

Title (en)

Integrated platform, tip, and main body microcircuits for turbine blades

Title (de)

In Schaufelplattform, Schaufelspitze und Schaufelblatt integrierte Mikrokanäle für Turbinenschaufeln

Title (fr)

Microcircuits pour pales de turbine intégrés dans la plate-forme, la pointe, et l'aube

Publication

EP 1882819 A1 20080130 (EN)

Application

EP 07252838 A 20070718

Priority

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- US 49140506 A 20060721

Abstract (en)

A turbine engine component (90) has an airfoil portion (110) with a pressure side (116) and a suction side (118). The turbine engine component (90) further has a first cooling microcircuit (102) for cooling the suction side (118) of the airfoil portion (110). The first cooling microcircuit (102) is embedded within a first wall (106) forming the suction side (118). The first cooling microcircuit (102) has a circuit for allowing a cooling fluid in the first cooling microcircuit (102) to exit at a tip (134) of the airfoil portion (110). The turbine engine component also has a second cooling microcircuit (100) embedded within a second wall (104) forming the pressure side (116) of the airfoil portion (110).

IPC 8 full level

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CPC (source: EP)

F01D 5/187 (2013.01); **F01D 5/225** (2013.01); **F05D 2240/81** (2013.01); **F05D 2260/202** (2013.01)

Citation (search report)

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- [Y] US 2004197190 A1 20041007 - STEC PHILIP FRANCIS [US], et al
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