

Title (en)

Cooling of critical parts of the turbo-blower compressor stage

Title (de)

Kühlung der wichtigen Teile einer Turbo-Gebläse-Kompressorstufe

Title (fr)

Refroidissement des parties critiques d'un étage de compresseur de turbosoufflante

Publication

EP 2108846 A2 20091014 (EN)

Application

EP 09466003 A 20090402

Priority

CZ 2008205 A 20080402

Abstract (en)

The compressor stage of the turbo-blower consists of suction (13), a compressor wheel (1) attached to a shaft to which the compressor insert (5) is adjoined, installed into a spiral casing (4) (the insert may be an integral part of casing 4), whereby the compressor wheel (1), equipped with a greater number of blades is further linked to a bladeless part (2) of the diffuser followed by a bladed part (3) of the diffuser, where the compressor stage has a separated space for the passage of compressed gas and a space for the coolant, limited by the left side wall (6) and the right side wall (7) of the bladeless part (2) as well as of the bladed part (3) of the diffuser, followed by the right and left chambers (9 and 10), which are designed for the passage of the coolant fed or drained by the respective supply and drain connections (11 and 12) of the coolant in the respective supply and drain, whereby in this construction both the left and right chambers (9 and 10) are equipped with one respective supply and drain connection (11 and 12) of the respective supply and drain of the coolant.

IPC 8 full level

F04D 29/44 (2006.01); **F04D 29/58** (2006.01)

CPC (source: EP)

F04D 29/444 (2013.01); **F04D 29/584** (2013.01); **F05D 2250/52** (2013.01)

Citation (applicant)

"MTU's powerful single-stage performer for four- strokes", WORLDWIDE TURBOCHARGER GUIDE, August 2007 (2007-08-01)

Cited by

CN105986885A; CN113653674A; EP2614259A4; WO2012033744A2; US11478771B2; US10436216B2; WO2014178909A1; WO2019046843A1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

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