

Title (en)

MODIFIED FIBER AND PREPARATION METHOD THEREFOR

Title (de)

VERÄNDERTE FASER UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FIBRE MODIFIÉE ET PROCÉDÉ DE PRÉPARATION POUR CELLE-CI

Publication

EP 3378978 A4 20190821 (EN)

Application

EP 16865799 A 20161118

Priority

- CN 201510819312 A 20151120
- CN 201610040025 A 20160121
- CN 201610045894 A 20160122
- CN 201610124616 A 20160304
- CN 2016106435 W 20161118

Abstract (en)

[origin: EP3378978A1] Modified fiber and a preparation method therefor. By means of a physical method, uniform dispersion of graphite particles in a polyester base material and a polyamide base material is realized, the technology is simple, a dispersing agent is not needed, and industrial production is easy. By introducing graphene into hollow cotton or polyamide fiber, and particularly introducing biomass graphene into the hollow cotton or polyamide fiber, modified hollow cotton or polyamide fiber is enabled to have a low-temperature far infrared function, the far infrared normal emittance thereof being not less than 0.85; the antibacterial performance is greater than 90%; and the heat preservation performance and the air permeability are both remarkable, and when the content of the biomass graphene is 1.4%, the heat preservation rate is equal to that of white duck down and is about 90%, but the air permeability is about 240 mm/s and is far higher than that of the duck down.

IPC 8 full level

C01B 32/00 (2017.01); **B82Y 30/00** (2011.01); **D01F 1/10** (2006.01); **D01F 6/90** (2006.01); **D01F 6/92** (2006.01); **D01F 9/12** (2006.01)

CPC (source: EP KR)

D01D 5/08 (2013.01 - EP KR); **D01F 1/10** (2013.01 - EP KR); **D01F 6/60** (2013.01 - EP); **D01F 6/62** (2013.01 - EP); **D01F 6/90** (2013.01 - KR); **D01F 6/92** (2013.01 - KR); **D01F 9/12** (2013.01 - KR)

Citation (search report)

- [XY] CN 104164707 A 20141126 - TONGXIANG ZHONGCHEN CHEMICAL FIBRE CO LTD
- [XY] CN 105001601 A 20151028 - ZHOU HUANMIN
- [XY] WO 2010045887 A1 20100429 - UNIV NANKAI [CN], et al
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- [XY] CN 104357941 A 20150218 - UNIV TIANJIN POLYTECHNIC
- See references of WO 2017084622A1

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Designated contracting state (EPC)

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