

Title (en)
TEMPERATURE CONTROL METHOD, CONTROL DEVICE OF VARIABLE TEMPERATURE CHAMBER IN REFRIGERATOR, AND REFRIGERATOR

Title (de)
TEMPERATURREGELUNGSVERFAHREN, STEUERVORRICHTUNG EINER VARIABLEN TEMPERATURKAMMER IN EINEM KÜHLSCHRANK UND KÜHLSCHRANK

Title (fr)
PROCÉDÉ DE CONTRÔLE DE LA TEMPÉRATURE; DISPOSITIF DE COMMANDE DE CHAMBRE DE TEMPÉRATURE VARIABLE DANS UN RÉFRIGÉRATEUR ET RÉFRIGÉRATEUR

Publication
EP 4083546 A1 20221102 (EN)

Application
EP 22165752 A 20220331

Priority
CN 202110469372 A 20210428

Abstract (en)
An embodiment of the present invention provides a temperature control method and control device of a variable-temperature compartment in a refrigerator, and a refrigerator. The refrigerator includes a variable-temperature compartment and a refrigeration system adapted to generate cold air to cool the variable-temperature compartment. The refrigeration system includes an evaporator configured corresponding to the variable-temperature compartment. The temperature control method of a variable-temperature compartment in a refrigerator includes: obtaining a set temperature of the variable-temperature compartment; determining whether the set temperature is greater than or equal to a first temperature threshold, if yes, executing a non-freezing temperature control mode on the variable-temperature compartment; and if no, executing a freezing temperature control mode on the variable-temperature compartment, where the non-freezing temperature control mode is that the refrigeration system is operated based on a temperature of the variable-temperature compartment and a temperature of the evaporator to cool the variable-temperature compartment, and the freezing temperature control mode is that the refrigeration system is operated based on the temperature of the variable-temperature compartment to cool the variable-temperature compartment. In the technical solutions of the embodiments of the present invention, temperature control modes of the variable-temperature compartment can be flexibly changed, and it is conducive to saving energy and defrosting in the non-freezing temperature control mode and improving a cooling rate in the freezing temperature control mode.

IPC 8 full level
F25D 11/02 (2006.01); **F25D 29/00** (2006.01)

CPC (source: CN EP)
F25D 11/02 (2013.01 - CN); **F25D 11/022** (2013.01 - EP); **F25D 25/025** (2013.01 - CN); **F25D 29/00** (2013.01 - EP); **F25D 29/003** (2013.01 - CN); **F25D 2600/00** (2013.01 - EP); **F25D 2600/04** (2013.01 - CN); **F25D 2700/10** (2013.01 - EP); **F25D 2700/12** (2013.01 - EP); **F25D 2700/121** (2013.01 - EP)

Citation (search report)

- [IY] CN 105716350 B 20180713
- [Y] WO 2006124004 A1 20061123 - GORENJE GOSPODINJSKI APARATI D, et al
- [A] KR 20080068233 A 20080723 - SAMSUNG ELECTRONICS CO LTD [KR]
- [A] EP 3680590 A1 20200715 - LG ELECTRONICS INC [KR]
- [A] EP 2770282 A1 20140827 - INDESIT CO SPA [IT]
- [YA] KR 20050023788 A 20050310 - LG ELECTRONICS INC
- [YA] KR 20200082221 A 20200708 - LG ELECTRONICS INC [KR]

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4083546 A1 20221102; CN 115247939 A 20221028

DOCDB simple family (application)
EP 22165752 A 20220331; CN 202110469372 A 20210428