

Title (en)
Electroconductive conjugate fiber

Title (de)
Elektrisch leitende zusammengesetzte Fasern

Title (fr)
Fibre conjuguée électroconductrice

Publication
EP 0735163 A1 19961002 (EN)

Application
EP 95104615 A 19950329

Priority
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Abstract (en)
An easily producible electroconductive conjugate fiber having an excellent electroconductivity and a high whiteness includes at least one non-electroconductive filamentary segment (A) formed from a fiber-forming polymeric material and at least one electroconductive filamentary segment (B) incorporated with the segments (A) so as to form, for example, a core-in-sheath type or bimetal type conjugate fiber, and including a thermoplastic polymeric matrix (a) and a plurality of electroconductive multilayered particles (b) dispersed in the matrix (a), having an average size of 0.1 to 2.0 μ m and each having (i) a core particle of a metal component, (ii) an undercoat layer formed from tin oxides on the core particle and (iii) an uppercoat layer formed from a mixture of indium oxides with tin oxides on the undercoat layer (ii), and optionally surface-treated with a silane compound, for example, vinyl tri-C1-5 alkoxysilane, or divinyl di-C1-5 alkoxysilane.

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IPC 8 full level
D01F 1/09 (2006.01); **D01F 8/04** (2006.01); **D01F 8/06** (2006.01); **D01F 8/14** (2006.01)

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Citation (search report)
• [Y] EP 0630950 A1 19941228 - TITAN KOGYO KK [JP]
• [Y] GB 2077182 A 19811216 - KANEBO LTD, et al & JP S6229526 B2 19870626
• [Y] EP 0386256 A1 19900912 - TEIJIN LTD [JP], et al & JP H02269762 A 19901105 - TEIJIN LTD, et al
• [A] EP 0343496 A2 19891129 - KURARAY CO [JP]
• [Y] DATABASE WPI Section Ch Week 8505, Derwent World Patents Index; Class A17, AN 85-028502

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