

Title (en)

Modified fibre, yarn and woven materials, methods of manufacture and uses thereof

Title (de)

Modifizierte Fasern, Garne und Gewebe, deren Herstellungsverfahren und Verwendungen

Title (fr)

Fibres modifiées, fils et tissus, procédés de fabrication et utilisations

Publication

**EP 1529860 A3 20060426 (EN)**

Application

**EP 04256832 A 20041104**

Priority

US 51753103 P 20031104

Abstract (en)

[origin: US2005095423A1] A fiber material and/or yarn is described that includes: a) at least one staple fiber component; b) at least one base fiber component, wherein the at least one staple fiber component is at least about 50% shorter in length than the at least one base fiber component and wherein each of the at least one staple fiber component and the at least one base fiber component has at least one melting point. Methods are also provided herein that include: a) providing at least one staple fiber component having at least one melting point; b) providing at least one base fiber component having at least one melting point, wherein at least one of the melting points of the staple fiber component is lower than at least one of the melting points of the base fiber component; c) mixing the at least one staple fiber component with the base fiber component to form a blend material; d) processing the blend material to form a fiber bundle or a yarn bundle; and e) applying a thermal energy source to the fiber bundle or yarn bundle to form the modified fiber bundle and/or yarn bundle.

IPC 8 full level

**D02G 3/34** (2006.01); **D02G 3/40** (2006.01)

CPC (source: EP US)

**D02G 3/34** (2013.01 - EP US); **D02G 3/402** (2013.01 - EP US); **Y10T 428/29** (2015.01 - EP US)

Citation (search report)

- [X] US 4324095 A 19820413 - LULAY ARTHUR, et al
- [X] GB 1059567 A 19670222 - COURTAULDS LTD
- [XA] DE 4321560 A1 19950112 - DANUBIA PETROCHEM DEUTSCHLAND [DE]
- [X] US 6588192 B1 20030708 - RICE J DERRILL [US]
- [XA] GB 2252108 A 19920729 - TBA INDUSTRIAL PRODUCTS LTD [GB], et al
- [X] GB 1393712 A 19750514 - TORAY INDUSTRIES

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2005095423 A1 20050505**; CA 2486470 A1 20050504; EP 1529860 A2 20050511; EP 1529860 A3 20060426

DOCDB simple family (application)

**US 97793304 A 20041101**; CA 2486470 A 20041102; EP 04256832 A 20041104