

Title (en)  
Electromagnet

Title (de)  
Elektromagnet

Title (fr)  
Électro-aimant

Publication  
**EP 2299457 A3 20141001 (DE)**

Application  
**EP 10009439 A 20100910**

Priority  
DE 102009041604 A 20090917

Abstract (en)  
[origin: EP2299457A2] A solenoid (10) comprises tube pipe (11) as guide for magnet armature (13) and magnet body (12). The magnet body is connected with tube pipe, where at least one mechanism (14) for fastening magnet body to tube pipe is provided and the mechanism has at least one electrically conducting element contacting, on one hand, tube pipe and, on other hand, magnet body for electric connection of tube pipe and magnet body.

IPC 8 full level  
**H01F 7/127** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP US)  
**H01F 7/127** (2013.01 - EP US); **H01F 7/1607** (2013.01 - EP US); **H01F 2007/083** (2013.01 - EP US); **H01F 2007/163** (2013.01 - EP US)

Citation (search report)

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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 SE SI SK SM TR

Designated extension state (EPC)  
BA ME RS

DOCDB simple family (publication)  
**EP 2299457 A2 20110323; EP 2299457 A3 20141001; EP 2299457 B1 20181114**; DE 102009041604 A1 20110324; JP 2011066422 A 20110331; JP 5812589 B2 20151117; US 2011063056 A1 20110317; US 8410879 B2 20130402

DOCDB simple family (application)  
**EP 10009439 A 20100910**; DE 102009041604 A 20090917; JP 2010208888 A 20100917; US 92338110 A 20100917