

Title (en)

GAS TURBINE WITH AXIALLY DISPLACEABLE ROTOR

Title (de)

STRÖMUNGSMASCHINE MIT EINEM AXIAL VERSCHIEBBAREN ROTOR

Title (fr)

TURBINE A GAZ AVEC ROTOR AXIALEMENT DEPLACABLE

Publication

**EP 1706597 B1 20090311 (DE)**

Application

**EP 05701049 A 20050119**

Priority

- EP 2005000498 W 20050119
- EP 04001335 A 20040122
- EP 05701049 A 20050119

Abstract (en)

[origin: EP1557536A1] The device has an axially movable rotor (3) and an annular channel (24) in a housing with inner and outer guide surfaces (21,22) forming a flow channel (24) narrowing in the axial direction, at least one fixed rim (15) in the annular channel and at least one rim (17) of profiles on the rotor, whereby the end of each rotor blade (14) and/or guide vane (16) is opposite an axial section of one of the two bounding surfaces to form a radial gap (23). The size of each radial gap between the end of each blade and the opposing axial section of the bounding surface is constant at least over the displacement distance of the rotor and the radial gap is parallel to the rotation axis of the rotor.

IPC 8 full level

**F01D 11/22** (2006.01); **F01D 11/02** (2006.01); **F04D 29/16** (2006.01)

CPC (source: EP US)

**F01D 11/02** (2013.01 - EP US); **F01D 11/22** (2013.01 - EP US); **F04D 29/052** (2013.01 - EP US); **F04D 29/164** (2013.01 - EP US); **F05D 2250/312** (2013.01 - EP US); **F05D 2250/314** (2013.01 - EP US)

Cited by

US9435218B2; US9441499B2

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

**EP 1557536 A1 20050727**; DE 502005006804 D1 20090423; EP 1706597 A1 20061004; EP 1706597 B1 20090311; US 2008232949 A1 20080925; US 7559741 B2 20090714; WO 2005071229 A1 20050804

DOCDB simple family (application)

**EP 04001335 A 20040122**; DE 502005006804 T 20050119; EP 05701049 A 20050119; EP 2005000498 W 20050119; US 58679505 A 20050119