

Title (en)

Turbomachinery stage with reduced secondary losses.

Title (de)

Turbomaschinenstufe mit vermindertem Strömungsverlust.

Title (fr)

Etage de turbomachine avec pertes secondaires réduites.

Publication

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Application

EP 91107716 A 19910513

Priority

FR 9005991 A 19900514

Abstract (en)

Turbine stage comprising a bank of fixed blades (1) integral with the stator (3) of the turbine supporting a diaphragm followed by a bank of moving blades (7) mounted on a disc (9) integral with the rotor (6) of the turbine, the said bank of moving blades (7) comprising at its apex a leaktight packing (10) constituted from several chambers (11). The disc (9) comprises intake orifices (16) opening into the space between the diaphragm (4) and the disc and disposed in the vicinity of the peripheral section of the disc (9). <??>The intake orifices (16) are connected by ducts (17) traversing at least some moving blades (8) up to outlet orifices (18) opening at the apex of these blades (8) downstream of the leaktight packing (10) or in a chamber of the latter (11). <??>The disturbed flow at the feet of the fixed blades (2) and the leakage flow between diaphragm (4) and rotor (6) are taken in by the orifices (16), which improves the efficiency. <IMAGE>

IPC 1-7

F01D 1/02; F01D 5/14

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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