

Title (en)
HYDRAULIC MACHINERY

Title (de)
HYDRAULISCHE MASCHINE

Title (fr)
ENGIN HYDRAULIQUE

Publication
EP 2792888 A1 20141022 (EN)

Application
EP 12858263 A 20121214

Priority
• JP 2011275236 A 20111216
• JP 2012082494 W 20121214

Abstract (en)
The invention addresses the problem of avoiding insufficient flow being supplied to the hydraulic actuator and speed becoming insufficient during light loads in hydraulic machinery such as hydraulic shovels when the engine rotation speed is set low during normal work. The solution is to increase the discharge flow of the hydraulic pump (2) by increasing the rotation speed of the engine (1) above the target rotation speed set by the engine rotation speed-setting means (14) when the hydraulic pump (2) discharge pressure is at the light load pump discharge pressure, the hydraulic pump (2) inclination angle is at the maximum inclination angle, and the negative control signal pressure is at the signal pressure when the hydraulic actuator-operating means (7) is at full operation.

IPC 8 full level
E02F 9/22 (2006.01); **F02D 29/04** (2006.01); **F02D 41/02** (2006.01); **F15B 1/08** (2006.01); **F15B 1/24** (2006.01); **F15B 11/00** (2006.01)

CPC (source: EP US)
E02F 9/2246 (2013.01 - EP US); **E02F 9/2285** (2013.01 - EP US); **E02F 9/2296** (2013.01 - EP US); **F02D 29/04** (2013.01 - EP US); **F02D 41/0205** (2013.01 - EP US); **F15B 1/083** (2013.01 - EP US); **F15B 1/24** (2013.01 - EP US); **F02D 41/021** (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

DOCDB simple family (publication)
EP 2792888 A1 20141022; EP 2792888 A4 20160106; CN 104136782 A 20141105; CN 104136782 B 20160330; JP 2013124752 A 20130624; JP 5614814 B2 20141029; KR 20140110859 A 20140917; US 2014331660 A1 20141113; WO 2013089230 A1 20130620

DOCDB simple family (application)
EP 12858263 A 20121214; CN 201280061268 A 20121214; JP 2011275236 A 20111216; JP 2012082494 W 20121214; KR 20147015866 A 20121214; US 201214365555 A 20121214