

Title (en)
SINGLE-SHAFT TURBO COMPRESSOR

Title (de)
EINWELLENTURBOVERDICHTER

Title (fr)
TURBOCOMPRESSEUR À UN SEUL ARBRE

Publication
EP 3485170 A1 20190522 (DE)

Application
EP 17761205 A 20170822

Priority
• DE 102016217672 A 20160915
• EP 2017071100 W 20170822

Abstract (en)
[origin: WO2018050404A1] The invention relates to a single-shaft turbo compressor (STC) comprising a rotor (R) extending along an axis (X), an outer housing (OC), static flow fittings (SFE), bearings (BG) for supporting the rotor (R), and at least one first shaft seal (SHS1), wherein the rotor (R) has a shaft (SH) and an impeller (IMP) arranged on the shaft (SH), wherein the static flow fittings (SFE) have supply elements (INE), intermediate elements (IBE) and discharge elements (EXE), and wherein the outer housing (OC) has a casing part (BC) that is open at the end on both sides. According to the invention, a first cover (CV1) of the outer housing (OC) is connected to a first shaft seal (SHS1), wherein supply lines (SPL) and discharge lines (EXL) of the first shaft seal (SHS1) are provided extending through the first cover (CV1) into a wall thickness of the casing part (BC) adjacent to the first cover (CV1).

IPC 8 full level
F04D 17/12 (2006.01); **F04D 29/10** (2006.01); **F04D 29/42** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP US)
F04D 17/125 (2013.01 - EP); **F04D 29/054** (2013.01 - US); **F04D 29/056** (2013.01 - US); **F04D 29/083** (2013.01 - US); **F04D 29/10** (2013.01 - EP); **F04D 29/102** (2013.01 - US); **F04D 29/122** (2013.01 - US); **F04D 29/4206** (2013.01 - EP US); **F04D 29/603** (2013.01 - US); **F04D 29/624** (2013.01 - EP); **F04D 1/08** (2013.01 - US); **F04D 17/125** (2013.01 - US); **F04D 29/044** (2013.01 - US)

Citation (search report)
See references of WO 2018050404A1

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)
DE 102016217672 A1 20180315; CN 109715954 A 20190503; CN 109715954 B 20210402; EP 3485170 A1 20190522; EP 3485170 B1 20200617; JP 2019529774 A 20191017; JP 6768936 B2 20201014; US 11286948 B2 20220329; US 2021285461 A1 20210916; WO 2018050404 A1 20180322

DOCDB simple family (application)
DE 102016217672 A 20160915; CN 201780056943 A 20170822; EP 17761205 A 20170822; EP 2017071100 W 20170822; JP 2019513982 A 20170822; US 201716330856 A 20170822