

Title (en)

Position detection device for a fluid cylinder

Title (de)

Positionsmessvorrichtung für einen fluidischen Zylinder

Title (fr)

Dispositif de détection de position pour un vérin fluide

Publication

EP 2149715 A3 20121107 (DE)

Application

EP 09008292 A 20090624

Priority

DE 202008010230 U 20080731

Abstract (en)

[origin: EP2149715A2] The device has an evaluation unit for determining the position of a piston rod (2) of a fluidic cylinder with respect to a cylinder barrel (1) of the fluidic cylinder based on intrinsic capacitance of a condenser formed from the cylinder barrel, the piston rod and a dielectric fluid operating as a dielectric. The piston rod is guided into the cylinder barrel in a longitudinally movable manner. The evaluation unit determines the capacitance over an oscillator circuit e.g. Martin-oscillator, with frequency evaluation that takes place in a digital manner.

IPC 8 full level

F15B 15/28 (2006.01); **G01M 99/00** (2011.01)

CPC (source: EP US)

F15B 15/2853 (2013.01 - EP US)

Citation (search report)

- [X] DE 3518858 A1 19851128 - NISSAN MOTOR [JP]
- [X] EP 0358366 A2 19900314 - ATSUGI MOTOR PARTS CO LTD [JP]

Cited by

CN111480060A; FR3064322A1; EP2759715A1; US11662265B2

Designated contracting state (EPC)

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 202008010230 U1 20091210; EP 2149715 A2 20100203; EP 2149715 A3 20121107; EP 2149715 B1 20170607; US 2010089144 A1 20100415; US 8117908 B2 20120221

DOCDB simple family (application)

DE 202008010230 U 20080731; EP 09008292 A 20090624; US 51288209 A 20090730