

Title (en)

ELECTRICITY GENERATION DEVICE WITH SEVERAL HEAT PUMPS IN SERIES

Title (de)

ELEKTRIZITÄT SERZEUGUNGSVORRICHTUNG MIT MEHREREN WÄRMEPUMPEN IN REIHE

Title (fr)

DISPOSITIF DE PRODUCTION D'ÉLECTRICITÉ AVEC PLUSIEURS POMPES À CHALEUR EN SÉRIE

Publication

EP 2379848 A2 20111026 (FR)

Application

EP 09805750 A 20091218

Priority

- FR 2009052615 W 20091218
- FR 0858836 A 20081219

Abstract (en)

[origin: WO2010070242A2] The invention relates to an electricity generation device (1) which includes: - a first heat pump (3) provided with a first closed circuit (15) containing a first heat transfer fluid, and a first heat exchanger (17) between the first heat transfer fluid and a flow of atmospheric air, in which the flow of atmospheric air transfers an amount of heat to the first heat transfer fluid, - at least one second heat pump (5) provided with a second closed circuit (23) containing a second heat transfer fluid, and a second heat exchanger (25) between the second heat transfer fluid and a third heat transfer fluid, in which the second heat transfer fluid transfers an amount of heat to the third heat transfer fluid; - means for transferring an amount of heat from the first heat transfer fluid to the second heat transfer fluid; - a third closed circuit (9) containing the third heat transfer fluid; - a turbine (11) inserted in the third closed circuit (9) and driven by the third heat transfer fluid; - an electricity generator (13) mechanically driven by the turbine (11).

IPC 8 full level

F01K 17/00 (2006.01); **F01K 25/08** (2006.01); **F25B 30/06** (2006.01)

CPC (source: EP US)

F01K 17/005 (2013.01 - EP US); **F01K 25/08** (2013.01 - EP US)

Citation (search report)

See references of WO 2010070242A2

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 SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010070242 A2 20100624; WO 2010070242 A3 20110512; AU 2009329431 A1 20110811; AU 2009329431 B2 20140814; BR PI0918110 A2 20151124; BR PI0918110 B1 20200128; CN 102325965 A 20120118; CN 102325965 B 20140702; DK 2379848 T3 20150126; EP 2379848 A2 20111026; EP 2379848 B1 20141126; ES 2528932 T3 20150213; FR 2940355 A1 20100625; FR 2940355 B1 20110722; HR P20150213 T1 20150327; MX 2011006529 A 20110929; PE 20120568 A1 20120606; PL 2379848 T3 20150430; PT 2379848 E 20150302; US 2011309635 A1 20111222; US 8624410 B2 20140107

DOCDB simple family (application)

FR 2009052615 W 20091218; AU 2009329431 A 20091218; BR PI0918110 A 20091218; CN 200980157062 A 20091218; DK 09805750 T 20091218; EP 09805750 A 20091218; ES 09805750 T 20091218; FR 0858836 A 20081219; HR P20150213 T 20150224; MX 2011006529 A 20091218; PE 2011001242 A 20091218; PL 09805750 T 20091218; PT 09805750 T 20091218; US 200913141057 A 20091218