

Title (en)

Method for modifying fibers and modified fibers

Title (de)

Verfahren zur Herstellung von modifizierten Fasern und modifizierte Fasern

Title (fr)

Procédé pour la préparation de fibres modifiées et fibres modifiées

Publication

EP 1612323 A1 20060104 (EN)

Application

EP 05254061 A 20050629

Priority

JP 2004192527 A 20040630

Abstract (en)

A method for modifying fibers comprises steps of adding a crosslinking agent and/or an aqueous resin emulsion to an alkali aqueous solution dissolving therein a cellulose ether having such a low degree of substitution that a molar degree of substitution with an alkyl group and/or a hydroxyalkyl group ranges 0.05 to 1.3, applying the resulting solution to fibers neutralizing the applied solution with an acid for coagulation, and thermally treating the fibers. Alternatively, the method comprises adding a crosslinking agent and/or an aqueous resin emulsion to an alkali aqueous solution dissolving therein a cellulose ether having such a low degree of substitution that a molar degree of substitution with an alkyl group and/or a hydroxyalkyl group ranges 0.05 to 1.3, applying the resulting solution to fibers, thermally treating the thus applied fibers, and applying an acid to the fibers to neutralize the alkali left on the fibers.

IPC 8 full level

D06M 15/09 (2006.01)

CPC (source: EP KR US)

D06M 15/09 (2013.01 - EP KR US); **D06M 2200/50** (2013.01 - EP US)

Citation (applicant)

- JP S61252369 A 19861110 - ASAHI CHEMICAL IND
- JP 2004218102 A 20040805 - SHINETSU CHEMICAL CO
- US 4221688 A 19800909 - JOHNSON ROBERT D, et al
- JP H0367145 B2 19911021
- JP S344199 B1
- JP S519440 B2 19760326
- "HANDBOOK OF CROSSLINKING AGENTS", 20 October 1981
- "SILICONE HANDBOOK", 31 August 1990, NIKKAN KOGYO SHIMBUN LTD., pages: 248 - 251

Citation (search report)

- [X] US 4341669 A 19820727 - MARCO FRANCIS W, et al
- [X] EP 0426304 A1 19910508 - UNILEVER PLC [GB], et al

Cited by

CN110565264A; CN105084908A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1612323 A1 20060104; **EP 1612323 B1 20080813**; CN 1763309 A 20060426; CN 1763309 B 20110413; DE 602005008828 D1 20080925; KR 101148417 B1 20120525; KR 20060048678 A 20060518; TW 200609414 A 20060316; TW I359892 B 20120311; US 2006000027 A1 20060105

DOCDB simple family (application)

EP 05254061 A 20050629; CN 200510119922 A 20050630; DE 602005008828 T 20050629; KR 20050056862 A 20050629; TW 94122160 A 20050630; US 16840305 A 20050629