Title (en)

Individualized, crosslinked fibers and process for making said fibers.

Title (de)

Individuell vernetzte Fasern und Verfahren zum Herstellen solcher Fasern.

Title (fr)

Fibres réticulées individuellement et procédé de préparation de ces fibres.

Publication

EP 0251676 A2 19880107 (EN)

Application

EP 87305616 A 19870624

Priority

US 87967186 A 19860627

Abstract (en)

Individualized, crosslinked fiber, and process for making such fibers. The individualized, crosslinked fibers have between about 0.5 mole % and about 3.5 mole % crosslinking agent, calculated on a cellulose anhydroglucose molar basis, reacted with fibers in the form of intrafiber crosslink bonds, wherein the crosslinking agent is selected from the group consisting of C2 - C8 dialdehydes, C2 - C8 dialdehyde acid analogues having at least one aldehyde functionality, and oligomers of such C2 - C8 dialdehydes, and dialdehyde acid analogues. Preferably, the crosslinking agent is glutaraldehyde, and between about 0.75 mole % and about 2.5 mole % crosslinking agent react to form the intrafiber crosslink bonds. The individualized crosslinked fibers are useful in a variety of absorbent sturcture applications.

IPC 1-7

D06M 13/12; A61L 15/00

IPC 8 full level

A61F 5/44 (2006.01); **A61F 13/15** (2006.01); **A61F 13/49** (2006.01); **A61F 13/53** (2006.01); **D06M 13/02** (2006.01); **D06M 13/12** (2006.01); **D06M 13/123** (2006.01); D06M 101/00 (2006.01); D06M 101/02 (2006.01); D06M 101/06 (2006.01); D06M 101/08 (2006.01)

CPC (source: EP KR)

D01F 8/00 (2013.01 - KR); **D06M 13/12** (2013.01 - EP)

Citation (applicant)

- US 3224926 A 19651221 - BERNARDIN LEO J
- US 3440135 A 19690422 - CHUNG RAYMOND
- US 3241553 A 19660322 - STEIGER FRED H
- US 4035147 A 19770712 - SANGENIS SOLANGE, et al
- US 3987968 A 19761026 - MOORE DANNY RAYMOND, et al
- US 3860003 A 19750114 - BUELL KENNETH BARCLAY

Cited by

US5124197A; DE10048681B4; US5348547A; EP0530591A1; US5304420A; US8426670B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0251676 A2 19880107; **EP 0251676 A3 19881221**; **EP 0251676 B1 19950222**; AT E118833 T1 19950315; AU 618934 B2 19920116; AU 7474587 A 19880107; CA 1340278 C 19981222; DE 3751077 D1 19950330; DE 3751077 T2 19950907; DK 171858 B1 19970714; DK 330387 A 19871228; DK 330387 D0 19870626; EG 18320 A 19930430; ES 2068182 T3 19950416; FI 872846 A0 19870626; FI 872846 A 19871228; FI 94435 B 19950531; FI 94435 C 19950911; GR 3015748 T3 19950731; HK 89996 A 19960531; IE 65730 B1 19951115; IE 871717 L 19871227; IL 82915 A0 19871220; IL 82915 A 19910512; JP 2599721 B2 19970416; JP S6366374 A 19880325; KR 880000629 A 19880328; KR 950002842 B1 19950327; MA 21017 A1 19871231; MX 169190 B 19930624; NZ 220854 A 19890727; PH 25621 A 19910808; PT 85179 A 19870701; PT 85179 B 19900330

DOCDB simple family (application)

EP 87305616 A 19870624; AT 87305616 T 19870624; AU 7474587 A 19870626; CA 540368 A 19870623; DE 3751077 T 19870624; DK 330387 A 19870626; EG 62587 A 19870625; ES 87305616 T 19870624; FI 872846 A 19870626; GR 940403850 T 19950411; HK 89996 A 19960523; IE 171787 A 19870626; IL 8291587 A 19870618; JP 16080887 A 19870627; KR 870006565 A 19870627; MA 21258 A 19870626; MX 709387 A 19870626; NZ 22085487 A 19870626; PH 35461 A 19870625; PT 8517987 A 19870626