

Title (en)

BOOM-SWIVEL COMPOUND DRIVE HYDRAULIC CONTROL SYSTEM OF CONSTRUCTION MACHINE

Title (de)

HYDRAULISCHES STEUERSYSTEM EINES AUSLEGERDREHGELENKVERBUNDANTRIEBS EINER EINER BAUMASCHINE

Title (fr)

SYSTÈME DE COMMANDE HYDRAULIQUE D'ENTRAÎNEMENT COMBINÉ FLÈCHE/PIVOT POUR MACHINE DE CONSTRUCTION

Publication

EP 2660478 A4 20140820 (EN)

Application

EP 10861359 A 20101227

Priority

KR 2010009361 W 20101227

Abstract (en)

[origin: EP2660478A1] Disclosed is a hydraulic control system for matching the drive speed of a boom up and a swing device according to the operation environment when compound-driving for manipulating boom and swing for excavation compensating error operation. The hydraulic control system of the present invention comprises: an operation mode selection switch for enabling the selection of an operation mode according to the operation environment; an electronic proportional pressure control valve for outputting a control signal pressure that is proportional to the manipulation of the operation mode selection switch when manipulating a boom operation lever for driving the boom up; a variable flow control valve that is placed on a flow channel between a first hydraulic pump and a spool for the swing device, and has an open area thereof that is variably matched proportional to the control signal pressure from the electronic proportional pressure control valve; and a controller having various types of operation modes previously set and stored thereon so as to control the flow being supplied to the spool for the swing device and a spool for the boom merge, according to the operation mode selected when manipulating the operation mode selection switch.

IPC 8 full level

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CPC (source: EP KR US)

E02F 9/2037 (2013.01 - EP US); **E02F 9/22** (2013.01 - KR); **E02F 9/2242** (2013.01 - EP US); **E02F 9/2292** (2013.01 - EP US); **E02F 9/2296** (2013.01 - EP US); **F15B 11/17** (2013.01 - EP US); **F15B 13/02** (2013.01 - KR); **F15B 13/044** (2013.01 - KR); **F15B 2211/20546** (2013.01 - EP US); **F15B 2211/20576** (2013.01 - EP US); **F15B 2211/30595** (2013.01 - EP US); **F15B 2211/40515** (2013.01 - EP US); **F15B 2211/41509** (2013.01 - EP US); **F15B 2211/428** (2013.01 - EP US); **F15B 2211/455** (2013.01 - EP US); **F15B 2211/6658** (2013.01 - EP US); **F15B 2211/7142** (2013.01 - EP US)

Citation (search report)

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- [Y] JP H093977 A 19970107 - DAIU JUKOGYO KK
- [Y] JP 2002047691 A 20020215 - KOMATSU MFG CO LTD
- See references of WO 2012091187A1

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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

DOCDB simple family (publication)

EP 2660478 A1 20131106; **EP 2660478 A4 20140820**; **EP 2660478 B1 20170315**; CN 103299089 A 20130911; CN 103299089 B 20160810; JP 2014505810 A 20140306; KR 20130137192 A 20131216; US 2013291530 A1 20131107; WO 2012091187 A1 20120705

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EP 10861359 A 20101227; CN 201080071033 A 20101227; JP 2013547272 A 20101227; KR 2010009361 W 20101227; KR 20137016543 A 20101227; US 201013996818 A 20101227