

Title (en)

NON-THERMOPLASTIC STARCH FIBERS AND STARCH COMPOSITION AND PROCESS FOR MAKING SAME

Title (de)

NICHTTHERMOPLASTISCHE STÄRKEFASERN UND STÄRKEZUSAMMENSETZUNG UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

FIBRES D'AMIDON NON THERMOPLASTIQUES, COMPOSITION D'AMIDON ET PROCESSUS DE FABRICATION DE CELLE-CI

Publication

EP 1470273 B1 20071121 (EN)

Application

EP 03707597 A 20030130

Priority

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Abstract (en)

[origin: WO03066942A1] Non-thermoplastic starch fibers having no melting point and having apparent peak wet tensile stress greater than about 0.2 MegaPascals (MPa). The fibers can be manufactured from a composition comprising a modified starch and a cross-linking agent. The composition can have a shear viscosity from about 1 PascalOESecconds to about 80 PascalOESecconds and an apparent extensional viscosity in the range of from about 150 PascalOESecconds to about 13,000 PascalOESecconds. The composition can comprise from about 50% to about 75% by weight of a modified starch; from about 0.1% to about 10% by weight of an aldehyde cross-linking agent; and from about 25% to about 50% by weight of water. Prior to cross-linking, the modified starch can have a weight average molecular weight greater than about 100,000 g/mol.

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