

Title (en)
ROTARY VANE PUMP

Title (de)
DREHSCHIEBERPUMPE

Title (fr)
POMPE À TIROIRS ROTATIFS

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Abstract (en)
[origin: WO2011154237A2] The invention relates to a rotary vane pump (1), comprising an interior (2), a rotor (3), which is rotatably mounted therein and which has a slot (4) extending perpendicularly to the rotational axis (9), a vane (5), which is movably supported in the slot (4) of the rotor (3) and divides the interior (2) into two chambers and contacts the inner circumferential surface of the interior so that the vane (5) moves relative to the rotor (3) and the rotor (3) moves relative to the inner circumferential track (7). It is essential to the invention that the interior (2) has a cross-sectional shape that deviates from a circular shape and that has steady curvature, in other words has no curvature jumps, said cross-sectional shape being designed in such a way that there is an equal distance between the longitudinal ends (6, 6') of the vane (5) and the inner circumferential track (7) in certain rotational positions of the vane (5), in which the vane (5) contacts the inner circumferential track (7) at both longitudinal ends (6, 6'), and that the slot (4) has at least one convex slot wall (11, 12).

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