

Title (en)

APPARATUS FOR MANUFACTURING CARBON FIBER BY USING MICROWAVES

Title (de)

VORRICHTUNG ZUR HERSTELLUNG VON KOHLENSTOFFFASERN UNTER VERWENDUNG VON MIKROWELLEN

Title (fr)

APPAREIL PERMETTANT DE FABRIQUER UNE FIBRE DE CARBONE À L'AIDE DE MICRO-ONDES

Publication

**EP 3556916 A4 20191127 (EN)**

Application

**EP 17885137 A 20171219**

Priority

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- KR 2017015018 W 20171219

Abstract (en)

[origin: EP3556916A1] The present invention relates to an apparatus for manufacturing carbon fiber by using microwaves, and more particularly, to an apparatus for manufacturing carbon fiber by using microwaves, which directly or indirectly heats and carbonizes a carbon fiber precursor by using microwaves, so that energy efficiency is improved because an entire carbonization furnace is not heated, and a property of the precursor is adjusted by a simpler method by the microwaves.

IPC 8 full level

**D01F 9/22** (2006.01); **D01F 9/32** (2006.01); **D06M 10/00** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

- [X] US 2016130732 A1 20160512 - SUZUKI YOSHINORI [JP]
- [XI] JP 2013002767 A 20130107 - MICRO DENSHI CO LTD, et al
- [XI] JP 2014067575 A 20140417 - MICRO DENSHI CO LTD, et al
- See references of WO 2018117594A1

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Designated extension state (EPC)

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**EP 3556916 A1 20191023**; **EP 3556916 A4 20191127**; **EP 3556916 B1 20210127**; CN 110073041 A 20190730; CN 110073041 B 20220809; JP 2020513486 A 20200514; KR 102037843 B1 20191030; KR 20180071184 A 20180627; US 2020056306 A1 20200220; WO 2018117594 A1 20180628

DOCDB simple family (application)

**EP 17885137 A 20171219**; CN 201780075534 A 20171219; JP 2019530093 A 20171219; KR 2017015018 W 20171219; KR 20170174703 A 20171219; US 201716346011 A 20171219