

Title (en)
Valve assembly

Title (de)
Ventilanordnung

Title (fr)
Agencement de vannes

Publication
EP 2234135 A3 20110302 (DE)

Application
EP 10002602 A 20100312

Priority
DE 102009014421 A 20090326

Abstract (en)
[origin: EP2234135A2] The system (10) has a pilot control valve (13) including a 3/2 way valve, and a main valve arrangement whose main valves (11, 12) include 2/2-way valves. The pilot-control valve moves one of the main valves into an open position so as to direct a path for a high pressure fluid to a space above a piston (17). The pilot-control valve connects the space to a low-pressure tank (28) so as to relieve pressure in the space above the piston via another main valve. The pilot-control valve opens the latter main valve and closes the former main valve.

IPC 8 full level
F15B 13/043 (2006.01); **F16K 31/383** (2006.01); **H01H 33/34** (2006.01)

CPC (source: EP KR US)
F15B 11/006 (2013.01 - EP KR US); **F15B 13/022** (2013.01 - KR); **F15B 13/0405** (2013.01 - KR); **F15B 13/0431** (2013.01 - EP KR US); **F15B 15/1404** (2013.01 - KR); **H01H 33/34** (2013.01 - EP KR US); **H01H 33/55** (2013.01 - EP KR US); **H01H 33/561** (2013.01 - EP KR US); **F15B 13/0405** (2013.01 - EP US); **F15B 2211/30575** (2013.01 - EP KR US); **F15B 2211/329** (2013.01 - EP KR US); **F15B 2211/7052** (2013.01 - EP KR US); **H01H 2033/308** (2013.01 - EP US); **Y10T 137/87193** (2015.04 - EP US); **Y10T 137/87201** (2015.04 - EP US); **Y10T 137/87209** (2015.04 - EP US); **Y10T 137/87225** (2015.04 - EP US)

Citation (search report)

- [XYI] DE 2047838 A1 19720330 - SIEMENS AG
- [X] GB 1583017 A 19810121 - ROSS OPERATING VALVE CO
- [Y] DE 8613507 U1 19860717
- [A] WO 2006042499 A2 20060427 - BOSCH REXROTH AG [DE], et al

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DE102015121719A1; US10830256B2; EP2933816A1; US9506573B2

Designated contracting state (EPC)
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 SE SI SK SM TR

Designated extension state (EPC)
AL BA ME RS

DOCDB simple family (publication)
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EP 10002602 A 20100312; CN 201010149562 A 20100325; DE 102009014421 A 20090326; KR 20100025761 A 20100323; US 72268610 A 20100312