

Title (en)
TWO-STAGE COMPRESSION REFRIGERATION SYSTEM

Title (de)
ZWEISTUFIGE KOMPRESSIIONSKÄLTEANLAGE

Title (fr)
SYSTÈME DE RÉFRIGÉRATION PAR COMPRESSION À DEUX ÉTAGES

Publication
EP 3136020 A1 20170301 (EN)

Application
EP 16185537 A 20160824

Priority
JP 2015167987 A 20150827

Abstract (en)
A two-stage compression refrigeration system 1 includes a two-stage compressor 2 that is provided with a low-stage compressor 21 and a high-stage compressor 22 in a closed housing 20 and whose interior is under an intermediate pressure, an oil separating device 3 that is provided on a discharge pipe 9A, an oil return pipe 13 that returns the oil separated by the oil separating device 3, into the closed housing 20 under the intermediate pressure, and a gas injection pipe 14 that injects an intermediate-pressure refrigerant gas from a gas-liquid separating device 6 provided on a refrigerant circuit 10, into the closed housing 20, and the oil return pipe 13 and the gas injection pipe 14 individually communicate with the closed housing 20, between the low-stage compressor 21 and high-stage compressor 22 of the two-stage compressor 2.

IPC 8 full level
F25B 1/10 (2006.01); **F25B 31/02** (2006.01); **F04B 27/00** (2006.01); **F25B 31/00** (2006.01)

CPC (source: EP)
F04B 39/0246 (2013.01); **F04B 39/04** (2013.01); **F04B 39/16** (2013.01); **F04C 23/005** (2013.01); **F04C 23/008** (2013.01); **F04C 29/026** (2013.01); **F04C 29/04** (2013.01); **F25B 1/10** (2013.01); **F25B 31/02** (2013.01); **F25B 41/39** (2021.01); **F04C 18/0215** (2013.01); **F04C 18/356** (2013.01); **F25B 31/004** (2013.01); **F25B 2400/13** (2013.01); **F25B 2400/23** (2013.01)

Citation (applicant)
• JP 2011007351 A 20110113 - SANYO ELECTRIC CO
• JP 5586880 B2 20140910
• JP 2011232000 A 20111117 - MITSUBISHI HEAVY IND LTD
• JP 5705455 B2 20150422

Citation (search report)
• [IY] WO 2013073063 A1 20130523 - SANYO ELECTRIC CO [JP], et al
• [YA] EP 2236828 A1 20101006 - MITSUBISHI HEAVY IND LTD [JP]
• [A] US 2010143172 A1 20100610 - SATO HAJIME [JP], et al
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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)
EP 3136020 A1 20170301; **EP 3136020 B1 20190417**; JP 2017044420 A 20170302; JP 6594707 B2 20191023

DOCDB simple family (application)
EP 16185537 A 20160824; JP 2015167987 A 20150827