Title (en)
Fully integrated electro-hydraulic linear actuator

Title (de)
Vollintegrierter elektrohydraulischer Linearaktuator

Title (fr)
Actionneur linéaire électro-hydraulique entièrement intégré

Publication
EP 2868932 B1 20161019 (EN)

Application
EP 14186455 A 20140925

Priority
IT MI20131586 A 20130926

Abstract (en)
[origin: EP2868932A1] Elimination of any work fluid reservoir and fluid chambers (7, 8) of identical areas over opposite sides of a double effect piston (2) that extends out of only one end of the cylinder (3) allow to achieve an enhanced compactness and the possibility of embedding practically the whole hydraulic circuit within a base block (4) of the cylinder, including hydraulically piloted valves and safety relief valves, and to associate a reversible drive motor (A) and pump assembly (B) to the base block. A magnetic coupling (C) between the motor and the pump eliminates the presence of rotary seal packing for long lasting seal proofness. No piping is required and the hydraulic circuit may be factory-charged with de-aerated hydraulic fluid and remains permanently sealed. Installation of the fully integrated electro-hydraulic linear actuator simply requires connecting the reversible drive motor (A) to a control unit.

IPC 8 full level
F15B 15/18 (2006.01)

CPC (source: EP)
F15B 15/18 (2013.01); F15B 1/025 (2013.01); F15B 7/006 (2013.01); F15B 15/1466 (2013.01); F15B 2211/20515 (2013.01); F15B 2211/20561 (2013.01); F15B 2211/27 (2013.01); F15B 2211/30515 (2013.01); F15B 2211/625 (2013.01); F15B 2211/7054 (2013.01)

Cited by
CN105387019A; NO20150966A1; EP4055278A4; IT201800001627A1; EP3464982A4; EP3730806A1; CN111852964A; US11454260B2; WO2017210492A1; IT201900008559A1; US11480199B2; US11815110B2; US11999214B2

Designated contracting state (EPC)
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