

Title (en)

REFRIGERATION DEVICE AND METHOD FOR DETECTING FILLING OF WRONG REFRIGERANT

Title (de)

KÜHLVORRICHTUNG UND -VERFAHREN ZUR ERKENNUNG DER ABFÜLLUNG EINES FALSCHEN KÜHLMITTELS

Title (fr)

DISPOSITIF DE RÉFRIGÉRATION ET PROCÉDÉ POUR DÉTECTER LE CHARGEMENT D'UN MAUVAIS FLUIDE FRIGORIGÈNE

Publication

**EP 2801772 B1 20210317 (EN)**

Application

**EP 12862282 A 20121225**

Priority

- JP 2011290214 A 20111229
- JP 2012008227 W 20121225

Abstract (en)

[origin: EP2801772A1] A method for detecting whether a different refrigerant has been charged into a refrigeration apparatus (10) including a refrigerant circuit (20) includes: a charging step of charging a refrigerant into the refrigerant circuit (20); a characteristics determination step of determining whether saturation temperature characteristics of the refrigerant charged in the charging step are identical to saturation temperature characteristics of a previously determined normal refrigerant, the saturation temperature characteristics of the refrigerant being derived from a pressure and a temperature of the refrigerant; and an alerting step of, when, in the characteristics determination step, a determination is made that the saturation temperature characteristics of the charged refrigerant are different from those of the normal refrigerant, issuing an alarm indicating that the charged refrigerant is different from the normal refrigerant.

IPC 8 full level

**F25B 45/00** (2006.01); **F25B 1/00** (2006.01); **F25B 49/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP US)

**F25B 1/00** (2013.01 - US); **F25B 45/00** (2013.01 - EP US); **F25B 49/00** (2013.01 - US); **F25B 49/005** (2013.01 - EP US); **F25B 2400/18** (2013.01 - EP US)

Citation (examination)

US 5285647 A 19940215 - MANZ KENNETH W [US], et al

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 2801772 A1 20141112**; **EP 2801772 A4 20151007**; **EP 2801772 B1 20210317**; CN 103998876 A 20140820; CN 103998876 B 20160706; DK 2801772 T3 20210517; JP 2013139948 A 20130718; JP 5445577 B2 20140319; SG 11201403680Q A 20141030; US 2014373559 A1 20141225; WO 2013099200 A1 20130704

DOCDB simple family (application)

**EP 12862282 A 20121225**; CN 201280062343 A 20121225; DK 12862282 T 20121225; JP 2011290214 A 20111229; JP 2012008227 W 20121225; SG 11201403680Q A 20121225; US 201214369521 A 20121225