

Title (en)
Improved turbomolecular pump.

Title (de)
Verbesserte Turbomolekularpumpe.

Title (fr)
Pompe turbomoléculaire améliorée.

Publication
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Application
EP 91200302 A 19910213

Priority
IT 6716390 A 19900309

Abstract (en)
A turbomolecular pump comprising, in addition to usual axial flow pumping stages consisting of alternated rotors (1,1a) and stators (2,2a), one or more tangential flow pumping stages (10;30) arranged at the exhaust side of the pump, to raise up the compression ratio. Each axial flow stage consists of a plane disk rotor (12;35) encompassed to a coplanar annular stator (13;36), spaced apart from the rotor disk, so that a free annular channel is formed in-between (14;38), in which channel the pumped gases move along a tangential flow. Such channel is closed by a baffle (15;39), and communicates with a suction port (17;40) and a discharge port (18;41). The plane disk rotor may be provided of vanes (37,37a,37b). It is possible to combine tangential flow stages (10) having rotor without vanes (12) and tangential flow stages (30) having rotor with vanes (35); in such a way it is possible to raise the exhaust pressure up to the atmospheric pressure, and to discharge directly in the atmosphere. <IMAGE>

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Citation (search report)

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