

Title (en)
HIGH-FREQUENCY HEATING DEVICE

Title (de)
HOCHFREQUENZERWÄRMUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE HAUTE FRÉQUENCE

Publication
EP 3780909 A4 20210505 (EN)

Application
EP 19781210 A 20190329

Priority
• JP 2018073616 A 20180406
• JP 2018073617 A 20180406
• JP 2019014067 W 20190329

Abstract (en)
[origin: EP3780909A1] A high-frequency heating device includes: a high-frequency power generator configured to generate microwaves; a surface wave line containing a conductive material; a power feeder connected to the high-frequency power generator; and a loop antenna disposed at a front end of the power feeder and facing an end of the surface wave line. In this aspect, a high input impedance can be maintained, and a decrease of radiation resistance can be prevented or reduced. As a result, the size of the power feeder can be reduced, and surface wave heating can be efficiently performed.

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

CPC (source: EP)
H05B 6/72 (2013.01); **H05B 6/74** (2013.01)

Citation (search report)
• [A] EP 0989589 A1 20000329 - MATSUSHITA ELECTRIC IND CO LTD [JP]
• [A] ES 2588927 T3 20161107 - OFFICE NAT D'ETUDES ET DE RECH AÉROSPATIALES (ONERA) [FR], et al
• [A] WO 2018037802 A1 20180301 - PANASONIC IP MAN CO LTD [JP]
• [A] WO 2018003546 A1 20180104 - PANASONIC IP MAN CO LTD [JP]
• [A] WO 2018037696 A1 20180301 - PANASONIC IP MAN CO LTD [JP]
• See references of WO 2019194098A1

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 3780909 A1 20210217; EP 3780909 A4 20210505; EP 3780909 B1 20220504; CN 111066375 A 20200424; CN 111066375 B 20220304;
WO 2019194098 A1 20191010

DOCDB simple family (application)
EP 19781210 A 20190329; CN 201980003756 A 20190329; JP 2019014067 W 20190329