

Title (en)
HYDRAULIC CONTROL SYSTEM FOR CONSTRUCTION MACHINERY

Title (de)
HYDRAULIKPUMPENSTEUERUNGSSYSTEM FÜR EINE BAUMASCHINE

Title (fr)
SYSTÈME DE COMMANDE HYDRAULIQUE POUR ENGINS DE CHANTIER

Publication
EP 2743517 A4 20150408 (EN)

Application
EP 11870643 A 20110809

Priority
KR 2011005790 W 20110809

Abstract (en)
[origin: EP2743517A1] A hydraulic control system for a construction machine is disclosed, which can operate an arm cylinder and a bucket cylinder by supplying hydraulic fluid from respective hydraulic pumps to the arm cylinder and the bucket cylinder during a combined operation, such as an excavating work, in which an arm joystick and a bucket joystick are simultaneously operated. The hydraulic control system includes a first arm control valve installed in a flow path between the first hydraulic pump and the arm cylinder and shifted to control a start, stop, and direction change of the arm cylinder in response to an operation of the arm joystick, a second arm control valve installed in a flow path between the second hydraulic pump and the arm cylinder and shifted to make discharged hydraulic fluid of the second hydraulic pump join hydraulic fluid of the arm cylinder to be supplied if a control signal according to the operation of the arm joystick exceeds a set value, a bucket control valve installed in a path between the second hydraulic pump and the bucket cylinder and shifted to control a start, stop, and direction change of the bucket cylinder in response to the operation of the bucket joystick, and a confluence cutoff proportional valve installed in a path between the second hydraulic pump and the second arm control valve.

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Citation (search report)
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• [Y] GB 2441258 A 20080227 - KOMATSU MFG CO LTD [JP]
• [A] JP H05288203 A 19931102 - KOMATSU MFG CO LTD
• See references of WO 2013022131A1

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US11408145B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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EP 2743517 A1 20140618; **EP 2743517 A4 20150408**; CN 103717914 A 20140409; CN 103717914 B 20160511; JP 2014522952 A 20140908; JP 5771332 B2 20150826; KR 20140050030 A 20140428; US 2014158235 A1 20140612; WO 2013022131 A1 20130214

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EP 11870643 A 20110809; CN 201180072647 A 20110809; JP 2014524910 A 20110809; KR 2011005790 W 20110809; KR 20147002787 A 20110809; US 201114235182 A 20110809