

Title (en)
MICROWAVE HEATING DEVICE

Title (de)
MIKROWELLENHEIZVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE AUX MICRO-ONDES

Publication
EP 3240363 A4 20171227 (EN)

Application
EP 15872162 A 20151204

Priority
• JP 2014259168 A 20141222
• JP 2015006017 W 20151204

Abstract (en)
[origin: EP3240363A1] Waveguide structure antenna (5) has ceiling surface (9) and side wall surfaces (10a, 10b, 10c) defining waveguide structure section (8), as well as has front opening (13) to emit microwaves from front opening (13) toward a heating-target object. Waveguide structure section (8) includes coupling part (7) joined to ceiling surface (9) to couple microwaves into an internal space of waveguide structure section (8). Waveguide structure section (8) emits circularly polarized waves from at least one microwave extraction opening (14) formed on ceiling surface (9) into a heating chamber. A joining portion between coupling part (7) and waveguide structure section (8) is configured such that a length in a direction of a pipe axis (V) is shorter than a length in a direction orthogonal to the direction of the pipe axis (V). According to this aspect, a loading surface in the heating chamber, in particular, a heating-target object loaded on its central area can uniformly be heated.

IPC 8 full level
H05B 6/72 (2006.01); **H05B 6/70** (2006.01); **H05B 6/74** (2006.01)

CPC (source: EP)
H05B 6/708 (2013.01); **H05B 6/725** (2013.01); **H05B 6/74** (2013.01)

Citation (search report)
• [IA] WO 2014171152 A1 20141023 - PANASONIC CORP [JP]
• [IA] JP 2010199009 A 20100909 - PANASONIC CORP
• [A] JP H0927389 A 19970128 - MATSUSHITA ELECTRIC IND CO LTD
• See references of WO 2016103585A1

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 3240363 A1 20171101; EP 3240363 A4 20171227; EP 3240363 B1 20200826; CN 107006084 A 20170801; CN 107006084 B 20200519; JP 2019079830 A 20190523; JP 6503561 B2 20190424; JP 6671005 B2 20200325; JP WO2016103585 A1 20171005; TW 201635856 A 20161001; TW I688311 B 20200311; WO 2016103585 A1 20160630

DOCDB simple family (application)
EP 15872162 A 20151204; CN 201580064897 A 20151204; JP 2015006017 W 20151204; JP 2016565885 A 20151204; JP 2019026596 A 20190218; TW 104141503 A 20151210