

Title (en)  
DEVICE FOR SUPPLYING COOLING AIR TO A MOVING BLADE

Title (de)  
VORRICHTUNG ZUR KÜHLLUFTBEAUFSCHLAGUNG EINER LAUFSCHAUFEL

Title (fr)  
DISPOSITIF POUR ALIMENTER UNE AUBE EN AIR DE REFROIDISSEMENT

Publication  
**EP 1730389 A1 20061213 (DE)**

Application  
**EP 05717155 A 20050329**

Priority  
• EP 2005051411 W 20050329  
• DE 102004015609 A 20040330

Abstract (en)  
[origin: WO2005095761A1] The invention relates to a device for supplying cooling air to the inside wall of a component rotating about a rotation axis (2), particularly a blade (1) in a rotary machine, comprising a component base (3), which can be rotationally fixed to a rotor unit and to which a component vane (4) is joined while forming a single part. This component vane extends in a radial manner, and a cooling channel area (K1) is provided therein, which at least extends in a radial manner along the rotation axis (2) and which, in the area of the component base (3) leads, via an opening (7), into a cooling air channel (5), which at least partially passes through the component base (3) along the rotation axis (2). The invention is characterized in that a distributing plate (8) is provided in the area of the cooling air supply channel (5) in such a manner that: at least as the component rotates about the rotation axis (2), the distributing plate (8) enters into a fluid-tight connection with an edge (71) of the opening that encircles the opening (7) of the cooling channel area (K1), and; the distributing plate (8) has at least one passage opening (81), which is located in the area of the opening (7) of the at least one cooling channel area (K1) and via which the cooling air passes from the axial cooling air supply channel (5) and enters the radial cooling channel area (K1).

IPC 8 full level  
**F01D 5/18** (2006.01)

CPC (source: EP US)  
**F01D 5/187** (2013.01 - EP US); **F05D 2230/21** (2013.01 - EP US); **F05D 2240/81** (2013.01 - EP US)

Citation (search report)  
See references of WO 2005095761A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005095761 A1 20051013**; AT E451541 T1 20091215; AU 2005229202 A1 20051013; AU 2005229202 B2 20100805; DE 502005008673 D1 20100121; EP 1730389 A1 20061213; EP 1730389 B1 20091209; ES 2337800 T3 20100429; MY 140195 A 20091130; US 2007041836 A1 20070222; US 7524168 B2 20090428

DOCDB simple family (application)  
**EP 2005051411 W 20050329**; AT 05717155 T 20050329; AU 2005229202 A 20050329; DE 502005008673 T 20050329; EP 05717155 A 20050329; ES 05717155 T 20050329; MY PI20051388 A 20050329; US 52825706 A 20060928