

Title (en)

COUNTER BALANCE VALVE AND FLUID PRESSURE CONTROL DEVICE PROVIDED WITH COUNTER BALANCE VALVE

Title (de)

SENKBREMSVENTIL UND MIT DEM SENKBREMSVENTIL AUSGESTATTETE FLUIDDRUCKSTEUERUNGSVORRICHTUNG

Title (fr)

SOUPAPE D'ÉQUILIBRAGE ET DISPOSITIF DE RÉGULATION DE PRESSION DE FLUIDE MUNI D'UNE SOUPAPE D'ÉQUILIBRAGE

Publication

**EP 3379090 A1 20180926 (EN)**

Application

**EP 16865999 A 20160909**

Priority

- JP 2015227811 A 20151120
- JP 2016076678 W 20160909

Abstract (en)

A counterbalance valve (10) includes: a valve-side passage (14a,14b) communicating with the directional control valve (3); a motor-side passage (15a,15b) communicating with the fluid pressure motor (2); a control valve (11) configured to control flowing of working fluid between the valve-side passage (14a,14b) and the motor-side passage (15a,15b) when the directional control valve (3) is switched; a pilot chamber (11a,11b) to which pilot pressure for controlling the control valve (11) is guided; a pilot passage (13a,13b) communicating the valve-side passage (14a,14b) with the pilot chamber (11a,11b); and a flow rate control valve (12a,12b) configured to variably control a flow rate of working fluid flowing through the pilot passage (13a,13b).

IPC 8 full level

**F15B 11/00** (2006.01); **E02F 9/22** (2006.01)

CPC (source: EP KR)

**E02F 9/2083** (2013.01 - EP); **E02F 9/2221** (2013.01 - KR); **E02F 9/2228** (2013.01 - EP); **E02F 9/2253** (2013.01 - EP); **E02F 9/226** (2013.01 - EP); **E02F 9/2267** (2013.01 - KR); **F15B 11/0406** (2013.01 - EP); **F15B 13/029** (2013.01 - EP); **F15B 13/0401** (2013.01 - KR); **F15B 13/043** (2013.01 - EP); **F15B 21/08** (2013.01 - KR); **E02F 9/2267** (2013.01 - EP); **F15B 2013/0412** (2013.01 - EP); **F15B 2211/40515** (2013.01 - EP); **F15B 2211/426** (2013.01 - EP KR); **F15B 2211/6326** (2013.01 - EP); **F15B 2211/6336** (2013.01 - EP); **F15B 2211/634** (2013.01 - EP); **F15B 2211/6346** (2013.01 - EP); **F15B 2211/6355** (2013.01 - EP); **F15B 2211/67** (2013.01 - EP); **F15B 2211/7058** (2013.01 - EP); **F15B 2211/715** (2013.01 - EP); **F15B 2211/755** (2013.01 - EP)

Citation (search report)

See references of WO 2017085996A1

Cited by

CN113348301A; US11913194B2

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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