

Title (en)
SELF-DRIVEN THERMAL COMPRESSION HEAT PUMP REFRIGERATION METHOD

Title (de)
KÜHLVERFAHREN FÜR THERMISCHE SELBSTANGETRIEBENE KOMPRESSIOWÄRMEPUMPE

Title (fr)
PROCÉDÉ DE RÉFRIGÉRATION DE POMPE À CHALEUR À COMPRESSION THERMIQUE AUTO-ENTRAÎNÉE

Publication
EP 3147589 A4 20180228 (EN)

Application
EP 15812225 A 20150522

Priority
• CN 201410280179 A 20140623
• CN 2015079574 W 20150522

Abstract (en)
[origin: EP3147589A1] The present invention relates to a self-driving heat compression-type heat pump refrigerating method. According to the method, high-temperature steam is prepared, with condensed heat generated by a heat compression-type heat pump refrigerating circulation system, as a driving heat source for heat compression-type heat pump refrigerating circulation system to drive the heat compression-type heat pump refrigerating circulation system. By consuming only a very small amount of electricity, the present invention can prepare the driving steam by using condensing heat generated by refrigerating media steam. The heat generated during the circulation of a system itself is used as a driving heat source, realizing refrigerating and heating. The present invention is highly efficient and energy-saving.

IPC 8 full level
F25B 15/00 (2006.01); **F25B 17/00** (2006.01); **F25B 25/02** (2006.01)

CPC (source: EP US)
F25B 15/00 (2013.01 - US); **F25B 15/008** (2013.01 - US); **F25B 15/02** (2013.01 - US); **F25B 17/00** (2013.01 - US); **F25B 25/02** (2013.01 - EP US); **F25B 27/007** (2013.01 - US)

Citation (search report)
• [XA] WO 2013021323 A1 20130214 - PELLEGRINI GIANFRANCO [IT], et al
• [XA] FR 2658903 A1 19910830 - ARMINES [FR]
• [XA] US 4285211 A 19810825 - CLARK SILAS W
• See references of WO 2015196884A1

Cited by
EP3627074A1; FR3086040A1

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

DOCDB simple family (publication)
EP 3147589 A1 20170329; EP 3147589 A4 20180228; CN 104034083 A 20140910; CN 106170666 A 20161130; CN 106170666 B 20190416; JP 2017516057 A 20170615; US 2017191707 A1 20170706; WO 2015196884 A1 20151230

DOCDB simple family (application)
EP 15812225 A 20150522; CN 201410280179 A 20140623; CN 2015079574 W 20150522; CN 201580010302 A 20150522; JP 2016568395 A 20150522; US 201515312635 A 20150522