

Title (en)

Electrically conducting fibres and method of making same.

Title (de)

Elektrisch leitende Fasern und Verfahren zu ihrer Herstellung.

Title (fr)

Fibres électro-conductrices et procédé pour leur fabrication.

Publication

EP 0035406 A1 19810909 (EN)

Application

EP 81300881 A 19810303

Priority

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- JP 9712880 A 19800715

Abstract (en)

An electrically conducting acrylic or modacrylic fibre is impregnated with 1 to 30 wt. % of copper sulfide, e.g. digenite. A two-step method of making these fibres comprises subjecting the fibres to a first heat-treatment in a bath containing a copper compound and a reducing agent to adsorb monovalent copper ions into the fibre, and subjecting the fibre to a second heat-treatment in the presence of a sulfur-containing compound to convert said adsorbed monovalent copper ions to copper sulfide. An alternative one-step method comprises subjecting the fibre to heat-treatment in a bath which contains a copper ion compound, a reducing agent which is capable of reducing copper ions to monovalent ions, and a sulfur-containing compound to convert monovalent copper ions to copper sulfide. The electrically conducting fibres have superior conductivity, which is not lost in repeated washing, can be dyed readily with cationic dyes without loss of electrical conductivity and possess the touch and other physical characteristics of the starting acrylic or modacrylic fibres.

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CPC (source: EP)

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Citation (search report)

- DE 74056 C
- GB 1372656 A 19741106 - RHONE POULENC TEXTILE
- DE 2329484 B2 19751218

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