

Title (en)

Stator stage of an axial compressor in a flow engine with transverse fins to increase the action

Title (de)

Stator-Stufe eines Axialverdichters einer Strömungsmaschine mit Querlamellen zur Wirkungsgradsteigerung

Title (fr)

Palier de stator d'un compresseur axial d'une turbomachine avec lames transversales pour l'augmentation de rendement

Publication

EP 1927723 B1 20091028 (DE)

Application

EP 07022949 A 20071127

Priority

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Abstract (en)

[origin: EP1927723A1] The stage has a stator vane (1) provided with a suction side (1a) and a pressure side. Transverse segments (3, 3') extend from a wall, at which the stator vane abuts, at a distance to the suction side into a flow volume. A transverse segments-chord length (3g) of the segments reduces with distance from the suction side. The segments have sides whose surface normal form an angle of 90 degrees with a surface normal of the wall. The segments are spaced at a distance to each other. The transverse segments affect a secondary flow from the pressure side to the suction side.

IPC 8 full level

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CPC (source: EP)

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Cited by

EP2799721A1; WO2015092306A1; EP2194232A3; CN111156201A; CN104131845A; FR2938871A1; RU170008U1; FR2939852A1; EP3163028A1; CN107035435A; FR2987875A1; GB2514981A; GB2514981B; BE1026810B1; US9879564B2; FR2976634A1; FR2993021A1; CN104005796A; CN105829653A; RU2598970C2; JP2017500487A; RU2666933C1; WO2011054812A3; WO2013009639A3; WO2013132190A1; EP2194232A2; US8591176B2; US9874221B2; US9938984B2; US9739154B2; US9140129B2; US10690149B2; WO2012172246A1; US9488064B2; US9726197B2; US10519980B2

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