

Title (en)
HEAT PUMP DEVICE

Title (de)
WÄRMEPUMPENVORRICHTUNG

Title (fr)
DISPOSITIF DE POMPE À CHALEUR

Publication
EP 3574270 A1 20191204 (EN)

Application
EP 17737508 A 20170628

Priority
• EP 17153848 A 20170130
• EP 2017066031 W 20170628

Abstract (en)
[origin: WO2018137789A1] A heat pump device, for example a thermoelectric heat pump device, for conditioning the temperature T_i inside (1) a room, the device comprising the device comprising at least one first means for heat distribution (5), a first liquid circuit (6) connected to said at least one first means for heat distribution (5), a first liquid transfer pump (7), at least one means for heat exchange (13) connected to a heat buffer (8). Said heat buffer (8) is liquidly connected to said at least one first means for heat distribution (5), and configured to comprise at least a part of said first liquid, wherein said heat buffer (8) is designed in accordance with $Q_b = mbc_{pb} (T_i - T_{bopt})$, and derived in accordance with Formula (I) wherein P_{tot} is the total power required to operate said first liquid transfer pump (7), said at least one first means for heat distribution (5) and said at least one means for heat exchange (13). Thus, the heat pump device allows to condition the temperature inside a room in an energy efficient way.

IPC 8 full level
F25B 21/02 (2006.01); **F25B 25/00** (2006.01); **F25B 30/00** (2006.01)

CPC (source: EP)
F25B 21/02 (2013.01); **F25B 30/00** (2013.01); **F25B 25/005** (2013.01); **F25B 2321/0212** (2013.01); **F25B 2321/0252** (2013.01); **F25B 2400/24** (2013.01); **F25B 2500/19** (2013.01)

Citation (search report)
See references of WO 2018137789A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2018137789 A1 20180802; EP 3574270 A1 20191204

DOCDB simple family (application)
EP 2017066031 W 20170628; EP 17737508 A 20170628