

Title (en)
INDUCTION HEATING DEVICE

Title (de)
INDUKTIONSGEIZVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE À INDUCTION

Publication
EP 2914060 A4 20151104 (EN)

Application
EP 13849536 A 20131023

Priority
• JP 2012235309 A 20121025
• JP 2013008140 A 20130121
• JP 2013006264 W 20131023

Abstract (en)
[origin: EP2914060A1] An induction heating device includes a top plate on which an object to be heated is placed, a plurality of heating coils which are disposed below the top plate, an inverter which supplies a high frequency current to the plurality of heating coils, a control unit which controls an output of the inverter, an operation display unit which outputs an operation command to the control unit, and a detection unit for the object to be heated which detects whether the object to be heated is present on the top plate. The control unit controls the inverter to supply a detection current for detecting presence of the object to be heated to the plurality of heating coils prior to receiving an operation command signal for indicating a start of a heating operation from the operation display unit. The detection unit for the object to be heated detects the presence of the object to be heated from an input current and/or an output voltage in an electrically conductive path for electric power transmission from a power source to the heating coils, during a detection time period which the detection current is supplied to the heating coils.

IPC 8 full level
H05B 6/06 (2006.01); **H05B 6/12** (2006.01)

CPC (source: EP)
H05B 6/062 (2013.01); **H05B 2213/03** (2013.01); **H05B 2213/05** (2013.01)

Citation (search report)
• [X1] FR 2863039 A1 20050603 - BRANDT IND [FR]
• [X1] EP 2482613 A1 20120801 - FAGORBRANDT SAS [FR]
• [X1] EP 2509392 A1 20121010 - SAMSUNG ELECTRONICS CO LTD [KR]
• [A] EP 2034800 A1 20090311 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
• [A] DE 102010031225 A1 20110210 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
• See references of WO 2014064931A1

Cited by
ES2673130A1; ES2673131A1; EP3291641A1; US11596030B2; US11153940B2; US11805576B2

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 2914060 A1 20150902; EP 2914060 A4 20151104; CN 104604330 A 20150506; JP 2017201636 A 20171109; JP 2017201637 A 20171109; JP 2017201638 A 20171109; JP 6195174 B2 20170913; JP 6341397 B2 20180613; JP 6341398 B2 20180613; JP 6388242 B2 20180912; JP WO2014064931 A1 20160908; WO 2014064931 A1 20140501

DOCDB simple family (application)
EP 13849536 A 20131023; CN 201380046334 A 20131023; JP 2013006264 W 20131023; JP 2014543150 A 20131023; JP 2017140928 A 20170720; JP 2017140933 A 20170720; JP 2017140936 A 20170720