

Title (en)

SYSTEM AND METHOD FOR IDENTIFYING COOKWARE ITEMS PLACED ON AN INDUCTION COOKTOP

Title (de)

SYSTEM UND VERFAHREN ZUR IDENTIFIZIERUNG EINES AUF EIN INDUKTIONSKOCHFELD GESTELLTEN KOCHGESCHIRRS

Title (fr)

SYSTÈME ET PROCÉDÉ D'IDENTIFICATION D'ÉLÉMENTS DE CUISINE PLACÉS SUR UNE PLAQUE DE CUISSON À INDUCTION

Publication

**EP 3920662 A1 20211208 (EN)**

Application

**EP 21177817 A 20210604**

Priority

- US 202016946098 A 20200605
- US 202016946101 A 20200605

Abstract (en)

A method is provided for identifying cookware items (30, 32, 34) placed on top of an induction cooktop (10) having a plurality of coils (20<sub>1</sub>-20<sub>n</sub>). The method includes the following steps: acquire coverage factor information for each coil (20<sub>1</sub>-20<sub>n</sub>) and collect it into a matrix; identify all local maxima in the matrix; find the coordinates of each of the local maxima as follows: when the local maxima is a single coil (20<sub>1</sub>-20<sub>n</sub>), the coordinates are those of the coil center, and when the local maxima is a region of contiguous coils (20<sub>1</sub>-20<sub>n</sub>), the coordinates are those of a centroid of the region; calculate distances from each coil (20<sub>1</sub>-20<sub>n</sub>) to each of the coordinates of the identified local maxima; determine a minimum among the distances; classify the coils (20<sub>1</sub>-20<sub>n</sub>) in clusters, based on the distances from the local maxima; and use the identified coil (20<sub>1</sub>-20<sub>n</sub>) clustering to estimate the position, shape, size, and orientation of the cookware items (30, 32, 34).

IPC 8 full level

**H05B 6/06** (2006.01)

CPC (source: EP)

**H05B 6/062** (2013.01); **H05B 2213/03** (2013.01); **H05B 2213/05** (2013.01)

Citation (applicant)

- EP 2242328 A2 20101020 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- EP 2112865 A2 20091028 - FAGORBRANDT SAS [FR]

Citation (search report)

- [AD] EP 2112865 A2 20091028 - FAGORBRANDT SAS [FR]
- [AD] EP 2242328 A2 20101020 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- [A] EP 2242329 B1 20150729 - BSH HAUSGERAETE GMBH [DE]

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 3920663 A1 20211208**; **EP 3920663 B1 20221228**; EP 3920662 A1 20211208

DOCDB simple family (application)

**EP 21177841 A 20210604**; EP 21177817 A 20210604