

Title (en)

HYDRAULIC CONTROL DEVICE FOR CONSTRUCTION MACHINE

Title (de)

HYDRAULISCHE STEUERVORRICHTUNG FÜR EINE BAUMASCHINE

Title (fr)

DISPOSITIF DE COMMANDE HYDRAULIQUE POUR UNE MACHINE DE CONSTRUCTION

Publication

**EP 2444555 A4 20161221 (EN)**

Application

**EP 10789245 A 20100617**

Priority

- JP 2010004052 W 20100617
- JP 2009145458 A 20090618
- JP 2009147939 A 20090622

Abstract (en)

[origin: EP2444555A1] To provide a hydraulic control device for a construction machine, wherein the amount of drive of an electric motor is reduced in order to minimize cost and conserve energy, and wasteful energy consumption can be minimized. The hydraulic control device for a construction machine comprises a hydraulically actuated primary actuator group and a secondary actuator group which is used less frequently than the primary actuator group. The hydraulic control device also comprises primary pumps (P1, P2) for supplying operating oil to the primary actuator group; secondary pumps (P3, P4) for supplying the operating oil to the secondary actuator group; actuator operating means; a remote control valve group (75) and a pilot valve (72) for outputting pilot pressures according to the operated amount of the actuator operation means; a primary control valve group (50) and a secondary control valve group (60), which are driven by the pilot pressures and which control the flow rate of the operating oil supplied to the hydraulic actuators; a first electric motor (M1) for driving the primary pumps (P1, P2); and a second electric motor (M2) for driving the secondary pumps (P3, P4).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [XYI] EP 1455439 A1 20040908 - KOBELCO CONSTR MACHINERY LTD [JP]
- [Y] JP H11107320 A 19990420 - YUTANI JUKO KK, et al
- See references of WO 2010146866A1

Cited by

EP4190978A1; EP3567166A1; US10954968B2; US10458097B2; US11643793B2; EP3722516A1; BE1027189A1; EP3985181A1; BE1028704A1

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