

Title (en)

Leading edge cooling of a gas turbine component using staggered turbulator strips

Title (de)

Kühlung der Leitkante einer Gasturbinenkomponente mittels gestaffelt angeordneten Turbulatoren

Title (fr)

Refroidissement du bord d'attaque d'un composant de turbine à gaz par générateurs de turbulence

Publication

**EP 1870561 A3 20101222 (EN)**

Application

**EP 07252545 A 20070622**

Priority

US 47389306 A 20060622

Abstract (en)

[origin: EP1870561A2] A turbine engine component has an airfoil portion (32) having a leading edge, a suction side (46), a pressure side (42) and a radial flow leading edge cavity (34) through which a cooling fluid flows for cooling the leading edge. The turbine engine component further has a staggered arrangement of trip strips (40; 44) for generating a vortex (49) in the leading edge cavity (34) which impinges on a nose portion (36) of the leading edge cavity (34).

IPC 8 full level

**F01D 5/18** (2006.01); **F01D 25/12** (2006.01)

CPC (source: EP US)

**F01D 5/187** (2013.01 - EP US); **F05D 2240/12** (2013.01 - EP US); **F05D 2240/121** (2013.01 - EP US); **F05D 2240/303** (2013.01 - EP US); **F05D 2260/2212** (2013.01 - EP US); **F05D 2260/22141** (2013.01 - EP US)

Citation (search report)

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- [XI] EP 0758932 B1 19980624 - UNITED TECHNOLOGIES CORP [US]
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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 MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 1870561 A2 20071226; EP 1870561 A3 20101222; EP 1870561 B1 20170405**; JP 2008002464 A 20080110; US 2007297916 A1 20071227

DOCDB simple family (application)

**EP 07252545 A 20070622**; JP 2007160904 A 20070619; US 47389306 A 20060622