

Title (en)
OXIDATION FIBER STRUCTURE

Title (de)
OXIDATIONSFASERSTRUKTUR

Title (fr)
STRUCTURE DE FIBRE D'OXYDATION

Publication
EP 3517659 A1 20190731 (EN)

Application
EP 18168094 A 20180418

Priority
TW 107201429 U 20180129

Abstract (en)
The present disclosure relates to an oxidation fiber structure having an oxidation fiber, and the oxidation fiber has an oxidation layer and a core portion, wherein the oxidation layer covers the outer side of the core portion. The microwave processing unit is used to focus the microwave to perform an ultra-fast pre-oxidization process on the passed fiber yarn bunch, thus processing the fiber yarn bunch to form an oxidation fiber yarn bunch. An oxidization time of an oxidation fiber is reduced, and the cross section area of the oxidation layer of the oxidation fiber in the oxidation fiber yarn bunch generated by the microwave focusing oxidization process occupies more than 50 % of the cross section area of the oxidation fiber in the oxidation fiber yarn bunch. Thus, the shell-core structure of the oxidation fiber can be reduced efficiently. Even, the oxidation fiber has no obvious shell-core structure.

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D10B 2321/10 (2013.01 - US); **D10B 2401/063** (2013.01 - US)

Citation (search report)
• [X] US 2009263295 A1 20091022 - PAULAUSKAS FELIX L [US], et al
• [X] US 2012156833 A1 20120621 - KAWASHIMA TAKAHIRO [JP], et al
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Designated contracting state (EPC)
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Designated extension state (EPC)
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DOCDB simple family (publication)
EP 3517659 A1 20190731; **EP 3517659 B1 20210224**; CN 207891471 U 20180921; JP 3216683 U 20180614; TW M564598 U 20180801;
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DOCDB simple family (application)
EP 18168094 A 20180418; CN 201820187510 U 20180202; JP 2018001251 U 20180405; TW 107201429 U 20180129;
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