

Title (en)

BOOM CYLINDER CONTROL CIRCUIT OF WORKING MACHINE

Title (de)

STEUERANLAGE FÜR EINEN AUSLEGERZYLINDER EINER BAUMASCHINE

Title (fr)

CIRCUIT DE COMMANDE D'UN VÉRIN DE FLÈCHE D'UNE MACHINE DE CHANTIER

Publication

EP 1211359 A1 20020605 (EN)

Application

EP 00956920 A 20000904

Priority

- JP 0006005 W 20000904
- JP 2000076002 A 20000317

Abstract (en)

The invention provides a boom cylinder control circuit of a working machine which makes boom operations easy when stone crushing operations by means of a breaker or operations to move a bucket back and forth along the ground are performed, wherein a control circuit of a boom cylinder 10 is provided with a lowering side oil discharging passage E and a rising side oil discharging passage F which allow oil of an oil chamber on the head side 10b and an oil chamber on the rod side 10a of the boom cylinder to flow toward an oil reservoir 12 without passing through a control valve 13 and a second solenoid valve 21 and a third solenoid valve 22 which act to open and close these oil discharging passages, respectively. <IMAGE>

IPC 1-7

E02F 9/22; **F15B 11/08**

IPC 8 full level

E02F 3/43 (2006.01); **E02F 9/22** (2006.01); **F15B 11/00** (2006.01); **F15B 11/024** (2006.01); **F15B 11/044** (2006.01)

CPC (source: EP)

E02F 3/435 (2013.01); **E02F 9/2203** (2013.01); **E02F 9/2221** (2013.01); **E02F 9/2228** (2013.01); **E02F 9/2285** (2013.01); **F15B 11/003** (2013.01); **F15B 11/024** (2013.01); **F15B 11/044** (2013.01); **F15B 2211/30505** (2013.01); **F15B 2211/30525** (2013.01); **F15B 2211/3111** (2013.01); **F15B 2211/3144** (2013.01); **F15B 2211/31588** (2013.01); **F15B 2211/329** (2013.01); **F15B 2211/40515** (2013.01); **F15B 2211/40576** (2013.01); **F15B 2211/413** (2013.01); **F15B 2211/41581** (2013.01); **F15B 2211/428** (2013.01); **F15B 2211/46** (2013.01); **F15B 2211/6306** (2013.01); **F15B 2211/6346** (2013.01); **F15B 2211/6355** (2013.01)

Cited by

CN108005139A; EP4379218A1; EP3305995A4; GB2402174A; GB2402174B; KR20200131243A; EP3770339A4; US10407876B2; US11454001B2; US6907815B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 1211359 A1 20020605; **EP 1211359 A4 20061213**; **EP 1211359 B1 20081105**; DE 60040746 D1 20081218; JP 2001262629 A 20010926; JP 3627972 B2 20050309; WO 0171110 A1 20010927

DOCDB simple family (application)

EP 00956920 A 20000904; DE 60040746 T 20000904; JP 0006005 W 20000904; JP 2000076002 A 20000317