

Title (en)  
CONTROL VALVE UNIT WITH ALTERNATING STOPS

Title (de)  
REGELVENTILEINHEIT MIT WECHSELANSCHLAG

Title (fr)  
UNITE DE VANNE DE REGULATION A BUTEE ALTERNEE

Publication  
**EP 1913259 A1 20080423 (DE)**

Application  
**EP 06776614 A 20060804**

Priority  
• EP 2006007742 W 20060804  
• DE 102005037619 A 20050809

Abstract (en)  
[origin: WO2007017197A1] The invention relates to a control valve unit (9) for an adjusting device of a hydrostatic piston engine. The control valve unit (9) comprises a valve housing (34), in which a valve element can be moved in a longitudinal direction. The valve element can be adjusted from a neutral position into a first end position and an opposite second end position. Along with an increasing adjustment of the valve element, a first or second outlet connection (35a, 35b) is connected in an increasing manner to an inlet connection (12). The other respective outlet connection (35b, 35a) is connected simultaneously to a relief line (13). The valve element comprises a first valve piston (32a) and a second valve piston (32b), which act upon one another via an elastic element (27).

IPC 8 full level  
**F04B 49/00** (2006.01); **F04B 1/32** (2006.01); **F04B 49/08** (2006.01); **F04B 49/10** (2006.01)

CPC (source: EP KR US)  
**F04B 1/32** (2013.01 - KR); **F04B 49/00** (2013.01 - KR); **F04B 49/002** (2013.01 - EP US); **F04B 49/08** (2013.01 - KR); **F04B 49/10** (2013.01 - KR); **F15B 11/042** (2013.01 - EP US); **F15B 11/044** (2013.01 - EP US); **F15B 21/08** (2013.01 - EP US); **F15B 2211/20546** (2013.01 - EP US); **F15B 2211/20553** (2013.01 - EP US); **F15B 2211/20561** (2013.01 - EP US); **F15B 2211/30565** (2013.01 - EP US); **F15B 2211/3144** (2013.01 - EP US); **F15B 2211/327** (2013.01 - EP US); **Y10T 137/7845** (2015.04 - EP US)

Citation (search report)  
See references of WO 2007017197A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2007017197 A1 20070215**; CN 101151464 A 20080326; CN 101151464 B 20100825; DE 102005037619 A1 20070222; DE 102005037619 B4 20200709; EP 1913259 A1 20080423; JP 2009505004 A 20090205; KR 20080031854 A 20080411; US 2009133761 A1 20090528

DOCDB simple family (application)  
**EP 2006007742 W 20060804**; CN 200680009920 A 20060804; DE 102005037619 A 20050809; EP 06776614 A 20060804; JP 2008525443 A 20060804; KR 20077026372 A 20071113; US 92112506 A 20060804