

Title (en)

Method and apparatus for reducing axial compressor blade tip flow

Title (de)

Verfahren und Vorrichtung zum Reduzieren der Randströmung einer Axialverdichterschaufel

Title (fr)

Méthode et dispositif pour réduire les fuites d'extrémité d'aubes de compresseur axial

Publication

EP 1793089 A2 20070606 (EN)

Application

EP 06125091 A 20061130

Priority

US 16463605 A 20051130

Abstract (en)

A turbine machine (T1) of the type having a high pressure compressor positioned in a casing is provided with a plurality of rotating compressor blades (10-14) with at least one air channel (10C-14C) formed in the blades (10-14) for air flow communication from the base to the tip for extracting and pressurizing air from an inner area proximate the disk (20) and conveying the extracted and pressurized air into an area between the blade tip and casing (C1) for blocking air flow across the tips of the blades (10-14).

IPC 8 full level

F01D 5/08 (2006.01); **F01D 11/04** (2006.01)

CPC (source: EP US)

F01D 11/10 (2013.01 - EP US); **F04D 29/164** (2013.01 - EP US); **F04D 29/681** (2013.01 - US); **F04D 29/684** (2013.01 - EP); **F05D 2240/307** (2013.01 - EP)

Citation (applicant)

- GB 2409247 A 20050622 - ROLLS ROYCE PLC [GB]
- GB 2165315 A 19860409 - ROLLS ROYCE
- EP 0278434 A2 19880817 - WEINHOLD WOLFGANG P
- US 5688107 A 19971118 - DOWNS JAMES P [US], et al

Cited by

GB2452297B; CN102628452A; EP2250347B1

Designated contracting state (EPC)

DE FR GB IT SE

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1793089 A2 20070606; **EP 1793089 A3 20071024**; CA 2569177 A1 20070530; CN 101008402 A 20070801; JP 2007154887 A 20070621; US 2007122280 A1 20070531

DOCDB simple family (application)

EP 06125091 A 20061130; CA 2569177 A 20061129; CN 200610172998 A 20061130; JP 2006323501 A 20061130; US 16463605 A 20051130