

Title (en)

High density graphite fiber and method of manufacture thereof.

Title (de)

Graphitfaser mit hoher Dichte und Verfahren zu deren Herstellung.

Title (fr)

Fibre de graphite à haute densité et méthode pour sa production.

Publication

EP 0374925 B1 19950308 (EN)

Application

EP 89123668 A 19891221

Priority

JP 32439788 A 19881222

Abstract (en)

[origin: EP0374925A2] A graphite fiber derived from an acrylic fiber having a fiber density of not less than 1.93 g/cm³, a strand tensile strength of not less than 350 kgf/mm², and a strand tensile modulus of not less than 53x10³ kgf/mm², and a method for producing the graphite fiber by carbonizing a preoxidized fiber derived from an acrylic fiber and having a fiber density of from 1.32 to 1.40 g/cm³ to obtain a carbon fiber having a nitrogen content of not less than 1.0% by weight based on the carbon fiber weight, a fiber density of not less than 1.79 g/cm³ and an orientation of not less than 79% at a maximum diffraction at 2 theta =25.3+/-0.5 DEG in X-ray diffraction angle of the (002) plane of the graphite crystal, and graphitizing the thus-obtained carbon fiber in an inert gas at a temperature of not lower than 2,400 DEG C and under a tension to stretch the fiber at least 3% during the graphitization.

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Cited by

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