

Title (en)  
**MULTIPLE WAY VALVE**

Publication  
**EP 0389787 B1 19921216 (DE)**

Application  
**EP 90103290 A 19900221**

Priority  
DE 3909988 A 19890325

Abstract (en)  
[origin: JPH02283903A] PURPOSE: To simplify the structure and reduce the risk of failure by introducing such a configuration that a valve rod in a first control chamber is given a section area greater than that of a piston confronting and that the force of motion toward the piston is greater than the force acting from a third control chamber to the piston. CONSTITUTION: Pilot valves 34 and 38 are formed as decompression valve of stepless operation type, and control chambers 17 and 19 receive alternately different control pressures according to the selection. A pressure is applied to a working space 5 for reducing the load, and also to a working space 6 for raising the load, when the control pressure is smaller than the max. control pressure by a pump 35 while the effective area of a piston 12 is greater than that of a confronting piston 30. When the load of the space 5 lowers, the valve 34 is actuated, and the operating pressure of a lever 40 which the control chamber 17 receives remains only a partial pressure of the max. control pressure. Because the force applied to a control chamber 46 and a compression spring 48 for the piston 30 is greater than the pressure applied from the piston 12 to the one 30, it serves as a receptacle table for a spring holder 24.

IPC 1-7  
**F15B 13/042**

IPC 8 full level  
**F15B 13/10** (2006.01); **F15B 13/04** (2006.01); **F15B 13/042** (2006.01)

CPC (source: EP US)  
**F15B 13/0402** (2013.01 - EP US); **Y10T 137/86582** (2015.04 - EP US); **Y10T 137/8663** (2015.04 - EP US)

Cited by  
DE4031628A1

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DE FR GB IT SE

DOCDB simple family (publication)  
**DE 3909988 C1 19900523**; DE 59000584 D1 19930128; EP 0389787 A2 19901003; EP 0389787 A3 19910410; EP 0389787 B1 19921216; JP H02283903 A 19901121; US 5038825 A 19910813

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