

Title (en)

Actuator for converting pressurized fluid energy into a mechanical force

Title (de)

Stellantrieb zur Umwandlung der Energie eines Fluids in eine mechanische Kraft

Title (fr)

Actionneur pour transformer l'énergie d'un fluide en force mécanique

Publication

EP 0838597 B1 20020515 (DE)

Application

EP 97118235 A 19971021

Priority

- DE 19643649 A 19961022
- DE 19725591 A 19970617

Abstract (en)

[origin: EP0838597A1] The actuator comprises an inner tubular expansion chamber (1) of elastic material, which is radially deformed when the fluid applies an internal pressure. An outer power transmission jacket (9) of flexible non-stretchable thread material surrounds the chamber. The jacket is anchored to the axial chamber ends, to generate axial tension forces during radial chamber expansion. The material of the jacket is formed from a filament which is passed back and forth over two tension anchors (2,3), to form a multi-layer jacket. The anchors are connected to the axial chamber ends.

IPC 1-7

F15B 15/10

IPC 8 full level

F15B 15/10 (2006.01)

CPC (source: EP US)

F15B 15/103 (2013.01 - EP US)

Cited by

DE202004005018U1; DE10345587A1; DE10017104A1; EP0989057A2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0838597 A1 19980429; EP 0838597 B1 20020515; DE 19725591 A1 19981224; DE 59707273 D1 20020620; US 5937732 A 19990817

DOCDB simple family (application)

EP 97118235 A 19971021; DE 19725591 A 19970617; DE 59707273 T 19971021; US 95092497 A 19971015