

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 B1 20091209 (DE)

Application

EP 05717155 A 20050329

Priority

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- DE 102004015609 A 20040330

Abstract (en)

[origin: US7524168B2] An arrangement is disclosed for the admission of cooling air to the internal walls of a component rotating about a rotation axis, such as a moving blade in a rotary machine. A component root can be fastened to a rotor unit in a rotationally fixed manner and adjoining in a radially extending manner is a one piece component airfoil in which at least one radially extending cooling passage region (K1) is provided which, in the region of the component root, opens out via an opening into a cooling-air supply passage passing at least partly through the component root longitudinally relative to the rotation axis. A distribution plate forms a fluid-tight connection with an opening margin, surrounding the opening of the cooling passage region (K1), at least during the rotation of the component about the rotation axis. The distribution plate provides at least one through-opening in the region of the opening of the at least one cooling passage region (K1), through which through-opening cooling air passes from the axial cooling-air supply passage into the radial cooling passage region (K1).

IPC 8 full level

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CPC (source: EP US)

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