

Title (en)  
Fluid-pressure actuator with a magnetic field sensor

Title (de)  
Druckmittelbetäigte Zylinder-Kolben-Anordnung mit einem Magnetfeldsensor

Title (fr)  
Vérin d'actionnement à fluide à capteur de champs magnétique

Publication  
**EP 0721067 A3 19980211 (DE)**

Application  
**EP 95120518 A 19951223**

Priority  
DE 19500137 A 19950104

Abstract (en)  
[origin: EP0721067A2] The piston-cylinder device has an annular permanent magnet (3) attached to the piston (11), cooperating with a magnetic field sensor (2) within the cylinder (10), for detecting the piston position. The permanent magnet is magnetised in the axial direction of the piston-cylinder device and provided by ferromagnetic discs (32,33) for guiding the magnetic flux. The piston has an open groove (31) receiving the permanent magnet, which has an outer dia. only slightly less than the inner dia. of the cylinder, which has a recess receiving a sleeve (21) of a non-magnetic material, incorporating the magnetic field sensor.

IPC 1-7  
**F15B 15/28**

IPC 8 full level  
**F15B 15/28** (2006.01)

CPC (source: EP)  
**F15B 15/2807** (2013.01)

Citation (search report)  
• [A] EP 0620372 A1 19941019 - HYDRAULIK TECHNIEK [NL]  
• [A] EP 0093859 A2 19831116 - BOSCH GMBH ROBERT [DE]  
• [A] US 4896584 A 19900130 - STOLL KURT [DE], et al  
• [A] DE 4122481 A1 19930107 - KUHNKE GMBH KG H [DE]  
• [A] DE 3738151 A1 19880526 - CKD CORP [JP]  
• [A] DE 4116651 A1 19920109 - FESTO KG [DE]  
• [DA] DE 3510601 A1 19860925 - WABCO WESTINGHOUSE STEUERUNG [DE]

Cited by  
CN109312856A; EP1445494A3; CN102943784A; EP2878831A1; DE102005030722A1; CN109162996A; US8365651B2; WO2017211519A1; WO2004081388A1

Designated contracting state (EPC)  
AT DE DK ES FR GB IE IT NL SE

DOCDB simple family (publication)  
**EP 0721067 A2 19960710; EP 0721067 A3 19980211; EP 0721067 B1 20020828**; AT E223002 T1 20020915; DE 19500137 A1 19960711;  
DE 59510348 D1 20021002

DOCDB simple family (application)  
**EP 95120518 A 19951223**; AT 95120518 T 19951223; DE 19500137 A 19950104; DE 59510348 T 19951223