

Title (en)

Method for preparing food by means of an induction heating device and induction heating device

Title (de)

Verfahren zum Zubereiten von Lebensmitteln mittels einer Induktionsheizeinrichtung und Induktionsheizeinrichtung

Title (fr)

Procédé de préparation d'aliments au moyen d'un dispositif de chauffage à induction et dispositif de chauffage à induction

Publication

EP 2574145 A3 20130717 (DE)

Application

EP 12185400 A 20120921

Priority

DE 102011083397 A 20110926

Abstract (en)

[origin: EP2574145A2] Preparing food products which are cooked in a liquid (6) present in a cooking vessel (5) by an induction heating device (9) having a resonant circuit (4) with an induction heating coil (1), comprises: continuously determining a parameter value of the resonant circuit, preferably a period of time of a self-resonant oscillation of the resonant circuit; subjecting the resonant circuit with a high frequency square wave voltage; detecting a change of the parameter value within the period; evaluating the determined change of the parameter value; and terminating the heating phase. Preparing food products which are cooked in a liquid (6) present in a cooking vessel (5) by an induction heating device (9) having a resonant circuit (4) with an induction heating coil (1), comprises: continuously determining a parameter value of the resonant circuit, preferably a period of time of a self-resonant oscillation of the resonant circuit, which depends on a temperature of the cooking vessel, preferably cooking vessel base; subjecting the resonant circuit with a high frequency square wave voltage for supplying heating power to the cooking vessel, preferably to cooking vessel base, having a heating setpoint value, during the heating phase, where the heating setpoint value is changed periodically, and the heating setpoint value is set for a first duration to a first value within a period, and is set during the remaining duration of a second, smaller value; detecting a change of the parameter value within the period; evaluating the determined change of the parameter value to determine the boiling point of the liquid; and terminating the heating phase when the boiling point has been identified. An independent claim is also included for an induction heating device comprising a resonant circuit with induction heating coil and a control device.

IPC 8 full level

H05B 6/06 (2006.01); **A23L 5/10** (2016.01)

CPC (source: EP US)

H05B 6/062 (2013.01 - EP US); **H05B 2213/07** (2013.01 - EP US)

Citation (search report)

- [A] DE 10231122 A1 20040122 - EGO ELEKTRO GERAETEBAU GMBH [DE]
- [A] DE 10253198 A1 20040624 - ELECTROLUX HOME PROD CORP [BE]
- [A] EP 2312909 A1 20110420 - WHIRLPOOL CO [US], et al
- [A] EP 2020826 A1 20090204 - PANASONIC CORP [JP]
- [A] JP 2009105079 A 20090514 - PANASONIC CORP

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CN110493906A

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)

EP 2574145 A2 20130327; **EP 2574145 A3 20130717**; **EP 2574145 B1 20150708**; CN 103052194 A 20130417; CN 103052194 B 20160217; DE 102011083397 A1 20130328; ES 2547206 T3 20151002; JP 2013073937 A 20130422; JP 6110619 B2 20170405; PL 2574145 T3 20160129; US 2013078346 A1 20130328; US 9491807 B2 20161108

DOCDB simple family (application)

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