

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2001 (12.07.2001)

PCT

(10) International Publication Number
WO 01/49907 A3

(51) International Patent Classification⁷:
D04H 1/54, 3/16, B32B 5/26, A61F 13/15

D01F 8/06,

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(21) International Application Number: PCT/US00/35281

(22) International Filing Date:
27 December 2000 (27.12.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/476,068 30 December 1999 (30.12.1999) US

(71) Applicant (*for all designated States except US*): **BBA NONWOVENS SIMPSONVILLE, INC.** [US/US]; 840 S.E. Main Street, Simpsonville, SC 29681 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **NEWKIRK, David, D.** [US/US]; 121 Sun Meadow Road, Greer, SC 29650 (US). **THOMAS, Harold, Edward** [US/US]; 5 St. Helaine Place, Greer, SC 29650 (US). **CHRISTOPHER, David, Bruce** [US/US]; 205 Carrick Drive, Simpsonville, SC 29681 (US). **MEECE, Barry, DeWayne** [US/US]; 639 Slatton Shoals Road, Pelzer, SC 29669 (US).

(74) Agents: **PENDLETON, Melissa, B.** et al.; Alston & Bird LLP, Bank of America Plaza, 101 South Tryon Street, Suite 4000, Charlotte, NC 28280-4000 (US).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:
10 May 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTICOMPONENT FIBERS AND FABRICS MADE USING THE SAME

(57) Abstract: The present invention provides multicomponent fibers arranged in structured domains. At least one of the polymer components is formed of a multipolymer blend. The present invention also provides nonwoven fabrics formed of the multicomponent fibers, the fabrics having a superior combination of extensibility, tensile properties and abrasion resistance. A second layer can be laminated to this coherent extensible nonwoven web.

WO 01/49907 A3

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/35281

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D01F/06 D04H1/54 D04H3/16 B32B5/26 A61F13/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D01F D04H B32B A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 16216 A (GESSNER SCOTT LOUIS ; GILLESPIE J DARRELL (US); MEECE BARRY DEWAYNE) 30 May 1996 (1996-05-30) cited in the application the whole document	1-27
P, A	WO 00 28122 A (MEECE BARRY DEWAYNE ; BBA NONWOVENS SIMPSONVILLE INC (US); QUANTRIL) 18 May 2000 (2000-05-18) page 16, line 5 - line 22; claims	1-27

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

9 July 2001

Date of mailing of the international search report

17/07/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Tarrida Torrell, J

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/35281

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9616216 A	30-05-1996	US 5543206 A	06-08-1996
		AU 4244196 A	17-06-1996
		EP 0740714 A	06-11-1996
		JP 9512313 T	09-12-1997
		US 2001003693 A	14-06-2001
		US 2001005662 A	28-06-2001
		US 2001004574 A	21-06-2001
		US 6207602 B	27-03-2001
		US 5921973 A	13-07-1999
WO 0028122 A	18-05-2000	AU 1337300 A	29-05-2000