Title (en)

MICROWAVE OVEN HAVING THE CAPACITY TO DETECT WHEN A PRODUCT IS FULLY THAWED

Publication

EP 0294872 B1 19930407 (FR)

Application

EP 88201084 A 19880531

Priority

FR 8707684 A 19870602

Abstract (en)

[origin: JPS6450385A] PURPOSE: To decide the defrosting cycle of product so as to control the operation by providing a microwave source and a detecting unit, and computing a value of the secondary derivative of a curve, which shows temperature rise of the detecting unit. CONSTITUTION: A computing and control device for computing a value of the secondary derivative of a curve, which shows temperature rise of a detecting unit as a function of time, so as to decide an end of a defrosting cycle of a product and for controlling the operation of a microwave oven at the end of the defrosting cycle when the value of the secondary derivative at the predetermined value or less is detected is provided. This detecting unit is made of the material 31, which can absorb the microwave, and the material 31 is made to contact with a temperature measuring element 32. The detecting unit is arranged at a side of a product 41 to be defrosted. A microwave source 42 generates the microwave so that the product 41 and the detecting unit 30 are irradiated with the microwave. A result of the measurement of temperature of the detecting unit 30 is transmitted to the computing and control device 43, and this computing and control device performs the operation for changing the operation of the microwave source.

IPC 1-7

H05B 6/68

IPC 8 full level

F24C 7/02 (2006.01); **H05B 6/68** (2006.01)

CPC (source: EP US)

H05B 6/666 (2013.01 - EP US)

Citation (examination)

FR 2571830 A1 19860418 - ESSWEIN SA [FR]

Cited by

FR2677853A1; EP0526297A1; US5293019A; US2015173129A1; US9999103B2; NL9202189A; FR2685772A1; US10314119B2

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

EP 0294872 A1 19881214; **EP 0294872 B1 19930407**; DE 3880017 D1 19930513; FR 2616211 A1 19881209; FR 2616211 B1 19910726; JP S6450385 A 19890227; US 4870235 A 19890926

DOCDB simple family (application)

EP 88201084 A 19880531; DE 3880017 T 19880531; FR 8707684 A 19870602; JP 13452688 A 19880602; US 20216188 A 19880602