

Title (en)

Nano carbon crystal material and method of manufacturing electrothermal board by using the same

Title (de)

Nano-Kohlenstoff-Kristallmaterial und Verfahren zur Herstellung einer elektrothermischen Platte damit

Title (fr)

Matériaux de nanocristaux de carbone et procédé pour la fabrication d'une carte électrothermique avec celui-ci

Publication

EP 2063024 A1 20090527 (EN)

Application

EP 07022709 A 20071122

Priority

EP 07022709 A 20071122

Abstract (en)

The present invention discloses a nano carbon crystal material and a method of manufacturing electrothermal board using the same, which is a crystal material and a method of using the facial heat generating body to overcome the present existing problems related to even temperature rise and heat dissipation at the surface of the carbon fiber electrothermal board, poor contact between the carbon fiber and the conducting band, poor insulation, and short life expectancy. The nano carbon crystal material is composed of acrylonitrile-based carbon fibers occupying 70#/480% of the total weight, nano carbon fibers occupying 1#/45% of the total weight and carbon crystals occupying 15#/429% of the total weight. After the nano carbon crystal material is mixed with a paper pulp and an adhesive is added, the electrothermal board produced under pressurized conditions will have the advantages of high stability, fast temperature rise, good insulation, and long life. In addition, the method of manufacturing the electrothermal board is simple, easy, and convenient, and thus is suitable for mass production to satisfy the requirements of production as well as our daily life.

IPC 8 full level

D21H 13/50 (2006.01); **D21H 17/67** (2006.01); **D21H 21/54** (2006.01); **H05B 3/36** (2006.01)

CPC (source: EP)

D21H 13/50 (2013.01); **D21H 17/67** (2013.01); **D21H 21/54** (2013.01); **H05B 3/145** (2013.01)

Citation (search report)

- [A] WO 2007106122 A2 20070920 - OGDEN TECHNOLOGIES INC [US], et al
- [A] WO 0219771 A1 20020307 - CECATEC CORP [KR], et al

Cited by

CN111138693A; CN107071935A; CN115011133A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 2063024 A1 20090527; EP 2063024 B1 20110921; AT E525525 T1 20111015

DOCDB simple family (application)

EP 07022709 A 20071122; AT 07022709 T 20071122