

Title (en)

Hydraulic pilot valve assembly and hydraulic valve assembly with same

Title (de)

Hydraulische Pilotventilanordnung und hydraulische Ventilanordnung damit

Title (fr)

Agencement de soupape pilote hydraulique et agencement de soupape hydraulique en étant équipé

Publication

EP 2642132 A3 20170712 (DE)

Application

EP 13001128 A 20130306

Priority

DE 102012005593 A 20120320

Abstract (en)

[origin: EP2642132A2] The arrangement (2) has a pilot valve (34) activated electromagnetically in a pulse-width-modulated manner or ballistically. A high pressure connection (42) and a low pressure connection are connected to a pressure medium source (46) and a pressure medium sink (52), respectively. A control connection is connected to a pilot controlled-control chamber (28). The control connection is connected to the high or low pressure connection when the pilot valve is in an open position. Another pilot valve (36) is connected in series with the former pilot valve in a pressure medium flow path (56). The pilot valve is designed as a 2/2-way switching valve, a directional control valve, a seat valve or a slider valve. An independent claim is also included for a hydraulic valve arrangement.

IPC 8 full level

F15B 9/09 (2006.01); **F15B 11/00** (2006.01); **F15B 21/08** (2006.01); **G05D 3/12** (2006.01)

CPC (source: EP US)

F15B 11/006 (2013.01 - EP US); **F15B 13/043** (2013.01 - EP US); **F15B 21/08** (2013.01 - EP US); **F15B 2211/30575** (2013.01 - EP US); **F15B 2211/328** (2013.01 - EP US); **F15B 2211/355** (2013.01 - EP US); **F15B 2211/6336** (2013.01 - EP US); **F15B 2211/6346** (2013.01 - EP US); **F15B 2211/6355** (2013.01 - EP US); **F15B 2211/6656** (2013.01 - EP US); **F15B 2211/67** (2013.01 - EP US); **Y10T 137/86582** (2015.04 - EP US); **Y10T 137/87193** (2015.04 - EP US)

Citation (search report)

- [X] DE 102009052285 A1 20110512 - BOSCH GMBH ROBERT [DE]
- [E] EP 2602492 A2 20130612 - BOSCH GMBH ROBERT [DE]
- [AD] EP 0828946 B1 20010711 - DANFOSS FLUID POWER AS [DK]
- [AD] INGO SCHEPERS ET AL: "A Novel Model for Optimized Development and Application of Switching Valves in Closed Loop Control", INTERNATIONAL JOURNAL OF FLUID POWER, vol. 12, no. 3, 1 January 2011 (2011-01-01), DE, pages 31 - 40, XP055374784, ISSN: 1439-9776, DOI: 10.1080/14399776.2011.10781035

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)

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DOCDB simple family (application)

EP 13001128 A 20130306; CN 201310180162 A 20130319; DE 102012005593 A 20120320; US 201313847065 A 20130319