

Title (en)
ELECTRICALLY CONDUCTING FIBRES AND METHOD OF MAKING SAME

Publication
EP 0035406 B1 19840808 (EN)

Application
EP 81300881 A 19810303

Priority
• JP 2838680 A 19800305
• JP 9712880 A 19800715

Abstract (en)
[origin: EP0035406A1] 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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IPC 8 full level
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CPC (source: EP)
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Cited by
US4556507A; EP0228218A3; EP0576747A1; EP0160406A3; CN113699785A; EP0217987A1; EP0257274A3; DE3209795A1; EP1566473A1; KR101028984B1; US5431856A; US5593618A; US5861076A; EP0086072A1; US4556508A; CN1058999C; EP0308234A1; US4755394A; EP0620562A1; US5424116A; EP0115661A1

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