

Title (en)  
Cooling of turbine blades or vanes

Title (de)  
Kühlung von Turbinenschaufeln oder -flügeln

Title (fr)  
Refroidissement d'aubes ou pales de turbine

Publication  
**EP 2692991 A1 20140205 (EN)**

Application  
**EP 12178885 A 20120801**

Priority  
EP 12178885 A 20120801

Abstract (en)  
The present invention relates to a turbine assembly (10) comprising a basically hollow aerofoil (12, 12a-12d), with at least a leading edge (14), a trailing edge (16), a pressure side (18) and a suction side (20), which are forming at least a cavity (22) within the hollow aerofoil (12, 12a-12d), and with at least a deflection structure (24, 24e-241) that is arranged in the at least one cavity (22) and that has a cross section (26), which is oriented basically perpendicular to a direction (28) pointing from the pressure side (18) to the suction side (20). According the invention the cross section (26) of the at least one deflection structure (24, 24e-241) has an aerofoil contour (30) and has a curved mean camber line (32).

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

CPC (source: EP)  
**F01D 5/187** (2013.01); **F05D 2210/33** (2013.01); **F05D 2240/127** (2013.01); **F05D 2250/32** (2013.01); **F05D 2250/70** (2013.01); **F05D 2260/2212** (2013.01)

Citation (search report)  
• [X] US 6056505 A 20000502 - CUNHA FRANCISCO JOSE [US], et al  
• [X] US 5246341 A 19930921 - HALL KENNETH B [US], et al  
• [X] GB 2165315 A 19860409 - ROLLS ROYCE  
• [X] US 5536143 A 19960716 - JACALA ARIEL [US], et al  
• [XA] SU 358525 A1 19721103 - AVILOVA SHULGINA M V, et al  
• [A] EP 1544413 A2 20050622 - UNITED TECHNOLOGIES CORP [US]

Cited by  
EP2918780A1; EP3650650A1; US11939883B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2692991 A1 20140205**

DOCDB simple family (application)  
**EP 12178885 A 20120801**