Title (en)

METHOD AND DEVICE FOR THE INDIRECT COOLING OF A FLOW REGIME IN RADIAL SLITS FORMED BETWEEN THE ROTORS AND STATORS OF TURBOMACHINES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR INDIREKTEN KÜHLUNG DER STRÖMUNG IN ZWISCHEN ROTOREN UND STATOREN VON TURBOMASCHINEN AUSGEBILDETEN RADIALSPALTEN

Title (fr)

PROCEDE ET DISPOSITIF DE REFROIDISSEMENT INDIRECT DE L'ECOULEMENT DANS DES ENTREFERS RADIAUX FORMES ENTRE LES ROTORS ET LES STATORS DE TURBOMACHINES

Publication

EP 1222400 A1 20020717 (DE)

Application

EP 99947181 A 19991020

Priority

CH 9900497 W 19991020

Abstract (en)

[origin: WO0129426A1] The invention relates to a method for the improved cooling of a flow regime in radial slits formed between rotors and stators of turbomachines. The invention also relates to a simple, cheap and robust device for implementing said method. According to the invention, said advantages are achieved by using water as a cooling fluid (29) for the stator component (20) which is positioned adjacent to the radial slit (24). At least one recess (26) is either formed on the inside of the radial slit (24) positioned adjacent to said stator component (20) or at least one cavity (38) is located at the stator component (20). Said recess (26) or cavity (38) is connected to a feed line (27) and to an outlet line (28) for the cooling fluid (29).

IPC 1-7

F04D 29/58

IPC 8 full level

F02B 39/00 (2006.01); **F04D 29/42** (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP KR)

F04D 29/284 (2013.01 - EP); **F04D 29/58** (2013.01 - KR); **F04D 29/584** (2013.01 - EP)

Citation (search report)

See references of WO 0129426A1

Cited by

DE102009024679B4; DE102010037356B4; US9951637B2; DE102009024679A1; US10598084B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 0129426 A1 20010426; AU 6075899 A 20010430; CN 1191433 C 20050302; CN 1375042 A 20021016; DE 59913001 D1 20060202; EP 1222400 A1 20020717; EP 1222400 B1 20051228; JP 2003525377 A 20030826; KR 100607424 B1 20060801; KR 20020041438 A 20020601

DOCDB simple family (application)

CH 9900497 W 19991020; AU 6075899 A 19991020; CN 99816962 A 19991020; DE 59913001 T 19991020; EP 99947181 A 19991020; JP 2001531987 A 19991020; KR 20027003433 A 20020314