

Title (en)

HERMETICALLY SEALED REFRIGERANT COMPRESSOR AND REFRIGERATION DEVICE USING SAME

Title (de)

HERMETISCH VERSIEGELTER KÄLTEMITTELVERDICHTER UND KÜHLVORRICHTUNG MIT VERWENDUNG DAVON

Title (fr)

COMPRESSEUR FRIGORIFIQUE HERMÉTIQUEMENT SCELLÉ ET DISPOSITIF FRIGORIFIQUE UTILISANT LEDIT COMPRESSEUR

Publication

EP 3617504 A4 20200422 (EN)

Application

EP 18791980 A 20180426

Priority

- JP 2017089973 A 20170428
- JP 2018016908 W 20180426

Abstract (en)

[origin: EP3617504A1] A sealed refrigerant compressor (100) includes: a compression element (107) accommodated in a sealed container (101) and configured to compress a refrigerant; and an electric element (106) configured to drive the compression element (107). Lubricating oil (103) is stored in the sealed container (101). The lubricating oil (103) is mixed oil constituted by at least mineral oil and synthetic oil. Kinetic viscosity of the lubricating oil (103) at 40°C falls within a range of 0.1 to 5.1 mm²/s, and a flash point of the lubricating oil (103) is 110°C or more.

IPC 8 full level

F04B 39/00 (2006.01); **C10M 101/02** (2006.01); **C10M 105/06** (2006.01); **C10M 105/18** (2006.01); **C10M 105/32** (2006.01); **C10M 107/34** (2006.01); **F04B 35/04** (2006.01); **F04B 39/02** (2006.01); **F04C 29/02** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 30/00** (2006.01); **C10N 30/02** (2006.01); **C10N 40/30** (2006.01)

CPC (source: EP US)

C10M 101/02 (2013.01 - EP); **C10M 105/06** (2013.01 - EP); **C10M 105/18** (2013.01 - EP); **C10M 105/32** (2013.01 - EP); **C10M 107/34** (2013.01 - EP); **C10M 111/02** (2013.01 - US); **F04B 35/04** (2013.01 - EP); **F04B 39/0215** (2013.01 - EP); **F04B 39/023** (2013.01 - EP); **F25B 31/002** (2013.01 - US); **F25B 31/02** (2013.01 - US); **C10M 2290/02** (2013.01 - US); **C10M 2290/04** (2013.01 - US); **C10N 2040/30** (2013.01 - US)

Citation (search report)

- [X1] US 2015014574 A1 20150115 - SAITO MASANORI [JP], et al
- [IA] EP 2128233 A1 20091202 - IDEMITSU KOSAN CO [JP]
- [A] JP 2016033222 A 20160310 - JX NIPPON OIL & ENERGY CORP
- [A] EP 2233555 A1 20100929 - IDEMITSU KOSAN CO [JP]
- [A] US 2015203732 A1 20150723 - SAITO MASANORI [JP], et al
- See references of WO 2018199204A1

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 3617504 A1 20200304; **EP 3617504 A4 20200422**; CN 110573734 A 20191213; JP 2021080926 A 20210527; JP WO2018199204 A1 20200319; US 2020141616 A1 20200507; WO 2018199204 A1 20181101

DOCDB simple family (application)

EP 18791980 A 20180426; CN 201880028242 A 20180426; JP 2018016908 W 20180426; JP 2019514597 A 20180426; JP 2021006990 A 20210120; US 201816609023 A 20180426