

Title (en)

HOUSEHOLD MICROWAVE OVEN WITH MODE VARIATION DEVICE

Title (de)

HAUSHALTS-MIKROWELLENGERÄT MIT MODENVARIATIONSVORRICHTUNG

Title (fr)

FOUR À MICRO-ONDES DOMESTIQUE AVEC DISPOSITIF DE VARIATION DE MODE

Publication

EP 3997961 B1 20230705 (DE)

Application

EP 20737166 A 20200707

Priority

- DE 102019210119 A 20190709
- EP 2020069062 W 20200707

Abstract (en)

[origin: WO2021005030A1] The invention relates to a household microwave appliance (1) having a cooking chamber (2) to which microwaves can be applied, at least one mode variation apparatus (7), which is designed to modify a field distribution of the microwaves in the cooking chamber, and at least one microwave leak sensor (10, 11), wherein the household microwave appliance (1) is designed to vary adjustment values of the at least one mode variation apparatus (7) and, on the basis of the quantity of measurement data of the detected microwave leak radiation resulting from the variation, to determine at least one operating point of the at least one mode variation apparatus. In a method for operating a household microwave appliance (1) according to the invention, microwaves are applied to a cooking chamber (2), adjustment values (φ) of at least one mode variation apparatus (7) are varied, the microwave leak radiation exiting the cooking chamber (2) is measured for the different adjustment values (φ) and, on the basis of the detected microwave leak radiation, operating points of the at least one mode variation apparatus (7) are determined. The invention can in particular be advantageously applied to standalone microwave appliances and to combination appliances such as ovens having an additional microwave function.

IPC 8 full level

H05B 6/64 (2006.01); **H05B 6/70** (2006.01); **H05B 6/72** (2006.01); **H05B 6/74** (2006.01)

CPC (source: CN EP US)

F24C 7/081 (2013.01 - CN); **H05B 6/6432** (2013.01 - CN EP US); **H05B 6/68** (2013.01 - US); **H05B 6/705** (2013.01 - CN EP); **H05B 6/725** (2013.01 - CN EP); **H05B 6/745** (2013.01 - CN); **H05B 6/6411** (2013.01 - US); **H05B 6/725** (2013.01 - US); **H05B 6/74** (2013.01 - US)

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)

DE 102019210119 A1 20210114; CN 114051766 A 20220215; EP 3997961 A1 20220518; EP 3997961 B1 20230705; US 2022264711 A1 20220818; WO 2021005030 A1 20210114

DOCDB simple family (application)

DE 102019210119 A 20190709; CN 202080049556 A 20200707; EP 2020069062 W 20200707; EP 20737166 A 20200707; US 202017624855 A 20200707