

Title (en)
Humidity controlled microwave oven and method of cooking.

Title (de)
Mikrowellenofen mit Feuchtigkeitsregelung und Kochverfahren.

Title (fr)
Four à micro-ondes à régulation d'humidité et méthode de cuisson.

Publication
EP 0000957 A1 19790307 (EN)

Application
EP 78100791 A 19780830

Priority
US 82908177 A 19770830

Abstract (en)
[origin: US4162381A] {PG,1 A microwave oven sensing system having a humidity sensor and a temperature sensor at an exit ventilation port of a microwave oven heating cavity to sense the exiting humidity and the air temperature of the microwave oven heating cavity. The humidity sensor and the temperature sensor are positioned to sense the {37 in-situ{38 {0 environmental conditions of the microwave oven heating cavity such as adjacent to and by the exterior of the exit ventilation port of the microwave oven heating cavity. The sensors connect to a programmable controller and input the sensed {37 in-situ{38 {0 environmental conditions of the microwave oven heating cavity to the programmable controller. {37 Characteristic humidity curves{38 {0 for microwave cooking of different types of foods are stored as algorithms in a memory of the programmable controller and the programmable controller controls the microwave cooking in accordance with a selected algorithm for the sensed {37 in-situ{38 {0 environmental conditions. A numeric keyboard control panel inputs to the programmable controller the microwave cooking parameters and selects the microwave cooking algorithm. The programmable controller controls a microwave power source control circuit and an air exchange circuit according to the selected algorithm in the programmable controller. An additional humidity sensor may be positioned in a nonhostile environment within the frame structure of the microwave oven to provide a calibration reference for the humidity sensor positioned at the exit ventilation port of the microwave heating cavity.

IPC 1-7
G05D 22/02; **H05B 9/00**; **H05B 9/06**

IPC 8 full level
G05D 22/02 (2006.01); **H05B 6/68** (2006.01); **H05B 6/80** (2006.01)

CPC (source: EP US)
G05D 22/02 (2013.01 - EP US); **H05B 6/6423** (2013.01 - US); **H05B 6/645** (2013.01 - EP US); **H05B 6/6458** (2013.01 - EP US)

Citation (search report)
• [X] DE 2706367 A1 19770825 - MATSUSHITA ELECTRIC IND CO LTD
• [X] FR 2312067 A1 19761217 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• DE 1492600 A1 19700326 - CRYODRY CORP
• FR 2335799 A1 19770715 - ELEKTROMASCHINEN AG [CH]
• US 3884213 A 19750520 - SMITH DONALD P
• DE 2307255 A1 19730906 - HUSQVARNA VAPENFABRIKS AB
• FR 2336777 A1 19770722 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• US 4011428 A 19770308 - FOSNOUGH ROBERT D, et al
• [P] DE 2744878 A1 19780420 - HITACHI HEATING APPL
• [A] DE 1090798 B 19601013 - SIEMENS ELEKTROGERAETE GMBH

Cited by
FR2451145A1; EP0517433A1; FR2625066A1; FR2621106A1; US5681496A; EP0024798A3; CN108139079A; AU2016343134B2; EP0615400A3; FR2621716A1; NL8303532A; EP0285185A1; EP0053523A1; FR2773872A1; US6078034A; EP0093172A4; US4517431A; EP0023971A3; EP0025513A1; US4350860A; EP0653900A1; US5525782A; FR2625065A1; FR2509108A1; US4584448A; EP0586035A3; EP0353691A3; US5078048A; EP0039645A1; FR2482143A1; US10852005B2; WO8201411A1; WO2017067671A1; EP0026094B1; EP0027711B1; EP3784004A1; EP1436550B1

Designated contracting state (EPC)
BE DE FR GB LU NL SE

DOCDB simple family (publication)
EP 0000957 A1 19790307; AU 3930578 A 19800306; AU 522240 B2 19820527; CA 1109529 A 19810922; US 4162381 A 19790724

DOCDB simple family (application)
EP 78100791 A 19780830; AU 3930578 A 19780828; CA 310263 A 19780829; US 82908177 A 19770830