

Title (en)

Cleaning elements on blade tips of an exhaust turbine

Title (de)

Reinigungselemente auf Laufschaufelspitzen einer Abgasturbine

Title (fr)

Éléments de nettoyage sur les extrémités des aubes d' une turbine

Publication

EP 1820938 A1 20070822 (DE)

Application

EP 06405074 A 20060220

Priority

EP 06405074 A 20060220

Abstract (en)

Exhaust gas turbine comprises a cleaning device with cleaning elements (11) arranged on the tips of the blades (1) of a turbine wheel. Independent claims are also included for the following: (1) Exhaust gas turbocharger with the above exhaust gas turbine; and (2) Commercial turbine with the above exhaust gas turbine. Preferred Features: A part of the blades have a blade tip elongated in the radial direction. The blade tips are coated on the pressure side and non-coated on the suction side.

Abstract (de)

Die Reinigungsvorrichtung umfasst an den Laufschaufeln (1) der Abgasturbine angeordnete Reinigungselemente (11), welche den Bereich radial ausserhalb der Laufschaufeln im Betrieb laufend von Verunreinigung (3) befreien. Von der Vielzahl von Laufschaufeln sind nur einige wenige mit Reinigungselementen ausgestattet. Dadurch können die Herstellungskosten tief gehalten werden.

IPC 8 full level

F01D 5/20 (2006.01); **F01D 11/12** (2006.01)

CPC (source: EP)

F01D 5/20 (2013.01); **F01D 11/122** (2013.01); **F01D 25/002** (2013.01); **F05D 2220/40** (2013.01); **F05D 2260/607** (2013.01)

Citation (applicant)

- CH 335901 A 19590131 - SULZER AG [CH]
- DE 2008503 A1 19710211
- DE 3515825 A1 19851114 - ELLIOTT TURBO [US]

Citation (search report)

- [X] DE 3102575 A1 19820128 - GEN ELECTRIC [US]
- [X] WO 0225065 A1 20020328 - ALSTOM SWITZERLAND LTD [CH], et al
- [X] EP 0702130 A2 19960320 - MTU MUENCHEN GMBH [DE]
- [X] GB 2225388 A 19900530 - ROLLS ROYCE PLC [GB]

Cited by

WO2019185713A1; EP3546703A1; CN108869032A; FR2962762A1; US8662834B2; WO2011002570A1; EP2204548A1; US8657570B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1820938 A1 20070822

DOCDB simple family (application)

EP 06405074 A 20060220