which is supported perpendicularly to the at least one pole face (22) of the magnet core (2) so as to be able to slide and has an armature plate (31) facing the pole face (22) and an armature pin (32) that projects from the armature plate (31) and is supported so as to be able to slide and rotate, and adjusting means which are formed on the electromagnet and/or on the armature and adjust the armature plate (31) to a predetermined rotational position, it is proposed that at least one first cutout (33) which is radially offset from the armature pin (32) and formed in the armature plate (31), and at least one second cutout (27) which is situated in the at least one pole face (22) of the magnet core (2) and assigned to the first cutout (33), be provided as adjusting means; the second cutout magnetically interacting with the first cutout (33) in response to the solenoid coil (1) being acted upon by a current, such that the armature plate (31) is adjusted to the predetermined rotational position.

IPC 1-7  
**H01F 7/16**

IPC 8 full level  
**H01F 7/14** (2006.01); **H01F 7/06** (2006.01); **H01F 7/16** (2006.01)

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**US 2003160671 A1 20030828**; **US 6674351 B2 20040106**; CN 1270329 C 20060816; CN 1406384 A 20030326; CZ 20022846 A3 20030416; CZ 298990 B6 20080326; DE 10065016 A1 20020704; DE 50113675 D1 20080410; EP 1348221 A1 20031001; EP 1348221 B1 20080227; ES 2298283 T3 20080516; JP 2004516675 A 20040603; JP 4090032 B2 20080528; WO 02052587 A1 20020704

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