

Title (en)

MICROWAVE PROCESSING DEVICE AND CARBON FIBER PRODUCTION METHOD

Title (de)

MIKROWELLENVERARBEITUNGSVORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG VON KOHLENSTOFFFASERN

Title (fr)

DISPOSITIF DE TRAITEMENT PAR MICRO-ONDES ET PROCÉDÉ DE PRODUCTION DE FIBRE DE CARBONE

Publication

EP 3745817 C0 20231018 (EN)

Application

EP 18901780 A 20181218

Priority

- JP 2018006744 A 20180118
- JP 2018046616 W 20181218

Abstract (en)

[origin: EP3745817A1] Provided is a microwave treatment apparatus that can properly treat a treatment target using microwaves. The apparatus includes: a vessel 10 in which a treatment target 2 is arranged; a microwave irradiating unit 20 that irradiates an internal portion of the vessel 10 with microwaves; and heat generating member 30 that is provided inside the vessel 10 along the treatment target 2, generates heat by absorbing part of microwaves used for irradiation by the microwave irradiating unit 20, and transmits part of the microwaves. The microwave irradiating unit 20 irradiates a portion in which the heat generating member 30 is provided with microwaves, thereby heating the treatment target 2 from the outside through heat generation at the heat generating member 30, and directly heating the treatment target 2 with microwaves transmitted through the heat generating member 30.

IPC 8 full level

H05B 6/78 (2006.01); **D01F 9/32** (2006.01); **H05B 6/64** (2006.01)

CPC (source: EP KR)

D01F 9/12 (2013.01 - KR); **D01F 9/32** (2013.01 - EP); **H05B 6/6491** (2013.01 - EP); **H05B 6/72** (2013.01 - KR); **H05B 6/74** (2013.01 - KR); **H05B 6/78** (2013.01 - EP); **H05B 6/80** (2013.01 - KR); **H05B 2206/044** (2013.01 - EP)

Cited by

WO2023036562A1

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

Participating member state (EPC – UP)

AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)

EP 3745817 A1 20201202; **EP 3745817 A4 20211215**; **EP 3745817 B1 20231018**; **EP 3745817 C0 20231018**; CN 111869321 A 20201030; CN 111869321 B 20230217; CN 117177398 A 20231205; JP 2019125534 A 20190725; JP 6446573 B1 20181226

DOCDB simple family (application)

EP 18901780 A 20181218; CN 201880091276 A 20181218; CN 202310042301 A 20181218; JP 2018006744 A 20180118