

Title (en)  
Actuator

Title (de)  
Kolben-Zylinder-Aggregat

Title (fr)  
Vérin

Publication  
**EP 0591614 B1 19961227 (DE)**

Application  
**EP 93107873 A 19930514**

Priority  
DE 9209980 U 19920724

Abstract (en)  
[origin: EP0591614A1] An actuator is proposed which has a piston rod (3) projecting from the cylinder (1) at least on one end face. Provided on the piston rod (3) at the periphery is at least one bearing surface (15) extending over a large part of its length and having a flat configuration. Firmly arranged on the bearing surface (15) is a measuring section (14) which extends in the longitudinal direction (12) of the piston rod (3) and can be scanned optically or electrically. In this way, the position of the piston rod (3) and/or of the piston connected to the piston rod (3) and arranged in the cylinder (1) can be reliably determined with relatively simple measures while ensuring a compact construction. <IMAGE>

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

IPC 8 full level  
**F15B 15/14** (2006.01); **F15B 15/28** (2006.01)

CPC (source: EP)  
**F15B 15/1414** (2013.01); **F15B 15/1419** (2013.01); **F15B 15/2807** (2013.01); **F15B 15/2846** (2013.01); **F15B 15/2853** (2013.01)

Cited by  
EP2042412A3; CN107740794A; EP0941812A1; EP0941813A1; CN100342143C; DE29713825U1; EP2042412A2; US8776667B2; WO2009053812A3

Designated contracting state (EPC)  
DE FR GB IT NL SE

DOCDB simple family (publication)  
**DE 9209980 U1 19920924**; DE 59304878 D1 19970206; EP 0591614 A1 19940413; EP 0591614 B1 19961227

DOCDB simple family (application)  
**DE 9209980 U 19920724**; DE 59304878 T 19930514; EP 93107873 A 19930514