

Title (en)
Electrically conductive filaments, fabrics made of these filaments and their use

Title (de)
Elektrisch leitfähige Fäden, daraus hergestellte Flächengebilde und deren Verwendung

Title (fr)
Fils conducteurs d'électricité, tissus fabriqués à partir de ceux-ci et leur utilisation

Publication
EP 1961845 A3 20090902 (DE)

Application
EP 08001371 A 20080125

Priority
DE 102007009118 A 20070224

Abstract (en)
[origin: EP1961845A2] The melt-spun thread useful in screen textiles and filter cloths for gas and fluid filters, comprises a thermoplastic polymer, a thermoplastic elastomer block copolymer, and soot particle in the form of aggregates aligned along the longitudinal axis of the thread. The thread is a core-skin or monofilament and has a modulus of elasticity of 0.1-5.5 GPa and an elastic elongation of greater than 1.5-4%. The aggregates are formed from primary particles connected with each other. The aggregates form electrically conductive paths along the longitudinal axis of the thread. The melt-spun thread useful in screen textiles and filter cloths for gas and fluid filters, comprises a thermoplastic polymer, a thermoplastic elastomer block copolymer, and soot particle in the form of aggregates aligned along the longitudinal axis of the thread. The thread is a core-skin or monofilament and has a modulus of elasticity of 0.1-5.5 GPa and an elastic elongation of greater than 1.5-4%. The aggregates are formed from primary particles connected with each other. The aggregates form electrically conductive paths along the longitudinal axis of the thread. The soot particle causes an electrical conductivity of the thread of 1.0-10 -> 5> Siemens/cm measured in the longitudinal direction of the thread. The core is formed from thermoplastic polymer. The weight ratio of core and skin is 70:30 to 50:50. An independent claim is included for textile surface structure such as fabric.

IPC 8 full level
D01F 1/09 (2006.01); **D01F 6/86** (2006.01); **D01F 6/90** (2006.01); **D01F 6/92** (2006.01); **D01F 8/14** (2006.01)

CPC (source: EP)
D01F 1/09 (2013.01); **D01F 6/86** (2013.01); **D01F 6/90** (2013.01); **D01F 6/92** (2013.01); **D01F 8/14** (2013.01)

Citation (search report)
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• [Y] WO 02072669 A1 20020919 - TICONA GMBH [DE], et al
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 1961845 A2 20080827; EP 1961845 A3 20090902; DE 102007009118 A1 20080828; JP 2008214846 A 20080918

DOCDB simple family (application)
EP 08001371 A 20080125; DE 102007009118 A 20070224; JP 2008039489 A 20080221