

Title (en)
TURBOMACHINE, PARTICULARLY A GAS TURBINE

Title (de)
STRÖMUNGSMASCHINE, INSBESONDERE GASTURBINE

Title (fr)
TURBO MACHINE, EN PARTICULIER TURBINE À GAZ

Publication
EP 2092164 A1 20090826 (DE)

Application
EP 07847789 A 20071204

Priority
• EP 2007063288 W 20071204
• CH 20582006 A 20061219

Abstract (en)
[origin: WO2008074633A1] The invention relates to a gas turbine (1), comprising a rotor (2), which has two blade rows (5) with a plurality of blades (6) and an interposed rotor heat shield (7) with a plurality of shield elements (12), and a stator (3), which has a guide vane row (8) with a plurality of guide vanes (9) disposed axially between the two adjoining guide vane rows (5). The guide vanes (9) have a stator sealing structure (10) radially on the inside. The shield elements (12) have a rotor sealing structure (13) radially on the outside, the structure interacting with the stator sealing structure (10) to form an axial seal (14). In addition, between two adjoining blades (6) a radial blade seal (15), and between two adjoining shield elements (12) a radial shield seal (16), are configured, which each separate a gas path (17) from the rotor (2). In order to increase the efficiency, the shield elements (12) and the blades (6) are matched to one another such that the radial shield seal (16) transitions without interruption into the radial blade seals (15) of the two axially adjoining blades (6) so that a continuous radial seal (21) is formed from the one blade (6) via the shield element (12) to the other blade (6).

IPC 8 full level
F01D 11/00 (2006.01)

CPC (source: EP KR US)
F01D 5/02 (2013.01 - KR); **F01D 5/12** (2013.01 - KR); **F01D 11/001** (2013.01 - EP US); **F01D 11/006** (2013.01 - EP US);
F01D 11/08 (2013.01 - KR)

Citation (search report)
See references of WO 2008074633A1

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008074633 A1 20080626; AT E483891 T1 20101015; CA 2673079 A1 20080626; CA 2673079 C 20151124;
DE 502007005296 D1 20101118; EP 2092164 A1 20090826; EP 2092164 B1 20101006; JP 2010513783 A 20100430; JP 5027245 B2 20120919;
KR 101426715 B1 20140806; KR 20090091190 A 20090826; MX 2009006599 A 20090702; US 2009274552 A1 20091105;
US 8052382 B2 20111108

DOCDB simple family (application)
EP 2007063288 W 20071204; AT 07847789 T 20071204; CA 2673079 A 20071204; DE 502007005296 T 20071204; EP 07847789 A 20071204;
JP 2009541958 A 20071204; KR 20097012744 A 20071204; MX 2009006599 A 20071204; US 48783009 A 20090619