

Title (en)

METHOD FOR PROFILING A TURBINE ROTOR BLADE AND CORRESPONDING TURBINE BLADE

Title (de)

VERFAHREN ZUM PROFILIEREN EINER TURBINENLAUFSCHAUFEL UND ENTSPRECHENDE TURBINENSCHAUFEL

Title (fr)

PROCÉDÉ POUR LE PROFILAGE D'UNE AUBE DE ROTOR DE TURBINE, ET AUBE DE TURBINE CORRESPONDANTE

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Application

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Abstract (en)

[origin: WO2016173875A1] The invention relates to a method for profiling a turbine rotor blade (14, 15) for an axial flow machine, having the following steps: providing a geometric model of a blade profile, having a camber line (3) of a profile section of the turbine rotor blade (14, 15); determining boundary conditions for a flow flowing around the turbine rotor blade (14, 15); changing the camber line (3) such that the flow which is adjusted by the boundary conditions produces the maximum of the difference of the isentropic mach number (22 to 25) between the pressure side and the suction side of the turbine rotor blade (14, 15) in a blade section which extends from the blade trailing edge (5) in the direction towards the blade leading edge (4) and the length of which is 65% of the length S of the blade chord.

IPC 8 full level

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