

Title (en)
LOCKABLE HYDRAULIC CYLINDER

Publication
EP 0334924 B1 19920617 (DE)

Application
EP 88908198 A 19880913

Priority
DE 3732561 A 19870926

Abstract (en)
[origin: WO8902987A1] A lockable hydraulic cylinder comprises a cylindrical tube (1) with at least one discharge connection (7), a working piston (3) sealed in the cylindrical tube (1) in which it slides, and a hydraulically operated closure element which engages with blocking elements (10). In order to achieve a compact locking unit which can also be incorporated in the cylinder and which has a small number of relatively moving parts of simple, compact design, the closure element is a differential piston (6) which travels in a sealed manner in a blind bore in the piston (3) and which is prestressed against the pressure in the direction of the locked position with an inlet space (8) adjoining the discharge connection (7). The diameter of the differential piston decreases near the inlet space (8) and the prestressed differential piston (6) exerts an outward radial force on the blocking elements (10). Radial recesses (11, 15) in which the blocking elements (10) engage are provided in the cylindrical tube (1) or in a component rigidly mounted on the latter, and in the piston (3).

IPC 1-7
F15B 15/26

IPC 8 full level
F15B 15/26 (2006.01)

CPC (source: EP)
F15B 15/261 (2013.01)

Citation (examination)
• DE 3143040 A1 19830505 - WABCO WESTINGHOUSE FAHRZEUG [DE]
• DE 3540277 A1 19860522 - ALFA ROMEO SPA [IT]

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 8902987 A1 19890406; DE 3732561 A1 19890413; DE 3732561 C2 19921008; DE 3872222 D1 19920723; EP 0334924 A1 19891004; EP 0334924 B1 19920617; JP 2701906 B2 19980121; JP H02501403 A 19900517

DOCDB simple family (application)
EP 8800835 W 19880913; DE 3732561 A 19870926; DE 3872222 T 19880913; EP 88908198 A 19880913; JP 50758188 A 19880913