

Title (en)

CARBONACEOUS FIBERS WITH SPRING-LIKE REVERSIBLE DEFLECTION AND METHOD OF MANUFACTURE

Publication

**EP 0199567 A3 19880113 (EN)**

Application

**EP 86302959 A 19860418**

Priority

- US 72444085 A 19850418
- US 82756786 A 19860210

Abstract (en)

[origin: EP0199567A2] A unique partially carbonized or substantially completely carbonized, resilient, fiber, yarn or fiber tow having a spring-like structural configuration and a reversible deflection of greater than 1.2:1 is prepared from a carbonaceous precursor materials which is stabilized and then heat treated to a temperature sufficient to impart a spring-like structural configuration to the fiber. Such fibers, yarn or fiber tow is optionally knitted or woven into a cloth which can then be deknitted and carded, garnetted or otherwise defibrilated to produce a resilient web-like fluff or wool-like material having the spring-like structural configuration. Electrical conductivity and a fused benzoidal structural configuration to the surface of the fiber, can optionally be obtained by carbonization of the fibers at a temperature of up to 3000 DEG C at any stage after the spring-like structural configuration is set in the fiber.

IPC 1-7

**D01F 9/22**; **D01F 9/14**; **D01F 9/20**

IPC 8 full level

**D01F 9/12** (2006.01); **D01F 9/14** (2006.01); **D01F 9/145** (2006.01); **D01F 9/15** (2006.01); **D01F 9/155** (2006.01); **D01F 9/20** (2006.01); **D01F 9/21** (2006.01); **D01F 9/22** (2006.01); **D01F 9/24** (2006.01); **D01F 11/16** (2006.01); **D02G 1/00** (2006.01); **D02J 13/00** (2006.01); **D04H 1/4242** (2012.01)

IPC 8 main group level

**D01F** (2006.01)

CPC (source: EP KR)

**D01F 9/12** (2013.01 - KR); **D01F 9/145** (2013.01 - EP); **D01F 9/15** (2013.01 - EP); **D01F 9/155** (2013.01 - EP); **D01F 9/21** (2013.01 - EP); **D01F 9/22** (2013.01 - EP); **D01F 9/24** (2013.01 - EP)

Citation (search report)

- [X] US 4412675 A 19831101 - KAWAKUBO TAKAMASA [JP]
- [X] US 4351816 A 19820928 - SCHULZ DAVID A
- [A] FR 1539755 A 19680920 - NAT RES DEV
- [X] CHEMICAL ABSTRACTS, vol. 98, 1983, page 81, abstract no. 144959r, Columbus, Ohio, US; & JP-A-57 175 664 (MURATA MACHINERY, LTD) 28-10-1982

Cited by

US5028477A; EP0466774A4; US5034267A; US4956235A; EP0336464A3; EP0315244A3; EP0336144A1; US4978571A; EP0355916A3; EP0314244A3; EP0331270A3; FR2628122A1; EP0318072A3; EP0286674A4; AU612710B2; EP0327170A3; FR2626581A1; US4944999A; EP0331819A3; JPH02503448A

Designated contracting state (EPC)

BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0199567 A2 19861029**; **EP 0199567 A3 19880113**; **EP 0199567 B1 19920826**; AU 5635986 A 19861023; AU 590879 B2 19891123; BR 8606634 A 19870804; CA 1284858 C 19910618; DE 3686504 D1 19921001; DE 3686504 T2 19930121; JP H0327121 A 19910205; JP H0327122 A 19910205; JP H0327123 A 19910205; JP H0663137 B2 19940817; JP H0663138 B2 19940817; JP H0670286 B2 19940907; JP S62500600 A 19870312; KR 880700109 A 19880215; KR 890000129 B1 19890308; WO 8606110 A1 19861023

DOCDB simple family (application)

**EP 86302959 A 19860418**; AU 5635986 A 19860418; BR 8606634 A 19860417; CA 506941 A 19860417; DE 3686504 T 19860418; JP 29516989 A 19891115; JP 29517089 A 19891115; JP 29517189 A 19891115; JP 50245786 A 19860417; KR 860700908 A 19861218; US 8600802 W 19860417