Title (en)

HYDRAULIC SERVICE SYSTEM FOR A PULSATING PRESS

Publication

EP 0029223 B1 19831123 (DE)

Application

EP 80107012 A 19801113

Priority

PL 21967279 A 19791115

Abstract (en)

[origin: EP0029223A2] 1. A hydraulic supply system for at least one differential-area (Vp, Vn) piston of a hydraulic control motor (16) of a pulsation press, in which one pump, which is connected to a relief valve and the pressure line of which is controlled by a directional slide valve, is provided for each piston drive, a pulsator (20) being arranged which conveys oil as a pulsating stream into the same operating chamber (Vn) of each piston of the hydraulic control motor (16) as the pump and a pressure accumulator additionally being connected for the return of each piston of the control motor (16) in the pressure chamber (Vp), characterized in that the differential-area (Vp, Vn) piston of the control motor (16) in addition comprises on one side two axially offset pressure chambers (Vn, Vw) of differing sizes ; in that the pump (4) acts on the larger pressure chamber (Vn) of the control motor (16), whereas a further pump (5) acts on the smaller pressure chamber (Vw) of the sampe piston of the control motor (16) with the interposition of a pulsator constructed as a rotary distributor (20) ; in that the two pumps (4, 5) are each protected by means of a nonreturn valve (8, 9) and the pressure lines thereof are each connected to a pressure accumulator (14, 15) ; and in that the directional slide valve (17), in one of its operating positions, conveys the oil to a chamber (Vp) on the other side of the piston of the control motor, the second operating chamber (Vw) being simultaneously connected to the exhaust by a further slide valve (24), whilst the pressure value in the chamber (Vp) on the other side of the piston of the control motor (Vp) on the other side of the piston above the piston is limited by means of a relief valve (25).

IPC 1-7

B21J 9/12; B30B 15/16

IPC 8 full level

F15B 21/12 (2006.01); B21J 9/12 (2006.01); B21J 9/06 (2006.01)

CPC (source: EP)

B21J 9/12 (2013.01)

Cited by

CN103286251A; CN104353770A; CN106996071A; DE3419689A1; EP0103727A1; FR2521460A1; US4502307A

Designated contracting state (EPC) DE FR GB IT

DOCDB simple family (publication)

EP 0029223 A2 19810527; EP 0029223 A3 19811028; EP 0029223 B1 19831123; BG 41652 A3 19870715; DD 154345 A5 19820317; DE 3065716 D1 19831229; HU 182236 B 19831228; PL 126538 B1 19830831; PL 219672 A1 19810619; RO 81558 A 19830429; RO 81558 B 19830430; SU 1050583 A3 19831023

DOCDB simple family (application)

EP 80107012 Å 19801113; BG 4966380 A 19801114; DD 22521180 A 19801114; DE 3065716 T 19801113; HU 273080 A 19801114; PL 21967279 A 19791115; RO 10259380 A 19801114; SU 3003442 A 19801113