

Title (en)

COMPRESSOR WHEEL AND USE OF THE COMPRESSOR WHEEL

Title (de)

VERDICHTERRAD UND VERWENDUNG DES VERDICHTERRADES

Title (fr)

ROUE DE COMPRESSEUR ET UTILISATION DE LA ROUE DE COMPRESSEUR

Publication

EP 3314129 A1 20180502 (DE)

Application

EP 16732583 A 20160623

Priority

- EP 15173688 A 20150624
- EP 2016064553 W 20160623

Abstract (en)

[origin: WO2016207288A1] The invention relates to a compressor wheel for a high-speed compressor, said compressor wheel being made of a polymer material and comprising a wheel front face (6), a wheel rear face (11), and a wheel hub (3). The wheel front face (6) has a curvature, by means of which the distance between a plane running radially through the outer circumference (15) of the wheel front face (6) and the surface of the wheel front face (6) increases from the outer circumference (15) to the wheel hub (3), and guide vanes (7) are arranged on the wheel front face (6). The wheel hub (3) protrudes in an axial direction on the wheel front face (11), and reinforcing ribs (13) run from the wheel hub (3) to the outer circumference (15). The distance between a plane running radially through the outer circumference (15) of the wheel front face (11) and the terminating edge (19) of the reinforcing ribs (13) increases from the outer circumference (15) of the wheel rear face (11) to the wheel hub (3). The invention further relates to a use of the compressor wheel.

IPC 8 full level

F04D 29/02 (2006.01); **F04D 29/28** (2006.01)

CPC (source: EP KR US)

F04D 29/02 (2013.01 - EP US); **F04D 29/023** (2013.01 - EP KR US); **F04D 29/281** (2013.01 - EP KR US); **F04D 29/284** (2013.01 - EP KR US); **F05D 2300/43** (2013.01 - EP KR US); **F05D 2300/436** (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 2016207288 A1 20161229; BR 112017027509 A2 20180821; BR 112017027509 B1 20221227; EP 3314129 A1 20180502; EP 3314129 B1 20231018; JP 2018518630 A 20180712; JP 6955812 B2 20211027; KR 102582856 B1 20230925; KR 20180019738 A 20180226; US 2018195524 A1 20180712

DOCDB simple family (application)

EP 2016064553 W 20160623; BR 112017027509 A 20160623; EP 16732583 A 20160623; JP 2017567108 A 20160623; KR 20187002197 A 20160623; US 201615738302 A 20160623