



(43) International Publication Date
16 August 2012 (16.08.2012)

(51) International Patent Classification:

A61F 13/15 (2006.01) A61F 5/441 (2006.01)
A61F 13/20 (2006.01) B32B 27/12 (2006.01)

(21) International Application Number:

PCT/US2012/023133

(22) International Filing Date:

30 January 2012 (30.01.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/026,059 11 February 2011 (11.02.2011) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(88) Date of publication of the international search report:

17 April 2014

(54) Title: LIQUID MANAGEMENT LAYER FOR PERSONAL CARE ABSORBENT ARTICLES

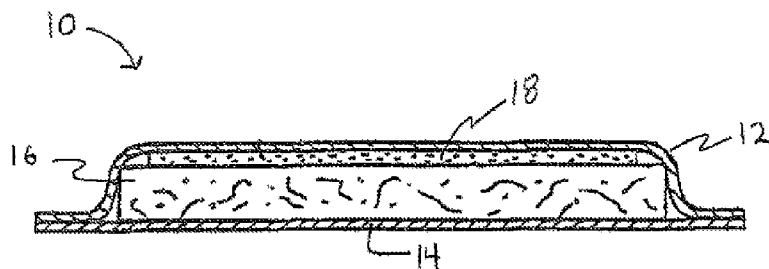


FIG. 1

(57) Abstract: A liquid management layer for a personal hygiene product is described. The liquid management layer includes a plurality of thermoplastic fibers in the form of a spunbond nonwoven web where thermoplastic fibers are randomly oriented and uncrimped, where the liquid management layer has a maximum void volume of 25 cc/g and a web density of at least 0.05 g/cc, where the liquid management layer has a maximum thickness of 1.5 mm, a basis weight of at least 30 g/m² and a rewet value of less than 0.4 g according to test method WSP 70.8, and where the liquid management layer has an average fiber diameter of at least 40 microns based on the number of thermoplastic fibers in the liquid management layer and where less than 10% by count of the plurality of thermoplastic fibers in the liquid management layer have an absolute fiber diameter less than 30 microns.



INTERNATIONAL SEARCH REPORT

International application No.

PCT/US12/23133

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61F 13/15, 13/20, 13/357; B32B 27/12 (2012.01)

USPC - 604/370, 378

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(8): A61F 13/15, 13/20, 13/357; B32B 27/12 (2012.01)

USPC: 604/367, 358, 385.23, 385.21, 385.01, 369; 210/504, 503, 500.1, 348; 428/301.4, 152

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

IPC(8): A61F 13/15, 13/20, 13/357; B32B 27/12 (2012.01)

USPC: 604/367, 358, 385.21, 385.01, 369; 210/504, 503, 500.1, 348; 428/301.4, 152

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

MicroPatent (US Granted, US Applications, EP-A, EP-B, WO, JP (bibliographic data only), DE-C, B, DE-A, DE-T, DE-U, GB-A, FR-A);
 DialogPro; Google; Google Scholar; IP.com; sublayer, surge, layer, transition, transfer, separat*, liquid, manag*, layer, uniform, size,
 diameter, denier, void volume, uncrimp*, uncreas*, fiber, fibr*, filament

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2003/0120231 A1 (WANG, JH et al.) June 26, 2003, abstract; figures 1, 2, 20; paragraphs [0046], [0049], [0051], [0052], [0055], [0060], [0063], [0064], [0071], [0078], [0079], [0101]-[0103]	1-20
Y	US 2010/0312212 A1 (BOND, EB et al.) December 9, 2010, paragraphs [0077]-[0082], [0177], [0178], [0181]	1-20
Y	US 5292239 A (ZELDIN, LM et al.) March 8, 1994, abstract; column 1, lines 54-62; column 5, lines 14-15	1-20
Y	WO 1996/015748 A2 (FAULKS, MJ et al.) May 30, 1996, page 21, lines 26-38; page 22, lines 1-5	1-20
Y	US 2005/0241745 A1 (BANSAL, V) November 3, 2005, paragraph [0004]	1-20
Y	EP 670154 A2 (EVERETT, RD et al) June 9, 1995, paragraph [0099]	2, 12, 13, 20
A	US 2004/0077247 A1 (SCHMIDT, RJ et al.) April 22, 2004, abstract	1-20

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Date of the actual completion of the international search

01 June 2012 (01.06.2012)

Date of mailing of the international search report

08 JUN 2012

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents

P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-3201

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PCT OSP: 571-272-7774