

Title (en)

DIFFUSER FOR A RADIAL COMPRESSOR

Title (de)

DIFFUSOR FÜR EINEN RADIALVERDICHTER

Title (fr)

DIFFUSEUR POUR COMPRESSEUR RADIAL

Publication

**EP 3682119 A1 20200722 (DE)**

Application

**EP 18756225 A 20180816**

Priority

- DE 102017118950 A 20170818
- EP 2018072247 W 20180816

Abstract (en)

[origin: WO2019034740A1] The invention relates to a diffuser for a radial compressor, comprising a flow channel defined by a first side wall and a second side wall, a diffuser vane ring with a plurality of diffuser vanes that are at least partially arranged in the flow channel, each of the diffuser vanes having a pressure side and a suction side, a plurality of diffuser passages, said diffuser passages being formed between every two adjacent diffuser vanes of the plurality of diffuser vanes, and circulation openings, each circulation opening connecting the flow channel to a diffuser cavity, at least two circulation openings being associated with one diffuser passage, and a circulation opening associated with a diffuser passage being fluidically connected to another circulation opening associated with the same diffuser passage or to a circulation opening associated with another diffuser passage, via the diffuser cavity.

IPC 8 full level

**F04D 29/68** (2006.01); **F04D 27/02** (2006.01); **F04D 29/44** (2006.01)

CPC (source: EP KR US)

**F04D 17/10** (2013.01 - KR); **F04D 27/023** (2013.01 - EP); **F04D 27/0238** (2013.01 - EP); **F04D 29/284** (2013.01 - US);  
**F04D 29/444** (2013.01 - EP KR US); **F04D 29/682** (2013.01 - EP KR); **F04D 29/684** (2013.01 - EP KR); **F04D 29/30** (2013.01 - US);  
**F04D 29/684** (2013.01 - US); **F05D 2210/12** (2013.01 - KR); **F05D 2220/40** (2013.01 - US); **F05D 2240/121** (2013.01 - US);  
**F05D 2250/51** (2013.01 - US)

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)

**WO 2019034740 A1 20190221**; CN 110945252 A 20200331; DE 102017118950 A1 20190221; EP 3682119 A1 20200722;  
JP 2020531730 A 20201105; JP 7374078 B2 20231106; KR 102569738 B1 20230823; KR 20200044012 A 20200428;  
US 11326619 B2 20220510; US 2020173462 A1 20200604

DOCDB simple family (application)

**EP 2018072247 W 20180816**; CN 201880053541 A 20180816; DE 102017118950 A 20170818; EP 18756225 A 20180816;  
JP 2020509003 A 20180816; KR 20207006464 A 20180816; US 201816639674 A 20180816