

Title (en)

Device for cooling an electrical device in a turbomachine

Title (de)

Vorrichtung zum Kühlen einer elektrischen Apparatur in einer Strömungsmaschine

Title (fr)

Dispositif de refroidissement d'un équipement électrique dans une turbomachine

Publication

**EP 1953479 A3 20090218 (FR)**

Application

**EP 08290032 A 20080115**

Priority

FR 0700643 A 20070130

Abstract (en)

[origin: EP1953479A2] The device has a double circuit type vortex tube (14) i.e. ranque tube, comprising an inlet (18) connected to an element (16) e.g. low pressure compressor of turbomachine (10), and a cool air outlet (24) connected to a heat exchanger (50). The outlet of the tube is connected to an inlet (34) of a secondary circuit of the heat exchanger. The tubes supplies, at the outlet, cool air whose temperature is 50 degree Celsius lower than the temperature of pressurized air supplied at the inlet (18).

IPC 8 full level

**F25B 9/04** (2006.01); **H05K 7/20** (2006.01)

CPC (source: EP US)

**F25B 9/04** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Citation (search report)

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- [Y] US 6990817 B1 20060131 - BHATIA RAKESH [US]
- [A] US 2002062650 A1 20020530 - DUKHAN NIHAD [US], et al
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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1953479 A2 20080806; EP 1953479 A3 20090218**; CA 2619146 A1 20080730; CN 101235729 A 20080806; CN 101235729 B 20110928; FR 2911915 A1 20080801; FR 2911915 B1 20110617; JP 2008208830 A 20080911; JP 2013167252 A 20130829; JP 5270181 B2 20130821; RU 2008103373 A 20090810; RU 2465477 C2 20121027; SG 144866 A1 20080828; UA 94912 C2 20110625; US 2008209914 A1 20080904

DOCDB simple family (application)

**EP 08290032 A 20080115**; CA 2619146 A 20080129; CN 200810004278 A 20080129; FR 0700643 A 20070130; JP 2008015854 A 20080128; JP 2013098437 A 20130508; RU 2008103373 A 20080129; SG 2008006447 A 20080124; UA A200801059 A 20080129; US 2016908 A 20080125