

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/cm<sup>3</sup>, a strand tensile strength of not less than 350 kgf/mm<sup>2</sup>, and a strand tensile modulus of not less than 53x10<sup>3</sup> kgf/mm<sup>2</sup>, 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/cm<sup>3</sup> 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/cm<sup>3</sup> 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.

IPC 1-7

**D01F 9/22**

IPC 8 full level

**D01F 9/22** (2006.01)

CPC (source: EP)

**D01F 9/22** (2013.01)

Cited by

EP0843033A4; US7939046B2; US8051666B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0374925 A2 19900627; EP 0374925 A3 19910925; EP 0374925 B1 19950308**; DE 68921581 D1 19950413; DE 68921581 T2 19950817

DOCDB simple family (application)

**EP 89123668 A 19891221**; DE 68921581 T 19891221