

Title (en)
Hydraulic control device

Title (de)
Hydraulische Steuereinrichtung

Title (fr)
Dispositif de commande hydraulique

Publication
EP 0823559 A3 19980715 (DE)

Application
EP 97112410 A 19970719

Priority
DE 19632201 A 19960809

Abstract (en)
[origin: EP0823559A2] The device has a proportional throttle valves connected in each of a feed (18) and an outflow conduit (23) of the motor, for lifting and lowering a load, respectively. A pressure maintaining valve (22) is provided for load-compensated volume flow control on lifting. The pressure drop occurring at the first proportional throttle valve is fed via two control conduits (31,32) to the spring-loaded pressure balance. The pressure maintaining valve is connected in a conduit section (26) common to the feed and outflow conduits. The first proportional throttle valve (19) controls a first (31) control conduit. In this first control conduit a changeover valve (34) is connected, with which the pressure maintaining valve can be changed over to a pressure feed dependent upon the second proportional throttle valve (24).

IPC 1-7
F15B 13/01; F15B 11/05

IPC 8 full level
F15B 11/00 (2006.01); **F15B 11/05** (2006.01); **F15B 11/16** (2006.01); **F15B 13/01** (2006.01)

CPC (source: EP)
F15B 11/003 (2013.01); **F15B 11/165** (2013.01); **F15B 2211/20538** (2013.01); **F15B 2211/30505** (2013.01); **F15B 2211/3054** (2013.01);
F15B 2211/3144 (2013.01); **F15B 2211/31529** (2013.01); **F15B 2211/327** (2013.01); **F15B 2211/40507** (2013.01); **F15B 2211/40515** (2013.01);
F15B 2211/411 (2013.01); **F15B 2211/41509** (2013.01); **F15B 2211/428** (2013.01); **F15B 2211/455** (2013.01); **F15B 2211/50536** (2013.01);
F15B 2211/513 (2013.01); **F15B 2211/57** (2013.01); **F15B 2211/6054** (2013.01); **F15B 2211/6055** (2013.01); **F15B 2211/6346** (2013.01);
F15B 2211/652 (2013.01); **F15B 2211/7052** (2013.01)

Citation (search report)
• [DA] DE 4446145 A1 19960627 - BOSCH GMBH ROBERT [DE]
• [A] EP 0615024 A2 19940914 - ORENSTEIN & KOPPEL AG [DE]
• [A] DE 3844400 A1 19900705 - REXROTH MANNESMANN GMBH [DE]
• [A] EP 0676547 A1 19951011 - HEILMEIER & WEINLEIN [DE]
• [DA] DE 3422978 A1 19860102 - BOSCH GMBH ROBERT [DE]

Cited by
EP0965763A1; CN102979774A; CN105035979A; EP0987444A3; WO2005093164A1; US6176261B1

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

DOCDB simple family (publication)
EP 0823559 A2 19980211; EP 0823559 A3 19980715; EP 0823559 B1 20011031; DE 19632201 A1 19980212; DE 59705151 D1 20011206

DOCDB simple family (application)
EP 97112410 A 19970719; DE 19632201 A 19960809; DE 59705151 T 19970719