

Search history

Search 1: FT=(nonwoven and round fiber and micron) (Results 80)
Search 2: FT=(nonwoven and round fiber and micron) and IC=(A61F13/511) (Results 18)

1) Family number: 72662042 (US2019003079A)

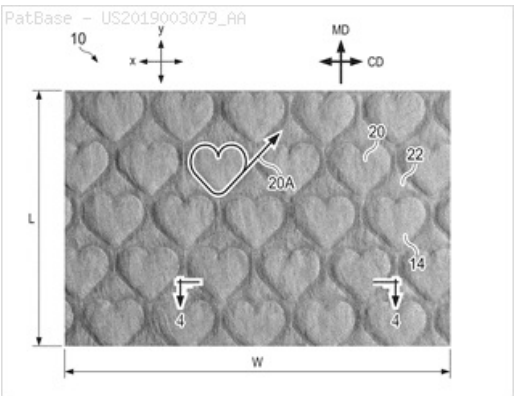
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Title: SHAPED NONWOVEN

Abstract: A nonwoven fabric. The nonwoven fabric can include a first surface and a second surface and a visually discernible pattern of three-dimensional features on one of the first or second surface. Each of the three-dimensional features can define a microzone comprising a first region and a second region. The first and second regions can have a difference in values for an intensive property. The nonwoven further has a plurality of apertures, wherein at least a portion of the aperture abuts at least one of the first region and the second region of the microzone.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/512 A61F13/551 B32B5/02 D01D5/098 D01F6/06 D01F8/06 D04H3/10 D04H3/16 (Advanced/Invention)
CPC: D01D5/0985 B32B2555/02 A61F13/51104 A61F13/15252 A61F13/15658 A61F13/55115 D01F6/06 D01F8/06 D04H3/102 D04H3/16 B32B5/022 A61F2013/15552 A61F2013/1526 A61F2013/49092 D10B2403/033 D10B2509/026 A61F2013/15373 A61F2013/15406 A61F13/4902 A61F13/512 D04H3/02 D04H3/14
US: 1/1 442/400



Family:

Publication number	Publication date	Application number	Application date
US2019003079 AA	20190103	US20180019724	20180627
WO19005906 A1	20190103	WO2018US39666	20180627

Priority:

US20170527216P 20170630 US20180019724 20180627

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO

Inventor(s): (std): ASHRAF ARMAN ; ARORA KELYN ANNE ; WEISMAN PAUL THOMAS ; WHITELY NATHAN RAY ; WHITELY NATHAN ; WEISMAN PAUL ; ARORA KELYN

Agent(s): KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

2) Family number: 11366076 (US5611981A)

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Title: PROCESS OF MAKING FIBERS

Abstract: Disclosed are fibers that are capable of spontaneously transporting certain fluids, for example aqueous fluids, such as water, on their surfaces. The fibers, especially in the form of tow, can be incorporated into absorbent articles, such as diapers, in order to transport fluids to more effectively utilize the absorbent portion of the article. The fibers can be synthetically coated with absorbent materials.

Classifications:

International (IPC 8-9): A41B17/00 A41D13/00 A41D20/00 A61F13/15 A61F13/20 A61F13/49 A61F13/511 A61F13/53 A61F5/44 A61L15/00 A61L15/42 A63B71/08 A63B71/14 B01J20/28 B43K8/03 D01D5/092 D01D5/23 D01D5/253 D01F11/02 D01F11/04 D01F2/28 D01F6/00 D01F6/04 D01F6/06 D01F6/60 D01F6/62 D01F6/84 D01F6/92 D01F6/96

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D06M101/30 D06M101/32 D06M101/34 D06M101/36 (Advanced/Non-
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A61F13/15 A61L15/00 A61L15/16 B43K8/00 D01D5/00 D01F2/24
D01F6/00 D01F6/04 D01F6/60 D01F6/62 D01F6/92 D02G1/00 D04H1/42
D04H3/00 D06M10/00 D06M13/00 D06M15/37 (Core/Invention);
D01D (Subclass/Invention)

International (IPC 1-7): A41B17/00 A41D13/00 A41D20/00 A61F13/15
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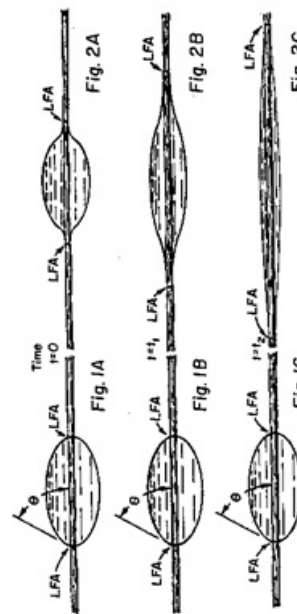
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European: A61F13/537B4 A61F13/537C2 A61F13/537C4 A61F13/537C8
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K61F13/53M4E K61F13/53Q K61F13/53S4B K61F13/53S5B1 K61F13/53S5B3

US: 210/500.1 210/767 264/130 264/168 264/177.13 264/210.3 264/210.8 264/211.14 264/211.15 264/211.17 264/342RE
425/192.5 425/192S 425/382.2 425/461 425/DIG.217 428/119 428/131 428/167 428/220 428/358 428/376 428/397 428/398
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PatBase - US5611981_A

U.S. Patent Mar. 18, 1997 Sheet 1 of 51 5,611,981



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Priority:

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Assignee(s): CLEMSON UNIV RESEARCH FOUNDATION ; EASTMAN KODAK CO A CORP OF NEW JERSEY ; EASTMAN CHEMICAL CO KINGSPO RT TENN US ; EASTMAN KODAK CO ROCHESTER N Y US ; HAILE WILLIAM ALSTON ; DALTON JAMES SAMUEL NELSON ; HALL HARRY PROBERT ; PHILLIPS BOBBY MAL ; TRENT LEWIS CHARLES ; SCALF RONALD SHERRILL ; NEAL RICHARD DIXON ; NELSON JACKSON LEE ; JONES RONNIE JAY ; EASTMAN CHEMICAL CO ; EASTMAN CHEMICAL COMPANY ; EASTMAN KODAK COMPANY ; BAGRODIA SHRIRAM ; CASEY DAVID AUGUSTUS ; CLEMSON UNIV

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Inventor(s): TRENT RONNIE JAY CHARLES ; BAGRODIA SHRIRAM ; RONNIE JAY CHARLES TRENT ; DAVID AUGUSTUS CASEY ; HARRY PROBERT HALL ; B M PHILLIPS ; W A HAILE ; S BAGRODIA ; WILLIAM ALSTON HAILE ; BOBBY MAL PHILLIPS ; SHRIRAM BAGRODIA ; SHRIRAM BAGRODIA ; HAILE WILLIAM ALSTON C O EASTMAN KODAK COMPANY ; BAGRODIA SHRIRAM C O EASTMAN KODAK COMPANY ; PHILLIPS BOBBY MAL C O EASTMAN KODAK COMPANY ; CASEY DAVID AUGUSTUS C O EASTMAN KODAK COMPANY ; HALL HARRY PROBERT C O EASTMAN KODAK COMPANY ; HALL HARRY PROBERT KINGSPO RT TN 37660 US ; CASEY DAVID AUGUSTUS KINGSPO RT TN 37660 US ; PHILLIPS BOBBY MAL JONESBOROUGH TN 37659 US ; BAGRODIA SHRIRAM KINGSPO RT TN 37660 US ; HAILE WILLIAM ALSTON KINGSPO RT TN 37663 US ; TRENT LEWIS CHARLES JOHNSON CITY TN 37602 US ; NELSON JACKSON LEE JOHNSON CITY TN 37604 US ; DALTON JAMES SAMUEL NELSON KINGSPO RT TN 37660 US ; JONES RONNIE JAY KINGSPO RT TN 37664 US ; SCALF RONALD SHERRILL BLUFF CITY TN 37618 US ; NEAL RICHARD DIXON KINGSPO RT TN 37660 US ; JAMES SAMUEL NELSON DALTON ; LEWIS CHARLES TRENT ; RONALD SHERRILL SCALF ; JACKSON LEE NELSON ; RICHARD DIXON NEAL ; RONNIE JAY JONES ; SHRIRAM BAGRODIA

Agent(s): PHILLIPS ORMONDE FITZPATRICK ; GOWLING LAFLEUR HENDERSON LLP ; NISHIYAMA MASAYA ; HIGUCHI SOTOJI ; ISHIDA TAKASHI ; TSURUTA JUNICHI

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IT JP KR LI LU MC NL NO SE

3) Family number: 72662207 (US2019003080A)

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Title: METHOD FOR MAKING A SHAPED NONWOVEN

Abstract: A method for making nonwoven fabric. The nonwoven fabric can include three-dimensional features that define a microzone comprising a first region and a second region. The first and second regions can have a difference in values for an intensive property. The nonwoven further has a plurality of apertures, wherein at least a portion of the aperture abuts at least one of the first region and the second region of the microzone.

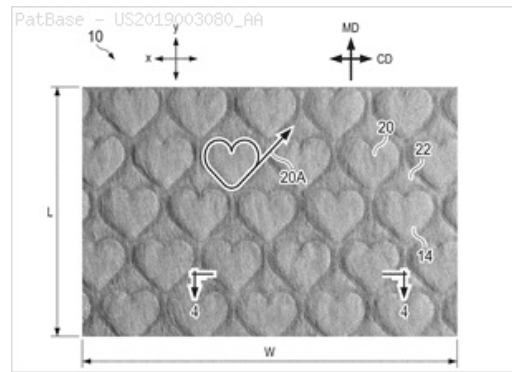
Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/551 B32B5/02 D01D5/098 D01F6/06 D01F8/06 D04H1/00 D04H1/44

D04H1/54 D04H3/10 D04H3/16 (Advanced/Invention)

CPC: D01D5/0985 B32B2555/02 A61F13/15252 A61F13/15658
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D04H3/16 A61F2013/15552 A61F2013/1526 A61F2013/49092
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A61F13/51104 D04H3/02 D04H3/14

US: 1/1 442/400



Family:

Publication number	Publication date	Application number	Application date
US2019003080 AA	20190103	US20180019785	20180627
WO19005910 A1	20190103	WO2018US39674	20180627

Priority:

US20170527224P 20170630 US20180019785 20180627

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO

Inventor(s): (std): ASHRAF ARMAN ; ARORA KELYN ANNE ; WEISMAN PAUL THOMAS ; WHITELY NATHAN RAY ; WHITELY NATHAN ; WEISMAN PAUL ; ARORA KELYN

Agent(s): KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

4) Family number: 51935275 (US2012238981A)

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Title: FLUID PERMEABLE STRUCTURED FIBROUS WEB

Abstract: A disposable absorbent article having a fluid permeable structured fibrous web with thermally stable, fibers that are thermally bonded together using heat provides a base substrate that is thermally stable. The base substrate is textured via mechanical treatment producing a structured fibrous web having an aged caliper of less than 1.5 mm, a vertical wicking height of at least 5 mm, a permeability of at least 10,000 cm²/(Pa·s) and a specific volume of at least 5 cm³/g. The structured fibrous web provides optimal fluid wicking and fluid acquisition capabilities and is directed toward fluid management applications. The structured fibrous web has a bio-based content of about 10 percent to about 100 percent using ASTM D6866-10, method B.

Classifications:

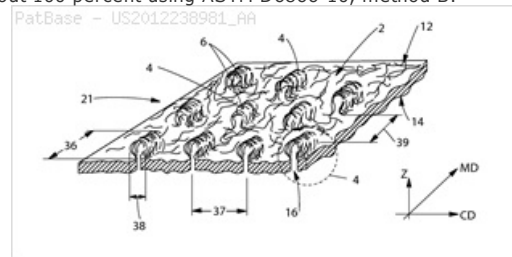
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European: A61F13/537B A61F13/537C2 A61F13/537D A61L15/26

US: 604/370



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BOND ERIC BRYAN ; COLLIAS DIMITRIS IOANNIS ; KELLETT PATTI JEAN ; PROCTER AND GAMBLE ; PROCTER AND GAMBLE COMAPNY ; WEINBERGER ERIC PATTON ; WEISMAN PAUL THOMAS

Assignee(s): PROCTOR AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE CO

Inventor(s): (std): KELLETT PATTI JEAN ; COLLIAS DIMITRIS IOANNIS ; WEISMAN PAUL THOMAS ; BOND ERIC BRYAN ; WEINBERGER ERIC PATTON

Inventor(s): PAUL THOMAS WEISMAN ; ERIC PATTON WEINBERGER ; ERIC BRYAN BOND ; PATTI JEAN KELLETT ; DIMITRIS IOANNIS COLLIAS

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; KREMER VERONIQUE MARIE JOSEPHINE; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

5) Family number: 47807383 (US2010310810A)

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Title: STRUCTURED FIBROUS WEB

Abstract: The present disclosure is directed to disposable absorbent articles comprising a structured fibrous web, the structured fibrous web comprising thermally stable, hydrophilic fibers that are thermally bonded together using heat producing a base substrate that is thermally stable. The base substrate is textured via mechanical treatment to increase its thickness and optionally modified via over bonding to improve its mechanical and fluid handling properties. The structured fibrous web provides optimal fluid wicking and fluid acquisition capabilities and is directed toward fluid management applications.

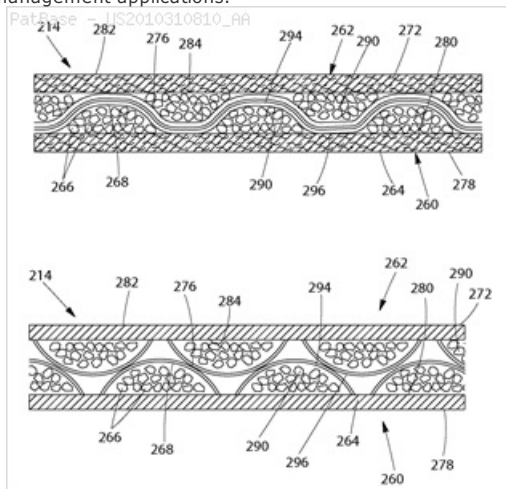
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European: A61F13/511 A61L15/26 A61L15/60 B32B5/26

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Family:

Publication number	Publication date	Application number	Application date
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CN102802575 A	20121128	CN201080024555	20100528
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Priority:

US20090477449 20090603 CN201080024555 20100528 EP20100725935 20100528
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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BOND ERIC BRYAN ; KRIPPNER CAROLA ; PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO ; STRUBE JOHN BRIAN

Assignee(s): PROCTER AND GAMBLE CO CINCINNATI ; THE PROCTER AND GAMBLE COMPANY

Inventor(s): (std): KRIPPNER CAROLA ; BOND ERIC BRYAN ; STRUBE JOHN BRIAN ; CAROLA KRIPPNER ; BRIAN STRUBE JOHN ; BRYAN BOND ERIC ; ERIC BRYAN BOND ; JOHN BRIAN STRUBE

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; HEIDE UTE; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY,GLOBAL LEGAL DEPARTMENT - IP; THE PROCTER AND GAMBLE COMPANY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: LOOPED NONWOVEN WEB

Abstract: The present invention relates to a nonwoven web comprising a plurality of loops. At least one of said loops having a loop circumference length to loop base length ratio that is greater than about 4:1. The loops may also have a base length less than 0.5 cm and a base length less than the maximum width of the loops. The present invention also relates to articles selected from the group consisting of disposable hygiene article and wipes comprising a nonwoven web wherein at least one region of the nonwoven web comprises loops in at least about 10 percent of the surface area of the nonwoven web. A method for producing a nonwoven web comprising a plurality of loops is also included. The method comprises the steps of providing a nonwoven web; providing means for moving fibers of the nonwoven web into the shape of a loop; and moving fibers of the nonwoven web into the shape of a loop.

Classifications:

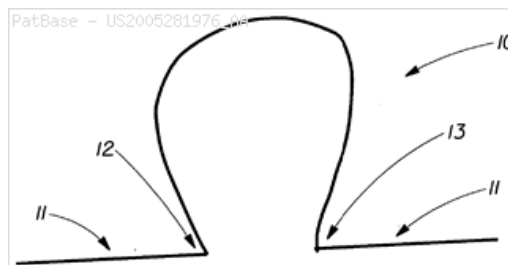
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International (IPC 1-7): A61F13/15 B32B3/02 D04H11/00

CPC: Y10T428/24289 Y10T428/24322 Y10T428/24339 Y10T428/23929 Y10T428/23957 Y10T428/23986 Y10T442/60 A44B18/0011 A61F13/51121 A61F13/627 D04H11/00

European: A44B18/00C4 A61F13/511 A61F13/62 D04H11/00

US: 428/133 428/137 428/139 428/85 428/85P 428/88 428/92 428/92S 428/96 442/327 442/327S



Family:

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Priority:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BOND ERIC B ; BOND ERIC BRYAN ; CURRO JOHN J ; CURRO JOHN JOSEPH ; HAMMONS JOHN L ; HAMMONS JOHN LEE ; HOYING JODY L ; LLOYD SUSAN N ; TURNER ROBERT H ; YOUNG TERRILL A ; PROCTER AND GAMBLE ; HOYING JODY LYNN ; LLOYD SUSAN NICOLE ; TURNER ROBERT HAINES ; YOUNG TERRILL ALAN ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): PROCTER AND GAMBLE CO

Inventor(s): (std): CURRO JOHN J ; BOND ERIC B ; HAMMONS JOHN L ; HOYING JODY L ; LLOYD SUSAN N ; TURNER ROBERT H ; YOUNG TERRILL A ; CURRO JOHN JOSEPH ; BOND ERIC BRYAN ; HAMMONS JOHN LEE ; HOYING JODY LYNN ; LLOYD SUSAN NICOLE ; TURNER ROBERT HAINES ; YOUNG TERRILL ALAN ; BOND ERIC BRIAN ; JOHN LEE HAMMONS ; ERIC BRYAN BOND ; TERRILL ALAN YOUNG ; JODY LYNN HOYING ; SUSAN NICOLE LLOYD ; ROBERT HAINES TURNER ; JOHN JOSEPH CURRO ; CURRO JOHN J BOND ERIC B HAMMO

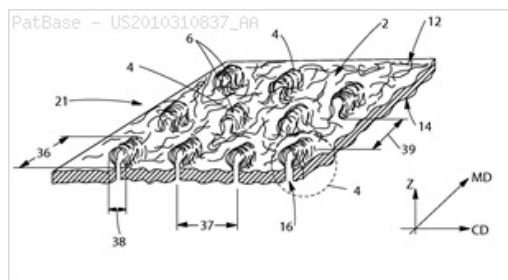
Agent(s): MBM INTELLECTUAL PROPERTY LAW LLP ; L HUILLIER FLORENT CHARLES ; REINHOLD COHN AND PARTNERS ; TANI YOSHIKAZU ; ABE KAZUO ; THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION ; ANDREW J ; GARY J ; RODDY M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: STRUCTURED FIBROUS WEB

Abstract: The present invention is directed to a structured fibrous web comprising thermally stable, hydrophilic fibers that are

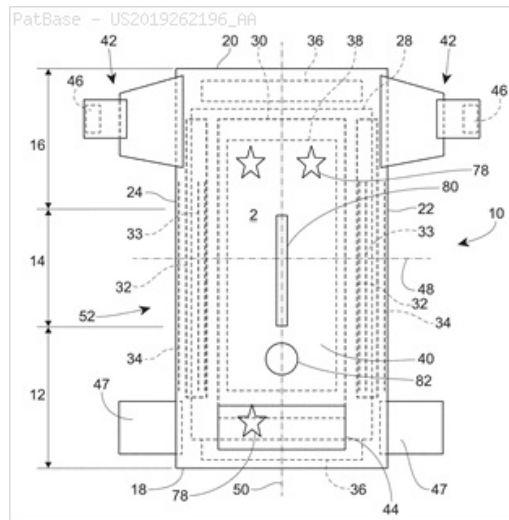
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D04H3/147 D04H3/16 (Advanced/Invention)
CPC: Y10T428/2481 D04H3/16 Y10T442/611 Y10T442/681 Y10T442/69
European: D04H3/16
US: 428/196 428/196P 428/219 428/219S 442/337 442/337S 442/401
442/401S 442/409 442/409S



Publication number	Publication date	Application number	Application date
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US2010310837 AA	20101209	US20090477600	20090603
WO10141578 A1	20101209	WO2010US37061	20100602

Assignee(s): (std):	KRIPPNER CAROLA ELKE BEATRICE ; PROCTER AND GAMBLE ; BOND ERIC BRYAN ; STRUBE JOHN BRIAN
Assignee(s):	DZE PROKTER EHND GEHMBL KOMPANI ; PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO CINCINNATI ; PROCTER AND GAMBLE COWORLD SHAVING HEADQUARTERSIP/LEGAL PATENT DEPARTMENT - 3EONE GILLETTE PARKBOSTONMA02127US ; THE PROCTER AND GAMBLE COMPANY
Inventor(s): (std):	BEATRICE KRIPPNER CAROLA ELKE ; BRIAN STRUBE JOHN ; BRYAN BOND ERIC ; STRUBE JOHN BRIAN ; BOND ERIC BRYAN ; KRIPPNER CAROLA ELKE BEATRICE
Inventor(s):	KRIPPNER CAROLA ; BOND ERIC ; STRUBE JOHN ; KRIPPNER CAROLA ELKE BEATRICEDE ; STRUBE JOHN BRIANUS ; BOND ERIC BRYANUS ; JOHN BRIAN STRUBE ; CAROLA ELKE BEATRICE KRIPPNER ; ERIC BRYAN BOND
Agent(s):	TORYS LLP; HEIDE UTE; TANI AND ABE PC; THE PROCTER AND GAMBLE COMPANY,GLOBAL LEGAL DEPARTMENT - IP; THE PROCTER AND GAMBLE COMPANY
Designated states:	AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International (IPC 8-9): A61F13/49 A61F13/511 A61F13/513 A61F13/514
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D04H1/54 D04H3/14 (Advanced/Invention)
CPC: A61F13/51305 A61F13/49009 A61F13/51464 B32B2307/51
B32B27/12 B32B5/022 B32B2262/0253 A61F13/538 A61F13/51104
A61F13/5116 B32B5/12 B32B5/26 D04H1/54 D04H3/14 D04H3/147



Family:

Publication number	Publication date	Application number	Application date
US2019262196 AA	20190829	US20180903094	20180223
WO19164740 A1	20190829	WO2019US17967	20190214

Priority:

US20180903094 20180223

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO

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Agent(s): KREBS JAY A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

9) Family number: 64694440 (US2017014282A)

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Title: TREATED NONWOVEN HAVING AN AFFINITY FOR AN ACTIVE INGREDIENT

Abstract: A nonwoven having a high affinity for an active ingredient is proved, the nonwoven having at least one high surface area fiber in addition to the active ingredient.

Classifications:

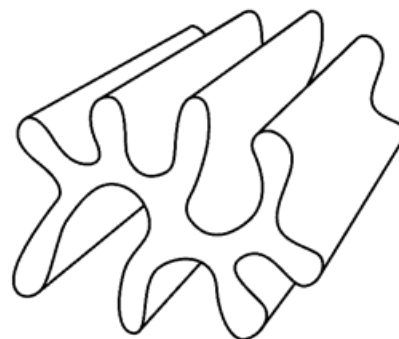
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International (IPC 1-7): A61F13/511

CPC: A61F13/51113 A61F13/15658 A61L15/24 A61L15/56 A61L15/44 A61F2013/51009 A61F13/511 D04H1/4391 D04H3/018 A61F2013/51023 A61F2013/51028 A61F2013/5109 A61F2013/51117 A61L2300/21 D04H1/4374 A61L15/46 A61F2013/51186

US: 1/1 604/359

PatBase - US2017014282_AA



Family:

Publication number	Publication date	Application number	Application date
AU2016291767 AA	20180104	AU20160291767	20160713
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Priority:

US20150191847P 20150713 US20160208845 20160713 WO2016US41994 20160713

Probable Assignee: AVINTIV SPECIALTY MATERIALS INC

Assignee(s): (std): AVINTIV SPECIALTY MAT INC ; AVINTIV SPECIALTY MATERIALS INC

Assignee(s): BANK OF AMERICA ; BANK OF AMERICA NA ; ERLANDSSON SVEN KRISTER ; GRONDIN PIERRE ; MOODY RALPH A III ; CREDIT SUISSE CAYMAN ISLANDS BRANCH AG ; US BANK NATIONAL ASSOCIATION COLLATERAL AGENT AS

Inventor(s): (std): MOODY III RALPH A ; GRONDIN PIERRE ; ERLANDSSON SVEN KRISTER ; MOODY RALPH A III ; RALPH A MOODY III ; SVEN KRISTER ERLANDSSON ; PIERRE GRONDIN

Inventor(s): MOODY RALPH A

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; STIKEMAN ELLIOTT SENCRL SRL LLP; JUAN PABLO CONCHA DELGADO; GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB; NAGATA YUTAKA; JOHNSON JOHN E III ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

10) Family number: 62326660 (US2016129626A)

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Title: METHODS FOR MAKING PATTERNED APERTURED WEBS

Abstract: A method of producing a patterned apertured web is provided. The method comprises providing a web having a central longitudinal axis. The web comprises a plurality of overbonds extending substantially parallel to the central longitudinal axis. The method comprises conveying the web in a machine direction that is substantially parallel to a direction of extension of the central longitudinal axis of the web. The method comprises stretching the web in a cross-machine direction to cause at least some of the overbonds to at least partially rupture and at least partially form patterned apertures in the web. At least some of the patterned apertures have Absolute Feret Angles, according to the Aperture Test herein, of at least about 20 degrees. At least some of the patterned apertures have an Aspect Ratio, according to the Aperture Test herein, in the range of about 2:1 to about 6:1.

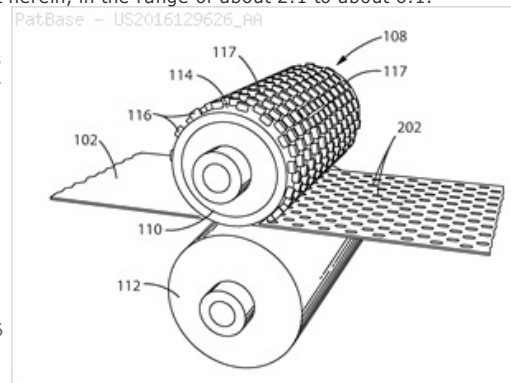
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International (IPC 1-7): A61F13/493 A61F13/512 A61F13/513 A61F13/514 A61F13/84

CPC: A61F13/537 A61F13/15203 A61F13/47 A61F2013/15243 A61F13/15764 A61F13/51484 A61F13/55105 A61F13/55115 A61F13/55145 A61F13/84 B29C55/10 B29L2007/001 B32B3/10 B32B37/02 B32B2262/0253 B32B2262/0284 B32B2262/12 B32B2305/026 B32B2432/00 B32B2535/00 D04H5/06 D10B2321/021 D10B2321/022 D10B2331/042 D10B2401/00 A61F13/15699 A61F13/511 A61F13/51104 A61F13/512 A61F13/5123 A61F13/5126 A61F13/51476 A61F13/51478 A61F13/515 A61F13/551 A61F2013/15715 A61F2013/51092 A61F2013/51147 A61F2013/51186 A61F2013/51486 A61F2013/8497 B32B3/26 B32B3/266 B32B5/022 B32B5/142 B32B5/26 B32B2250/03 B32B2307/726 B32B2555/00 B32B2555/02 D10B2509/026 Y10T428/24314 Y10T428/24322 Y10T428/24331 Y10T442/60 Y10T442/66 A61F13/51121 A61F13/5116 A61F13/51305 A61F13/51394 A61F2013/51165 A61F2013/51178 A61F2013/51182 A61F2013/5127 A61F2013/51322 A61F2013/51377 B44F99/00 A61F13/45 A61F13/472 A61F13/476 A61F13/51113 A61F13/513 A61F13/5146 A61F13/51462 A61F2013/51009 A61F2013/51117 D04H1/50 A61F2013/51061 A61F2013/51078 A61F2013/5128 B32B3/06 B32B3/30 B32B7/05 B32B2250/04 B32B2250/20 B32B2250/242 D04H3/14 Y10T428/24612 Y10T428/24793 Y10T428/24826

US: 1/1 156/229 156/60 206/438 206/526 206/570 264/40.1 428/131 428/137 428/138 604/365 604/367 604/372 604/378 604/383 604/385.01



Family:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE ; P AND G

Assignee(s): PROCTER AND GAMBLE CO CINCINNATI ; SCHUTTE JENNIFER ; TAPP ANN CECILIA ; WALTHER RACHAEL EDEN ; STRUBE JOHN BRIAN ; ROE DONALD CARROLL ; GIOVANNI SARA LYN ; ORR JILL MARLENE ; MULLANE TIMOTHY IAN ; PORTER MARGARET ELIZABETH ; ARORA KELYN ANNE ; BICKING AMANDA MARGARET ; DUSOLD JENNIFER LYNN ; DZE PROKTER END GEMBL KOMPANI

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Inventor(s): ARORA KELYN ENN ; DYUSOLD DZHENNIFER LINN ; MULLANE TIMOTI JEN ; OR DZHIL MARLENE ; PORTER MARGARET ELIZABET ; RODIK DZHENNIFER ; ROE DONALD KERROLL ; TAP AN SESILIYA ; UELTER REJCHEL EDEN ; MOS STEFANI NEZGODA ; SHTRUBE DZHON BRAJN ; BIKING AMANDA MARGARET ; SHYUTTE DZHENNIFER ; PORTER MARGARET ELIZABETH CINCINNATI ; DUSOLD JENNIFER LYNN CINCINNATI ; BICKING AMANDA MARGARET CINCINNATI ; WALTHER RACHAEL EDEN CINCINNATI ; TAPP ANN CECILIA CINCINNATI ; SCHUTTE JENNIFER CINCINNATI ; RITTER MATTHEW STEVEN CINCINNATI ; HAMMONS JOHN LEE CINCINNATI ; GIOVANNI SARA LYN CINCINNATI ; VALTER REJCHEL IDEN ; TEPP ENN SESILIYA ; SHTRUBE DZHON BRAJAN ; OR DZHILL MARLIN ; MYULLANE TIMOTI JEN ; DZHOVANNI SARA LYN ; STRUBE JOHN BRIAN CINCINNATI ; ROE DONALD CARROLL CINCINNATI ; ORR JILL MARLENE CINCINNATI ; MULLANE TIMOTHY IAN CINCINNATI ; ARORA KELYN ANNE CINCINNATI

Agent(s): WILSON LUE LLP; LLOVET AHUMADA RAUL; L HUIILLIER FLORENT CHARLES; KREMER VERONIQUE MARIE JOSEPHINE; P AND G PATENT GERMANY; HEIDE UTE; NAGAI HIROSHI; RYBINOJ NA; RYBINA N A; BEST CHRISTIAN M; LEAL GEORGE H; KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY NZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 70781692 (US2018229216A)

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Title: ABSORBENT ARTICLES WITH SUBSTRATES HAVING REPEATING PATTERNS OF APERTURES COMPRISING A PLURALITY OF REPEAT UNITS

Abstract: The present disclosure is directed to absorbent articles with substrates or topsheets having repeating patterns of apertures comprising a plurality of repeat units. Each of the repeat units comprises at least three apertures.

Classifications:

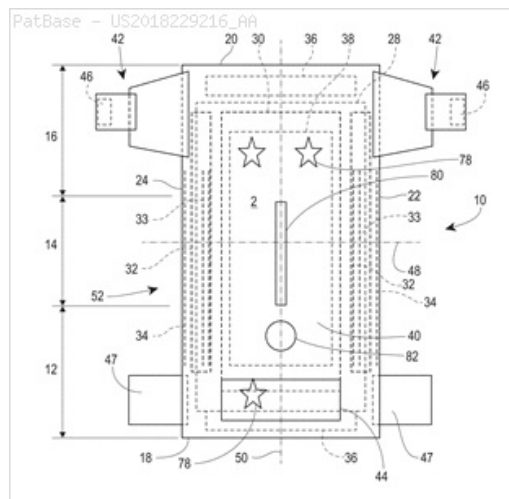
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A61F13/514 B01J20/28 B01J20/32 (Advanced/Invention)

CPC: B01J20/28095 B01J20/28038 B01J20/3297 A61F13/15617

A61F13/51121 A61F2013/51042 A61F13/5126 A61F13/51394

A61F13/51456 A61F2013/15959 A61F13/5123 A61F13/5116 A61F13/5122



Family:

Publication number	Publication date	Application number	Application date
US2018229216 AA	20180816	US20180897184	20180215
WO18152272 A1	20180823	WO2018US18280	20180215

Priority:

US20170459765P 20170216 US20180897184 20180215

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO

Inventor(s): (std): SMITH ALIZHA VICTORIA ; ARORA KELYN ANNE ; RITTER MATTHEW STEVEN ; RITTER MATTHEW ; SMITH ALIZHA ; ARORA KELYN

Agent(s): KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

12) Family number: 43550697 (US2009258210A)

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Title: ELASTOMERIC MATERIALS

Abstract: Some embodiments of the present invention include elastomeric films with a basis weight of about 40 gsm or less or about 25 gsm or less. Other embodiments include elastomeric laminates comprising the elastomeric film bonded to one or more substrates (such as nonwoven fabrics). Methods of the making the elastomeric films and elastomeric laminates are also provided.

Classifications:

International (IPC 8-9): A61F A61F13/15 A61F13/20 A61F13/49

A61F13/511 A61F13/514 A61F13/66 A61L15/24 B29C47/00 B29C47/02

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A61F13/15 B29K21/00 B29K23/00 B29L7/00 B29L9/00 B32B27/08

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B32B27/32 B32B37/02 B32B5/02 C08J5/18 C08L23/00

C08L23/08 (Core/Invention);

B29C47/06 B29C65/00 B32B27/08 B32B5/22 C08J5/18 (Core/Non-invention);

A61F B32B C08J C08L (Subclass/Invention)

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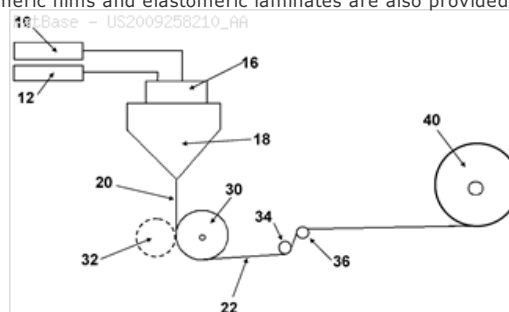
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Family:



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Probable Assignee: BERRY FILM PRODUCTS CO INC

Assignee(s): (std): BLAND DAVID G ; CLOPAY PLASTIC PROD CO ; CANCIO LEOPOLDO V ; CLOPAY PLASTICS PRODUCTS CO INC ; CLOPAY PLASTIC PRODUCTS CO INC ; AUTRAN JEAN PHILIPPE ; AUTRAN JEAN PHILIPPE MARIE ; MUSLET IYAD ; PROCTER AND GAMBLE ; MUSLAT IYAD ; CLOPAY PLASTICS PRODUCTS COMPA ; NETON JANET ; MANSFIELD TODD LEON ; PROCTER AND GAMBLE CO ; MUSLET LYAD ; CLOPLAY PLASTIC PRODUCTS CO INC

Assignee(s): CREDIT SUISSE CAYMAN ISLANDS BRANCH AG ; US BANK NATIONAL ASSOCIATION ; US BANK NATIONAL ASSOCIATION COLLATERAL AGENT AS ; PROCTER AND GAMBLE CO ; THE PROCTOR AND GAMBLE COMPANY ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; DZE PROKTER EHND GEHMBL KOMPANI ; CLOPAY PLASTICS PRODUCTS COMPANY INC ; BANK OF AMERICA NA ; BERRY FILM PRODUCTS CO INC ; CLOPAY PLASTIC PRODUCTS COMPANY INC ; CLOPAY PLASTIC PRODUCTS CO LLC ; CLOPAY PLASTIC PRODUCTS CO INC MASON ; THE PROCTER AND GAMBLE COMPANY

Inventor(s): (std): MARIE AUTRAN JEAN PHILIPPE ; JANET NETON ; IYAD MUSLAT ; LEON MANSFIELD TODD ; LYAD MUSLET ; JEAN PHILIPPE MARIE AUTRAN ; MUSLAT IYAD ; AUTRAN JEAN PHILIPPE MARIE ; BLAND DAVID ; LEOPOLDO V CANCIO ; DAVID G BLAND ; MANSFIELD TODD LEON ; NETON JANET ; MUSLET IYAD ; CANCIO LEOPOLDO V ; BLAND DAVID G ; AUTRAN JEAN PHILIPPE ; AUTRAN JR JEAN PHILIPPE MARIE ; MEHNSFILD TODD LEON ; BLEHND DEHVID G ; AUTRAN ZHAN FILIPP MARI ; MUSLET LUEHD ; KEHNSIO LEOPOL DO V ; NETON DZHANET ; MUSLET LYAD ; BLEHND DEHVID DZH ; KANCHIO LEOPOLDO V ; AUTRAN ZHAN FILIPPE MARI ; IYAD MUSLET ; AUTRAN JEAN PHILIPPE MAIRE ; MUSLAT JJAD

Inventor(s): AUTRAN ZHAN-FILIPPE MARI ; JEAN PHILIPPE MARIE AUTRAN ; TODD LEON MANSFIELD ; MUSLET, IYad ; CANCIO LEOPOLDO ; JEAN PHILIPPE AUTRAN ; AUTRAN JEANPHILIPPE MARIE ; MUSLET IYAD MASON ; AUTRAN JEAN PHILIPPE MARIE CINCINNATI ; BLAND DAVID G MASON ; CANCIO LEOPOLDO V VERO BEACH ; IYAD MUSLET DAVID G BLAND LEOPOLDO V CANCIO

Agent(s): SPRUSON AND FERGUSON; WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MACRAE AND CO; DIMOCK STRATTON LLP; WILSON LUE LLP; BARROS; LLOVET AHUMADA RAUL; LUZ CLEMENCIA DE PAEZ; 2K PATENTANWAELTE BLASBERG KEWITZ AND REICHEL PARTNERSCHAFT MBB; KREMER VERONIQUE MARIE JOSEPHINE; FINDLAY ALICE ROSEMARY; L HUILLIER FLORENT CHARLES; PONTI ADELAIDA; CLT PATENT AND TRADEMARK HK LTD; MARKS AND CLERK SINGAPORE LLP; EVIN KAZMIRCI; WOOD HERRON AND EVANS LLP; THE PROCTER AND GAMBLE COMPANY,GLOBAL LEGAL DEPARTMENT - IP; PROCTER AND GAMBLE CO GLOBAL LEGAL DEPARTMENT IP; RICHARD L; KATHLEEN Y; THOMPSON HINE LLP; JAMES T; LUNN GREGORY J; THE PROCTER AND GAMBLE COMPANY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

13) Family number: 70160703 (US2018168893A)

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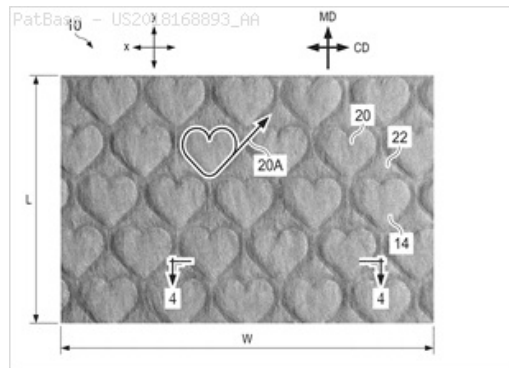
Title: SHAPED NONWOVEN

Abstract: A nonwoven fabric. The nonwoven fabric can include a first surface and a second surface and a visually discernible pattern of three-dimensional features on one of the first or second surface. Each of the three-dimensional features can define a microzone comprising a first region and a second region. The first and second regions can have a difference in values for an intensive property, wherein the intensive property is one or more of thickness, basis weight, or volumetric density, and wherein the first surface has a TS7 value of less than about 15 dB V2 rms.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/511 A61F13/514 A61F13/531 D04H11/08 D04H3/007 D04H3/147 D04H3/16 (Advanced/Invention)
CPC: A61F13/51104 D04H3/007 D04H3/147 D04H3/16 A47L13/16
A61F13/15203 A61F13/49011 A61F13/51108 A61F13/513 A61F13/51401
A61F13/51476 A61F13/531 A61F13/539 A61F2013/15373

A61F2013/15406 A61F2013/15422 A61F2013/49093 A61F2013/51026
A61F2013/51338 A61F2013/51452 A61F2013/530481 A61F2013/5315
A61F2013/5395 D01D5/08 D01D5/22 D01D5/30 D04H11/08
US: 1/1 604/370



Family:

Publication number	Publication date	Application number	Application date
■ CN110022821 A	20190716	CN201780074101	20171214
■ CN110022822 A	20190716	CN201780074109	20171214
■ DE112017006311 T5	20191002	DE201711006311T	20171214
■ DE112017006328 T5	20190912	DE201711006328T	20171214
■ EP3554440 A1	20191023	EP20170822995	20171214
■ EP3554441 A1	20191023	EP20170822996	20171214
■ GB201907877 A0	20190717	GB20190007877	20171214
■ GB201907879 A0	20190717	GB20190007879	20171214
■ GB2570616 A1	20190731	GB20190007879	20171214
■ GB2570850 A1	20190807	GB20190007877	20171214
■ US2018168893 AA	20180621	US20170840455	20171213
■ WO18112144 A1	20180621	WO2017US66311	20171214
■ WO18112146 A1	20180621	WO2017US66313	20171214

Priority:

US20160434547P 20161215 US20170840455 20171213 WO2017US66311 20171214
WO2017US66313 20171214

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE ; PROCTOR AND GAMBLE CO

Assignee(s): PROCTER AND GAMBLE CO ; PROCTOR AND GAMBLE CO CINCINNATI

Inventor(s): (std): WEISMAN PAUL THOMAS ; ASHRAF ARMAN ; WEISMAN PAUL ; WEISMAN PAUL T ; PAUL THOMAS WEISMAN ; ARMAN ASHRAF

Inventor(s): ASHRAF ARMAN CINCINNATI ; WEISMAN PAUL THOMAS CINCINNATI ; WEISMAN PAUL CINCINNATI

Agent(s): TER MEER STEINMEISTER AND PARTNER PATENTANWALTE MBB; P AND G PATENT GERMANY; KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

14) Family number: 66397703 (US2017203542A)

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Title: NONWOVEN COMPOSITE INCLUDING NATURAL FIBER WEB LAYER AND METHOD OF FORMING THE SAME

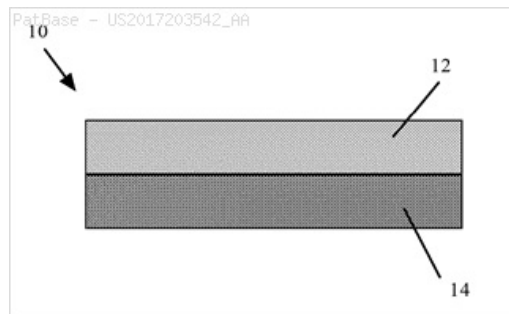
Abstract: A composite structure including at least one natural fiber web layer and at least one nonwoven web layer. In an exemplary embodiment, the natural fiber web layer is made of cotton fibers and the nonwoven web layer is a spunbond or spunmelt layer. The composite structure may be used to form components of an absorbent article, such as top sheets or back sheets of a diaper.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/511 A61F13/514 B32B5/02 B32B5/22 B32B5/26 B32B7/04 B32B7/08 D04H1/425 D04H1/4374 D04H1/46 D04H1/492 D04H1/498 D04H1/70 D04H13/00 D04H3/14 D04H3/16 D04H5/03 D06C27/00 (Advanced/Invention)

CPC: B32B2262/0261 B32B2262/06 B32B2307/554 B32B2037/1072 B32B7/04 B32B2555/00 B32B5/022 B32B5/06 B32B5/08 B32B5/26 B32B7/08 B32B29/02 B32B2250/02 B32B2250/20 B32B2262/0253 B32B2262/0269 B32B2262/0276 B32B2262/04 B32B2262/062 B32B2262/065 B32B2262/067 B32B2262/08 B32B2262/14 B32B2307/54 B32B2307/544 B32B2307/718 B32B2307/726 B32B2307/728 B32B2307/73 B32B2307/754 B32B2555/02 D04H1/425 D04H1/4374 D04H1/498 D04H3/14 D04H5/03 D04H1/492 D04H1/70

US: 1/1 428/222



Family:

Publication number	Publication date	Application number	Application date
■ CA3020895 AA	20180713	CA20173020895	20170117
■ CN109311263 A	20190205	CN201780014402	20170117
■ EP3402665 A1	20181121	EP20170739149	20170117

JP2019508603 T2	20190328	JP20180555848T	20170117
KR20180123012 A	20181114	KR20187023487	20170117
MX2018008708 A1	20190114	MX20180008708	20170117
US2017203542 AA	20170720	US20170407989	20170117
WO17124092 A1	20170720	WO2017US13766	20170117

Priority:

US20160279187P 20160115 US20170407989 20170117 WO2017US13766 20170117

Probable Assignee: NUTEK DISPOSABLES INC

Assignee(s): (std): FIRST QUALITY NONWOVENS INC ; NUTEK DISPOSABLES INC

Assignee(s): PARSONS JOHN C ; RAMARATNAM KARTHIK ; ZAJACZKOWSKI PETER

Inventor(s): (std): RAMARATNAM KARTHIK ; PARSONS JOHN C ; ZAJACZKOWSKI PETER ; PARSON JOHN C ; KARTHIK RAMARATNAM ; PETER ZAJACZKOWSKI ; JOHN C PARSON

Agent(s): GILBERTS LLP; SCHLICH GEORGE; ASAMURA PATENT OFFICE PC; GEORGE KENNETH P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

15) Family number: 51934711 (US2012238979A)

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Title: STRUCTURED FIBROUS WEB

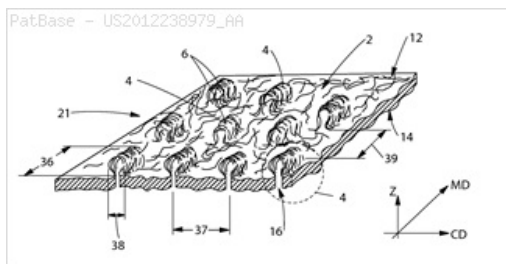
Abstract: A disposable absorbent article having a structured fibrous web, with thermally stable, hydrophilic fibers that are thermally bonded together using heat provides a base substrate that is thermally stable. The base substrate is textured via mechanical treatment to increase its thickness and optionally modified via over bonding to improve its mechanical and fluid handling properties. The structured fibrous web provides optimal fluid wicking and fluid acquisition capabilities and is directed toward fluid management applications. The structured fibrous web has a bio-based content of about 10 percent to about 100 percent using ASTM D6866-10, method B.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/537 A61F13/538 A61L15/26 A61L15/58 D04H11/00 D04H3/05 D04H3/16 (Advanced/Invention)

CPC: A61F13/538 A61L15/225 A61F13/5376 D04H3/011 D04H3/14 A61F13/53708 A61F13/53747

US: 604/366



Family:

Publication number	Publication date	Application number	Application date
BR112013023425 A2	20160920	BR20131123425	20120306
CA2830208 AA	20130913	CA20122830208	20120306
CN103429278 A	20131204	CN201280013246	20120306
CN103429278 B	20150610	CN201280013246	20120306
EP2686023 A1	20140122	EP20120710605	20120306
JP2014512895 T2	20140529	JP20130558043T	20120306
JP5781635 B2	20150924	JP20130558043T	20120306
US2012238979 AA	20120920	US20110047948	20110315
WO12125336 A1	20120920	WO2012US27846	20120306

Priority:

US20110047948 20110315 WO2012US27846 20120306

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BOND ERIC BRYAN ; COLLIAS DIMITRIS IOANNIS ; KELLETT PATTI JEAN ; PROCTER AND GAMBLE ; WEINBERGER ERIC PATTON ; WEISMAN PAUL THOMAS

Assignee(s): PROCTOR AND GAMBLE CO ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

Inventor(s): (std): WEINBERGER ERIC PATTON ; BOND ERIC BRYAN ; WEISMAN PAUL THOMAS ; COLLIAS DIMITRIS IOANNIS ; KELLETT PATTI JEAN ; KELLET PATTI JEAN

Inventor(s): PAUL THOMAS WEISMAN ; ERIC PATTON WEINBERGER ; ERIC BRYAN BOND ; PATTI JEAN KELLET ; DIMITRIS IOANNIS COLLIAS

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; KREMER VERONIQUE MARIE JOSEPHINE; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

16) Family number: 76184718 (US2019314218A)

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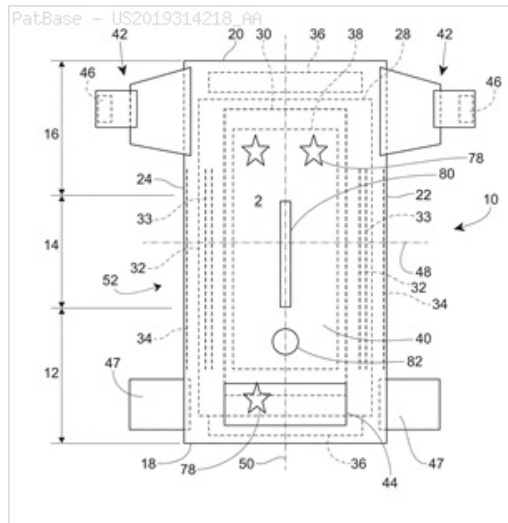
Title: WEBS FOR ABSORBENT ARTICLES AND METHODS OF MAKING THE SAME

Abstract: The present disclosure is directed, in part, to webs or topsheets for absorbent articles and methods of making the same. The webs and topsheets include bicomponent fibers having a first component and a second component, wherein the first component has a different hydrophilicity than the second component. The webs and topsheets include a continuous land area and discrete zones of modified surface energy. One of the first and second components forms an outer surface of the fibers in the continuous land area and the other of the components at least partially forms an outer surface of the fibers in the discrete zones of modified surface energy such that the discrete zones of modified surface energy have a different hydrophilicity than the continuous land area.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/511 A61F13/512 A61F13/513 A61F13/514 A61F13/53 D04H1/4291 D04H1/54 D04H1/541 (Advanced/Invention)

CPC: A61F13/51305 A61F13/51121 A61F13/51113 A61F13/512 A61F2013/8497 A61F13/15804 A61F13/514 A61F13/53 A61F2013/15463 A61F13/15764 A61F13/51104 A61F13/513 A61F2013/51338 A61F2013/51366 D04H1/4291 D04H1/5405 D04H1/541 A61F2013/15715 A61F2013/15886 A61F2013/422



Family:

Publication number	Publication date	Application number	Application date
US2019314218 AA	20191017	US20190372702	20190402
WO19204237 A1	20191024	WO2019US27576	20190416

Priority:

US20180658627P 20180417 US20190372702 20190402

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO

Inventor(s): (std): ARORA KELYN A ; HAMMONS JOHN L ; WHITELY NATHAN R ; AVILES MISAEL O ; ARORA KELYN ; HAMMONS JOHN ; WHITELY NATHAN ; AVILES MISAEL

Agent(s): KREBS JAY A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

17) Family number: 47807753 (US2010312211A)

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Title: STRUCTURED FIBROUS WEB

Abstract: The present disclosure is directed to disposable absorbent articles comprising a structured fibrous web, the structured fibrous web comprising thermally stable, hydrophilic fibers that are thermally bonded together using heat producing a base substrate that is thermally stable. The base substrate is textured via mechanical treatment to increase its thickness and optionally modified via over bonding to improve its mechanical and fluid handling properties. The structured fibrous web provides optimal fluid wicking and fluid acquisition capabilities and is directed toward fluid management applications.

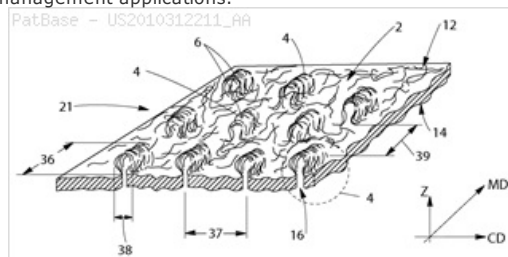
Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/53 A61F13/537 A61F13/538 D04H11/00 D04H11/08 (Advanced/Invention)

CPC: A61F13/537 A61F13/53713 A61F13/53708 A61F2013/53721 A61F13/5376 A61F13/538 D04H11/00

European: A61F13/537D A61F13/538 D04H11/00 K61F13/537B5

US: 1/1 604/370 604/378 604/378P 604/380 604/384



Family:

Publication number	Publication date	Application number	Application date
BRPI1012912 A2	20160405	BR2010PI12912	20100527
CA2763921 AA	20111129	CA20102763921	20100527
CN102458330 A	20120516	CN201080024279	20100527
CN102458330 B	20140319	CN201080024279	20100527

DE602010010548 D1	20131121	DE201060010548T	20100527
EP2437703 A1	20120411	EP20100721601	20100527
EP2437703 B1	20130925	EP20100721601	20100527
JP2012528682 T2	20121115	JP20120513990T	20100527
US2010312211 AA	20101209	US20090477438	20090603
US2014276515 AA	20140918	US20140270382	20140506
US8759606 BB	20140624	US20090477438	20090603
US9439816 BB	20160913	US20140270382	20140506
WO10141309 A1	20101209	WO2010US36346	20100527

Priority:

US20090477438 20090603 EP20100721601 20100527 WO2010US36346 20100527
US20140270382 20140506

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BOND ERIC BRYAN ; KRIPPNER CAROLA ; KRIPPNER CAROLA ELKE BEATRICE ; PROCTER AND GAMBLE ; STRUBE JOHN BRIAN

Assignee(s): THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO CINCINNATI

Inventor(s): (std): KRIPPNER CAROLA ELKE BEATRICE ; BOND ERIC BRYAN ; STRUBE JOHN BRIAN ; KRIPPNER CAROLA ; BEATRICE KRIPPNER CAROLA ELKE ; BRIAN STRUBE JOHN ; BRYAN BOND ERIC

Inventor(s): JOHN BRIAN STRUBE ; CAROLA ELKE BEATRICE KRIPPNER ; ERIC BRYAN BOND

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; HEIDE UTE; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY,GLOBAL LEGAL DEPARTMENT - IP; ANDREW A; JOHN P; CHRISTIAN M; THE PROCTER AND GAMBLE COMPANY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

18) Family number: 70636761 (US2018216269A)

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Title: SHAPED NONWOVEN

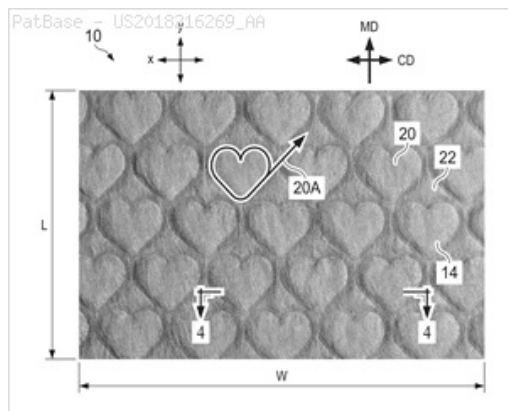
Abstract: A nonwoven fabric. The nonwoven fabric can include a first surface and a second surface and a visually discernible pattern of three-dimensional features on one of the first or second surface. Each of the three-dimensional features can define a microzone comprising a first region and a second region. The first and second regions can have a difference in values for an intensive property, and wherein in at least one of the microzones, the first region is hydrophobic and the second region is hydrophilic.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/51 A61F13/511 A61F13/513 A61F13/514 A61F13/537 A61F13/551 A61F13/84 B32B5/02 D04H13/00 D04H3/007 D04H3/018 D04H3/03 D04H3/14 D04H3/17 D04H3/16 (Advanced/Invention)

CPC: A61F13/51 A61F13/513 A61F13/514 D04H3/14 A61F13/51104 B32B5/022 A61F13/51394 A61F13/51401 A61F13/51456 A61F13/51476 A61F13/51496 A61F13/537 A61F2013/51088 D04H3/007 D04H3/018 D04H3/147 D04H3/16 A61F13/15203 A61F13/51108 A61F13/551 A61F13/84 A61F2013/15373 A61F2013/15406 A61F2013/15422 A61F2013/15959 A61F2013/8497 D01D5/253 D01F8/06 D04H3/03 D04H13/00 D10B2401/021 D10B2401/022 D10B2403/011 D10B2403/033 D10B2509/026 A61F13/15707 A61F2013/15715

US: 1/1 206/438 604/378



Family:

Publication number	Publication date	Application number	Application date
CN110191982 A	20190830	CN201880007483	20180125
CN110198693 A	20190903	CN201880007752	20180125
GB201909891 A0	20190821	GB20190009891	20180125
GB201909896 A0	20190821	GB20190009896	20180125
GB2571693 A1	20190904	GB20190009891	20180125
GB2571897 A1	20190911	GB20190009896	20180125
IN201917024914 A	20190823	IN201917024914	20190624
US2018216269 AA	20180802	US20180879474	20180125
US2018216271 AA	20180802	US20180879480	20180125
US2019298587 AA	20191003	US20190446156	20190619
WO18144293 A1	20180809	WO2018US15120	20180125
WO18144295 A1	20180809	WO2018US15122	20180125

Priority:

US20170452518P 20170131 US20180879474 20180125 US20180879480 20180125
WO2018US15120 20180125 WO2018US15122 20180125 US20180687043P 20180619
US20190446156 20190619

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE
Assignee(s): PROCTER AND GAMBLE CO
Inventor(s): (std): ASHRAF ARMAN ; WEISMAN PAUL THOMAS ; GRENIER ADRIEN ; JAMES MARTIN IAN ; SINIGAGLIA STEFANO MICHELE ; SINIGAGLIA STEFANO ; WEISMAN PAUL ; JAMES MARTIN ; ARMAN ASHRAF ; PAUL THOMAS WEISMAN ; ADRIEN GRENIER ; MARTIN IAN JAMES ; STEFANO SINIGAGLIA ; STEFANO MICHELE SINIGAGLIA ; ARORA KELYN ANNE ; AVILES MISAEL OMAR ; HAMMONS JOHN LEE
Agent(s): KREBS JAY A
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW