

Title (en)

Cooling air exit openings for turbine blade

Title (de)

Kühlluftauslass-Schlitz von Turbinenschaufeln

Title (fr)

Fentes d'évacuation de l'air de refroidissement d'aubes de turbine

Publication

**EP 1555390 B1 20061122 (FR)**

Application

**EP 04293046 A 20041220**

Priority

FR 0400289 A 20040114

Abstract (en)

[origin: EP1555390A1] The blade has an aerodynamic surface (14), and a platform (24) connected to its base (16) via a connection zone (26). A cooling circuit extends radially between the top and the base of the blade. A part of a lower sill (34) of a discharge slit close to the platform presents a circular cross-section (40) to remove any protrusions between a reinforcement wall (32) of the slit and the connection zone. An independent claim is also included for a high-pressure turbine of a turbo machine including a set of blades.

IPC 8 full level

**F01D 5/18** (2006.01); **F01D 5/14** (2006.01); **F01D 9/02** (2006.01); **F02C 7/18** (2006.01)

CPC (source: EP US)

**B22C 9/103** (2013.01 - EP US); **F01D 5/143** (2013.01 - EP US); **F01D 5/186** (2013.01 - EP US); **F01D 5/187** (2013.01 - EP US);  
**F01D 9/041** (2013.01 - EP US); **F05D 2230/21** (2013.01 - EP US); **F05D 2230/211** (2013.01 - EP US); **F05D 2240/122** (2013.01 - EP US);  
**F05D 2240/30** (2013.01 - EP US); **F05D 2240/304** (2013.01 - EP US); **F05D 2240/80** (2013.01 - EP US)

Cited by

EP1726782A3; EP1840329A1; FR2899269A1; EP1840328A1; FR2899270A1; US9719357B2; US7857584B2; WO2014163694A3;  
US11867083B2; WO2021259569A1; EP4136323B1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

**EP 1555390 A1 20050720; EP 1555390 B1 20061122;** CA 2493094 A1 20060714; CA 2493094 C 20111011; DE 602004003331 D1 20070104;  
DE 602004003331 T2 20070621; ES 2276254 T3 20070616; FR 2864990 A1 20050715; FR 2864990 B1 20080222; JP 2005201273 A 20050728;  
JP 4619135 B2 20110126; RU 2005100467 A 20060620; RU 2294438 C2 20070227; UA 84846 C2 20081210; US 2005249593 A1 20051110;  
US 7278827 B2 20071009

DOCDB simple family (application)

**EP 04293046 A 20041220;** CA 2493094 A 20050114; DE 602004003331 T 20041220; ES 04293046 T 20041220; FR 0400289 A 20040114;  
JP 2005004827 A 20050112; RU 2005100467 A 20050113; UA A200500303 A 20050113; US 3201205 A 20050111