

Title (en)

ROTARY PISTON PUMP AND METHOD OF OPERATION

Title (de)

ROTATIONSKOLBENPUMPE UND VERFAHREN ZU IHREM BETRIEB

Title (fr)

POMPE ROTATIVE A PISTONS ET PROCEDE DE FONCTIONNEMENT

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Application

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Abstract (en)

[origin: WO9928629A1] A work unit, such as a blower, compressor, supercharger or engine is shown with a main shaft (1) and a pair of pistons (3) mounted on respective shafts (4). The main shaft (1) and the shafts (4) are connected by suitable gearing to hold the pistons (3) in a stationary orientation relative to the axis of the main shaft (1) and the housing (5). The main shaft (1) has a pair of opposed part cylindrical recesses (55) to accommodate the respective pistons (3). The arcuate surfaces (R4) of the pistons (3) cooperate with the concentric arcuate surface (R5) of the shaft (1). As the shaft (1) rotates, the edges or tips (48) of the pistons (3) can cooperate with the respective top and bottom arcuate surfaces (R1, R2) of the inner surface (49) of the housing (5) on either side of the blades (53, 54), while the external arcuate surfaces (R4) of the piston (3) can cooperate with the concentric arcuate surfaces (R3) of the internal surface (49) of the housing (5).

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