

Title (en)

SYSTEM, APPARATUS, AND METHOD FOR ICE DETECTION

Title (de)

SYSTEM, VORRICHTUNG UND VERFAHREN ZUR EISDETEKTION

Title (fr)

SYSTÈME, APPAREIL ET PROCÉDÉ DE DÉTECTION DE GLACE

Publication

**EP 2673580 A4 20170426 (EN)**

Application

**EP 12745318 A 20120208**

Priority

- US 201161441157 P 20110209
- US 201213368814 A 20120208
- US 2012024336 W 20120208

Abstract (en)

[origin: US2012198864A1] A system, apparatus, and method for determining when an amount of ice formed on an evaporator or evaporator grid has reached a predetermined size are illustrated. An acoustic transmitter an acoustic transmitter positioned proximate to the evaporator channels acoustic signals emanating from the evaporator or evaporator grid to an acoustic sensor, which generates an electronic signal indicative of the acoustic signal. A receiver module coupled to the acoustic sensor is configured to receive the electronic signal and determine that ice formed on the evaporator has reached a predetermined size based on the electronic signal.

IPC 8 full level

**F25C 1/00** (2006.01); **G01B 17/00** (2006.01)

CPC (source: EP US)

**F25D 21/02** (2013.01 - EP US); **F25B 2700/111** (2013.01 - EP US)

Citation (search report)

- [XY] DE 3116361 A1 19821223 - PIFFL ERNST
- [Y] US 2008202142 A1 20080828 - KNOWLES TERENCE J [US], et al
- [X] US 2008029245 A1 20080207 - GOLDSTEIN VLADIMIR [CA]
- [X] DE 4340871 C1 19950427 - LUDWIG MATTHIAS DIPL PHYS [DE]
- [X] DE 2730648 A1 19790125 - STIEBEL ELTRON GMBH & CO KG
- [X] US 2010126191 A1 20100527 - HAN JEONG SU [KR], et al
- [X] DE 3205370 C1 19830707
- [X] JP 2000320948 A 20001124 - FUJI ELECTRIC CO LTD
- [X] DE 2750165 A1 19780524 - MATSUSHITA ELECTRIC IND CO LTD
- See references of WO 2012109360A2

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)

**US 2012198864 A1 20120809**; CN 103459947 A 20131218; CN 103459947 B 20160810; EP 2673580 A2 20131218; EP 2673580 A4 20170426; WO 2012109360 A2 20120816; WO 2012109360 A3 20121108

DOCDB simple family (application)

**US 201213368814 A 20120208**; CN 201280008385 A 20120208; EP 12745318 A 20120208; US 2012024336 W 20120208