

Title (en)
MICROWAVE HEATING DEVICE

Title (de)
MIKROWELLENHEIZVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE AUX MICRO-ONDES

Publication
EP 3240366 B1 20210512 (EN)

Application
EP 15872165 A 20151204

Priority
• JP 2014259171 A 20141222
• JP 2015006020 W 20151204

Abstract (en)
[origin: EP3240366A1] 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. At least one microwave extraction opening (14) includes at least a pair of microwave extraction openings (14) that is symmetrical with respect to pipe axis (V) of waveguide structure section (8). Waveguide structure section (8) has a flat area between the pair of microwave extraction openings (14). According to this aspect, the heating-target object loaded in the heating chamber can uniformly and locally be heated.

IPC 8 full level
H05B 6/72 (2006.01); **F24C 7/02** (2006.01); **H05B 6/70** (2006.01); **H05B 6/74** (2006.01)

CPC (source: EP)
F24C 7/02 (2013.01); **H05B 6/708** (2013.01); **H05B 6/72** (2013.01); **H05B 6/725** (2013.01); **H05B 6/74** (2013.01)

Cited by
EP3905849A4; AU2020205145B2

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

DOCDB simple family (publication)
EP 3240366 A1 20171101; **EP 3240366 A4 20171227**; **EP 3240366 B1 20210512**; CN 107006086 A 20170801; CN 107006086 B 20201027; JP 2016119253 A 20160630; JP 6459123 B2 20190130; TW 201635855 A 20161001; TW I686103 B 20200221; WO 2016103588 A1 20160630

DOCDB simple family (application)
EP 15872165 A 20151204; CN 201580064916 A 20151204; JP 2014259171 A 20141222; JP 2015006020 W 20151204; TW 104141502 A 20151210