

Title (en)

Hydraulic control block and hydraulic system

Title (de)

Hydraulischer Steuerblock und Hydrauliksystem

Title (fr)

Bloc de commande hydraulique et système hydraulique

Publication

EP 2669527 A3 20170308 (DE)

Application

EP 13001909 A 20130412

Priority

DE 102012010847 A 20120531

Abstract (en)

[origin: EP2669527A2] The block has two pressure supply circuits (10, 20) including a valve arrangement that is provided with four directional valves (1-4). The valve arrangement selectively connects two pump ports with one of the pressure supply circuits individually over the valves or is in combination with remaining pump ports, where a direct connection of a consumer port is provided per pump port over a control valve, which is designed as a 6/3-way valve and a 4/3-way valve. A safety-relevant shut-down path provides a direct connection switchable by a valve between the pump port and a hydraulic tank. The shut-down path is a black-and-white or proportional valve, a piston valve, a logic valve in cartridge construction, a flow control valve or a pressure limiting valve (21). The pressure supply circuits are designed as supply channels.

IPC 8 full level

F15B 11/17 (2006.01)

CPC (source: EP US)

F15B 11/17 (2013.01 - EP US); **F15B 13/0803** (2013.01 - US); **F15B 2211/20576** (2013.01 - EP US); **F15B 2211/30595** (2013.01 - EP US); **F15B 2211/411** (2013.01 - EP US); **F15B 2211/41509** (2013.01 - EP US); **F15B 2211/7142** (2013.01 - EP US); **F15B 2211/781** (2013.01 - EP US); **Y10T 137/87885** (2015.04 - EP US)

Citation (search report)

- [X] WO 0055509 A1 20000921 - CATERPILLAR MITSUBISHI LTD [JP], et al
- [X] US 2008034746 A1 20080214 - VERKUILEN MICHAEL T [US]
- [A] US 2011056194 A1 20110310 - WOJCICKI MARK [US], et al
- [A] FR 2335768 A1 19770715 - BAMFORD EXCAVATORS LTD [GB]

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CN109114048A

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 2669527 A2 20131204; **EP 2669527 A3 20170308**; CN 103486103 A 20140101; DE 102012010847 A1 20131205; JP 2013249954 A 20131212; US 2013319561 A1 20131205

DOCDB simple family (application)

EP 13001909 A 20130412; CN 201310214787 A 20130531; DE 102012010847 A 20120531; JP 2013113773 A 20130530; US 201313901276 A 20130523