Title (en)

OPERATION VALVE DEVICE.

Title (de

STEUERUNGSVENTIL.

Title (fr)

SOUPAPE DE COMMANDE.

Publication

EP 0396760 B1 19940720

Application

EP 89909420 A 19890816

Priority

- JP 8900834 W 19890816
- JP 20274788 A 19880816

Abstract (en

[origin: WO9002266A1] This invention relates to an operation valve device for supplying a pressure oil to an actuator such as a hydraulic cylinder and a hydraulic motor. This operation valve device includes first and second oil ports (3, 4) for causing the pressure oil supplied to an input port (2) communicating with a pump (P) to flow out selectively into pressure chambers (B1, B2) on both sides of an actuator (B) through outlet ports (6, 7), first and second communication ports (12, 13) bored concentrically and facing each other in such a manner as to allow the first and second oil ports to communicate with a tank port (10), first and second valve ports (14, 15) bored concentrically and continuously outside the first and second communication ports, respectively, a pair of support shafts (16, 16) inserted into each of these valve ports in such a manner as to face each other, vacuum prevention valves (9, 9) fitted to the tip of these support shafts so as to open and close the communication ports, respectively, and check valves (8, 8) fitted into the intermediate portion of the support shafts in the axial direction so as to prevent the outflow of the pressure oil from the first and second oil ports to the input port side, respectively. Since the vacuum prevention valves (9, 9) and the check valves are disposed on the concentric support shafts, the operation valve device of the present invention is compact in size and can reduce oil leakage.

IPC 1-7

F15B 11/02

IPC 8 full level

F15B 11/02 (2006.01); F15B 13/02 (2006.01)

CPC (source: EP KR)

F15B 11/02 (2013.01 - KR); F15B 13/02 (2013.01 - EP)

Cited by

WO9724534A1

Designated contracting state (EPC)

DE GB SE

DOCDB simple family (publication)

**WO 9002266 A1 19900308**; DE 68916946 D1 19940825; DE 68916946 T2 19950105; EP 0396760 A1 19901114; EP 0396760 A4 19910123; EP 0396760 B1 19940720; JP 2559619 B2 19961204; JP H0251602 A 19900221; KR 900702240 A 19901206; KR 970001463 B1 19970206

DOCDB simple family (application)

JP 8900834 W 19890816; DE 68916946 T 19890816; EP 89909420 A 19890816; JP 20274788 A 19880816; KR 900700767 A 19900414