

Title (en)
MICROWAVE TREATMENT DEVICE

Title (de)
MIKROWELLENBEHANDLUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE TRAITEMENT PAR MICRO-ONDES

Publication
EP 3618570 A4 20200506 (EN)

Application
EP 18791220 A 20180418

Priority
• JP 2017089338 A 20170428
• JP 2018015930 W 20180418

Abstract (en)
[origin: EP3618570A1] A microwave treatment device includes a heating chamber, a first and second antennas, a transmission line group, and a plurality of supply parts. The heating chamber accommodates an object to be heated. The first and second antennas radiate microwaves to the heating chamber. The transmission line group includes a plurality of transmission lines for supplying the first and second antennas with microwaves. The plurality of supply parts supplies the transmission line group with a microwave. The plurality of transmission lines includes first to fourth transmission lines coupled in a ring shape. The transmission line group further includes a first branch part between the first and third transmission lines, and a second branch part between the second and fourth transmission lines. The plurality of supply parts includes a first supply part between the first and second transmission line, and a second supply part between the third and fourth transmission lines. The first transmission line has the same phase length as that of each of the second and fourth transmission lines, and the third transmission line has a phase length different from that of each of the first, second, and third transmission lines. This aspect can carry out desired heating to objects to be heated having various shapes, types, and amounts for a short time.

IPC 8 full level
H05B 6/70 (2006.01); **F24C 7/02** (2006.01); **H05B 6/66** (2006.01); **H05B 6/72** (2006.01); **H05B 6/74** (2006.01)

CPC (source: EP)
F24C 7/02 (2013.01); **H05B 6/70** (2013.01); **H05B 6/707** (2013.01); **H05B 6/72** (2013.01)

Citation (search report)
• [Y] JP S56132793 A 19811017 - HITACHI NETSU KIGU KK
• [Y] WO 2006120397 A1 20061116 - QUINTEL TECHNOLOGY LTD [GB], et al
• [A] EP 2051564 A1 20090422 - PANASONIC CORP [JP]
• [A] EP 2306785 A1 20110406 - PANASONIC CORP [JP]
• See references of WO 2018198889A1

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 3618570 A1 20200304; **EP 3618570 A4 20200506**; **EP 3618570 B1 20210609**; CN 110547044 A 20191206; CN 110547044 B 20220208; JP 7170197 B2 20221114; JP WO2018198889 A1 20200514; WO 2018198889 A1 20181101

DOCDB simple family (application)
EP 18791220 A 20180418; CN 201880026610 A 20180418; JP 2018015930 W 20180418; JP 2019514415 A 20180418