

Title (en)  
Hydraulic control valve device

Title (de)  
Hydraulische Steuerventileinrichtung

Title (fr)  
Dispositif de vanne de commande hydraulique

Publication  
**EP 2503161 B1 20171004 (DE)**

Application  
**EP 12157756 A 20120301**

Priority  
DE 102011014685 A 20110322

Abstract (en)  
[origin: EP2503161A2] The hydraulic control valve device (1) has a throttling control valve (2), which is arranged in an intermediate position with a conveying line (3) and a pump (4), where an outlet side fitting tight counter-balance valve (15a) is arranged in the direction of a flow position (18a) for being operated with a control pressure (pA) of the control valve. Multiple throttle units (21a,21b,23a,23b) are formed as diaphragms or nozzles.

IPC 8 full level  
**F15B 11/00** (2006.01)

CPC (source: EP)  
**F15B 11/003** (2013.01); **F15B 2211/30515** (2013.01); **F15B 2211/50527** (2013.01); **F15B 2211/7053** (2013.01)

Cited by  
EP3004470A4; US10316929B2; US10323663B2; US11209027B2; US11209028B2; US11536298B2; US9810242B2; US10502239B2; US11028861B2; US10036407B2; US10724552B2; US11326627B2; US10344783B2; US11047406B2; US11204048B2; US11566642B2

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 2503161 A2 20120926; EP 2503161 A3 20160210; EP 2503161 B1 20171004**; CN 102691683 A 20120926; CN 102691683 B 20160203; DE 102011014685 A1 20120927; JP 2012197937 A 20121018; JP 5959252 B2 20160802

DOCDB simple family (application)  
**EP 12157756 A 20120301**; CN 201210055999 A 20120228; DE 102011014685 A 20110322; JP 2012063458 A 20120321