

Title (en)

ICE-FULL STATE DETECTING APPARATUS AND REFRIGERATOR HAVING THE SAME

Title (de)

VORRICHTUNG ZUR ERFASSUNG EINES "EIS-VOLL"-ZLL"-ZUSTANDS UND KÜHLSCHRANK DAMIT

Title (fr)

APPAREIL DE DÉTECTION D'ÉTAT "PLEIN DE GLAÇONS" ET RÉFRIGÉRATEUR PRÉSENTANT LEDIT APPAREIL

Publication

EP 2297533 A4 20150128 (EN)

Application

EP 09733100 A 20090415

Priority

- KR 2009001935 W 20090415
- KR 20080034861 A 20080415

Abstract (en)

[origin: WO2009128647A2] An ice-full state detecting apparatus and a refrigerator having the same are disclosed. The refrigerator including an ice-full state detecting apparatus includes: a refrigerator body including a cooling chamber; a cooling chamber door to open and close the cooling chamber; an ice maker installed at the cooling chamber or at the cooling chamber door; an ice storage container to store ice made by the ice maker; and the ice-full state detecting apparatus to detect an ice-full state of the ice storage container, wherein the ice-full state detecting apparatus includes: a ice-full state detecting sensor to detect an ice-full state of the ice storage container; a sensor heater to heat the ice-full state detecting sensor; a detecting unit to detect whether the ice-full state detecting sensor is in contact with external air; and a controller to control the operation of the sensor heater based on the detection result of the detecting unit. The ice-full state detecting sensor can be restrained from being frosted to thus prevent degradation of detection performance of the ice-full state detecting sensor. In addition, power consumption required for a defrosting operation can be reduced.

IPC 8 full level

F25C 1/24 (2006.01); **F25C 1/04** (2006.01); **F25C 5/00** (2006.01); **F25C 5/08** (2006.01); **F25C 5/18** (2006.01); **F25D 21/04** (2006.01)

CPC (source: EP KR US)

F25C 1/24 (2013.01 - KR); **F25C 5/18** (2013.01 - KR); **F25C 5/187** (2013.01 - EP US); **F25C 5/22** (2017.12 - EP US); **F25D 23/08** (2013.01 - KR); **F25D 29/00** (2013.01 - KR); **F25C 1/04** (2013.01 - EP US); **F25C 5/08** (2013.01 - EP US); **F25C 5/24** (2017.12 - EP US); **F25D 21/04** (2013.01 - EP US); **F25D 2400/02** (2013.01 - EP US); **F25D 2700/02** (2013.01 - EP US)

Citation (search report)

- [Y] US 6314745 B1 20011113 - JANKE DONALD E [US], et al
- [Y] US 2007119193 A1 20070531 - DAVIS MATTHEW W [US], et al
- See references of WO 2009128647A2

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 TR

DOCDB simple family (publication)

WO 2009128647 A2 20091022; **WO 2009128647 A3 20100114**; EP 2297533 A2 20110323; EP 2297533 A4 20150128; EP 2297533 B1 20181017; KR 101451659 B1 20141016; KR 20090109421 A 20091020; US 2011100039 A1 20110505

DOCDB simple family (application)

KR 2009001935 W 20090415; EP 09733100 A 20090415; KR 20080034861 A 20080415; US 93795609 A 20090415