

Title (en)
Hydraulic pump

Title (de)
Hydraulische Pumpe

Title (fr)
Pompe hydraulique

Publication
EP 1555432 A1 20050720 (EN)

Application
EP 04250254 A 20040119

Priority
EP 04250254 A 20040119

Abstract (en)
An hydraulic pump (100) comprises a plurality of pumping bores (16a - 16d), each pumping bore (16a - 16d) including an inlet port (32a - 32d) for the supply of hydraulic fluid into said pumping bore (16a - 16d), a delivery port (30a - 30d) for the delivery of said hydraulic fluid from said pump (100) and a plurality of pump plungers (20a - 20d), each pump plunger (20a - 20d) being reciprocable within a respective one of said pumping bores (16a - 16d). Each pump plunger includes a head portion (22a - 22d) and a skirt portion (24a - 24d), and each pump plunger (20a - 20d) defines with said pumping bore (16a - 16d) a pumping chamber (23a - 23d) disposed between said head portion of said pump plunger and one end of said pumping bore and a transfer chamber disposed between said head portion (22a - 22d) and said skirt portion (24a - 24d) of said pump plunger (20a - 20d). The pump also includes communication means connected between the pumping chamber of each pumping bore and the transfer chamber of an adjacent pumping bore, and drive means (140) for reciprocably driving each of the pump plungers (20a - 20d) within said pumping bores (16a - 16d) such that hydraulic fluid is drawn into said pumping chamber through the inlet port of an adjacent pumping bore and pumped from said pumping chamber through the delivery port of said adjacent pumping bore. The drive means (140) includes means for temporarily halting at least one of the pump plungers (20a - 20d) during a part of its stroke. <IMAGE>

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Citation (search report)
• [XY] US 3002462 A 19611003 - RAYMOND THOMAS E
• [Y] GB 592386 A 19470916 - TECALEMIT LTD, et al
• [Y] US 6412454 B1 20020702 - GREEN EDWARD [IL]
• [A] US 3738111 A 19730612 - FLETCHER E

Cited by
WO2021200662A1

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