

Title (en)  
Cooled airfoil

Title (de)  
Gekühlte Turbomaschinenschaufel

Title (fr)  
Aube refroidie

Publication  
**EP 1728969 A2 20061206 (EN)**

Application  
**EP 06252658 A 20060522**

Priority  
US 14085105 A 20050531

Abstract (en)  
A cooled airfoil ( 10 ) has an internal fluid passage ( 34 ) that includes upstream and downstream legs, such as a co-centrifugal leg ( 40 ) and a counter-centrifugal leg ( 42 ). The legs are separated from each other by a rib ( 44 ) but are connected in series with each other. The airfoil also includes a vent passage ( 56 ) for venting fluid from the internal passage. The intake ( 60 ) to the vent passage resides in the counter-centrifugal leg. The vent at least partially counteracts the separation potential of a separation susceptible region ( 54 ) by allowing some of the coolant to vent from the passage leg ( 42 ).

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

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

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 LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1728969 A2 20061206**; AU 2006202304 A1 20061214; JP 2006336651 A 20061214; RU 2006118026 A 20071210;  
US 2007009358 A1 20070111

DOCDB simple family (application)  
**EP 06252658 A 20060522**; AU 2006202304 A 20060530; JP 2006151846 A 20060531; RU 2006118026 A 20060525; US 14085105 A 20050531