

Title (en)
VANE MACHINE

Title (de)
FLUEGELZELLENMASCHINE

Title (fr)
MACHINE À CELLULES ROTATIVES

Publication
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Application
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Abstract (en)
[origin: WO2008146094A1] The invention relates to a vane machine (500) for the expansion or compression of gaseous media, for example, air, exhaust gases of an internal combustion engine, vaporous media, or a mixture thereof, comprising a housing (505) with a cylindrical space and an inlet opening (510) and an outlet opening (520) into the cylindrical space, with a parallel offset or eccentrically disposed shaft (101) relative to the center axis (501) of the housing, at least one first and one second circular disc (102, 103; 401, 402) disposed on the shaft (101) offset in a parallel fashion relative to each other. The invention further comprises sliders (104 to 115) that are guided by the circular discs and can be displaced in the direction of the inner wall of the housing (505), wherein a vane is formed by two neighboring sliders (108, 109/109, 110;...) of the adjoining region of the inner wall of the housing (505), and the volume of the vanes in the region of the inlet opening (510) differs from the volume of the vanes in the region of the outlet opening (520). In order to obtain a reliable and efficient vane machine, the invention proposes that each of the circular discs comprise a plurality of circular arc-shaped slits (201 to 212), that each slider be designed in the shape of a circular arc on at least the end facing the housing of the vane machine, and that the circular arc-shaped part of each slider (104) move into at least one circular arc-shaped slit of a first circular disc (102) and into a circular arc-shaped slit of a second circular disc (103).

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