

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311001488 A

(19) INDIA

(22) Date of filing of Application :07/01/2023

(43) Publication Date : 13/01/2023

(54) Title of the invention : MICROWAVE HEATING APPARATUS

(51) International classification :H05B0006640000, H05B0006700000, H05B0006680000, G06F0003010000, B33Y0030000000

(86) International Application No :NA  
Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA  
Filing Date :NA

(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

**1)Chitkara University**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

**2)Chitkara Innovation Incubator Foundation**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)KAUR, Amanpreet**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

**2)DATTA, Priyanka**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

Embodiments of present disclosure relates to a microwave heating apparatus 100 that prevents heating of non-microwave food to prevent hazard. The microwave heating apparatus 100 includes a housing 102 having a chamber 104 configured to receive one or more food items, a microwave generation unit 106 disposed within the chamber 104 to generate a set of electromagnetic radiations, and a scanning unit 110 attached inside the chamber 104 and configured to acquire one or more images of internal area of the chamber 104. Additionally, the a processor 112 operatively coupled to the housing 102, the processor 112 configured to analyse the received iamges and determine type of the one or more food items. Further, upon detection of at least one of the non-microwavable food item in the chamber, and transmits the termination signal to the actuation unit which in turn deactivates the microwave generation unit 106.

No. of Pages : 19 No. of Claims : 7