Title (en)

Radial compressor with a diffuser including passive flow control

Title (de)

Radialverdichter mit einem Diffusor mit Mitteln zur passiven Kontrolle der Durchflussmenge

Title (fr)

Diaphragme avec contrôle passif de débit pour étage de compression

Publication

EP 2650543 A3 20180228 (FR)

Application

EP 13162922 A 20130409

Priority

FR 1253314 A 20120411

Abstract (en)

[origin: EP2650543A2] The diaphragm (4) has a set of passages (9) extending between two mutually opposite faces of the diaphragm, so as to create a flow of gas between the opposite faces depending on a pressure difference prevailing on either side of the diaphragm. The set of passages is arranged regularly in the diaphragm, where each passage extends, on one of the faces of the diaphragm, between two fixed blades provided on the diaphragm, and the number of passages corresponds to the number of fixed blades of the diaphragm. An independent claim is also included for a compression stage of a compressor.

IPC 8 full level

F04D 17/12 (2006.01); **F04D 29/44** (2006.01); **F04D 29/68** (2006.01)

CPC (source: EP US)

F04B 45/04 (2013.01 - EP US); **F04D 17/122** (2013.01 - EP US); **F04D 27/0207** (2013.01 - EP US); **F04D 29/444** (2013.01 - EP US); **F04D 29/681** (2013.01 - EP US)

Citation (search report)

- [X] US 2007147987 A1 20070628 - KIRTLEY KEVIN R [US]
- [X] US 2305226 A 19421215 - STALKER EDWARD A
- [X] GB 937987 A 19630925

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

DOCDB simple family (publication)

EP 2650543 A2 20131016; **EP 2650543 A3 20180228**; **EP 2650543 B1 20210224**; BR 102013008608 A2 20160329; FR 2989434 A1 20131018; FR 2989434 B1 20151218; US 2013272909 A1 20131017; US 9447784 B2 20160920

DOCDB simple family (application)

EP 13162922 A 20130409; BR 102013008608 A 20130409; FR 1253314 A 20120411; US 201313860968 A 20130411