

Title (en)
Gasturbine with cooled rotor

Title (de)
Gasturbine mit gekühltem Rotor

Title (fr)
Turbine à gaz avec refroidissement du rotor

Publication
EP 0636764 B1 19970319 (DE)

Application
EP 94108585 A 19940604

Priority
DE 4324034 A 19930717

Abstract (en)
[origin: EP0636764A1] The gas turbine has a bladed rotor (6) welded together from a plurality of discs (7,8). Hollow spaces (9) exist between the discs (7,8) and axial ducts (17) occur in the rotor periphery between the rotor surface (15) and platforms (16) formed by the rotor blades (13) and segmental heat accumulation plates respectively. According to the invention cooling air is fed to these axial ducts (17) from at least one hollow space between two rotor discs (7,8). For this purpose the at least one hollow space (9) is connected to the said axial ducts (17), preferably by way of connecting apertures (18). It is fed from a central cooling air feed duct (20) emerging from the downstream end of the rotor. The cooling air is preferably drawn off from the process air at the centre part of the compressor, resulting in low-pressure cooling. <IMAGE>

IPC 1-7
F01D 5/08; **F01D 5/06**

IPC 8 full level
F01D 5/06 (2006.01); **F01D 5/08** (2006.01); **F02C 7/18** (2006.01)

CPC (source: EP US)
F01D 5/063 (2013.01 - EP US); **F01D 5/082** (2013.01 - EP US); **F01D 5/084** (2013.01 - EP US); **F01D 5/085** (2013.01 - EP US);
F05D 2260/607 (2013.01 - EP US)

Designated contracting state (EPC)
CH DE FR GB LI NL

DOCDB simple family (publication)
DE 4324034 A1 19950119; DE 59402122 D1 19970424; EP 0636764 A1 19950201; EP 0636764 B1 19970319; JP 3853383 B2 20061206;
JP H0754602 A 19950228; RU 94026895 A 19970427; US 5507620 A 19960416

DOCDB simple family (application)
DE 4324034 A 19930717; DE 59402122 T 19940604; EP 94108585 A 19940604; JP 16234594 A 19940714; RU 94026895 A 19940715;
US 27470294 A 19940714