

Title (en)

PITCH-BASED CARBON FIBRES SUPERIOR IN COMPRESSIVE PHYSICAL PROPERTIES AND PROCESS FOR PRODUCING SAME

Publication

EP 0349307 A3 19900307 (EN)

Application

EP 89306590 A 19890629

Priority

JP 16068388 A 19880630

Abstract (en)

[origin: EP0349307A2] A process for producing a pitch-based carbon fiber comprises hydrogenating a carbonaceous pitch in the presence of a hydrogenation catalyst to add to the pitch two moles or more hydrogen per pitch molecule; heat-treating the hydrogenated pitch at atmospheric pressure or under reduced pressure to obtain an optically anisotropic pitch; collecting from said optically anisotropic pitch a component which is insoluble in an organic solvent having a solubility parameter at 25 DEG C of 7.4 to 9.0 and soluble in an organic solvent having a solubility parameter at 25 DEG C of 9.2 to 11.0 to obtain a spinning pitch having an optically anisotropic phase content of 5% to 40% by volume; spinning said spinning pitch; and thereafter making the resulting pitch fiber infusible and then carbonizing the thus-infusiblized pitch fiber.

IPC 1-7

C10C 3/00; **D01F 9/12**

IPC 8 full level

C10C 3/02 (2006.01); **C10C 3/00** (2006.01); **C10C 3/04** (2006.01); **D01F 9/145** (2006.01); **D01F 9/155** (2006.01)

CPC (source: EP KR)

C10C 3/00 (2013.01 - EP); **D01F 9/14** (2013.01 - KR); **D01F 9/145** (2013.01 - EP)

Citation (search report)

- [A] EP 0246591 A1 19871125 - IIZUKA KOZO [JP], et al
- [A] GB 2168996 A 19860702 - NIPPON OIL CO LTD
- [A] PATENT ABSTRACTS OF JAPAN, vol. 12, no. 421 (C-541)[3268], 8th November 1988; & JP-A-63 150 378 (MITSUBISHI CHEM. IND. LTD) 23-06-1988
- [A] PATENT ABSTRACTS OF JAPAN, vol. 10, no. 355 (C-388)[2411], 29th November 1986; & JP-A-61 155 491 (NIPPON OIL CO. LTD) 15-07-1986

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EP 0349307 A2 19900103; **EP 0349307 A3 19900307**; **EP 0349307 B1 19941109**; DE 68919283 D1 19941215; DE 68919283 T2 19950323; JP 2535207 B2 19960918; JP H0214023 A 19900118; KR 910001104 A 19910130; KR 960007715 B1 19960608

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