Title (en)

HYDRAULIC DRIVE DEVICE OF A WORKING MACHINE

Title (de)

HYDRAULISCHE ANTRIEBSVORRICHTUNG FÜR EINE ARBEITSMASCHINE

Title (fr)

DISPOSITIF D'ENTRAÎNEMENT HYDRAULIQUE D'UN ENGIN DE CHANTIER

Publication

EP 2677180 B1 20210922 (EN)

Application

EP 12747270 A 20120209

Priority

- JP 2011028940 A 20110214
- JP 2012052977 W 20120209

Abstract (en)

[origin: EP2677180A1] To provide a hydraulic drive system for a working machine, which can realize the assurance of good operability in normal operation and precision operation and a reduction in energy loss in the precision operation. A controller (31) is provided with a pump delivery rate control unit (40) and a center bypass valve control unit (50). The pump delivery rate control unit (40) performs control processing to output, to a control terminal of a solenoid-operated proportional reducing valve (21), a control signal to make a displacement of a variable displacement hydraulic pump (10) smaller than a displacement corresponding to normal operation when a working element control device is in a manipulation mode considered to correspond to precision operation. The center bypass valve control unit (50) performs control processing to output, to a control terminal of a proportional solenoid valve (23), a control signal to make a center bypass valve (22) have a relatively large opening amount despite the center bypass valve (22) is in a switched state between a fully open position and a fully closed position when the working element control device is in a manipulation mode considered to correspond to the precision operation and a load pressure on a working element actuator is in a low state.

IPC 8 full level

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CPC (source: EP KR US)

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