

Title (en)
RODLESS WORKING CYLINDER

Publication
EP 0135041 B1 19880608 (DE)

Application
EP 84108579 A 19840720

Priority
DE 3328786 A 19830810

Abstract (en)
[origin: EP0135041A1] 1. Rodless working cylinder with a power take-off (3) which can be driven, by a piston arranged displaceably in a cylinder tube (5), directly by means of a power bridge or indirectly by means of a rope, band or the like, there being a guide rail (13 ; 2) which extends parallel to the cylinder tube (5) and with which rolling means (1a, 1b ; 12a, 12b) connected to the power take-off (3) interact, characterized in that the cylinder tube (5) is made multisurfaced on the outside, in that a flat guide rule (13 ; 2) is fastened to at least one surface in such a way that its longitudinal sides project beyond the cylinder tube (5), and in that mounted in a cover plate (3a) connected to the power take-off are concave or convex rollers (1a, 1b ; 12a, 12b) which roll on the correspondingly shaped longitudinal sides of the guide rule (13, 2).

IPC 1-7
F15B 15/08

IPC 8 full level
F15B 15/08 (2006.01)

CPC (source: EP)
F15B 15/084 (2013.01)

Citation (examination)
EP 0104364 A1 19840404 - KNORR BREMSE GMBH [DE]

Cited by
EP0263215A1; US5311810A; US5279207A; EP0536799A1; US5275088A; FR2639081A1; US5868499A; EP0828083A3; US6336393B1; US8091468B2; WO2007121808A1

Designated contracting state (EPC)
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EP 0135041 A1 19850327; EP 0135041 B1 19880608; DE 3328786 A1 19850228; DE 3471980 D1 19880714

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