

Title (en)

Hydraulic valve assembly with hydraulic pilot valve assembly

Title (de)

Hydraulische Ventilanordnung mit hydraulischer Pilotventilanordnung

Title (fr)

Agencement de soupape hydraulique avec un agencement de soupape pilote hydraulique

Publication

EP 2642132 A2 20130925 (DE)

Application

EP 13001128 A 20130306

Priority

DE 102012005593 A 20120320

Abstract (en)

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.

Abstract (de)

Offenbart ist eine hydraulische Pilotventilanordnung zur Vorsteuerung eines Ventils (6,306,506), die zumindest ein elektromagnetisch pulswertenmoduliert betätigbares Pilotventil (34,234,434) aufweist. Das Pilotventil ist dabei ballistisch oder invers ballistisch betätigbar. Weiterhin offenbart ist eine hydraulische Ventilanordnung mit der Pilotventilanordnung (2,102,202,302,402,602) und mit einem Ventil, das über die Pilotventilanordnung vorsteuerbar ist.

IPC 8 full level

F15B 9/09 (2006.01); **F15B 11/00** (2006.01); **F15B 21/08** (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 (applicant)

- EP 0828946 B1 20010711 - DANFOSS FLUID POWER AS [DK]
- INTERNATIONAL JOURNAL OF FLUID POWER, vol. 12, no. 3, 2011

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 2642132 A2 20130925; **EP 2642132 A3 20170712**; **EP 2642132 B1 20190612**; CN 103321978 A 20130925; CN 103321978 B 20170301; DE 102012005593 A1 20130926; US 2013248032 A1 20130926

DOCDB simple family (application)

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