

Title (en)
Control apparatus for a hydraulic cylinder

Title (de)
Einrichtung zur Steuerung eines hydraulischen Zylinders

Title (fr)
Dispositif de contrôle d'un vérin hydraulique

Publication
EP 1302256 B1 20040825 (DE)

Application
EP 02022661 A 20021010

Priority
DE 10150768 A 20011013

Abstract (en)
[origin: EP1302256A2] Arrangement comprises a control block arranged between a hydraulic pump and a cylinder. The control block has channels for hydraulic lines and electrically controlled hydraulic valves that have sensors for monitoring their positions. To guarantee hydraulic safety an electrical circuit arrangement (30) is provided that supplies safety input signals (X) corresponding to an algorithm for valve setting signals (y18a, y18b, y19a) to the valves (18, 19). The electrical circuit is hard-wired to the control block.

IPC 1-7
B21D 55/00; **B21D 24/00**; **B30B 15/26**

IPC 8 full level
B21D 24/00 (2006.01); **B21D 55/00** (2006.01); **B30B 15/26** (2006.01); **B30B 15/28** (2006.01); **F15B 20/00** (2006.01)

CPC (source: EP)
B30B 15/28 (2013.01); **F15B 20/002** (2013.01); **F15B 20/008** (2013.01)

Cited by
CN110978611A; CN102303421A; EP1995601A1; FR2916536A1; DE102009020643A1; WO2005119382A1; EP3144543A1; US10400905B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
EP 1302256 A2 20030416; **EP 1302256 A3 20030604**; **EP 1302256 B1 20040825**; AT E274384 T1 20040915; DE 10150768 A1 20030417; DE 50200890 D1 20040930; ES 2223023 T3 20050216

DOCDB simple family (application)
EP 02022661 A 20021010; AT 02022661 T 20021010; DE 10150768 A 20011013; DE 50200890 T 20021010; ES 02022661 T 20021010