

Title (en)
MICROWAVE HEATING DEVICE

Title (de)
MIKROWELLENHEIZVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE AUX MICRO-ONDES

Publication
EP 3240365 A4 20171227 (EN)

Application
EP 15872164 A 20151204

Priority
• JP 2014259170 A 20141222
• JP 2015006019 W 20151204

Abstract (en)
[origin: EP3240365A1] 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 a coupling part joined to ceiling surface (9) to couple microwaves into an internal space of waveguide structure section (8). Waveguide structure section (8) includes at least one microwave extraction opening (14) formed on ceiling surface (9) to emit circularly polarized waves from microwave extraction opening (14) into a heating chamber. Waveguide structure section (8) has, at a portion of ceiling surface (9), which is closer to the coupling part than to microwave extraction openings (14), step area (9a) having a height that differs from heights of other portions of ceiling surface (9). According to this configuration, a heating-target object loaded on a central area of a loading surface can uniformly be heated.

IPC 8 full level
H05B 6/72 (2006.01); **F24C 7/02** (2006.01); **H05B 6/74** (2006.01)

CPC (source: EP)
F24C 7/02 (2013.01); **H05B 6/725** (2013.01)

Citation (search report)
• [A] WO 2014171152 A1 20141023 - PANASONIC CORP [JP]
• [A] EP 0148562 A1 19850717 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• [A] EP 2348257 A1 20110727 - PANASONIC CORP [JP]
• See references of WO 2016103587A1

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 3240365 A1 20171101; **EP 3240365 A4 20171227**; **EP 3240365 B1 20180711**; CN 107006085 A 20170801; CN 107006085 B 20200703; JP 2016119252 A 20160630; JP 6414684 B2 20181031; TW 201625884 A 20160716; TW I700465 B 20200801; WO 2016103587 A1 20160630

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