

Title (en)
CRIMPED FIBRE AND ITS PRODUCTION

Title (de)
GEKRÄUSELTER FASER UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
FIBRE FRISÉE ET PRODUCTION DE CELLE-CI

Publication
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Application
EP 01986728 A 20011012

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Abstract (en)
[origin: WO0231236A1] A method for the manufacture of lyocell fibre includes the steps of: (i) forming a solution of cellulose in an aqueous tertiary amine N-oxide solvent at a temperature above ambient temperature, the solution having from a trace (as herein defined) to 30 percent by weight of particles of a thermoplastic polymer having a glass transition temperature below the temperature at which the solution is formed, based on the weight of cellulose dispersed therein; ii) extruding the solution by way of a die into an aqueous coagulating bath, thereby forming lyocell fibre; iii) washing the fibre to remove residual amine N-oxide therefrom, and drying the fibre; and (iv) crimping the fibre so as to induce from 2.5 to 8 crimps/cm in the fibre. In the method according to the invention, the thermoplastic polymer is preferably dispersed throughout the lyocell in domains, and the maximum dimension of substantially all of the domains is preferably no more than 50 nanometres (nm). The invention provides lyocell fibre having a trace to 30 percent by weight of low melting thermoplastic polymer and 2.5 to 8 crimps per centimetre.

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