Title (en)

Aminated cellulosic synthetic fibers

Title (de)

Aminierte cellulosische Synthesefasern

Title (fr)

Fibres synthétiques cellulosiques aminées

Publication

EP 0665311 B1 19981209 (DE)

Application

EP 95100299 A 19950111

Priority

- DE 4402711 A 19940129
- DE 4422758 A 19940629

Abstract (en)

[origin: EP0665311A1] Aminated cellulosic synthetic fibres are obtd. by adding an amine-substd. cellulose deriv. (II) to a viscose material or alkali cellulose (III) and processing by the viscose spinning method, or by adding (II) to a cellulose soln. and spinning to give fibres. (II) consists of polymers of unsatd. amines with cellulose or cellulose components (2), or reaction prods. of (2) with amines of formula (1a) or (1b): Y = ester gp.; A + N + one or two 1-4C alkylene gps. = bivalent heterocyclic gp.; A = O or a gp. of formula R-N, R-CH or Z-R1R2N+; R = H, amino, 1-6C alkyl (opt. substd. with 1 or 2 amino, sulpho, OH, sulphato, phosphato or COOH gps.) or 3-8C alkyl with 1 or 2 in-chain O and/or NH gps. (opt. substd. with one gp. as above, except phosphato); R1, R2 = H, Me or Et; Z = anion; B = -NH2, R1R3N- or Z- R1R2R4N+-; R3 = Me or Et; R4 = H, Me or Et; alkylene = 2-6C alkylene (opt. substd. with 1 or 2 OH) or 3-8C alkylene with 1 or 2 in-chain O and/or NH; alk = 2-6C alkylene, or 3-8C alkylene with 1 or 2 in-chain O and/or NH, pref. 2-6C alkylene; m = 1 or 2; n = 1-4; the amino, OH and ester gps. can be on prim., sec. or tert. C atoms of the alkylene gp. Also claimed is a process for the prodn. of dyed or printed cellulosic synthetic fibre materials, by producing the aminated fibres as above, converting into woven or knitted fabric, and dyeing or printing this with reactive dye(s), pref. at pH 4.5-8.5, in the absence of electrolyte salts or alkali.

IPC 1-7

D01F 2/00; D01F 2/04; D01F 2/06; D01F 2/10; D06P 3/66

IPC 8 full level

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CPC (source: EP KR US)

D01F 2/00 (2013.01 - EP US); **D01F 2/04** (2013.01 - EP US); **D01F 2/06** (2013.01 - EP US); **D01F 2/10** (2013.01 - EP US); **D01F 2/22** (2013.01 - KR); **D01F 8/02** (2013.01 - KR); **D06P 3/66** (2013.01 - EP US); **D06P 5/00** (2013.01 - KR); **D06P 5/225** (2013.01 - EP US); Y10S 8/921 (2013.01 - US)

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EP0705924A3; CN104746161A; US5851239A; DE19549408A1; US6001995A; EP0790348A1; WO9637642A1; WO9637643A1; WO9713893A1; EP0719793B1

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