

Title (en)
CARBON FIBER BUNDLE AND METHOD FOR PRODUCING SAME

Title (de)
KOHLENSTOFFFASERBÜNDEL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
FAISCEAU DE FIBRES DE CARBONE ET PROCÉDÉ POUR SA PRODUCTION

Publication
EP 3705610 A4 20220105 (EN)

Application
EP 18874618 A 20181016

Priority

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Abstract (en)
[origin: EP3705610A1] The purpose of the present invention is to provide: a carbon fiber bundle which exhibits excellent filament shape stability when forming a composite material, and from which it is possible to obtain a carbon fiber composite material which exhibits high tensile strength; and a method for producing the same. To achieve this purpose, the provided carbon fiber bundle exhibits a tensile elasticity as a resin-impregnated strand of 265-300 GPa, a tensile strength as a resin-impregnated strand of 6.0 GPa or more, a knot strength of 820 N/mm² or more, a filament number of 30,000 or more, and an average tear distance of 600-850 mm, wherein the rate of change in filament width is 8% or less when the carbon fiber bundle is unraveled under the conditions stipulated in the description, and there are four or fewer sections per 1,000 m which exhibit a filament width equal to or less than 75% of the average filament width when the carbon fiber bundle is unraveled under the conditions stipulated in the description.

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Citation (search report)

- [E] EP 3467165 A1 20190410 - TORAY INDUSTRIES [JP]
- [A] WO 2016181845 A1 20161117 - TORAY INDUSTRIES [JP]
- [A] JP 2017160563 A 20170914 - TORAY INDUSTRIES
- [A] JP H07216680 A 19950815 - TORAY INDUSTRIES
- See references of WO 2019087766A1

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WO2022030854A1

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