

Title (en)

METHOD FOR INFLUENCING SECONDARY FLOWS IN A TURBOMACHINE AND TURBOMACHINE

Title (de)

VERFAHREN ZUR BEEINFLUSSUNG VON SEKUNDÄRSTRÖMUNGEN BEI EINER TURBOMASCHINE SOWIE TURBOMASCHINE

Title (fr)

PROCÉDÉ PERMETTANT D'INFLUENCER DES FLUX SECONDAIRES DANS UNE TURBOMACHINE ET TURBOMACHINE

Publication

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Application

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Abstract (en)

[origin: WO2010000788A2] The invention relates to a method for influencing secondary flows in a passage (20) between two adjacent rotating blades and guide vanes (14) of a turbomachine. Said blades project respectively from a lateral wall (12) of a hub or a housing of the turbomachine, and a fluid flows through the passage (20) in a main flow direction (23). According to the method, the following step is carried out in order to reduce internal losses: a stable auxiliary fluid whirl (36) is generated, said whirl rotating in the passage, perpendicular to the main flow direction (23) and in the opposite direction to a secondary whirl (28), using a whirl channel (30) formed in the lateral wall (12) of the hub or housing. Said channel is not rotationally symmetrical in relation to the hub axis.

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