

Title (en)

ELECTROMAGNET AND A METHOD FOR THE PRODUCTION THEREOF

Title (de)

ELEKTROMAGNET UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

ÉLECTRO-AIMANT ET SON PROCÉDÉ DE PRODUCTION

Publication

**EP 3341946 A1 20180704 (DE)**

Application

**EP 16774849 A 20160802**

Priority

- DE 102015011238 A 20150825
- EP 2016001332 W 20160802

Abstract (en)

[origin: WO2017032441A1] 1. Electromagnet 2. Outline 2.1 Task: The electromagnet, at least consisting of a magnet coil (2) wound onto a coil core (6), a housing (3), a pole core (4), an armature (5), an armature rod (16) and a yoke (7), should have a very low hysteresis of the force with a variable stroke at low manufacturing costs. 2.2 Solution: The coil core (6) is manufactured by jointly overmolding or overcasting the yoke (7), the pole core (4) and the core flange (14) with a plastic mass (8), wherein the axial intermediate space (10) between the yoke (7) and the pole core (4) is also filled with the plastic mass. 2.3 Use: Electromagnets of the described type are used for actuating fluid valves or couplings, preferentially in motor vehicles or in mobile working machines.

IPC 8 full level

**H01F 7/128** (2006.01); **H01F 7/08** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP US)

**F16K 31/0675** (2013.01 - US); **H01F 7/128** (2013.01 - EP); **H01F 7/129** (2013.01 - US); **H01F 7/1607** (2013.01 - EP US);  
**H01F 2007/085** (2013.01 - EP US)

Citation (search report)

See references of WO 2017032441A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102015011238 A1 20170302**; CN 108352241 A 20180731; EP 3341946 A1 20180704; US 2020227189 A1 20200716;  
WO 2017032441 A1 20170302

DOCDB simple family (application)

**DE 102015011238 A 20150825**; CN 201680059205 A 20160802; EP 16774849 A 20160802; EP 2016001332 W 20160802;  
US 201615754907 A 20160802