

Title (en)
MULTI PISTON MACHINE WITH AT LEAST THREE SWITCHABLE DISPLACEMENT VOLUMES AND A CENTRAL FIRST CONTROL VALVE

Title (de)
MEHRKOLBENMASCHINE MIT WENIGSTENS DREI SCHALTBAREN VERDRÄNGUNGSVOLUMEN UND EINEM ZENTRALEN ERSTEN STEUERVENTIL

Title (fr)
MACHINE À PISTONS MULTIPLES AVEC AU MOINS TROIS VOLUMES DE DÉPLACEMENT COMMUTABLES ET UNE PREMIÈRE SOUPAPE DE COMMANDE CENTRALE

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Abstract (en)
The invention concerns multi piston machine (10) with a rotor (70), wherein the pistons (1.1 - 1.18) abut against a cam surface (21) with multiple lobes (22). According to the invention the multi piston machine (10) is switchable between at least three non-zero displacement volumes by means of a first and a second control valve, wherein the first and the second control valve are connected to the first and the second working (11; 12) port respectively, wherein the first to fourth fluid chambers (31 - 34) are annular with respect to the axis of rotation (13), being arranged distributed along the axis of rotation (13), wherein the first control valve is arranged radially inside the first to fourth fluid chambers (31 - 34), wherein the first control valve is fluidically connected to the second and the third fluid chamber (32; 33), wherein second control valve is arranged radially outside the first to fourth chambers (31 - 34), wherein the second control valve is fluidically connected to the first and the fourth fluid chamber (31; 34), wherein the first chamber (31) is located closer to the second control surface (80) than the second to fourth chambers (32 - 34).

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Citation (applicant)

- US 6050173 A 20000418 - SAKAI TOSHIYUKI [JP], et al
- US 4807519 A 19890228 - WUESTHOF PETER [DE], et al
- US 5836231 A 19981117 - LEINONEN MAUNO [FI]

Citation (search report)

- [E] EP 4102052 A1 20221214 - BOSCH GMBH ROBERT [DE]
- [A] US 6050173 A 20000418 - SAKAI TOSHIYUKI [JP], et al
- [A] US 2012036994 A1 20120216 - SOUPLY JEAN-PIERRE [FR], et al

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