

Title (en)

Hydraulic drive system for construction machine

Title (de)

Hydraulikantriebssystem für Baumaschinen

Title (fr)

Système de commande hydraulique pour machine de construction

Publication

**EP 2362023 A1 20110831 (EN)**

Application

**EP 11151508 A 20110120**

Priority

JP 2010042676 A 20100226

Abstract (en)

A manually operated directional control valve 39 is interposed between attachment-drive lines 37a and 37b to establish connection between an attachment-drive actuator 22 and an attachment-drive control valve 33. The directional control valve 39 is switched to any one of switching positions X, Y, and Z, the first switching position X allowing an actuator port A and a valve port B to communicate with each other and to block a line port C and a tank port D, the switching position Y allowing the actuator port A and the tank port D to communicate with each other and to block the valve port B and the line port C, and the switching position Z allowing the line port C and the tank port D to communicate with each other and to block the actuator port A and the valve port B. Thus, depressurizing work for the attachment-drive lines can be done with a hydraulic circuit having a simple, compact structure.

IPC 8 full level

**E02F 3/36** (2006.01); **B66C 13/12** (2006.01); **E02F 9/22** (2006.01); **F15B 21/04** (2006.01)

CPC (source: EP)

**E02F 3/3654** (2013.01); **E02F 9/2267** (2013.01); **E02F 9/2271** (2013.01); **F15B 20/005** (2013.01); **F15B 2211/3116** (2013.01)

Citation (applicant)

JP H0637087 B2 19940518

Citation (search report)

- [A] JP 2005307606 A 20051104 - SUMITOMO CONSTR MACHINERY MFG
- [A] JP 2007262778 A 20071011 - KOBELCO CONSTR MACHINERY LTD
- [A] DE 202009007316 U1 20090820 - LEISTER HERMANN [DE]
- [A] EP 1365076 A1 20031126 - KOMATSU MFG CO LTD [JP]

Cited by

DE102012012299A1; WO2022073651A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2362023 A1 20110831**; JP 2011179191 A 20110915

DOCDB simple family (application)

**EP 11151508 A 20110120**; JP 2010042676 A 20100226