

Title (en)
HIGH-FREQUENCY HEATING DEVICE

Title (de)
HOCHFREQUENZERWÄRMUNGSVORRICHTUNG

Title (fr)
DISPOSITIF CHAUFFANT À HAUTE FRÉQUENCE

Publication
EP 3503682 A4 20190814 (EN)

Application
EP 17843289 A 20170724

Priority
• JP 2016162144 A 20160822
• JP 2017026621 W 20170724

Abstract (en)
[origin: EP3503682A1] A high-frequency heating device (1a) includes a first generation unit (8), a surface wave exciter (9), and a first connecting unit (12). The first generation unit (8) generates microwaves. The surface wave exciter (9) includes a plurality of metal plates (11) periodically arranged at a predetermined interval in a propagation direction of the microwaves and heats a heating subject (6) by propagating the microwaves in a surface wave mode. The first connecting unit (12) is provided in a middle portion of the surface wave exciter (9) in the propagation direction (D) of the microwaves generated by the first generation unit so that the microwaves are supplied to the surface wave exciter (9) through the first connecting unit (12). According to the present aspect, a heating subject can be more evenly heated.

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

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

Citation (search report)
• [X] JP H06338387 A 19941206 - MATSUSHITA ELECTRIC IND CO LTD
• [A] EP 2931007 A1 20151014 - PANASONIC IP MAN CO LTD [JP]
• [A] EP 1619933 A1 20060125 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• See references of WO 2018037803A1

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 3503682 A1 20190626; **EP 3503682 A4 20190814**; **EP 3503682 B1 20200401**; CN 109156054 A 20190104; CN 109156054 B 20201208; JP 6967708 B2 20211117; JP WO2018037803 A1 20190620; WO 2018037803 A1 20180301

DOCDB simple family (application)
EP 17843289 A 20170724; CN 201780029584 A 20170724; JP 2017026621 W 20170724; JP 2018535539 A 20170724