Title (en)

HIGH-FREQUENCY HEATING DEVICE

Title (de)

HOCHFREQUENZERWÄRMUNGSVORRICHTUNG

Title (fr)

DISPOSITIF CHAUFFANT HAUTE-FRÉQUENCE

Publication

EP 3481149 A4 20190717 (EN)

Application

EP 17819906 A 20170616

Priority

- JP 2016129566 A 20160630
- JP 2017022304 W 20170616

Abstract (en)

[origin: EP3481149A1] High-frequency power generation unit (120) configured to generate high-frequency power, surface wave excitation body (103) configured to propagate the high-frequency power with a surface wave to heat heating-target object (102), high-frequency power supply unit (110) configured to supply the high-frequency power to surface wave excitation body (103), and mounting stand (101) on which heating-target object (102) is mounted. In accordance with a desired degree of surface concentration of the high-frequency power around surface wave excitation body (103), high-frequency power generation unit (120) sets a magnitude relationship between a frequency of the high-frequency power to be supplied to surface wave excitation body (103) and an exciting frequency of surface wave excitation body (103) to heat heating-target object (102). High-frequency heating device (100) capable of changing a heating state in a thickness direction of heating-target object (102) is therefore provided.

IPC 8 full level

H05B 6/74 (2006.01); **H05B 6/68** (2006.01); **H05B 6/70** (2006.01)

CPC (source: EP)

H05B 6/707 (2013.01)

Citation (search report)

- [XYI] JP 2015162273 A 20150907 - PANASONIC CORP
- [XYI] JP H06260276 A 19940916 - MATSUSHITA ELECTRIC IND CO LTD
- [XYI] WO 2015129233 A1 20150903 - PANASONIC CORP [JP] & US 2017034876 A1 20170202 - OMORI YOSHIHARU [JP], et al
- [Y] JP 2015220189 A 20151207 - PANASONIC IP MAN CORP
- See references of WO 2018003546A1

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 3481149 A1 20190508; **EP 3481149 A4 20190717**; **EP 3481149 B1 20230510**; CN 109315029 A 20190205; CN 109315029 B 20211207; JP 6956326 B2 20211102; JP WO2018003546 A1 20190425; WO 2018003546 A1 20180104

DOCDB simple family (application)

EP 17819906 A 20170616; CN 201780035541 A 20170616; JP 2017022304 W 20170616; JP 2018525054 A 20170616