

Title (en)
TURBINE VANE SYSTEM

Title (de)
ANORDNUNG VON TURBINENLEITSCHAUFELN

Title (fr)
DISPOSITIF D'AUBES DIRECTRICES DE TURBINE

Publication
EP 1309773 A1 20030514 (DE)

Application
EP 01962905 A 20010803

Priority
• EP 01962905 A 20010803
• EP 0109015 W 20010803
• EP 00117667 A 20000816

Abstract (en)
[origin: EP1180578A1] The invention relates to a turbine vane (1), especially a turbine vane of the last stages, respectively comprising a lower area (2) which is radially and externally arranged, an upper area (3) which is radially and internally arranged, and a radial cooling air channel (4) extending between the upper area and the lower area. Cooling air (23) can be introduced into said channel via an inlet (36) in the lower area, and can be at least partially discharged via an outlet (35) in the upper area. The cooling air channel comprises a radial inner channel through which the cooling air flows from the lower area to the upper area, and an outer channel (9) which is adjacent to the inner channel and which at least partially surrounds the inner channel on the circumferential side thereof. Said outer channel communicates with the inner channel and comprises an outlet (12) which is arranged in the lower area. Part of the cooling air (41) flows back in the direction of the lower area via the outer channel and emerges via the outlet.

IPC 1-7
F01D 5/18

IPC 8 full level
F01D 9/02 (2006.01); **B22C 9/10** (2006.01); **B22C 9/24** (2006.01); **F01D 5/18** (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)
F01D 5/187 (2013.01 - EP US); **F01D 5/189** (2013.01 - EP US)

Citation (search report)
See references of WO 0214654A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
EP 1180578 A1 20020220; DE 50108476 D1 20060126; EP 1309773 A1 20030514; EP 1309773 B1 20051221; ES 2255567 T3 20060701; JP 2004506827 A 20040304; JP 4726389 B2 20110720; US 2003180147 A1 20030925; US 7201564 B2 20070410; WO 0214654 A1 20020221

DOCDB simple family (application)
EP 00117667 A 20000816; DE 50108476 T 20010803; EP 0109015 W 20010803; EP 01962905 A 20010803; ES 01962905 T 20010803; JP 2002519765 A 20010803; US 34473003 A 20030214