

Title (en)
MULTI-FUNCTION HYDRAULIC VALVE ASSEMBLY

Title (de)
HYDRAULISCHES VENTILAGGREGAT FÜR MEHRERE FUNKTIONEN

Title (fr)
ENSEMBLE SOUPAPE HYDRAULIQUE MULTIFONCTIONS

Publication
EP 1481168 B1 20090930 (EN)

Application
EP 03701411 A 20030214

Priority
• CA 0300212 W 20030214
• US 36107502 P 20020301
• US 12078902 A 20020412

Abstract (en)
[origin: CA2476759A1] A hydraulic valve assembly (10) for selectably delivering hydraulic fluid from a supply of hydraulic fluid to one of a first hydraulic operator (80) and a second hydraulic operator (82) is disclosed. The assembly includes first (32) and second (34) supply ports which communicate with the supply (18) and four operator ports (44,46,48,50). First (44) and third (48) ports communicate with the first hydraulic operator (80). Second (46) and fourth (50) ports communicate with the second hydraulic operator (82). First (36) and second (38) chambers are provided. The first chamber communicates with the first supply port and first and second operator ports. The second chamber communicates with the second supply port and third and fourth operator ports. Two selection valves (60,61) operating in unison are each located in each chamber. The selection valves operate between a first position at a first hydraulic fluid pressure and a second position at a second hydraulic fluid pressure. In a first position, the valves permit fluid communication of the first and second supply ports with the first and third operator ports, respectively. In a second position, the valves permit fluid communication with the second and fourth operator ports.

IPC 8 full level
F15B 13/07 (2006.01); **B66F 9/14** (2006.01); **B66F 9/22** (2006.01); **F15B 11/20** (2006.01)

CPC (source: EP US)
B66F 9/143 (2013.01 - EP US); **B66F 9/148** (2013.01 - EP); **B66F 9/22** (2013.01 - EP); **F15B 11/20** (2013.01 - EP); **F15B 13/07** (2013.01 - EP); **Y10T 137/2554** (2015.04 - EP US); **Y10T 137/8667** (2015.04 - EP US); **Y10T 137/8671** (2015.04 - EP US)

Cited by
DE102014101764A1

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

DOCDB simple family (publication)
AT E444449 T1 20091015; AU 2003203106 A1 20030916; CA 2476759 A1 20030912; CA 2476759 C 20110726; CN 100404882 C 20080723; CN 1639467 A 20050713; DE 60329471 D1 20091112; EP 1481168 A1 20041201; EP 1481168 B1 20090930; JP 2005519244 A 20050630

DOCDB simple family (application)
AT 03701411 T 20030214; AU 2003203106 A 20030214; CA 2476759 A 20030214; CN 03804959 A 20030214; DE 60329471 T 20030214; EP 03701411 A 20030214; JP 2003573302 A 20030214