

Title (en)

TURBOMACHINE COMPRESSOR HAVING A STATIONARY WALL PROVIDED WITH A SHAPE TREATMENT

Title (de)

TURBOMASCHINENVERDICHTER MIT EINER STATIONÄREN WAND MIT FORMBEHANDLUNG

Title (fr)

COMPRESSEUR DE TURBOMACHINE COMPORTANT UNE PAROI FIXE POURVUE D'UN TRAITEMENT DE FORME

Publication

EP 4121636 A1 20230125 (FR)

Application

EP 21731220 A 20210423

Priority

- FR 2004496 A 20200506
- FR 2021050704 W 20210423

Abstract (en)

[origin: CA3176299A1] The invention relates to a turbomachine having a compressor comprising variable pitch stator vanes (11) each extending radially between a rotating hub (6) and a stationary casing (3) surrounding this rotating hub (6), each variable pitch vane (11) comprising a blade (12) having a base (14) spaced by a first radial clearance (J1) from a stationary wall (2) of the casing (3), and a tip (17) spaced by a second radial clearance (J2) from a rotating wall (4) of the rotating hub (6). The stationary wall of the casing (3) or the rotating wall (4) of the rotating hub (6) has a shape treatment opposite the blade (12) for channeling an air leak passing through the corresponding clearance.

IPC 8 full level

F01D 5/14 (2006.01); **F01D 17/16** (2006.01); **F04D 29/52** (2006.01); **F04D 29/56** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP US)

F01D 5/143 (2013.01 - EP); **F01D 11/08** (2013.01 - US); **F01D 17/16** (2013.01 - US); **F01D 17/162** (2013.01 - EP US);
F04D 29/526 (2013.01 - EP US); **F04D 29/563** (2013.01 - EP US); **F04D 29/681** (2013.01 - US); **F04D 29/685** (2013.01 - EP US);
F05D 2220/32 (2013.01 - US); **F05D 2220/3216** (2013.01 - EP); **F05D 2240/12** (2013.01 - EP US); **F05D 2250/294** (2013.01 - EP);
F05D 2260/60 (2013.01 - US); **F05D 2260/606** (2013.01 - EP); **Y02T 50/60** (2013.01 - EP)

Citation (search report)

See references of WO 2021224558A1

Designated contracting state (EPC)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3109959 A1 20211112; FR 3109959 B1 20220422; CA 3176299 A1 20211111; CN 115552099 A 20221230; EP 4121636 A1 20230125;
US 2023175527 A1 20230608; WO 2021224558 A1 20211111

DOCDB simple family (application)

FR 2004496 A 20200506; CA 3176299 A 20210423; CN 202180033699 A 20210423; EP 21731220 A 20210423; FR 2021050704 W 20210423;
US 202117997955 A 20210423