

Title (en)

OVEN, METHOD OF CONTROLLING OVEN, AND SENSORS

Title (de)

OFEN, VERFAHREN ZUR STEUERUNG DES OFENS UND SENSOREN

Title (fr)

FOUR, MÉTHODE DE COMMANDE DU FOUR ET CAPTEURS

Publication

**EP 3568639 A2 20191120 (EN)**

Application

**EP 17822731 A 20171128**

Priority

- GB 201620108 A 20161128
- GB 2017053569 W 20171128

Abstract (en)

[origin: WO2018096369A2] An oven, suitable for domestic use for cooking food, includes sensors for temperature, humidity, convective heat transfer and radiant temperature, and controls convective, radiative and conductive heat fluxes, as well as the rate of mass transfer of water to/and or from an article, such as food, throughout a cooking process. An air circulation channel has inlets and outlet nozzles, and a variable air speed regulator, the inlets, outlets and air speed being configured to provide a relatively high speed of air impingement on an article in the oven, enabling an article to rest on the base of the oven, and to minimise the loss of heat and humidity conditioned air when the oven door is opened. A radiant temperature and convective heat transfer coefficient sensor has first and second sensor spades, with high and low emissivity coatings, connected to a heat sink through conductors, a plurality of temperature sensors in the sensor spades and spaced along the conductors, and an air temperature sensor, and temperature readings are taken periodically to independently determine radiative temperature and the convective heat transfer coefficient of air.

IPC 8 full level

**F24C 3/12** (2006.01); **F24C 7/08** (2006.01); **G01J 5/00** (2006.01); **G01J 5/08** (2006.01); **G01K 7/42** (2006.01)

CPC (source: EP GB)

**A21B 3/04** (2013.01 - GB); **F24C 3/128** (2013.01 - EP GB); **F24C 7/085** (2013.01 - EP); **F24C 7/087** (2013.01 - GB); **F24C 15/003** (2013.01 - GB); **F24C 15/327** (2013.01 - GB); **G01J 5/0044** (2013.01 - EP); **G01J 5/0846** (2013.01 - EP); **G01J 5/0853** (2013.01 - EP); **G01K 7/427** (2013.01 - EP); **G01K 17/20** (2013.01 - EP)

Citation (search report)

See references of WO 2018096369A2

Cited by

NL2028140B1; WO2022235154A1; NL2028142B1; WO2022235153A1

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

DOCDB simple family (publication)

**WO 2018096369 A2 20180531**; **WO 2018096369 A3 20180726**; EP 3568639 A2 20191120; GB 201620108 D0 20170111; GB 201821250 D0 20190213; GB 201821284 D0 20190213; GB 2566401 A 20190313; GB 2566401 B 20190911; GB 2567076 A 20190403; GB 2567076 B 20191225

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