Title (en)

Parallel external axis rotary piston machine

Title (de

Parallel- und aussenachsige Rotationskolbenmaschine

Title (fr)

Machine à pistons rotatifs avec des axes parallèles externes

Publication

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Application

EP 94250290 A 19941205

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Abstract (en)

[origin: EP0661456A1] The invention relates to a parallel external axis rotary piston machine, preferably for compressing a compressible working medium, with two intermeshing screw rotors, of which the one is designed as a ribbed rotor (main impeller), the ribs of which lie outside the pitch circle, and the other is designed as a grooved rotor (secondary impeller), the head part of which lies essentially inside the pitch circle, and the screw pitch is selected as a function of the tooth pairing in such a way that at least one tooth is in engagement. According to the invention, the profile flank (26, 27, 53, 54), in transverse section, is designed in the area of the pitch circle (22, 23, 59, 60) in such a way that the contact between the impellers (2, 3, 50, 51) takes place only at the pitch circle point (39, 65), and in fact in such a way that the flanks roll on one another without slip at the engagement point on the pitch circle (22, 23, 59, 60). <IMAGE>

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