

Title (en)

Hydraulic control device and control block

Title (de)

Hydraulische Steueranordnung und Steuerblock

Title (fr)

Commande hydraulique et bloc de commande

Publication

**EP 1710446 A3 20070321 (DE)**

Application

**EP 06007227 A 20060405**

Priority

- DE 102005015689 A 20050405
- DE 102005022891 A 20050518

Abstract (en)

[origin: EP1710446A2] The arrangement has a continuous adjustable solenoid valve arrangement with a forward motion valve gate to adjust a pressurizing medium flow rate to a load. A reverse motion cross section is adjustable for the flow rate diverting from the load by the reverse motion valve gate. Pump side of valve gates upstream a common individual pressure scale, over which pressurizing medium flows to an inlet orifice controlled by one of the gates. An independent claim is also included for a control block for controlling several loads.

IPC 8 full level

**F15B 11/05** (2006.01); **F15B 11/042** (2006.01); **F15B 11/044** (2006.01)

CPC (source: EP)

**F15B 11/042** (2013.01); **F15B 11/044** (2013.01); **F15B 11/05** (2013.01); **F15B 2211/30535** (2013.01); **F15B 2211/30565** (2013.01);  
**F15B 2211/3057** (2013.01); **F15B 2211/351** (2013.01); **F15B 2211/353** (2013.01); **F15B 2211/50572** (2013.01); **F15B 2211/57** (2013.01);  
**F15B 2211/6313** (2013.01); **F15B 2211/634** (2013.01); **F15B 2211/6654** (2013.01); **F15B 2211/6658** (2013.01); **F15B 2211/7053** (2013.01)

Citation (search report)

- [X] EP 1281872 A1 20030205 - BOSCH GMBH ROBERT [DE]
- [YD] WO 9214944 A1 19920903 - CATERPILLAR INC [US]
- [A] EP 1500825 A2 20050126 - BOSCH REXROTH AG [DE]
- [Y] ESDERS H: "ELEKTROHYDRAULISCHES LOAD-SENSING FÜR DIE MOBILHYDRAULIK", OLHYDRAULIK UND PNEUMATIK, VEREINIGTE FACHVERLAGE, MAINZ, DE, vol. 38, no. 8, January 1994 (1994-01-01), pages 473 - 478,480, XP000195316, ISSN: 0341-2660

Cited by

DE102009047035A1; CN116164003A; DE102011114241A1; DE102011114241B4; US10337532B2; US10526071B2; US11274752B2;  
WO2021141874A1; WO2009062564A1; US10723441B2; EP3553325A1; EP3561313A1; CN110374944A; US8479769B2; US10711809B2;  
US10947997B2; US10737764B2; US10793261B2; US11072418B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1710446 A2 20061011; EP 1710446 A3 20070321; EP 1710446 B1 20081224;** AT E418683 T1 20090115; DE 102005022891 A1 20061012;  
DE 502006002405 D1 20090205

DOCDB simple family (application)

**EP 06007227 A 20060405;** AT 06007227 T 20060405; DE 102005022891 A 20050518; DE 502006002405 T 20060405