

Title (en)
Blade for a gas turbine with cooled tip cap

Title (de)
Schaufel für eine Gasturbine mit gekühlter Spitze

Title (fr)
Aube de turbine avec refroidissement de l'extrémité

Publication
EP 2230383 A1 20100922 (EN)

Application
EP 09155437 A 20090318

Priority
EP 09155437 A 20090318

Abstract (en)
A cooled blade (10) for a gas turbine comprising an airfoil section which extends in the radial direction of the turbine or in the longitudinal direction of the blade (10) between a platform and a blade tip (11) which is provided with a cap (33), which airfoil section (12) is bounded transversely with respect to the longitudinal direction by a leading edge and a trailing edge and has a pressure face (17) and a suction face (18), with cooling channels (19) extending in the radial direction between the platform and the blade tip (11) in the interior of the airfoil section, which cooling channels (19) can be acted upon by a cooling air flow from the platform (13). In the case of a blade (10) such as this, the blade tip is cooled better in that first cooling holes (25) for convection cooling are provided on the pressure face (17) of the blade (10), and second cooling holes (27) for film cooling are provided on the suction side (18) of the blade (10), through the cap (33) of the blade (10), in the blade tip (11) from the cooling channels (19), and distributed over the blade width.

IPC 8 full level
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F01D 5/20 (2013.01 - EP US); **F05D 2240/307** (2013.01 - EP US); **F05D 2250/231** (2013.01 - EP US); **F05D 2250/232** (2013.01 - EP US); **F05D 2260/20** (2013.01 - EP US); **F05D 2260/202** (2013.01 - EP US)

Citation (applicant)
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