Title (en)

REFRIGERATION DEVICE

Title (de)

KÜHLVORRICHTUNG

Title (fr)

DISPOSITIF DE RÉFRIGÉRATION

Publication

EP 2251621 A4 20140514 (EN)

Application

EP 09707244 A 20090203

Priority

- JP 2009000405 W 20090203
- JP 2008026873 A 20080206
- JP 2008163245 A 20080623
- JP 2008253411 A 20080930

Abstract (en)

[origin: EP2251621A1] A refrigerant circuit (11) includes an oil separator (60) configured to separate oil from high pressure refrigerant, and an oil feed circuit (70) configured to feed the oil separated in the oil separator (60) to a compression mechanism (20) so as to cool the refrigerant in the course of a compression phase of the compression mechanism (20). The oil feed circuit (70) includes a recovery mechanism (40) configured to recover energy of the oil separated in the oil separator (60). In the compression mechanism (20), the refrigerant is cooled by the oil, thereby reducing power of the compression mechanism (20). Simultaneously, in the recovery mechanism (40), power required to increase pressure of the oil in the compression mechanism (20) is recovered.

IPC 8 full level

F25B 1/00 (2006.01); **F25B 11/02** (2006.01); **F25B 43/02** (2006.01)

CPC (source: EP US)

F25B 13/00 (2013.01 - EP US); **F25B 31/004** (2013.01 - EP US); **F25B 40/00** (2013.01 - EP US); F25B 2309/061 (2013.01 - EP US); F25B 2313/02742 (2013.01 - EP US); F25B 2400/14 (2013.01 - EP US); F25B 2400/141 (2013.01 - EP US)

Citation (search report)

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- [XI] JP S58159454 U 19831024
- [Y] JP 2004177020 A 20040624 - DENSO CORP
- [Y] WO 2007132649 A1 20071122 - MATSUSHITA ELECTRIC IND CO LTD [JP], et al
- [A] EP 1416231 A1 20040506 - MATSUSHITA ELECTRIC IND CO LTD [JP]
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Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

EP 2251621 A1 20101117; **EP 2251621 A4 20140514**; AU 2009210984 A1 20090813; AU 2009210984 B2 20111124; CN 101939599 A 20110105; JP 2010032195 A 20100212; JP 5380987 B2 20140108; KR 101185307 B1 20120926; KR 20100114122 A 20101022; US 2010275634 A1 20101104; WO 2009098862 A1 20090813

DOCDB simple family (application)

EP 09707244 A 20090203; AU 2009210984 A 20090203; CN 200980104273 A 20090203; JP 2008253411 A 20080930; JP 2009000405 W 20090203; KR 20107019618 A 20090203; US 81211109 A 20090203