

Title (en)
Gas turbine blade and a process for manufacturing a gas turbine blade

Title (de)
Filmkühlung von Gasturbinenschaufeln mittels Schlitzen für Kühlluft

Title (fr)
Aube de turbine à gaz et procédé de fabrication d'une aube de turbine à gaz

Publication
EP 1207268 B1 20050209 (DE)

Application
EP 00125031 A 20001116

Priority
EP 00125031 A 20001116

Abstract (en)
[origin: EP1207268A1] The cooling process is applied to a gas turbine blade (1). A slot (15) is eroded into the leading edge region of the platform (3), Cooling air (25) from the underside (8) of the platform is shock-cooled as it enters and the top side (7) of the platform is film-cooled. The channels (17) leading into the slots can be laser-drilled, with the slot walls being protected by an anti-adhesion strip.

IPC 1-7
F01D 5/18; **F01D 9/02**

IPC 8 full level
B23K 26/00 (2006.01); **B23K 26/18** (2006.01); **B23K 26/38** (2006.01); **F01D 5/18** (2006.01); **F02C 7/00** (2006.01)

CPC (source: EP US)
F01D 5/186 (2013.01 - EP US); **F01D 5/187** (2013.01 - EP US); **F05D 2240/81** (2013.01 - EP US); **F05D 2260/202** (2013.01 - EP US)

Cited by
EP1788192A3; CN111734497A; EP3232001A1

Designated contracting state (EPC)
DE FR GB IT

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EP 1207268 A1 20020522; **EP 1207268 B1 20050209**; CA 2361978 A1 20020516; DE 50009497 D1 20050317; JP 2002213203 A 20020731; JP 4040864 B2 20080130; US 2002110454 A1 20020815; US 6719529 B2 20040413

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EP 00125031 A 20001116; CA 2361978 A 20011114; DE 50009497 T 20001116; JP 2001350479 A 20011115; US 447801 A 20011116