

Title (en)

Fine denier two component corespun yarn for fire resistant safety apparel and method.

Title (de)

Feines, aus zwei Komponenten bestehendes Kerngarn für Feuerschutzkleidung sowie Herstellungsverfahren.

Title (fr)

Fil à âme à fin denier fait de deux composants pour vêtements de protection résistant au feu et procédé pour la production de ce fil.

Publication

EP 0385024 A1 19900905 (EN)

Application

EP 89309151 A 19890908

Priority

US 31037889 A 19890215

Abstract (en)

The fine denier corespun yarn (10) is formed on an air jet spinning apparatus and comprises two components, including a core (11) of high temperature resistant fibers, and a core wrapper (12) of low temperature resistant fibers surrounding and covering the core (11). The high temperature resistant fibers of the core (11) are selected from the group consisting essentially of aramid fibers (Kevlar and Nomex), polybenzimidazole fibers (PBI) and heat stabilized/oxidized polyacrylonitrile fibers. The low temperature resistant fibers of the core wrapper (12) are natural fibers, such as cotton. The corespun yarn (10) is fabricated into a fabric and subjected to a high temperature flame environment, the low temperature resistant fibers of the core wrapper (12) are charred but do not melt, drip or exhibit afterflame or afterglow, and the charred portion remains in position around the core (11) and maintains the same type of flexibility and integrity as the unburned fabric.

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D02G 3/04; **D02G 3/44**

IPC 8 full level

D02G 3/36 (2006.01); **D02G 3/44** (2006.01)

CPC (source: EP KR)

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Citation (search report)

- [X] NL 8603023 A 19880616 - WISSELINK S TEXTIELFABRIEKEN B
- [X] WO 8701140 A1 19870226 - TEN CATE OVER ALL FABRICS BV [NL]
- [Y] Dr.Otto-Albrecht Neumüller: "Römpf Chemie-Lexikon" Franch'sche Verlagshandlung, Stuttgart

Cited by

EP0962313A1; CN102828312A; CN104452007A; CN102181993A; CN110656412A; EP0962563A1; US5572860A; CN104328582A; CN109468720A; CN113355779A; US10433593B1; US8528120B2; WO2023178399A1; WO2019051543A1; US8932965B1; US10288385B2

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DOCDB simple family (application)

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