

Title (en)  
Turbine discs cooling device

Title (de)  
Kühleinrichtung für Turbinenscheiben

Title (fr)  
Dispositif de refroidissement de disques de turbines

Publication  
**EP 1450005 B1 20070425 (FR)**

Application  
**EP 04290324 A 20040209**

Priority  
FR 0301842 A 20030214

Abstract (en)  
[origin: EP1450005A1] The device has an upstream (32) and downstream annular plate (34) extending radially from upstream and downstream flanges (36, 38) of a lower platform, respectively. An airtight device (42) extends longitudinally between the plates to seal an annular cavity. Bolded links (83) maintain the upstream and downstream plates against the respective flanges. Holes (70) inject cooling air towards a turbine disc.

IPC 8 full level  
**F01D 5/08** (2006.01); **F02C 1/00** (2006.01); **F01D 11/02** (2006.01); **F02C 7/18** (2006.01); **F16J 15/447** (2006.01)

CPC (source: EP US)  
**F01D 5/082** (2013.01 - EP US)

Cited by  
FR3115562A1; EP3150798A1; FR3030614A1; CN107109956A; RU2705319C2; US10605085B2; US10280776B2; EP2098686A3; FR2995021A1; GB2520212A; GB2520212B; FR3087839A1; WO2014037664A1; WO2016097632A1; EP2098686A2; US9920690B2

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**EP 1450005 A1 20040825; EP 1450005 B1 20070425**; CA 2456700 A1 20040814; CA 2456700 C 20110927; DE 602004006035 D1 20070606; DE 602004006035 T2 20080103; ES 2283955 T3 20071101; FR 2851288 A1 20040820; FR 2851288 B1 20060728; JP 2004245224 A 20040902; JP 4578117 B2 20101110; RU 2004104120 A 20050727; RU 2341669 C2 20081220; US 2004161334 A1 20040819; US 7025562 B2 20060411

DOCDB simple family (application)  
**EP 04290324 A 20040209**; CA 2456700 A 20040211; DE 602004006035 T 20040209; ES 04290324 T 20040209; FR 0301842 A 20030214; JP 2004036047 A 20040213; RU 2004104120 A 20040213; US 77766304 A 20040213