

Title (en)
VANE CELL MACHINE

Title (de)
FLÜGELZELLENMASCHINE

Title (fr)
MACHINE A CELLULES SEMI-ROTATIVE

Publication
EP 0659237 B1 19960424 (DE)

Application
EP 93919192 A 19930826

Priority
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• EP 9302311 W 19930826

Abstract (en)
[origin: WO9405912A1] In order to compensate in an efficient manner the radial and axial forces in a vane cell machine, and at the same time to increase its service life, the vane cell machine for liquids has a slotted rotor (1) mounted in a stator (4), and in which radially movable vanes (9) are slidingly mounted in such a way that they can be pressed against a stator inner wall by centrifugal, elastic or other pressure forces. Expanding or narrowing sickle-shaped feeding cells are formed and the liquid enters through a hollow, central stator, so that the vane cells are filled from the inside towards the outside. The rotor (1) is tubular and designed without a shaft; its two sides are prolonged beyond the working area determined by the vanes and the rotor is mounted in the outer stator by means of its prolongations. The rotor has vane slits that extend from its inner to its outer diameter. In the area of the rotor prolongations, the casing of the stator has hydraulic working surfaces oriented towards the rotor and on whose surface the operation pressure is applied and/or not applied in order to at least partially compensate or avoid radial forces.

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