

Title (en)

CONTROL SYSTEM FOR OPERATING WORK DEVICE FOR CONSTRUCTION MACHINE

Title (de)

STEUERUNGSSYSTEM ZUM BETRIEB EINER ARBEITSVORRICHTUNG FÜR EINE BAUMASCHINE

Title (fr)

SYSTÈME DE COMMANDE POUR FAIRE FONCTIONNER UN DISPOSITIF DE TRAVAIL D'UNE MACHINE DE CONSTRUCTION

Publication

EP 2772653 A1 20140903 (EN)

Application

EP 11873593 A 20111007

Priority

KR 2011007439 W 20111007

Abstract (en)

Disclosed is a control system for controlling flow so as to allow simultaneous usage of a parallel flow path and a tandem flow path thereby reducing loss of pressure inside a control valve, when simultaneously operating work devices having different operating pressures. A control system for operating the work device, according to the present invention, provides the control system for operating the work device for a construction machine, comprising: first and second hydraulic pumps that are connected to an engine; a revolution control valve, an arm control valve, and a left driving control valve, which are installed on a first center bypass path of the first hydraulic pump, and each of which is connected via the parallel flow path; a boom control valve, a bucket control valve, and a right driving valve, which are installed on a second center bypass path of the second hydraulic pump, and each of which is connected via the parallel flow path; a pressure generation device; a bleed flow path, which is formed on a control spool at a lower side of a boom of the boom control valve, for maintaining an open state of the second center bypass path without closing same, when the boom control valve is switched so as to lower the boom; and a center bypass switch valve, which is installed on the lowermost side of the second center bypass path and is switched by means of a control signal for switching the boom control valve.

IPC 8 full level

F15B 13/043 (2006.01); **E02F 9/22** (2006.01); **F15B 11/17** (2006.01); **F15B 13/02** (2006.01)

CPC (source: EP US)

E02F 3/42 (2013.01 - US); **E02F 9/123** (2013.01 - US); **E02F 9/22** (2013.01 - US); **E02F 9/2217** (2013.01 - EP US);
E02F 9/2225 (2013.01 - EP US); **E02F 9/2267** (2013.01 - US); **E02F 9/2282** (2013.01 - EP US); **E02F 9/2285** (2013.01 - EP US);
E02F 9/2292 (2013.01 - EP US); **F15B 11/17** (2013.01 - EP US); **F15B 2211/20546** (2013.01 - EP US); **F15B 2211/20576** (2013.01 - EP US);
F15B 2211/3116 (2013.01 - EP US); **F15B 2211/3133** (2013.01 - EP US)

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 2772653 A1 20140903; **EP 2772653 A4 20151021**; CN 103842663 A 20140604; JP 2014534386 A 20141218; JP 5802338 B2 20151028;
KR 20140074306 A 20140617; US 2014238010 A1 20140828; WO 2013051740 A1 20130411

DOCDB simple family (application)

EP 11873593 A 20111007; CN 201180073924 A 20111007; JP 2014534449 A 20111007; KR 2011007439 W 20111007;
KR 20147007835 A 20111007; US 201114348686 A 20111007