

Title (en)

Method and apparatus maintaining liquid beverages in a supercooled state

Title (de)

Verfahren und Vorrichtung zur Haltung flüssiger Getränke in einem supragekühlten Status

Title (fr)

Procédé et appareil pour la conservation de boissons liquides dans un état surfondu

Publication

**EP 1980809 A2 20081015 (EN)**

Application

**EP 08152003 A 20080227**

Priority

KR 20070034405 A 20070406

Abstract (en)

Disclosed herein is a refrigerator including a device to restrain the freezing of liquid-phase beverages, thereby stably maintaining the supercooled state of the liquid-phase beverages. The refrigerator includes a main body (10), a supercooling chamber (30) disposed in the main body (10) such that cool air is supplied to the supercooling chamber (30), a microwave generator (50) to oscillate microwaves to the supercooling chamber (30), and a control unit (53) to control the magnitude of the microwaves oscillated from the microwave generator (50). The present invention has the effect of restraining the freezing of the liquid-phase beverages, thereby stably maintaining the supercooled state of the liquid-phase beverages, and therefore, increasing the supercooled degree of the liquid-phase beverages.

IPC 8 full level

**F25D 29/00** (2006.01)

CPC (source: EP KR US)

**F25B 40/02** (2013.01 - KR); **F25D 11/00** (2013.01 - KR); **F25D 23/04** (2013.01 - KR); **F25D 23/12** (2013.01 - EP US); **F25D 17/065** (2013.01 - EP US); **F25D 2317/061** (2013.01 - EP US); **F25D 2400/02** (2013.01 - EP US); **F25D 2400/06** (2013.01 - EP US); **F25D 2700/121** (2013.01 - EP US)

Citation (applicant)

JP 2003214753 A 20030730 - HOSHIZAKI ELECTRIC CO LTD

Cited by

EP3168552A1; US10451337B2; WO2010079971A3; WO2024025584A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1980809 A2 20081015**; CN 101280988 A 20081008; CN 101280988 B 20100609; KR 20080090927 A 20081009; RU 2008110643 A 20090927; RU 2378587 C2 20100110; US 2008245079 A1 20081009

DOCDB simple family (application)

**EP 08152003 A 20080227**; CN 200810086764 A 20080320; KR 20070034405 A 20070406; RU 2008110643 A 20080319; US 7179908 A 20080226