Title (en)
METHOD AND SYSTEM FOR CONTROLLING A HEAT PUMP HAVING THERMOELECTRIC MODULES

Title (de)
VERFAHREN UND SYSTEM ZUR REGULIERUNG EINER WÄRMEPUMPE MIT THERMOELEKTRISCHEN MODULEN

Title (fr)
PROCEDE ET SYSTEME DE CONTROLE D'UNE POMPE A CHALEUR A MODULES THERMOELECTRIQUES

Publication
EP 2567160 A1 20130313 (FR)

Application
EP 11723546 A 20110502

Priority
• FR 1053420 A 20100503
• FR 2011050990 W 20110502

Abstract (en)
[origin: WO2011138547A1] The invention relates to the control of a thermoelectric heat pump which includes thermoelectric units (41, 42, 43, 44) having a plurality of thermoelectric modules (3) for transferring heat between two circuits of the pump. The invention makes it possible to connect the first exchanger (41a) of an input unit (41) to the first circuit (C1) and the second exchanger (44b) of an output unit (44) to the second circuit (C2); to use a plurality of valves (V1-V20) to configure a cascade arrangement, in which the second exchanger (41b) of the input unit is connected to a first exchanger (42a; 44a) of the thermoelectric units, and the first exchanger (44a) of the output unit (44) is connected to a second exchanger (41b; 43b) of the thermoelectric units. The possibility of enabling different configurations according to requirements, including at least one cascade arrangement, makes it possible to maintain a high performance coefficient.

IPC 8 full level
F25B 21/02 (2006.01)

CPC (source: EP)
F25B 21/02 (2013.01); F25B 2321/021 (2013.01)

Citation (search report)
See references of WO 2011138547A1

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)
FR 2959557 A1 20111104; **FR 2959557 B1 20120525**; EP 2567160 A1 20130313; EP 2567160 B1 20160420; ES 2573409 T3 20160607; WO 2011138547 A1 20111110

DOCDB simple family (application)
FR 1053420 A 20100503; EP 11723546 A 20110502; ES 11723546 T 20110502; FR 2011050990 W 20110502