

Title (en)

HERMETIC REFRIGERANT COMPRESSOR AND FREEZING/REFRIGERATING APPARATUS USING SAME

Title (de)

HERMETISCHER KÄLTEMITTELVERDICHTER UND GEFRIER-/KÜHLGERÄT DAMIT

Title (fr)

COMPRESSEUR HERMÉTIQUE DE RÉFRIGÉRANT ET APPAREIL DE CONGÉLATION/RÉFRIGÉRATION L'UTILISANT

Publication

**EP 3825388 A4 20210818 (EN)**

Application

**EP 19837799 A 20190702**

Priority

- JP 2018136855 A 20180720
- JP 2019026301 W 20190702

Abstract (en)

[origin: EP3825388A1] A hermetic refrigerant compressor includes a sealed container 101, in which lubricating oil 103 having a kinematic viscosity in a range of 1 mm<sup>2</sup>/S to 10 mm<sup>2</sup>/S at 40°C is stored, the sealed container 101 accommodating an electric element 106 and a compression element 107, the compression element 107 being driven by the electric element 106 and configured to compress a refrigerant. The lubricating oil 103 has a surface tension in a range of 23 mN/m to 45 mN/m.

IPC 8 full level

**C10M 171/02** (2006.01); **C10M 171/00** (2006.01); **F04B 39/02** (2006.01); **C10N 20/00** (2006.01); **C10N 20/02** (2006.01); **C10N 40/30** (2006.01)

CPC (source: CN EP)

**C10M 171/008** (2013.01 - EP); **C10M 171/02** (2013.01 - CN); **F04B 37/12** (2013.01 - CN); **F04B 39/0215** (2013.01 - CN EP); **C10M 2203/1006** (2013.01 - EP); **C10M 2219/00** (2013.01 - EP); **C10M 2223/00** (2013.01 - EP); **C10N 2020/097** (2020.05 - EP); **C10N 2020/103** (2020.05 - EP); **C10N 2030/02** (2013.01 - EP); **C10N 2030/06** (2013.01 - EP); **C10N 2040/30** (2013.01 - EP)

Citation (search report)

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- [E] US 2019285063 A1 20190919 - HAYASHI YASUSHI [JP], et al & WO 2018101246 A1 20180607 - PANASONIC APPLIANCES REFRIGERATION DEVICES SINGAPORE [SG], et al
- [Y] US 2016055934 A1 20160225 - TAGAWA KAZUO [JP]
- [Y] YURY V. SEMENYUK ET AL: "Thermophysical properties of compressor oils for refrigerating plant", JOURNAL OF SYNTHETIC LUBRICATION., vol. 25, no. 2, 1 January 2008 (2008-01-01), GB, pages 57 - 73, XP055499586, ISSN: 0265-6582, DOI: 10.1002/jsl.50
- See also references of WO 2020017319A1

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

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DOCDB simple family (application)

**EP 19837799 A 20190702**; CN 201980055604 A 20190702; CN 202211239683 A 20190702; EP 23209854 A 20190702; JP 2019026301 W 20190702; JP 2020531220 A 20190702; JP 2021003361 A 20210113