

Title (en)

COOLABLE COMPONENT AND METHOD FOR THE PRODUCTION OF A THROUGH-OPENING IN A COOLABLE COMPONENT

Title (de)

KÜHLBARES BAUTEIL UND VERFAHREN ZUR HERSTELLUNG EINER DURCHTRITTSÖFFNUNG IN EINEM KÜHLBAREM BAUTEIL

Title (fr)

COMPOSANT A REFROIDIR ET PROCEDE DE REALISATION D'UN ORIFICE DE PASSAGE DANS UN COMPOSANT A REFROIDIR

Publication

EP 1507957 B1 20050824 (DE)

Application

EP 03732591 A 20030514

Priority

- CH 8502002 A 20020522
- EP 0350162 W 20030514

Abstract (en)

[origin: WO03098008A1] The invention relates to through openings for a coolant in a coolable component. The through opening is characterised in that an insert (11) is secured in a first opening (10), reducing the first opening cross-section to a second opening cross-section and is removed from said first opening when a blockage of the second opening diameter occurs as a result of a local increase in temperature and a thermally unstable connection between the insert and the component. According to the invention, the danger of damage to components which are to be cooled, especially turbine blades, as a result of a blockage of fine through openings is significantly reduced.

IPC 1-7

F01D 5/18

IPC 8 full level

F01D 5/18 (2006.01); **F04D 31/00** (2006.01)

CPC (source: EP US)

F01D 5/186 (2013.01 - EP US); **F01D 5/188** (2013.01 - EP US); **F05D 2260/607** (2013.01 - EP US)

Cited by

US11286792B2

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

WO 03098008 A1 20031127; AU 2003238523 A1 20031202; CN 100402802 C 20080716; CN 1671948 A 20050921; DE 50301055 D1 20050929; EP 1507957 A1 20050223; EP 1507957 B1 20050824; US 2005118024 A1 20050602; US 7128530 B2 20061031

DOCDB simple family (application)

EP 0350162 W 20030514; AU 2003238523 A 20030514; CN 03817724 A 20030514; DE 50301055 T 20030514; EP 03732591 A 20030514; US 99278904 A 20041122