Title (en)
METHOD FOR PRODUCING CELLULOSE FIBERS AND CELLULOSE FILAMENT YARNS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON CELLULOSEFASERN UND CELLULOSE-FILAMENTGARNEN

Title (fr)
PROCEDE DE FABRICATION DE FIBRES CELLULOSIQUES ET DE FILS CONTINUS CELLULOSIQUES

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Abstract (en)
[origin: WO0218682A1] The invention relates to a method for producing cellulose fibers and cellulose filament yarns with improved properties on the basis of cellulose according to a dry-wet spinning method using aqueous aminoxides, especially N-methyl-morpholino-N-oxide as a solvent. The inventive method comprises the following steps: a) dispersing the cellulose and the aqueous aminoxide at an elevated temperature in a reactor, removing the water and subjecting the dispersion to shearing, thereby converting it to a homogeneous solution with a relaxation time in the range of from 0.5 to 80 seconds at 85 DEG C, b) feeding the solution to at least one spinning nozzle and shaping it, c) transporting the jet of solution through a non-precipitating medium while further shaping it, and d) precipitating the cellulose yarn or bunch of yarns, separating it from the precipitation bath via a deflection element and washing, treating to give softness and suppleness, drying and optionally cross-linking the product(s) in a multi-step post-dischargement treatment. In step a), a solution with a cuoxam degree of polymerization (DP) of the cellulose of >/= 450 is produced, said solution is shaped in steps b) and c) with a strain rate of (I). The reviving batch in step d) optionally also contains a cross-linking agent.

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