Title (en)

Rodless fluid pressure cylinder

Title (de

Kolbenstangenloser Druckmittelzylinder

Title (fr)

Vérin sans tige

Publication

EP 1085218 A3 20030917 (DE)

Application

EP 00119717 A 20000909

Priority

DE 19945067 A 19990920

Abstract (en)

[origin: EP1085218A2] The cylinder has a cylinder tube (11) with slots (15) and closed at one end. A sealed piston moves in the cylinder and supports a force transfer element that protrudes from the slots. A flexible sealing band (17) inside the cylinder seals the slots and is held by a holder unit (19) on both sides of the piston at the sealing surface of the cylinder inner wall. The sealing band has a pair of sealing lips (37) at the sealing surface. Support surfaces (34) with support grooves are formed at the sealing face of the cylinder tube. The holder unit is formed with paired nose-shaped holder ribs (32) formed at the sealing band and holder grooves (23) arranged in the slot area. The sealing band is formed so that when the cylinder interior is pressure-free, the holder ribs engage the sealing band in the holder grooves and the sealing lips at the cylinder inner wall. The support surfaces of the sealing band are spaced from the support surfaces (27) in the cylinder tube.

IPC 1-7

F15B 15/08

IPC 8 full level

F15B 15/08 (2006.01)

CPC (source: EP)

F15B 15/082 (2013.01)

Citation (search report)

- [XDY] DE 3807786 A1 19880922 CKD CORP [JP]
- [AY] EP 0531131 A1 19930310 SMC CORP [JP]
- [ADY] EP 0260344 A2 19880323 PROMA PROD & MARKETING GMBH [DE]
- [A] DE 19840876 A1 19990401 SMC KK [JP]
- [A] EP 0345506 A1 19891213 UNIVER SPA [IT]

Cited by

EP1437514A3

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

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EP 1085218 A2 20010321; EP 1085218 A3 20030917; DE 19945067 A1 20010322

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