Title (en)

Turbine stage with radial inlet and axial outlet

Title (de)

Turbinenstufe mit radialer Zuströmung und axialer Abströmung

Title (fr)

Etage de turbine avec entrée radiale et sortie axiale

Publication

**EP 0985803 B1 20030402 (DE)**

Application

**EP 98810899 A 19980910**

Priority

EP 98810899 A 19980910

Abstract (en)

[origin: EP0985803A1] At the turbine step, in a steam turbine, the working medium is deflected from an inflow spiral (41) through the inflow channel (40) into a radial direction by a guide grid (Le). At the following downstream flow channel (50), the flow is deflected so that it has an axial flow through the following turbine wheel (La). The structure of the wall contours (27,28) of the housing (20) and hub (21) give the main flow line (51) initially a direction component which is radially outwards and then, shortly before the turbine wheel (La), a pure axial alignment. The flow through the turbine wheel (La) is homogenized by a curvature which is against the original deflection curvature. The kink points (AA,BB) at the channel wall (28), at the hub side, are downstream of the corresponding kink points (A,B) at the housing side of the channel. The flow is additionally homogenized by the divergent-convergent channel contour structure.

IPC 1-7

**F01D 9/04**; F01D 1/04

IPC 8 full level

**F01D 1/04** (2006.01); **F01D 9/04** (2006.01)

CPC (source: EP)

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Cited by

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