

Title (en)
HYBRID-DRIVEN COLD/HEAT STORAGE TYPE HEAT PUMP UNIT UTILIZING SOLAR PHOTOVOLTAIC POWER AND COMMERCIAL POWER

Title (de)
WÄRMEPUMPENEINHEIT MIT HYBRIDANTRIEB UND KALT-/WARMSPEICHERUNG FÜR DEN EINSATZ IN DER PHOTOVOLTAIK UND KOMMERZIELLEN EINSATZ

Title (fr)
UNITE DE POMPE A CHALEUR DE TYPE A ACCUMULATION FROID / CHAUD A ENTRAINEMENT HYBRIDE UTILISANT UNE ALIMENTATION PHOTOVOLTAIQUE SOLAIRE ET UNE ALIMENTATION COMMERCIALE

Publication
EP 2388540 A4 20130731 (EN)

Application
EP 10731055 A 20100115

Priority
• CN 2010070200 W 20100115
• CN 200910076400 A 20090115

Abstract (en)
[origin: EP2388540A1] A hybrid-driven cold/heat storage type heat pump unit utilizing a solar photovoltaic power and a commercial power, which has a DC compressor (2) and an AC compressor (8), is a dual supply heat pump system driven by a solar photovoltaic DC power and a common commercial AC power in combination. When there is sunshine, the DC generated by a solar cell panel (60) is used for driving the DC compressor (2) directly to produce cold and heat capacity, and the produced cold and heat capacity could be stored respectively in a phase-change cold storage medium (39) and a phase-change heat storage medium (20). When the DC power is insufficient, the AC power from power network is used for power supply.

IPC 8 full level
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Citation (search report)
• [A] US 5372011 A 19941213 - O'NEAL EDWARD J [US]
• [A] DE 19800004 A1 19980910 - LINDE AG [DE]
• See references of WO 2010081421A1

Cited by
FR3072161A1; ES2902039A1; FR3117195A1; AU2015296894B2; WO2019073177A1; WO2020254839A1; WO2022117959A1; WO2016015098A1

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