

Title (en)  
Graphite fiber

Title (de)  
Graphitfaser

Title (fr)  
Fibre de graphite

Publication  
**EP 0279687 B1 19960214 (EN)**

Application  
**EP 88301424 A 19880219**

Priority  
JP 3574387 A 19870220

Abstract (en)  
[origin: EP0279687A2] A graphite fiber having an elastic modulus E of 340 - 680 GPa, a microvoid radius of not larger than 20 ANGSTROM and a crystal size Lc ( ANGSTROM ) satisfying the following formula:  $Lc \leq 0.918 \times 10^3 E^{-3} \times 10^5$  is valuable for a composite material having an improved compression strength. The graphite fiber is made preferably by oxidizing an acrylonitrile polymer precursor containing 0.05 - 8 wt.% of comonomer units and having an iodine adsorption amount of not larger than 3 wt.% and an orientation degree of at least 85%, at 200 - 300 DEG C in an oxidative atmosphere under tension to obtain an oxidized fiber having a water adsorption of not larger than 7 wt.% and an orientation degree of at least 78%, followed by carbonization and graphitization of the oxidized fiber under tension.

IPC 1-7  
**D01F 9/22**

IPC 8 full level  
**D01F 9/12** (2006.01); **D01F 9/22** (2006.01)

CPC (source: EP)  
**D01F 9/22** (2013.01)

Cited by  
EP1961847A4; EP0416789A3; EP1059685A3; US6509119B1

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DOCDB simple family (publication)  
**EP 0279687 A2 19880824; EP 0279687 A3 19910403; EP 0279687 B1 19960214**; DE 3855003 D1 19960328; DE 3855003 T2 19960627; JP S63211326 A 19880902

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