

Title (en)

Air-conditioning device for a compartment, in particular for a railway vehicle, and method for defrosting the device

Title (de)

Klimaanlagenvorrichtung eines Abteils, insbesondere für Schienenfahrzeug, und Verfahren zum Auftauen des Geräts

Title (fr)

Dispositif de climatisation d'un compartiment, notamment pour un véhicule ferroviaire, et procédé de dégivrage du dispositif

Publication

EP 2894419 B1 20201216 (FR)

Application

EP 15150505 A 20150108

Priority

FR 1450117 A 20140108

Abstract (en)

[origin: CA2876724A1] The air conditioning device (10) has a primary heat pump circuit (12) comprising a first primary heat exchanger (14) with air from the compartment, a primary compressor (16), a second primary heat exchanger (18) with outside air, and a primary expansion device (20) and a heat storage tank (46), connected to the primary circuit (12) in parallel with said first primary heat exchanger (14) with air from the compartment. The air conditioning device (10) includes a secondary heat pump circuit (12) comprising a first secondary heat exchanger (14) with air from the compartment, a secondary compressor (16), a second secondary heat exchanger (18) with outside air, and a secondary expansion device (20). The heat storage tank (46) is connected to the secondary circuit (12) in parallel with said first secondary exchanger (14) with air from the compartment.

IPC 8 full level

F25B 47/02 (2006.01); **F25B 41/04** (2006.01)

CPC (source: EP US)

B61D 27/0018 (2013.01 - US); **F25B 7/00** (2013.01 - US); **F25B 41/20** (2021.01 - EP US); **F25B 41/24** (2021.01 - EP US); **F25B 47/022** (2013.01 - EP US); **F25D 21/06** (2013.01 - US); **F25B 2400/061** (2013.01 - EP US); **F25B 2400/24** (2013.01 - EP US)

Citation (examination)

JP S6410062 A 19890113 - DAIKIN IND LTD

Cited by

CN109059151A; CN111469816A; EP3290288A1; FR3055252A1; EP3290285A1; FR3055290A1; EP3153337A1; FR3041288A1; US10759253B2

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 2894419 A1 20150715; **EP 2894419 B1 20201216**; CA 2876724 A1 20150708; CA 2876724 C 20220531; FR 3016206 A1 20150710; FR 3016206 B1 20160205; PL 2894419 T3 20210802; US 2015191182 A1 20150709; US 9994238 B2 20180612

DOCDB simple family (application)

EP 15150505 A 20150108; CA 2876724 A 20141222; FR 1450117 A 20140108; PL 15150505 T 20150108; US 201514592030 A 20150108