

Title (en)

A METHOD OF CONTROLLING A HYDRAULIC SYSTEM, A HYDRAULIC SYSTEM AND A CRANE

Title (de)

VERFAHREN ZUR STEUERUNG EINES HYDRAULIKSYSTEMS, HYDRAULIKSYSTEM UND KRAN

Title (fr)

PROCÉDÉ DE COMMANDE D'UN SYSTÈME HYDRAULIQUE, SYSTÈME HYDRAULIQUE ET GRUE

Publication

**EP 3763949 B1 20220223 (EN)**

Application

**EP 19185008 A 20190708**

Priority

EP 19185008 A 20190708

Abstract (en)

[origin: EP3763949A1] A hydraulic system for operating a working equipment, said hydraulic system comprising a set of hydraulic cylinders (5, 6, 7), each having a first port (17, 18, 19) and a second port (20, 21, 22) on opposite sides of respective piston (8, 9, 10), a tank (23) for housing hydraulic fluid, a pump (24) configured to pump hydraulic fluid from the tank (23) to each cylinder, and a set of hydraulic control valves (25, 26, 27), one for each cylinder, each control valve (25, 26, 27) being configured to control a flow of hydraulic fluid from said pump (24) to one of the first port (17, 18, 19) and the second port (20, 21, 22). The hydraulic system comprises means for determining the total return flow rate from said cylinders (5, 6, 7) to the tank (23), and a control unit (28) configured to control the flow rate of hydraulic fluid to said first or second port (17-22) of the cylinders (5, 6, 7) on basis of the determined total return flow rate, such that a predetermined return flow rate limit is not exceeded.

IPC 8 full level

**B66C 13/12** (2006.01); **B66C 13/18** (2006.01); **F15B 11/042** (2006.01); **F15B 11/044** (2006.01)

CPC (source: EP)

**B66C 13/20** (2013.01); **B66C 23/54** (2013.01); **F15B 11/042** (2013.01); **F15B 2211/30525** (2013.01); **F15B 2211/327** (2013.01);  
**F15B 2211/351** (2013.01); **F15B 2211/353** (2013.01); **F15B 2211/6336** (2013.01); **F15B 2211/634** (2013.01); **F15B 2211/665** (2013.01);  
**F15B 2211/6654** (2013.01); **F15B 2211/7053** (2013.01); **F15B 2211/71** (2013.01); **F15B 2211/78** (2013.01)

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 3763949 A1 20210113; EP 3763949 B1 20220223;** DK 3763949 T3 20220523

DOCDB simple family (application)

**EP 19185008 A 20190708;** DK 19185008 T 20190708