Synthesis of textile fibers and electronics based on conductive polymers

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Applicant(s): Armines

The present invention relates to a novel method for the synthesis of conductive textile based on the textile substrate, crosslinked polymer electrolytes and semiconductor polymers enveloping the assembly of the textile-polymer electrolyte comprising the steps of (has) polymerization of at least one monomer electrolyte in the structure of the fibers of the textile, in the presence of a crosslinking agent; (and b) polymerization of at least one monomer semiconductor at the surface of the composite textile/polymer crosslinked electrolyte obtained in step a), in the presence of an oxidizing agent, as well as textiles or textile fibres thus obtained and their uses for example in the biomedical field.
Polymer fiber having improved long-term dispersibility

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Date of publication: 2019-03-21

Applicant(s): Trevira

The invention relates to a polymer fiber having improved dispersibility, a method for the production thereof and the use thereof. The polymer fiber according to the invention comprises at least one synthetic polymer and a preparation present on the surface of the fibers, said preparation comprising at least one cellulose ether selected from the group consisting of carboxymethyl cellulose (CMC), methyl cellulose (MC), ethyl cellulose (EC), hydroxyethyl cellulose (HEC), hydroxypropyl cellulose (HPC), methylethyl cellulose (MEC), hydroxyethylmethyl cellulose (HEMC), hydroxypropylmethyl cellulose (HPMC), ethylhydroxyethyl cellulose, carboxymethylhydroxyethyl cellulose, and mixtures thereof. The polymer fiber according to the invention has improved dispersibility and is thus suitable for the preparation of aqueous suspensions which are used, for example, in the formation of textile fabrics, for example nonwovens.
Polymeric treatment for textile material

Patent number: US20180271217
Date of publication: 2018-09-27
Applicant(s): New Balance Athletics

The invention relates to a polymeric treatment for a textile component. An exemplary method of treating a textile element for incorporation into at least a portion of an article of footwear includes applying a thermoplastic polymer to a textile element having at least one first region and at least one second region, selectively activating the thermoplastic polymer in the at least one first region to modify at least one structural property of the at least one first region, and leaving the thermoplastic polymer in the at least one second region of the textile element unactivated, wherein the at least one modified structural property of the at least one first region differs from at least one structural property of the at least one second region.
Pattern coated textile for active cooling

Patent number: US20180305859
Date of publication: 2018-10-25
Applicant(s): Milliken

A pattern coated textile containing a textile having an upper surface and a lower surface and comprising a plurality of yarns, where at least a portion of the yarns comprise a synthetic polymer and a patterned coating on at least the lower surface. The patterned coating covers between about 5 and 95% of the surface area of the lower surface of the textile and contains a functioned polyester selected from the group consisting of an ethoxylated polyester, a sulfonated polyester, an ethoxylated and sulfonated polyester, and mixtures thereof. The patterned coating also contains a binder and an optional dye.
High density artificial leather

Patent number: US20180258584

Date of publication: 2018-09-13

Applicant(s): Kia Motors

A method for manufacturing a high density artificial leather, may include (a) manufacturing a long fiber-type non-woven fabric having an areal weight of 400 to 500 g/m² and an apparent density of 0.3 to 0.6 g/cm³ by self-twist spinning a sea component polymer fiber and an island component polymer fiber; (b) shrinking the long fiber-type non-woven fabric with hot water; (c) eluting the sea component polymer fiber from the shrunken non-woven fabric by immersing the shrunken non-woven fabric in an aqueous alkaline solution; and (d) impregnating a polymer elastomer in a non-woven fabric from which the sea component polymer fiber is eluted, to manufacture a long fiber-type fine yarn non-woven fabric.
A crosslinkable polyolefin composition

Patent number: EP3339366
Date of publication: 2018-06-27
Applicant(s): Borealis

The present invention relates to crosslinkable polyolefin compositions, to a process for their preparation, to crosslinked compositions such as foams, sealants or adhesives and shaped articles, and their use in food packaging, textile packaging and technical and protection films. The crosslinkable polyolefin composition comprises one or more polyolefin polymers A, a hydrolysable silane functional polyolefin polymer B prepared from monomers comprising olefin monomers a) and silane functional compound(s) b), wherein the silane functional polyolefin polymer B is grafted onto the one or more polyolefin polymers A. The crosslinkable polyolefin compositions is crosslinkable by moisture.
Two layer fluorinated polymer fibre

Patent number: FR3067363

Date of publication: 2018-12-14

Applicant(s): Arkema

The invention concerns composite piezoelectric fibres. More particularly, the invention relates to two-component piezoelectric-effect fibres consisting solely of polymer materials. The invention also relates to the method for producing these fibres, as well as the applications thereof in various sectors of technical textiles, filtration, and in electronics.
Fire-protection coating

Patent number: DE202017006962

Date of publication: 2019-02-14

Applicant(s): Schillings

Multilayer heat-insulating plate for thermal insulation for building said arrangement comprising: a) a main layer (10) of thermally insulative organic polymeric material, a first major surface and a first major surface opposite second major surface; b) a backing (20) layer having a first major surface and a first major surface opposite second major surface, wherein the reinforcement (20) layer with the main layer (10) along the first major surface of the main layer and along the first major surface of the backing layer thereto, wherein the reinforcement (20) layer inorganic salts in an amount of at least 50 -% by weight, based on the total weight of the (20) reinforcement layer, thereto; c) a decoupling (30) layer having a first major surface and a first major surface opposite second major surface, the decoupling (30) layer with the first major surface of the decoupling layer on the second major surface of the backing (20) and connected thereto, the decoupling (30) layer one or more fibers and/or webs system, are selected from the group consisting of glass fiber fabric, polyester nonwoven, glass woven, scrim fabric and fiber - / polyester blend nonwoven; d) a fire protection layer (40), on the second major surface of the decoupling layer (30) and connected thereto, wherein the fireproof layer (40) expansive graphite.