

Title (en)
CARBON FIBER NONWOVEN FABRIC

Title (de)
KOHLEFASERVLIESTOFF

Title (fr)
TISSU NON TISSÉ EN FIBRE DE CARBONE

Publication
EP 3222772 A1 20170927 (EN)

Application
EP 17165911 A 20140317

Priority

- JP 2013064153 A 20130326
- JP 2013064284 A 20130326
- JP 2013065674 A 20130327
- EP 14774131 A 20140317

Abstract (en)
A carbon fiber nonwoven fabric in which carbon fibers are sized with an aliphatic compound having a plurality of epoxy groups; the number average x of carbon fibers forming a carbon fiber bundle (1), in which the number of carbon fibers forming the carbon fiber bundle is 90 or more, is in the range of 90 to 1,000 fibers per bundle among the carbon fiber bundles in the carbon fiber nonwoven fabric; and the standard deviation \bar{A} of the number of carbon fibers forming the carbon fiber bundle (1) is in the range of 50 to 500, wherein said carbon fiber nonwoven fabric is formed from a carbon fiber bundle whose drape value (cm)/single fiber flexural stiffness (Pa·cm⁴) at 25°C is in a range of 1.5 x 10⁻³ to 3.0 x 10⁻³ (cm/(Pa·cm⁴)). It is possible to provide a carbon fiber nonwoven fabric in which high flowability and mechanical properties can be both satisfied with small variability in mechanical properties when a carbon fiber composite material is molded, and which also has an excellent shaping property for a carbon fiber mat.

IPC 8 full level
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CPC (source: EP US)
D04H 1/4242 (2013.01 - EP US); **D06M 13/11** (2013.01 - EP US); **D06M 15/53** (2013.01 - EP US); **D06M 2101/40** (2013.01 - EP US)

Citation (applicant)

- JP 2012158846 A 20120823 - TEIJIN LTD
- JP 2012158847 A 20120823 - TEIJIN LTD

Citation (search report)

- [E] EP 2857439 A1 20150408 - TORAY INDUSTRIES [JP]
- [E] EP 2813532 A1 20141217 - TORAY INDUSTRIES [JP]
- [A] JP 2005264383 A 20050929 - TORAY INDUSTRIES
- [A] DATABASE WPI Week 199512, 1995 Derwent World Patents Index; AN 1995-084853, XP002761285

Designated contracting state (EPC)
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