

Title (en)
CONSTRUCTION MACHINE WITH FLOATING FUNCTION

Title (de)
BAUMASCHINE MIT SCHWIMMFUNKTION

Title (fr)
ENGIN DE CHANTIER À FONCTION FLOTTANTE

Publication
EP 2937472 A1 20151028 (EN)

Application
EP 12890478 A 20121220

Priority
KR 2012011178 W 20121220

Abstract (en)
Disclosed is a construction machine with a floating function for performing soil preparation or the like for flattening the ground or the like using a dozer blade. The construction machine with a floating function according to the present invention comprises: a hydraulic pump and a pilot pump; a dozer cylinder connected to the hydraulic pump so as to move the dozer blade in the vertical direction; a control valve arranged in a channel between the hydraulic pump and the dozer cylinder; a dozer check valve arranged in the channel between the control valve and the dozer cylinder; a return check valve arranged in the channel between the control valve and a hydraulic tank; a solenoid valve for floating arranged in a signal path between the pilot pump and the dozer check valve such that the solenoid valve is capable of opening and closing; a channel for floating, one end of which is connected to the hydraulic tank and the other end of which is connected to the channel interconnecting the control valve and the dozer cylinder; and a check valve arranged in the channel for floating so as to supply working fluid to the dozer cylinder through the channel for floating from the hydraulic tank in a floating mode, and cut off the channel for floating when the floating mode is cancelled.

IPC 8 full level
E02F 9/22 (2006.01); **E02F 3/84** (2006.01); **F15B 11/00** (2006.01)

CPC (source: EP US)
E02F 3/844 (2013.01 - EP US); **E02F 9/2203** (2013.01 - EP US); **E02F 9/2285** (2013.01 - EP US); **E02F 9/2292** (2013.01 - US); **F15B 11/003** (2013.01 - EP US); **F15B 2211/3051** (2013.01 - EP US); **F15B 2211/3127** (2013.01 - EP US); **F15B 2211/7741** (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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2937472 A1 20151028; **EP 2937472 A4 20160907**; AU 2012397386 A1 20150709; AU 2012397386 B2 20160519; KR 101741702 B1 20170530; KR 20150092168 A 20150812; US 2015315768 A1 20151105; WO 2014098284 A1 20140626

DOCDB simple family (application)
EP 12890478 A 20121220; AU 2012397386 A 20121220; KR 2012011178 W 20121220; KR 20157015833 A 20121220; US 201214652012 A 20121220