

Title (en)  
PILOT CONTROLLED SERVO-VALVE

Title (de)  
VORGESTEUERTES SERVOVENTIL

Title (fr)  
SERVO-SOUPAPE A COMMANDE PILOTE

Publication  
**EP 0828945 B1 20020911 (DE)**

Application  
**EP 95937068 A 19951113**

Priority  
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Abstract (en)  
[origin: US5896890A] PCT No. PCT/EP95/04454 Sec. 371 Date Sep. 16, 1997 Sec. 102(e) Date Sep. 16, 1997 PCT Filed Nov. 13, 1995 PCT Pub. No. WO96/15373 PCT Pub. Date May 23, 1996A pilot controlled servo-valve has four main flow connections, an axially sliding main control piston with four control edges and a front restoring spring that defines a spring-centered middle position of the main control piston. A control sleeve has ring shaped openings for the first, second and third main flow connections and a front opening for the fourth main flow connection. A first front face of the main control piston is axially opposed to the front opening. A pressure compensation surface is formed by the second front face of the main control piston in a spring chamber. The main control piston applies the pressure in the fourth main flow connection on said pressure compensating surface through a pressure relief channel. A traverse bore connects said pressure relief channel to an auxiliary connection chamber connected to the third main flow connection by the forth control edge. This valve may be space-savingsly integrated in a hydraulic block and has a clearly defined middle position, as well as a remarkable dynamic performance.

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IPC 8 full level  
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**WO 9615373 A1 19960523**; AT E224012 T1 20020915; AU 3928595 A 19960606; CA 2205441 A1 19960523; CA 2205441 C 20050208; CN 1070584 C 20010905; CN 1163657 A 19971029; DE 59510375 D1 20021017; EP 0828945 A1 19980318; EP 0828945 B1 20020911; JP 3638286 B2 20050413; JP H10508679 A 19980825; LU 88558 A1 19960715; RU 2153105 C2 20000720; US 5896890 A 19990427

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