

Title (en)
HYDRAULIC DRIVE DEVICE OF WORKING MACHINE

Title (de)
HYDRAULISCHE ANTRIEBSVORRICHTUNG FÜR EINE ARBEITSMASCHINE

Title (fr)
DISPOSITIF D'ENTRAÎNEMENT HYDRAULIQUE D'ENGIN DE CHANTIER

Publication
EP 2677180 A1 20131225 (EN)

Application
EP 12747270 A 20120209

Priority

- JP 2011028940 A 20110214
- JP 2012052977 W 20120209

Abstract (en)

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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