

Title (en)
METHOD AND DEVICE FOR COOLING THE FLOW IN THE RADIAL GAPS FORMED BETWEEN ROTORS AND STATORS OF TURBINE-TYPE MACHINES

Title (de)
VERFAHREN UND VORRICHTUNG ZUR KÜHLUNG DER STRÖMUNG IN ZWISCHEN ROTOREN UND STATOREN VON TURBOMASCHINEN AUSGEBILDETEN RADIALSPALTEN

Title (fr)
PROCEDE ET DISPOSITIF DE REFROIDISSEMENT DE L'ECOULEMENT DANS LES FENTES RADIALES FORMEES ENTRE LES ROTORS ET LES STATORS DE TURBOMACHINES

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Abstract (en)
[origin: WO0129425A1] The aim of the invention is to provide a method for cooling the flow in the radial gaps formed between rotors and stators of turbine-type machines which is improved in terms of the cooling effect; and a simple, economical and robust device for carrying out this method. To this end, the invention provides that a stator part (20) that is adjacent to the radial gap (24) is subjected to the effects of a first cooling fluid (29) and that a second, gaseous cooling fluid (41) is guided into the radial gap (24). At least one recess (26) is configured inside the stator part (20) that is adjacent to the radial gap (24) or at least one cavity is provided on the stator part (20) to this end. The recess (26) or cavity is connected to a delivery line (27) and to a discharge line (28) for the first cooling fluid (29). At least one delivery channel (40) and a discharge device (42) for the second cooling fluid (41) are also located on the radial gap (24).

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