

Title (en)

Cooled turbomachinery element and casting method thereof

Title (de)

Gekühltes Bauteil einer Strömungsmaschine und Verfahren zum Giessen dieses gekühlten Bauteils

Title (fr)

Element refroidi d'une turbomachine et procédé pour le moulage de cet élément

Publication

EP 1621730 A1 20060201 (DE)

Application

EP 04017673 A 20040726

Priority

EP 04017673 A 20040726

Abstract (en)

A cooling channel (41) is provided in the outer wall of the blade that is impinged upon by a working medium (A). A cooling fluid (KF) flows along the longitudinal axis of the cooling channel. A device is provided in the cooling channel for imparting a swirl on the flowing cooling fluid. Preferably, at least one turbulator element (47) is provided on the inner surface of the cooling channel. Independent claims are included for a gas turbine and for a method of casting a cooled component.

IPC 8 full level

F01D 5/18 (2006.01); **F01D 25/24** (2006.01); **F23R 3/00** (2006.01)

CPC (source: EP US)

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F23R 3/005 (2013.01 - EP US); **F05D 2230/21** (2013.01 - EP US); **F05D 2250/25** (2013.01 - EP US); **F05D 2260/2212** (2013.01 - EP US)

Citation (search report)

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- [X] WO 2004035992 A1 20040429 - ALSTOM SWITZERLAND LTD [CH], et al
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US9506352B2; WO2015032936A1; WO2016014056A1; TWI609128B

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