

Title (en)
GAS REFRIGERATION MACHINE, METHOD FOR OPERATING A GAS REFRIGERATION MACHINE, AND METHOD FOR PRODUCING A GAS REFRIGERATION MACHINE IN THE FORM OF AN OPEN SYSTEM

Title (de)
GASKÄLTEMASCHINE, VERFAHREN ZUM BETREIBEN EINER GASKÄLTEMASCHINE UND VERFAHREN ZUM HERSTELLEN EINER GASKÄLTEMASCHINE ALS OFFENES SYSTEM

Title (fr)
MACHINE DE RÉFRIGÉRATION À GAZ, PROCÉDÉ DE FONCTIONNEMENT D'UNE MACHINE DE RÉFRIGÉRATION À GAZ ET PROCÉDÉ DE PRODUCTION D'UNE MACHINE DE RÉFRIGÉRATION À GAZ SOUS LA FORME D'UN SYSTÈME OUVERT

Publication
EP 4237756 A1 20230906 (DE)

Application
EP 21798712 A 20211026

Priority
• DE 102020213547 A 20201028
• DE 102020213822 A 20201103
• EP 2021079711 W 20211026

Abstract (en)
[origin: WO2022090248A1] The invention relates to a gas refrigeration machine with the following features: an inlet (2) for gas; a recuperator (10); a compressor (40) with a compressor inlet (41), said compressor inlet (41) being coupled to a first recuperator outlet (12); a heat exchanger (60); a turbine (70); and a gas outlet (5), wherein the gas refrigeration machine is designed as an open system; the gas refrigeration machine is designed such that a working agent in at least one element of the group of elements comprising the recuperator (10), the compressor (40), the heat exchanger (60), and the turbine (70) is the gas; the inlet (2) is arranged on a first section of a housing (100) of the gas refrigeration machine, said housing being equipped with the inlet (2) and the gas outlet (5); the gas outlet (5) is arranged on a second section of the housing (100) of the gas refrigeration machine; and the first section is arranged above the second section in an operating direction in which the gas refrigeration machine is arranged for an operation of the gas refrigeration machine.

IPC 8 full level
F25B 9/00 (2006.01); **F25B 9/14** (2006.01); **F25B 11/04** (2006.01); **F25B 29/00** (2006.01); **F25B 40/00** (2006.01)

CPC (source: EP US)
F25B 9/004 (2013.01 - EP US); **F25B 9/06** (2013.01 - US); **F25B 9/14** (2013.01 - EP US); **F25B 11/04** (2013.01 - EP); **F25B 29/003** (2013.01 - EP); **F25B 40/00** (2013.01 - EP); **F25B 2309/003** (2013.01 - EP); **F25B 2309/004** (2013.01 - EP US); **F25B 2309/005** (2013.01 - EP US); **F25B 2339/047** (2013.01 - EP); **F25B 2500/18** (2013.01 - EP)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022090248 A1 20220505; DE 102020213821 A1 20220428; DE 102020213822 A1 20220428; DE 102020213822 B4 20240606; EP 4237756 A1 20230906; JP 2023547684 A 20231113; US 2023258371 A1 20230817; US 2023324087 A1 20231012; WO 2022090241 A1 20220505

DOCDB simple family (application)
EP 2021079711 W 20211026; DE 102020213821 A 20201103; DE 102020213822 A 20201103; EP 2021079702 W 20211026; EP 21798712 A 20211026; JP 2023527328 A 20211026; US 202318306587 A 20230425; US 202318308287 A 20230427