

Title (en)
HYDRAULIC SERVICE SYSTEM FOR A PULSATING PRESS

Publication
EP 0029223 A3 19811028 (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 same 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 above the piston is limited by means of a relief valve (25).

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CPC (source: EP)
B21J 9/12 (2013.01)

Citation (search report)
• DE 2335412 A1 19750206 - EXNII KUSNETSCHNO PRESSOWOWO M
• DE 2345527 A1 19750320 - SCHIRMER & PLATE

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

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