

Search query (2): [SP]: signal layer for an absorbent article a signal layer for an absorbent article provided to absorb menstrual fluid includes a pattern of capillary channels allowing capillary action such that discharged menstrual fluid that comes across one of the openings in the capillary channels enters into the capillary channels and is retained therein due to the capillary force. the color of the retained menstrual discharge dyes or colors the pattern for signaling purpose, and the pattern is directly or indirectly visible to an observer.

Results: 28

1) Family number: 31807054 (US6171291B)

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Title: GENERALLY THIN, FLEXIBLE, SANITARY NAPKIN WITH CENTRAL ABSORBENT HUMP

Abstract: A generally thin, flexible sanitary napkin capable of handling medium to high menstrual flows which has a central absorbent hump is disclosed. The hump comprises a longitudinally-oriented elongated medial absorbent hump that projects from the body surface of the sanitary napkin. The sanitary napkin preferably has surrounding absorbent regions outboard of the hump with a caliper of less than or equal to about 5 millimeters. The sanitary napkin preferably has a caliper at the point of maximum amplitude of the hump that is greater than twice the caliper of the surrounding regions. The hump preferably has a caliper of at least about 0.15 inch (about 3.5-4 millimeters). The longitudinal central region of the sanitary napkin preferably has a flexure-resistance that is greater than that of the surrounding regions.

Classifications:

International (ipc 8-9): A41F1/00 A61F13/00 A61F13/15 A61F13/42 A61F13/472 A61F13/49 A61F13/514 A61F13/53 A61F13/539 A61F13/56 A61F13/62 A61F13/64 A61F13/72 A61F5/44 D01D5/253 (Advanced/Invention); A61F13/00 A61F5/44 (Advanced/Non-invention); A61F13/15 A61F13/56 D01D5/00 (Core/Invention)

International (ipc 1-7): A61F13/15 A61F13/472

CPC: A61F13/531 A61F13/47218 A61F13/47236 A61F13/4753 A61F13/4758 A61F13/49009 A61F13/494 A61F13/49413 A61F13/511 A61F13/51405 A61F13/51464 A61F13/51466 A61F13/51484 A61F13/532 A61F13/533 A61F13/539 A61F13/64 A61F13/72 A61F2013/15373 A61F2013/15406 A61F2013/15414 A61F2013/15447 A61F2013/4568 A61F2013/4575 A61F2013/49033 A61F2013/49042 A61F2013/49069 A61F2013/51061 A61F2013/51139 A61F2013/51429 A61F2013/51488 A61F2013/530007 A61F2013/530051 A61F2013/530058 A61F2013/530094 A61F2013/530102 A61F2013/530109 A61F2013/530145 A61F2013/530153 A61F2013/53016 A61F2013/530167 A61F2013/530255 A61F2013/530299 A61F2013/53035 A61F2013/530357 A61F2013/530372 A61F2013/530496 A61F2013/530547 A61F2013/530554 A61F2013/530569 A61F2013/530583 A61F2013/530613 A61F2013/530802 A61F2013/530934 A61F2013/53721 A61F2013/53739 A61F2013/53795 A61F2013/5386 A61F2013/53916 A61F2013/53925 A61F2013/5395 A61F2013/53966 A61F2013/53975 A61F2013/53983 A61F2013/583 A61F2013/8476 D01D5/253 A61F13/15203 A61F13/15211 A61F13/15707 A61F13/47209 A61F13/47227 A61F13/47263 A61F13/47272 A61F13/474 A61F13/476 A61F13/49 A61F13/491 A61F13/51 A61F13/514 A61F13/51478 A61F13/5148 A61F13/515 A61F13/534 A61F13/535 A61F13/537 A61F13/5605 A61F13/5611 A61F13/58 A61F13/622 A61F2013/15292 A61F2013/153 A61F2013/15308 A61F2013/15325 A61F2013/15357 A61F2013/15365 A61F2013/15382 A61F2013/1539 A61F2013/15926 A61F2013/4512 A61F2013/4543 A61F2013/4562 A61F2013/4708 A61F2013/49023 A61F2013/49031 A61F2013/49044 A61F2013/49046 A61F2013/49057 A61F2013/49063 A61F2013/49065 A61F2013/49066 A61F2013/49074 A61F2013/4908 A61F2013/5055 A61F2013/51007 A61F2013/51009 A61F2013/51011 A61F2013/51023 A61F2013/5103 A61F2013/51033 A61F2013/51066 A61F2013/51069 A61F2013/51092 A61F2013/51409 A61F2013/51411 A61F2013/51433 A61F2013/51441 A61F2013/5147 A61F2013/51472 A61F2013/530131 A61F2013/530481 A61F2013/5688 A61F2013/582 A61F2013/586 A61F13/512 A61F13/5126 A61F2013/51147 A61F2013/51322

European: A61F13/15B1B A61F13/15B1B3 A61F13/15B3B A61F13/15J A61F13/15M6 A61F13/472B A61F13/472B1 A61F13/472C A61F13/472D A61F13/472E A61F13/474 A61F13/475A1B A61F13/475B A61F13/476 A61F13/511 A61F13/512 A61F13/514 A61F13/514A2 A61F13/514B2 A61F13/514B2A A61F13/514C3 A61F13/515 A61F13/531 A61F13/532 A61F13/534 A61F13/535 A61F13/537 A61F13/539 A61F13/56B A61F13/56B2 A61F13/72 D01D5/253 K61F13/15F2 K61F13/15F2B K61F13/15F2C K61F13/15G K61F13/15J2 K61F13/15J8A K61F13/15J8A1 K61F13/15J8A2 K61F13/15J8A4 K61F13/15J8C K61F13/15J8D K61F13/15J8D1 K61F13/15J8D1A K61F13/15J8D2 K61F13/15J8E K61F13/15J8G K61F13/15J8L K61F13/15M11G K61F13/15M2F K61F13/45C K61F13/45C3 K61F13/45C3C K61F13/45C4 K61F13/45C4A K61F13/472A K61F13/476 K61F13/47D K61F13/49 K61F13/491 K61F13/494 K61F13/494A1 K61F13/49D2 K61F13/49D2H1A K61F13/49D2H3 K61F13/49D2H4 K61F13/49D3 K61F13/49D3A K61F13/49D3A1 K61F13/49D3B3 K61F13/49E3 K61F13/49E3A K61F13/49E3B K61F13/49H1 K61F13/49H4 K61F13/49H7A K61F13/505A K61F13/51 K61F13/511C K61F13/511D1 K61F13/511D4 K61F13/511D6 K61F13/511E1 K61F13/511E1A K61F13/511F2 K61F13/512C K61F13/513D K61F13/513E K61F13/513G K61F13/513G3 K61F13/513G5 K61F13/513H K61F13/514A4 K61F13/514A4A K61F13/514A4C K61F13/514A4D K61F13/514A6 K61F13/514B4 K61F13/514B5 K61F13/514C2 K61F13/514C2A K61F13/514C4A K61F13/51M2 K61F13/51M3 K61F13/51M3A K61F13/51M6 K61F13/51M6C K61F13/51M6D K61F13/51N1 K61F13/51N2 K61F13/51N2A K61F13/51S K61F13/533 K61F13/537B5 K61F13/537B5D K61F13/537H K61F13/538B K61F13/539A1 K61F13/539A2 K61F13/539C K61F13/539E K61F13/539G K61F13/539H K61F13/53L K61F13/53L4B K61F13/53L5 K61F13/53L5B K61F13/53L5B1 K61F13/53L5B2 K61F13/53M K61F13/53M1A K61F13/53M1B K61F13/53M2 K61F13/53M2A K61F13/53M4D K61F13/53M4E K61F13/53M7A K61F13/53M7B K61F13/53M7D K61F13/53Q K61F13/53Q1A K61F13/53Q2E K61F13/53Q2E1 K61F13/53Q3 K61F13/53Q4 K61F13/53Q4B K61F13/53R K61F13/53S5A K61F13/56G1 K61F13/58 K61F13/58C K61F13/58D K61F13/58E K61F13/62 K61F13/64 K61F13/84D K61F15/56

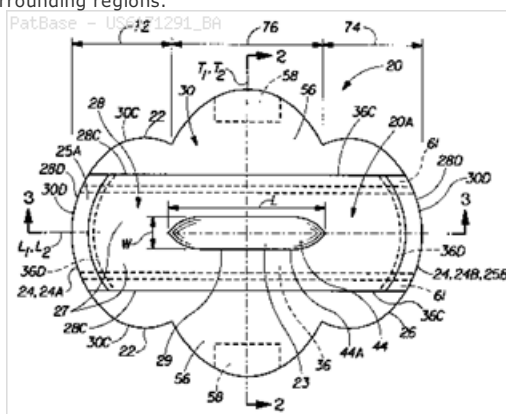
US: 604/378 604/385.1 604/385.23 604/387

Family:

Publication number	Publication date	Application number	Application date
AU199856362 A1	19980611	AU19980056362	19980227
AU200071509 A5	20010215	AU20000071509	20001110
US6171291 BA	20010109	US19970929028	19970915

Priority:

US19900605583	19901029	US19910734392	19910723	US19910734404	19910723
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AU19930049929	19930723	US19930161215	19931202	US19930166660	19931213
US19930165757	19931213	US19940204794	19940302	US19940238192	19940504



US19940268869 19940630 US19940288656 19940810 US19940315315 19940929
 US19950530456 19950919 US19950563879 19951121 US19960681641 19960729
 US19970929028 19970915 AU20000071509 20001110

Probable Assignee: PROCTER AND GAMBLE CO

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

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

Inventor(s): (std): OSBORN III THOMAS WARD ; OSBORN THOMAS WARD III ; SCHMITZ DEBORAH CATHERINE

Inventor(s): THOMAS WARD OSBORN III

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD

2) Family number: 8348059 (EP0532937A1)

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Title: TOPSHEET FOR AN ABSORBANT SANITARY ARTICLE AND METHOD OF PRODUCING THIS TOPSHEET.

Abstract: A top sheet provided with openings (6) and associated liquid-carrying capillary tubes (8) is designed to have a textile-like appearance and oblique openings (9) formed on the lower ends of the respective liquid-carrying capillary tubes. The upper openings (6) of this top sheet for an absorbent sanitary article have a plane configuration in each case formed by a combination of straight and curved lines, and in each case two adjacent, upper openings are separated from one another by a fine rib (10). The lower openings (9) have circumferential edges (9A) extending in an irregular wavy shape. A mould for the top sheet is provided with a plurality of openings which each represent an asymmetrical figure or a linearly symmetrical figure having a single axis of symmetry.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 B26F1/31 B29C51/10 (Advanced/Invention); B29C51/10 (Advanced/Non-invention); A61F13/00 A61F13/15 B26F1/00 B29C51/10 B29C59/06 (Core/Invention)

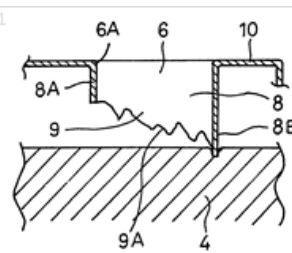
International (IPC 1-7): A61F13/00 A61F13/15 A61F13/46 A61F13/54 B26F1/26 B29C 59/06 B29C51/10 B29C59/06

CPC: A61F13/5121 B26F1/31 A61F13/15731 A61F2013/15926 A61F2013/5127 A61F2013/51338 A61F2013/51355 A61F2013/51372

European: A61F13/15M6C A61F13/512 B26F1/31 K61F13/15M11G K61F13/512E K61F13/513E K61F13/513G K61F13/513G5

PatBase - EP0532937_A1

FIG.2B



Family:

Publication number	Publication date	Application number	Application date
AU199220953 A1	19930225	AU19920020953	19920812
AU666656 B2	19960222	AU19920020953	19920812
CA2075693 AA	19930222	CA19922075693	19920810
CA2075693 C	19970923	CA19922075693	19920810
DE59207456 D1	19961205	DE19925007456	19920821
EP0532937 A1	19930324	EP19920114335	19920821
EP0532937 B1	19961030	EP19920114335	19920821
GB2258840 A1	19930224	GB19920017530	19920818
GB2258840 B2	19950426	GB19920017530	19920818
GB9217530 A0	19920930	GB19920017530	19920818
JP2928665 B2	19990803	JP19910234124	19910821
JP5049659 A2	19930302	JP19910234124	19910821
KR100221119 B1	19990915	KR19920014966	19920820
KR19930003888 A	19930322	KR19920014966	19920820
PH30965 A	19971223	PH19920044811	19920813
TH25971 B	20090514	TH19921001159	19920820
TH56349 A	20030430	TH19921001159	19920820

Priority:

JP19910234124 19910821 CA19922075693 19920810

Probable Assignee: UNI CHARM CORP

Assignee(s): (std): UNI CHARM CORP

Assignee(s): UNI CHARM CORP KAWANOE EHIME JP ; YAMAMOTO MASAMITSU ; YUNI CHAAMU KK ; MURAKAMI MASAKI ; UNI CHARM CO LTD

Inventor(s): (std): MASAKI MURAKAMI ; MASAMITSU YAMAMOTO ; MURAKAMI MASAKI ; YAMAMOTO MASAMITSU

Inventor(s): YAMAMOTO MASAMITSU KAWANOE SHI EHIME KEN JP ; MURAKAMI MASAKI KAWANOE SHI EHIME KEN JP

Agent(s): PHILLIPS ORMONDE FITZPATRICK; OGILVY RENAULT LLP SENCRL SRL

Designated states: DE FR IT SE

3) Family number: 28543115 (US2003009295A)

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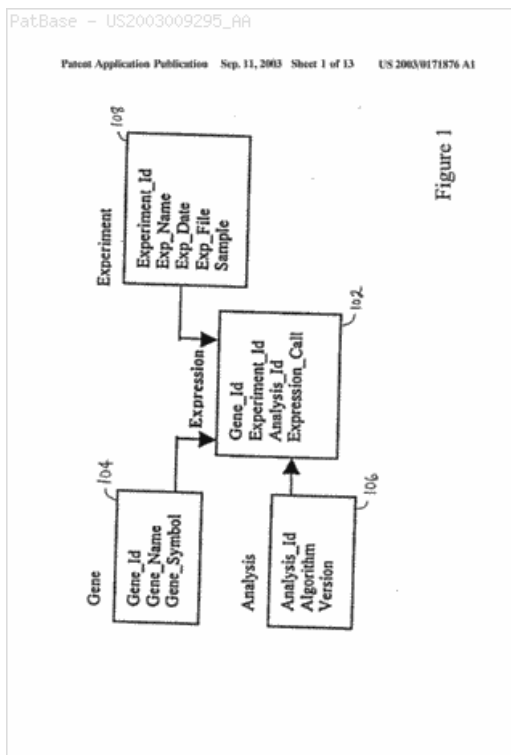
Title: SYSTEM AND METHOD FOR RETRIEVING AND USING GENE EXPRESSION DATA FROM MULTIPLE SOURCES

Abstract: A method of analyzing gene expression, gene annotation, and sample information in a relational format supporting efficient exploration and analysis, the method comprising: providing a data warehouse which comprises a gene expression database for storing quantitative gene expression measurements for tissues and cell lines screened using various assays; a clinical database for storing information on bio-samples and donors; and a fragment index for biological properties for DNA fragments; providing a connector which permits loading of more than one source of gene expression, gene annotation, and sample information, receiving a query regarding gene expression of one or more DNA fragments; determining the level of gene expression of the one or more DNA fragments; correlating the level of gene expression with the clinical database and the fragment index; and displaying the results of said correlation is disclosed.

Classifications:

International (IPC 8-9): A61F13/15 A61L15/42 A61L15/56 C12Q1/68

G01N33/48 G01N33/50 G06F17/30 G06F19/00 G06F19/28 G06F7/00
G06F7/06 G06G7/48 G06G7/58 (Advanced/Invention);
B65D81/26 G06F17/00 G06F19/18 G06F19/20
G06F19/22 (Advanced/Non-invention);
A61F13/15 A61L15/16 G06F17/30 G06F19/00 G06F7/00
G06F7/06 (Core/Invention);
B65D81/26 G06F17/00 (Core/Non-invention)
International (ipc 1-7): A61F13/15 A61F13/20 A61L2/00 B05D1/32
B05D1/36 B05D3/00 B05D5/00 C12Q1/68 G01N33/48 G01N33/50
G06F17/30 G06F19/00 G06G7/48 G06G7/58
CPC: Y10S707/99942 Y10S707/99943 Y10S707/99933
Y10S707/99945 Y10S707/99948 A61F13/505 A61F13/512
A61F13/51305 A61F13/51394 A61F2013/15243 A61L15/42
A61L15/56 B65D81/264 G16B50/00 G16B20/00 G16B25/00
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European: A61F13/505 A61F13/511 A61F13/513B A61L15/42
A61L15/56 G06F17/30A2 G06F19/28 K61F13/15J3 L65D81/26E
S06F19/18 S06F19/20 S06F19/22 S06F19/24
US: 1/1 427/2.31 427/2.310S 427/259 427/259S 435/6 435/6.13
435/6.130P 435/6.130S 435/6P 435/6S 604/367 604/367P 604/382
604/382S 604/385.01 604/385.010S 702/19 702/2 702/20 702/20P
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Family:

Publication number	Publication date	Application number	Application date
AU2002255735 AA	20020924	AU20020255735	20020314
AU2002257308 AA	20021203	AU20020257308	20020523
AU2002350131 AA	20030526	AU20020350131	20021104
US2003009295 AA	20030109	US20020096645	20020314
US2003100999 AA	20030529	US20010862424	20010523
US2003135174 AA	20030717	US20020211989	20020802
US2003171876 AA	20030911	US20020090144	20020305
US2004234995 AA	20041125	US20040495100	20040507
US7020561 BA	20060328	US20020212445	20020805
US7428554 BA	20080923	US20040850232	20040520
WO02073504 A1	20020919	WO2002US07727	20020314
WO02095659 A2	20021128	WO2002US16066	20020523
WO02095659 A3	20030410	WO2002US16066	20020523
WO03042780 A2	20030522	WO2002US35454	20021104
WO03042780 A3	20030828	WO2002US35454	20021104

Priority:

US20000206571P 20000523	US20010275465P 20010305	US20010325776P 20010305
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US20020412156P 20020919	WO2002US35454 20021104	US20030471826P 20030520
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Probable Assignee: GENE LOGIC INC

Assignee(s): (std): GENE LOGIC INC ; HUANG DA WEI ; ELASHOFF MICHAEL ; MARKOWITZ VICTOR M ; MENEZES SUPRIYA ; MERTZ LARRY ; NADIMPALLI RAMGOPAL ; MARKOWITZ VICTOR ; TOPALOGLOU THODOROS ; OCIMUM BIOSOLUTIONS INC ; DIGGANS JAMES C ; DOLGINOW DOUG ; CHEN AMY

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Inventor(s): (std): ATHANASOPOULOS ALEXANDROS ; BENECKE HERMAN P ; CAFMEYER JEFFREY ; CAMPBELL JOHN ; CHEN AMY ; CHEN I MIN A ; CHEN I MIN AMY ; COLLIN FRANCOIS ; DIGGANS JAMES C ; DOLGINOW DOUG ; DOLGINOW DOUG ; DROTLEFF ELIZABETH ; ELASHOFF MICHAEL ; GEGENHEIMER C MICHAEL ; HUANG DA WEI ; IVANCIC WILLIAM A ; MARKOWITZ VICTOR ; MARKOWITZ VICTOR M ; MCLOUGHLIN KEVIN ; MENEZES SUPRIYA ; MERTZ LARRY ; MUSICK ELEANOR M ; NADIMPALLI RAMGOPAL ; NORTHROP VIRGINIA M ; SCHELHORN JEAN E ; SONNETT JAMES M ; SPANGLER J MICHAEL ; KOSKY ANTHONY ; KRYLOV DMITRY ; TIPPLE DAVID ; TOPALOGLOU THODOROS ; COBERLY CARTER

Inventor(s): COBERLY CARTER ; VICTOR M MARKOWITZ ; LARRY MERTZ ; SUPRIYA MENEZES ; RAMGOPAL NADIMPALLI ; MICHAEL ELASHOFF ; JAMES C DIGGANS ; DOUG DOLGINOW ; DA WEI HUANG

Agent(s): PROCOPIO CORY HARGREAVES AND SAVITCH LLP; ELEANOR M

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

Title: ABSORBING ARTICLE

Abstract: PROBLEM TO BE SOLVED: To provide an absorbing article in which the determination of the changing time of the absorbing article can be easily done and an uncomfortable feeling at the time of confirming the absorbing condition can be reduced. SOLUTION: The absorbing article has a colored layer. The absorbing article is constituted such that the visibility of the color in the absorbing portion of the body fluid looked from the skin abutting face side when the body fluid is absorbed is enhanced in comparison with the time before the body fluid is absorbed. It is preferable that the difference between the brightness LB before and after the liquid absorbing of the whole layer of skin side from the colored layer is 7 to 30.

Classifications:

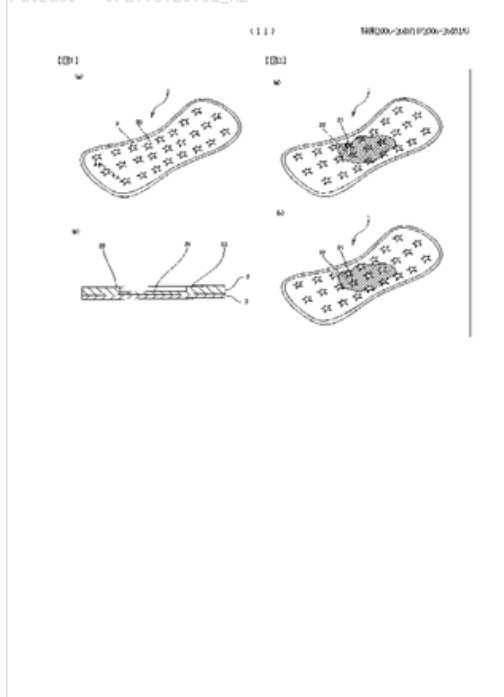
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A61F13/472 A61F13/49 A61F13/511 A61F13/539

A61F5/44 (Advanced/Invention);

A61F13/00 A61F13/15 A61F13/42 A61F5/44 (Core/Invention)

PatBase - JP2006026081_A2



Family:

Publication number	Publication date	Application number	Application date
JP2006026081 A2	20060202	JP20040208860	20040715
JP4322180 B2	20090826	JP20040208860	20040715

Priority:

JP20040208860 20040715

Probable Assignee: KAO CORP

Assignee(s): (std): KAO CORP

Inventor(s): (std): ITOI NAMIE ; SUMIYA HIDEO ; TANAKA MASAHIITO

Agent(s): MATSUSHIMA YOSHIYUKI; HATORI OSAMU

Title: Soilage-indicating diaper

Abstract: A diaper which is self-indicating to an observer when it is soiled by its wearer. The indicator layer is protruded or ruptured through the absorptive layer to provide contact with excreta such as fecal matter and conduction of the moisture of the excreta through to the visible portion of the indicator layer.

Classifications:

International (IPC 8-9): A61F13/42 (Advanced/Invention);

A61F13/42 (Core/Invention)

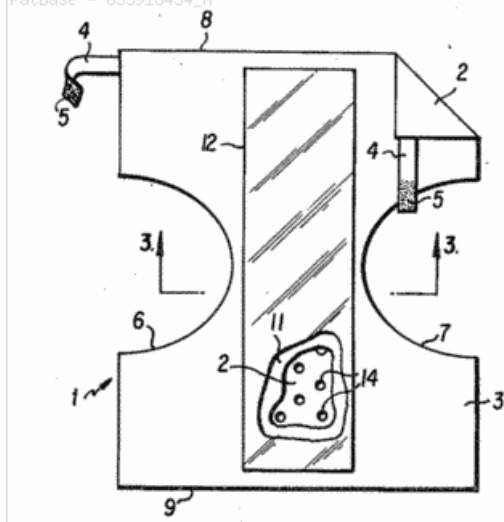
International (IPC 1-7): A61F13/16

CPC: A61F13/42

European: A61F13/42

US: 128/287 604/361

PatBase - US3918454_A



Family:

Publication number	Publication date	Application number	Application date
US3918454 A	19751111	US19730337767	19730302

Priority:

US19730337767 19730302

Probable Assignee: DREYER FREDERIC C
Assignee(s): (std): DREYER FREDERIC C ; KORODI MIKLOS B
Inventor(s): (std): DREYER FREDERIC C ; KORODI MIKLOS B

6) Family number: 31013149 (JP2004236826A)

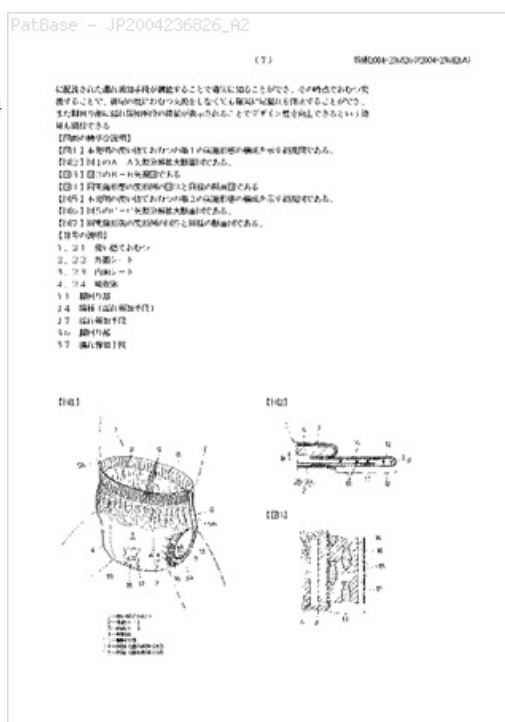
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Title: DISPOSABLE DIAPER

Abstract: PROBLEM TO BE SOLVED: To provide a disposable diaper, surely informing leakage when the capacity of an absorber becomes close to the limit. SOLUTION: This disposable diaper is formed by interposing the absorber 4 between a liquid permeable inner surface sheet 3 and a liquid impermeable outer surface sheet 2, and provided with a leakage informing means allowing the absorber 4 discolored due to contact with water when it absorbs water to be seen from the outside of the outer surface sheet 2. A pattern 14 as the leakage informing means is disposed at the peripheral area 11 of a leg region.

Classifications:

International (ipc 8-9): A61F13/42 A61F13/49 A61F13/514 A61F5/44 (Advanced/Invention);
A61F13/15 A61F13/42 A61F5/44 (Core/Invention)
International (ipc 1-7): A61F13/42 A61F13/49 A61F13/514 A61F5/44



Family:

Publication number	Publication date	Application number	Application date
JP2004236826 A2	20040826	JP20030028738	20030205
JP3947715 B2	20070725	JP20030028738	20030205

Priority:

JP20030028738 20030205

Probable Assignee: DAIO SEISHI KK
Assignee(s): (std): DAIO SEISHI KK
Assignee(s): DAIO PAPER CORP
Inventor(s): (std): KAO HIROYUKI ; KONDO KOJI

7) Family number: 29677162 (US2003201582A)

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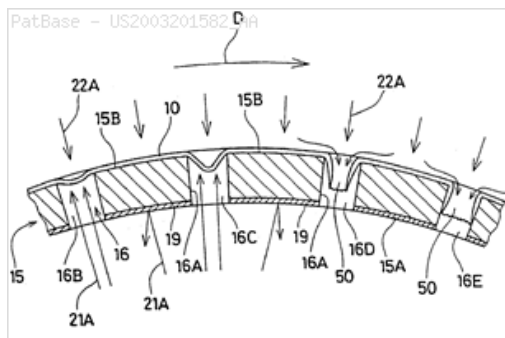
Title: PROCESS OF FORMING A PERFORATED WEB

Abstract: A process of forming a soft and resilient web exhibiting a substantially continuous pattern of debossments or apertures is disclosed. The process comprises locally heating process to melt predetermined points of the web. The process includes: continuously bringing the web in contact relation with a forming structure exhibiting a substantially continuous pattern of apertures corresponding to the debossments or apertures of the web; locally heating the region of the web at the predetermined points along the surface of the web by an energy source to give the web temperature above its melting temperature; applying a substantially uniform fluid pressure differential to the locally heated web at least in those areas to be debossed or apertured, whereby the web is debossed or apertured at the predetermined points and generally maintains its surface structure at least in those areas in which the web is not debossed or apertured; and removing the debossed or apertured web from the forming structure. A soft and resilient web formed by the process is also disclosed.

Classifications:

International (ipc 8-9): A61F13/15 A61F13/49 A61F13/511 B26F1/26 B29C51/10 B29C51/22 B29C51/42 B29C59/04 B29C59/06 B29D99/00 B32B3/12 B32B5/02 D04H1/54 (Advanced/Invention);

B29C59/04 B32B37/00 D04H1/54 (Advanced/Non-invention);
A61F13/15 B26F1/00 B29C51/10 B29C51/18 B29C59/02 B29C59/04
B29D99/00 B32B5/02 D04H1/54 (Core/Invention)
International (IPC 1-7): A61F13/15 A61F13/49 A61F13/511
A61F13/517 B26F1/26 B29C51/10 B29C51/22 B29C51/36
B29C59/04 B29C59/06 B29D31/00 B32B3/10 B32B3/24 B32B31/00
B32B5/02 D04H1/46 D04H1/54 D04H13/00
CPC: B32B3/20 B32B27/02 D04H1/54 D04H1/558 Y10S428/913
Y10T428/24273 Y10T428/24281 Y10T428/24942 A61F13/51104
A61F13/5122 A61F13/5123 A61F13/5126 A61F13/51311 B26F1/26
A61F13/15731 B29C2793/0045 A61F13/512
European: A61F13/15M6C A61F13/512 B26F1/26 B32B27/02
B32B3/20 D04H1/54 D04H1/558 L29C793/00E
US: 264/154 264/154S 264/284 264/293 264/504 264/504P 428/131
428/132 428/212 428/913 604/378 604/383



Family:

Publication number	Publication date	Application number	Application date
AT270535 E	20040715	AT19970951709T	19971215
AU199855278 A1	19990705	AU19980055278	19971215
BRPI9714910 A	20010918	BR1997PI14910	19971215
CA2310780 AA	20000519	CA19972310780	19971215
CA2310780 C	20061212	CA19972310780	19971215
CA2552621 AA	19990624	CA19972552621	19971215
CA2555829 AA	19990624	CA19972555829	19971215
CA2555829 C	20081125	CA19972555829	19971215
CN1224507 C	20051026	CN200410005951	19971215
CN1537520 A	20041020	CN200410005951	19971215
DE69729811 D1	20040812	DE19976029811	19971215
DE69729811 T2	20050804	DE19976029811T	19971215
EP1047364 A1	20001102	EP19970951709	19971215
EP1047364 B1	20040707	EP19970951709	19971215
JP2001504766 T2	20010410	JP19990505506T	19971215
JP3423725 B2	20030707	JP19990505506T	19971215
KR100382840 B1	20030509	KR20007006399	20000612
KR20010033042 A	20010425	KR20007006399	19971215
US2003201582 AA	20031030	US20030422029	20030423
US6599612 BA	20030729	US20000555933	20000606
US6780372 BB	20040824	US20030422029	20030423
WO9930658 A1	19990624	WO1997US23079	19971215
ZA9811399 A	19990830	ZA19980011399	19981211

Priority:

BR1997PI14910	19971215	CA19972310780	19971215	CA19972552621	19971215
CN200410005951	19971215	WO1997US23079	19971215	CA19972555829	19971215
US20000555933	20000606	KR20007006399	20000612	US20030422029	20030423

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): GRAY BRIAN FRANCIS ; PROCTER AND GAMBLE ; THE PROCTER AND GAMBLE COMPANY

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

Inventor(s): (std): BRIAN FRANCIS GRAY ; GRAY BRIAN F ; GRAY BRIAN FRANCIS ; GRAY FRANCIS

Inventor(s): BRIAN F GRAY

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

8) Family number: 44976223 (US2010121298A)

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Title: TRANSFER LAYER FOR ABSORBENT ARTICLE

Abstract: Three-dimensional formed films particularly useful as transfer layers in absorbent articles comprise a base plane having land areas defining a plurality of protuberances having sidewalls and a bottom wall, a plurality of the protuberances having an aperture in substantially at least one sidewall. In preferred embodiment, the film further comprises a plurality of capillaries, which can originate in the base plane or in a secondary plane spaced from the base plane. In preferred embodiments, the capillaries terminate in a common plane with the bottom surfaces of the protrusions.

Classifications:

International (IPC 8-9): A61D9/00 A61F13/15 A61F13/49 A61F13/53

A61F13/534 A61F13/537 B32B3/10 B32B3/24 (Advanced/Invention);

A61F13/15 B32B3/10 (Core/Invention);

A61F13/15 A61F13/537 (Core/Non-invention)

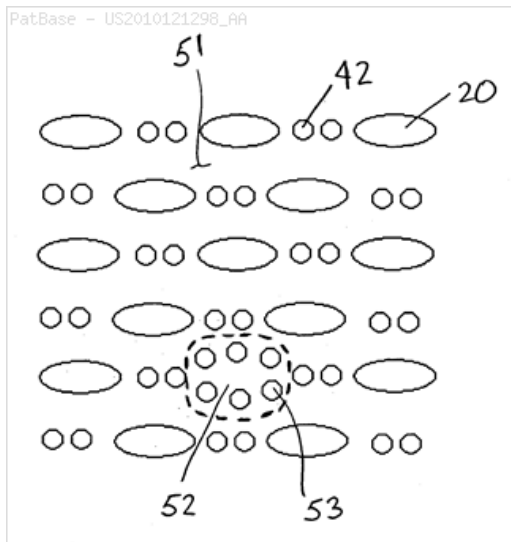
International (IPC 1-7): A61D9/00 A61F13/15

CPC: Y10T428/24273 Y10T428/24281 A61F13/53713

A61F2013/53721 A61F2013/53782

European: A61F13/537B2 K61F13/537B5 K61F13/537E4

US: 428/131 428/131S 428/132 604/378 604/378P 604/383

**Family:**

Publication number	Publication date	Application number	Application date
BRPI0904272 A2	20101221	BR2009PI04272	20091105
CN101732134 A	20100616	CN200910206760	20091109
CN101732134 B	20140709	CN200910206760	20091109
EP2184041 A2	20100512	EP20090175468	20091110
EP2184041 A3	20110824	EP20090175468	20091110
IN02168DE2009 A	20100611	IN2009DE02168	20091020
IN02249DE2009 A	20100618	IN2009DE02249	20091030
JP2010148861 A2	20100708	JP20090256395	20091109
JP5133325 B2	20130130	JP20090256395	20091109
KR101228680 B1	20130131	KR20090106526	20091105
KR20100052410 A	20100519	KR20090106526	20091105
TW201021772 A	20100616	TW20090137383	20091104
TWI396524 B	20130521	TW20090137383	20091104
US2010121298 AA	20100513	US20080291427	20081110
US2012237722 AA	20120920	US20120445033	20120412
US8344203 BB	20130101	US20120445033	20120412

Priority:

US20080291427 20081110 US20120445033 20120412

Probable Assignee: TREDEGAR FILM PRODUCTS CORP**Assignee(s):** (std): PEACOCK ANDREW J ; RIEKER GREGORY M ; SEYLER RICKEY J ; TREDEGAR FILM PROD CORP ; TREDEGAR FILM PRODUCTION CORP**Assignee(s):** TREDEGAR FILM PRODUCTS CORP ; TREDEGAR FILM PRODUCTS CORPORATIONUS**Inventor(s):** (std): SEYLER RICKEY J ; RIEKER GREGORY M ; PEACOCK ANDREW J**Inventor(s):** RICKEY J SEYLER ; GREGORY M RIEKER ; ANDREW J PEACOCK**Agent(s):** KETELAARS MAARTEN F J M; ARAI EIICHI; FUJITA TAKASHI; ISHII SADAJI; HIRAKI YUSUKE; TESSARI PATENT LAW GROUP PLLC; CONDO ROCCIA LLP**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**9) Family number: 11277249 (US5500270A)**

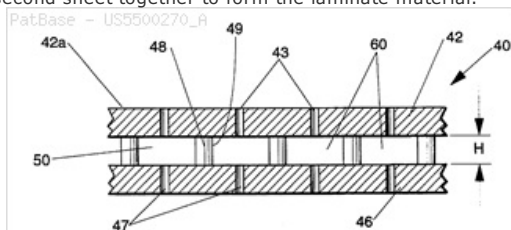
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Title: CAPILLARY LAMINATE MATERIAL**Abstract:** The present invention pertains to a laminate material. The laminate material includes a first sheet and a second sheet spaced apart from one another by spacers to define a capillary zone for the capillary movement of fluid between the first and second sheets. The spacers connect the first sheet and the second sheet together to form the laminate material.**Classifications:**

International (ipc 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/53 A61F13/534 A61F5/44 A61L15/16 B32B27/32 B32B37/00 B32B5/14 B32B5/18 B32B5/32 H01L21/304 (Advanced/Invention); A61F13/15 A61F5/44 (Advanced/Non-invention); A61F13/15 A61F5/44 A61L15/16 B32B27/32 B32B5/14 B32B5/18 B32B5/22 H01L21/02 (Core/Invention)

International (ipc 1-7): A61F13/15 A61F13/46 A61F5/44 A61L15/16 B32B27/32 B32B3/12 B32B5/14 B32B5/18 B32B5/32 B32B7/04

CPC: Y10T428/24149 Y10T428/24165 Y10T428/24174 Y10T428/24273 Y10T428/24281 Y10T428/24289 Y10T428/24322 Y10T428/24331 Y10T428/24562 Y10T428/2457 A61F13/512 A61F13/53 A61F13/537

European: A61F13/512 A61F13/53 A61F13/537**US:** 428/116 428/118 428/119 428/131 428/132 428/133 428/137 428/138 428/166 428/167 604/378 604/383 604/385.1**Family:**

Publication number	Publication date	Application number	Application date
AT193824 E	20000615	AT19950912629T	19950227
AU199519719 A1	19951003	AU19950019719	19950227
AU199889547 A1	19990107	AU19980089547	19981027

AU733089 B2	20010503	AU19980089547	19981027
BRPI9507065 A	19970930	BR1995PI07065	19950227
CA2184250 AA	19960827	CA19952184250	19950227
CA2184250 C	20001107	CA19952184250	19950227
CL1995000345 A1	19960209	CL19950000345	19950308
CL39311 B	19970812	CL19950000345	19950308
CN1096259 C	20021218	CN19951092105	19950227
CN1143902 A	19970226	CN19951092105	19950227
CO4370029 A1	19961007	CO19950010146	19950314
CZ9602666 A3	19970212	CZ19960002666	19950227
DE69517520 D1	20000720	DE19956017520	19950227
DE69517520 T2	20001019	DE19956017520T	19950227
EG20514 A	19990630	EG19950000190	19950313
EP0750483 A1	19970102	EP19950912629	19950227
EP0750483 B1	20000614	EP19950912629	19950227
ES2146753 T3	20000816	ES19950912629T	19950227
FI963634 A	19960913	FI19960003634	19960913
FI963634 A0	19960913	FI19960003634	19960913
HK1012938 A1	20010518	HK19980114369	19981221
HU78002 A2	19990528	HU19960002520	19950227
HU9602520 A0	19961128	HU19960002520	19950227
JP4070804 B2	20080402	JP19950524039T	19950227
JP9510374 T2	19971021	JP19950524039T	19950227
KR100377299 B1	20030611	KR19960705059	19950227
KR19970701526 A	19970412	KR19960705059	19960912
KR19977001526 A	19970412	KR19967005059	19950227
KR970701526 A	19970412	KR19960705059	19960912
MX9604112 A1	19980531	MX19960004112	19950227
NO963804 A	19961114	NO19960003804	19960911
NO963804 A0	19960911	NO19960003804	19960911
NO963804 L	19961114	NO19960003804	19960911
PE20096 A1	19960603	PE19950263801	19950310
PH31228 A	19980512	PH19950050058	19950302
TH18499 A	19960509	TH19951000515	19950313
TW278030 B	19960611	TW19950102489	19950315
US5500270 A	19960319	US19940212487	19940314
WO9524877 A1	19950921	WO1995US02446	19950227
ZA9502080 A	19951211	ZA19950002080	19950314

Priority:

US19940212487 19940314 AU19950019719 19950227 WO1995US02446 19950227
AU19980089547 19981027

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): PROCTER AND GAMBLE CO CINCINNATI ; PROCTER AND GAMBLE CO THE ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; THE PROCTOR AND GAMBLE COMPANY ; PROCTER AND GAMBLE COMPANY THE ; PROCTOR AND GAMBLE CO ; BURCHNALL JOHN BILLINGS ; LANGDON FREDERICK MICHAEL ; OUELLETTE WILLIAM ROBERT

Inventor(s): (std): LANGDON FREDERICK MICHAEL ; LANGDON FREDERIK M ; LANGDON MICHAEL ; OUELLETTE ROBERT ; OUELLETTE WILLIAM R ; OUELLETTE WILLIAM ROBERT ; OUELLETTE WILLIAM ROBERT ; QUELLETTE WILLIAM R ; BILLINGS BURCHNALL JOHN ; BURCHNAIL JOHN B ; BURCHNALL BILLINGS ; BURCHNALL JOHN B ; BURCHNALL JOHN BILINGS ; BURCHNALL JOHN BILLINGS ; LANGDON FRED M ; LANGDON FREDERIK MICHAEL

Inventor(s): JOHN B BURCHNALL ; FREDERIK MICHAEL LANGDON ; FREDERIK M LANGDON ; FRED M LANGDON ; ROBERT OUELLETTE WILLIAM ; WILLIAM ROBERT OUELLETTE ; WILLIAM ROBERT OUELLETTE ; JOHN BILLINGS BURCHNALL ; FREDERICK MICHAEL LANGDON ; WILLIAM R OUELLETTE

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; HARNECKER LTDA; CARLOS REINALDO OLARTE GARCIA

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KE KG KP KR KZ LI LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SI SK SN SZ TD TG TJ TT UA UG UZ VN

10) Family number: 20723274 (WO0035503A1)

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Title: AN ABSORBENT ARTICLE HAVING A MATERIAL LAMINATE THAT COMPRISES A LIQUID PERMEABLE TOP SHEET AND A LIQUID PERMEABLE LIQUID TRANSFER SHEET

Abstract: An absorbent article, such as a diaper, sanitary napkin, incontinence protector, wound dressing or the like, comprising an absorbent body (12) enclosed between a liquid-impermeable backing sheet (11) and a laminate (1) in the form of a liquid-permeable top sheet (2) and a liquid-permeable liquid transfer sheet (3), with the liquid transfer sheet (3) lying proximal to the absorbent body (12), in which article the liquid-permeable top sheet (2) and the liquid transfer sheet (3) are joined together and in which the absorbent body includes partially neutralised superabsorbent material.

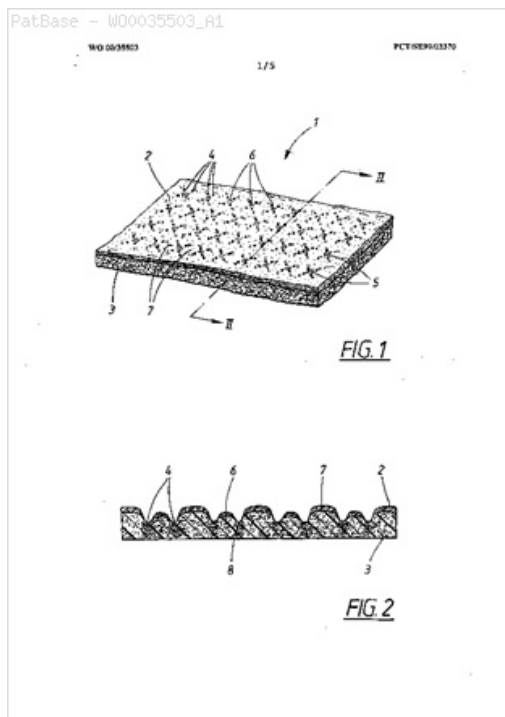
Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511
A61F13/515 A61F13/53 A61F13/539 A61F5/44 A61L15/46 A61L15/60
B32B5/18 (Advanced/Invention);

A61F13/47 A61F13/53 A61F5/44 B32B5/18 (Advanced/Non-invention);
A61F13/15 A61F5/44 A61L15/16 B32B5/18 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/49 A61F13/511
A61F13/53 A61F13/539 A61F5/44 A61L15/46 A61L15/60 B32B5/18

CPC: A61F13/5116 A61F2013/51182 A61L15/60 A61F13/512
A61F2013/5395 A61L15/46 A61L2300/412



Family:

Publication number	Publication date	Application number	Application date
AT261318 E	20040315	AT19990964875T	19991215
AU200030912 A1	20000703	AU20000030912	19991215
AU200030912 A5	20000703	AU20000030912	19991215
AU760134 B2	20030508	AU20000030912	19991215
BRPI9916290 A	20011016	BR1999PI16290	19991215
CA2352806 AA	20010529	CA19992352806	19991215
CA2352806 C	20080819	CA19992352806	19991215
CO5070671 A1	20010828	CO19990078516	19991215
DE69915512 D1	20040415	DE19996015512	19991215
DE69915512 D1	20040415	DE19996015512T	19991215
DE69915512 T2	20050303	DE19996015512T	19991215
DK1140228 T3	20040719	DK19990964875T	19991215
EP1140228 A1	20011010	EP19990964875	19991215
EP1140228 B1	20040310	EP19990964875	19991215
ES2217869 T3	20041101	ES19990964875T	19991215
JP2002532277 T2	20021002	JP20000587821T	19991215
JP4489300 B2	20100623	JP20000587821T	19991215
KR100625005 B1	20060920	KR20017007303	19991215
KR20010101177 A	20011114	KR20017007303	19991215
MY121797 A	20060228	MY19990005330	19991208
PL195669 B1	20071031	PL19990348823	19991215
PL348823 A1	20020617	PL19990348823	19991215
RU2001119446 A	20030420	RU20010119446	19991215
RU2232605 C2	20040720	RU20010119446	19991215
SE513375 C2	20000904	SE19980004360	19981216
SE9804360 A	20000617	SE19980004360D	19981216
SE9804360 A0	19981216	SE19980004360	19981216
SE9804360 L	20000617	SE19980004360	19981216
TW524682 B	20030321	TW19990122015	19991215
WO0035503 A1	20000622	WO1999SE02370	19991215

Priority:

SE19980004360 19981216 WO1999SE02370 19991215 KR20017007303 20010612

Probable Assignee: SCA HYGIENE PROD AB

Assignee(s): (std): HAGRUD ULRIKA ; SCA HYGIENE PROD AB ; SCA HYGIENE PRODUCTS AB

Assignee(s): SCA HYGIENE PRODUCTS AB GOETEBORG GOTENBURG

Inventor(s): (std): HAGRUD ; HAGRUD ULRIKA ; ULRIKA ; ULRIKA HAGRUD ; KHAGRUD UL RIKI

Inventor(s): KHAGRUD UL'RIKA

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; FETHERSTONHAUGH AND CO; ERNESTO CAVELIER

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

Title: ABSORBENT ARTICLE HAVING DRYNESS INDICATING GRAPHIC

Abstract: An absorbent article including features facilitating toilet training of a wearer is provided. The article includes at least a first appearing graphic that changes from an initial, less visible state to a subsequent, more visible state in the absence of wetness, thereby to provide positive encouragement to a child during toilet training. The appearing graphic becomes less visible if subjected to liquid. A wetness sensation member may also be provided to give tactile, negative sensation to the child, thereby giving feedback received by at least two different senses. Additionally or alternatively, a second appearing graphic, different from the first appearing graphic, may be provided to increase a child's interest in the toilet training process. The first and second appearing graphics may become visible at different times, thereby providing a sequential or spaced reveal of the image.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/20 A61F13/42 A61F13/49 A61F13/514 A61F13/53 (Advanced/Invention);

A61F13/84 (Advanced/Non-invention);

A61F13/15 A61F13/42 (Core/Invention)

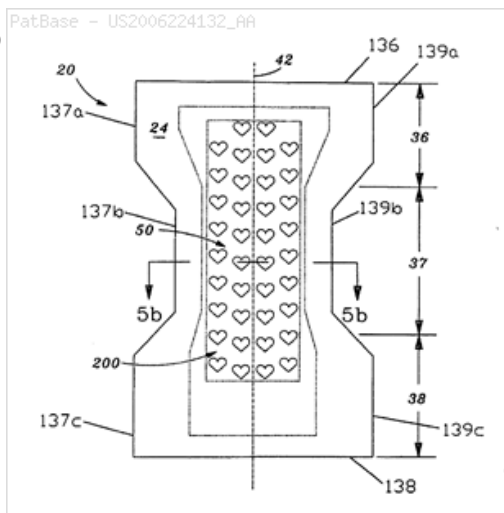
International (IPC 1-7): A61F13/42

CPC: A61F13/42 A61F2013/429 A61F2013/425 A61F2013/8497

A61F2013/422

European: A61F13/42 A61F13/56C K61F13/42E K61F13/84G

US: 604/358 604/361 604/361P

**Family:**

Publication number	Publication date	Application number	Application date
AR056651 AA	20071017	AR2006P101336	20060404
CA2603207 AA	20070925	CA20062603207	20060404
CA2603207 C	20130611	CA20062603207	20060404
CA2812736 AA	20061012	CA20062812736	20060404
CL2006000754 A1	20060825	CL20060000754	20060404
CN101203199 A	20080618	CN200680011335	20060404
CN101203199 B	20110817	CN200680011335	20060404
EP1865903 A1	20071219	EP20060749283	20060404
JP2008534227 T2	20080828	JP20080505473T	20060404
MX2007012107 A1	20071116	MX20070012107	20060404
US2006224132 AA	20061005	US20050098362	20050404
US2013150816 AA	20130613	US20130763885	20130211
US2014243769 AA	20140828	US20140270583	20140506
US2017035623 AA	20170209	US20160331959	20161024
US8378166 BB	20130219	US20050098362	20050404
US8742199 BB	20140603	US20130763885	20130211
US9504612 BB	20161129	US20140270583	20140506
US10219956 BB	20190305	US20160331959	20161024
WO06108002 A1	20061012	WO2006US12569	20060404

Priority:

US20050098362	20050404	CA20062603207	20060404	CA20062812736	20060404
WO2006US12569	20060404	US20130763885	20130211	CA20132603207	20130430
US20140270583	20140506	US20160331959	20161024		

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): ROE DONALD C ; KLOFTA THOMAS J ; FEIST BARRY R ; PROCTER AND GAMBLE ; ROE DONALD CARROLL ; KLOFTA THOMAS JAMES ; FEIST BARRY ROBERT ; DELHOUME MATHILDE CLARISSE ; AMES OOTEN KATHLEEN Q ; AMES OOTEN KATHLEEN QUINLAN ; CIESKO MARK J ; CIESKO MARK JOHN ; DELHOUME MATHILDE C

Assignee(s): PROCTER AND GAMBLE CO ; FIEST BARRY ROBERT ; THE PROCTER AND GAMBLE COMPANY

Inventor(s): (std): AMES OOTEN KATHLEEN Q ; AMES OOTEN KATHLEEN QUINLAN ; CARROLL ROE DONALD ; CIESKO MARK J ; CIESKO MARK JOHN ; CLARISSE DELHOUME MATHILDE ; DELHOUME MATHILDE C ; DELHOUME MATHILDE CLARISSE ; FEIST BARRY R ; FEIST BARRY ROBERT ; JAMES KLOFTA THOMAS ; JOHN CIESKO MARK ; KLOFTA THOMAS J ; KLOFTA THOMAS JAMES ; QUINLAN AMES OOTEN KATHLEEN ; ROBERT FEIST BARRY ; ROE DONALD C ; ROE DONALD CARROLL ; FIEST BARRY ROBERT

Inventor(s): FEIST BARRY ; DONALD CARROLL ROE ; DELHOUME MATHILDE ; CIESKO MARK ; BARRY ROBERT FEIST ; AMES OOTEN KATHLEEN ; THOMAS JAMES KLOFTA ; ROE DONALD ; MATHILDE CLARISSE DELHOUME ; MARK JOHN CIESKO ; KLOFTA THOMAS

Agent(s): DIMOCK STRATTON LLP; WILSON LUE LLP; LLOVET; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; CHARLES R; MATTHEW P; MATSON CHARLES R

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 KN KP KR KZ LC LI LK LR LS LT LU LV LY 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 TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: SANITARY NAPKIN FOR CLEAN BODY BENEFIT

Abstract: A sanitary napkin has a facing layer joined to a backsheet, and an absorbent core disposed between the facing layer and backsheet. The facing layer has a first region comprising a plurality of apertures, and a second region comprising a plurality of raised, out-of-plane deformations that can be soft, resilient, rib-like elements. In one embodiment, the sanitary napkin also comprises a deep-embossed channel.

Classifications:

International (ipc 8-9): A61F13/15 A61F13/20 A61F13/472

A61F13/511 A61F13/512 A61F13/53 (Advanced/Invention);

A61F13/15 A61F13/511 A61F13/53 (Advanced/Non-invention);

A61F13/00 (Core/Invention);

A61F (Subclass/Non-invention)

International (ipc 1-7): A61F13/00 A61F13/15 A61F13/20

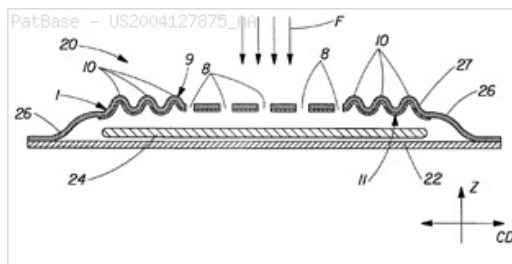
A61F13/472 A61F13/511 A61F13/53

CPC: A61F13/51104 Y10T428/24355 A61F13/4756 A61F13/512

A61F2013/4958

European: A61F13/475A3 A61F13/512 K61F13/495E

US: 428/141 604/378 604/378P 604/380 604/385.01 604/385.010P 604/385.101

**Family:**

Publication number	Publication date	Application number	Application date
AR042529 AA	20050622	AR2003P104707	20031218
AU2003303334 AA	20040722	AU20030303334	20031216
AU2003303334 BB	20070726	AU20030303334	20031216
BRPI0316932 A	20051018	BR2003PI16932	20031216
CA2505188 AA	20050505	CA20032505188	20031216
CA2505188 C	20081118	CA20032505188	20031216
CA2638971 AA	20040715	CA20032638971	20031216
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CN1720012 A	20060111	CN200380104694	20031216
DE60347016 D1	20141224	DE20036047016	20031216
DE60347860 D1	20150903	DE20036047860	20031216
DE60350511 D1	20170921	DE20036050511	20031216
EG24049 A	20080413	EG20050000293	20050613
EP1572049 A1	20050914	EP20030808468	20031216
EP1572049 B1	20141119	EP20030808468	20031216
EP2332503 A1	20110615	EP20100181896	20031216
EP2332503 B1	20150722	EP20100181896	20031216
EP2845572 A1	20150311	EP20140183684	20031216
EP2845572 B1	20170809	EP20140183684	20031216
IL168388 A1	20120731	IL20030168388	20031216
IN01808DN2005 A	20110211	IN2005DN01808	20050503
IN249211 B	20111014	IN2005DN01808	20050503
JP2006510456 T2	20060330	JP20040563730T	20031216
JP4545595 B2	20100915	JP20040563730T	20031216
KR100862624 B1	20081009	KR20057011127	20031216
KR20050084356 A	20050826	KR20057011127	20031216
MXPA05005289 A1	20050725	MX2005PA05289	20031216
PE05512004 A1	20040902	PE20040000009	20040105
TH64827 A	20041021	TH20031004760	20031216
TR201512608 T4	20151021	TR20150012608T	20031216
TR201716158 T4	20171221	TR20170016158T	20031216
TW200422027 A	20041101	TW20030135988	20031218
TWI236367 B	20050721	TW20030135988	20031218
US2004127875 AA	20040701	US20030720557	20031124
US2011313385 AA	20111222	US20110219085	20110826
US8030535 BB	20111004	US20030720557	20031124
US8704036 BB	20140422	US20110219085	20110826
WO04058119 A1	20040715	WO2003US40306	20031216
ZA200503480 A	20060830	ZA20050003480	20050429

Priority:

US20020434792P	20021218	US20030720557	20031124	CA20032505188	20031216
CA20032638971	20031216	EP20030808468	20031216	EP20100181896	20031216
EP20140183684	20031216	WO2003US40306	20031216	WO2003US40306	20050616
EP20100181896	20100929	US20110219085	20110826		

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): HAMMONS JOHN LEE ; LLOYD SUSAN NICOLE ; PROCTER AND GAMBLE ; THE PROCTER AND GAMBLE COMPANY ; TAUB STEWART LAWRENCE

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

Inventor(s): (std): HAMMONS JOHN L ; HAMMONS JOHN LEE ; LLOYD SUSAN N ; LLOYD SUSAN NICOLE ; STEWART LAWRENCE TAUB ; TAUB STEWART L ; TAUB STEWART LAWRENCE ; LAWRENCE HAMMONS JOHN LEE LLOY

Inventor(s): HAMMONS JOHN LEE LLOYD SUSAN NICOLE TAUB... ; HAMMONS JOHN LEE LLOYD SUSAN NICOLE TAUB STEWART L ; TAUB STEWART LAWRENCE WEST CHESTER ; TAUB STEWART LAWRENCE NEEDHAM ; LLOYD SUSAN NICOLE ERLANGER ; HAMMONS JOHN LEE HAMILTON CINCINNATI ; SUSAN NICOLE LLOYD ; TAUB STEWART ; HAMMONS JOHN LEE FAIRFIELD ; HAMMONS JOHN LEE LLOYD SUSAN NICOLE TAUB STEWART LAWRENCE ; JOHN LEE HAMMONS ; LLOYD SUSAN

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MBM INTELLECTUAL PROPERTY LAW LLP; JARRY FLORES ALLAN; KREMER VERONIQUE MARIE JOSEPHINE; BRIATORE ANDREA; REINHOLD COHN AND PARTNERS; DILEK ZEYBEL; AYLIN SENER; AMANDA T; JASON J; RODDY M; ANDREW J; MEGAN C

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 KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG
PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA
ZM ZW

13) Family number: 28284426 (US2002133132A)

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Title: ABSORBENT ARTICLE WITH A RESPONSE SURFACE

Abstract: A breathable absorbent article has at least one of a topsheet, an absorbent core, an optional distribution layer or a backsheet that comprises at least one to layer of a resilient, three dimensional liquid impervious polymeric film having apertures. The apertures form capillaries which are disposed at multiple directions, and/or have different diameters and lengths to create a response surface that is proportional to the pressure applied by the user's body, volume distribution of bodily fluid discharged by the user, the location of the discharge with respect to the position of the article, or a combination thereof, while the article is in use. The polymeric film can be formed by various processes, for example, vacuum forming or hydroforming methods.

Classifications:

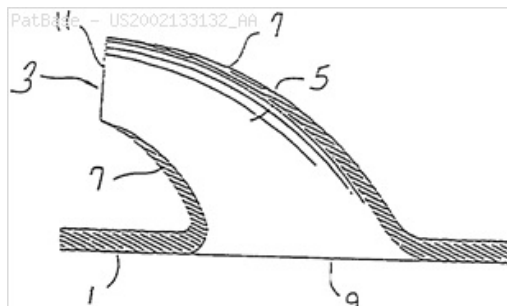
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A61F13/511 A61F13/514 A61F5/44 B26F1/26 B32B3/10
B32B5/26 (Advanced/Invention);
A61F13/15 A61F5/44 B26F1/00 B32B3/10 B32B5/22 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/472 A61F13/49
A61F13/511 A61F13/512 A61F13/514 A61F13/537 A61F5/44
B32B3/10

CPC: Y10T428/24273 A61F13/537 A61F13/15731 A61F13/512
A61F13/5146 A61F2013/51415 A61F2013/51421 A61F2013/53726
A61F2013/53782 B26F1/26 B32B3/10 B32B5/26

European: A61F13/15C3 A61F13/15M6C A61F13/512
A61F13/514B1A A61F13/537 B26F1/26 B32B3/10 B32B5/26
K61F13/512C K61F13/512E K61F13/514A4A2 K61F13/514A4A5
K61F13/537B5A K61F13/537E4

US: 428/131 428/131S 604/383 604/383P



Family:

Publication number	Publication date	Application number	Application date
AU2002303099 AA	20021021	AU20020303099	20020221
BRPI0207432 A	20060117	BR2002PI07432	20020221
CA2438572 AA	20030814	CA20022438572	20020221
HU0303922 AB	20040301	HU20030003922	20020221
IN01063KN2003 A	20050708	IN2003KNO1063	20030822
JP2004528084 T2	20040916	JP20020578874T	20020221
MXPA03007382 A1	20040316	MX2003PA07382	20020221
US2002133132 AA	20020919	US20020082040	20020220
WO02080835 A2	20021017	WO2002US05532	20020221
WO02080835 A3	20040129	WO2002US05532	20020221

Priority:

US20010269870P 20010221 US20020082040 20020220 WO2002US05532 20020221

Probable Assignee: TREDEGAR FILM PRODUCTS CORP

Assignee(s): (std): SIMON KELLINA JO ; TREDEGAR FILM PROD CORP

Assignee(s): TREDEGAR FILM PRODUCTS CORP ; TREDEGAR FILM PRODUCTS RICHMOND CORP ; COPAT MARCELO S ; PEARSON LAURENCE T

Inventor(s): (std): COPAT MARCELO S ; KELLINA JO SIMON ; LAURENCE T PEARSON ; MARCELO S COPAT ; PEARSON LAURENCE T ; SIMON KELLINA JO

Inventor(s): SIMON KELLINA JO

Agent(s): KIRBY EADES GALE BAKER; YOSHIDA YUTAKA; ASAMURA KIYOSHI; ASAMURA HAJIME; MORI TOHRU

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

14) Family number: 33475442 (US2006229577A)

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Title: ABSORBENT ARTICLE HAVING A WETNESS EVENT COUNTER

Abstract: A wetness event counter, which can be utilized in a disposable absorbent article, has at least one indicating member. The indicating member can provide a first indication to a caregiver for a first wetness event and a second indication, which is different from the first indication, to a caregiver upon a second wetness event.

Classifications:

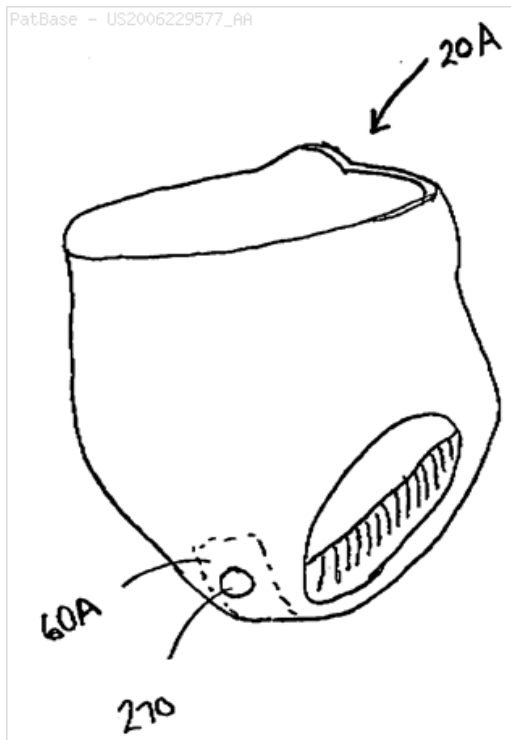
International (IPC 8-9): A61F13/15 A61F13/20 A61F13/42
A61F13/49 (Advanced/Invention);
A61F13/15 A61F13/42 (Core/Invention)

International (IPC 1-7): A61F13/42

CPC: A61F13/42

European: A61F13/42

US: 604/361 604/361P 604/362

**Family:**

Publication number	Publication date	Application number	Application date
AR055902 AA	20070912	AR2006P101378	20060406
AR058793 AA	20080227	AR2006P101379	20060406
CA2603265 AA	20070925	CA20062603265	20060406
CA2603267 AA	20070925	CA20062603267	20060404
CL2006000791 A1	20060825	CL20060000791	20060407
CL2006000792 A1	20060825	CL20060000792	20060407
CN101146500 A	20080319	CN200680009738	20060406
CN101151008 A	20080326	CN200680010739	20060404
EP1865902 A1	20071219	EP20060740672	20060404
EP1865904 A1	20071219	EP20060749367	20060406
JP2008534231 T2	20080828	JP20080505497T	20060406
JP2008535576 T2	20080904	JP20080505547T	20060404
MX2007011973 A1	20071207	MX20070011973	20060404
MX2007011974 A1	20071207	MX20070011974	20060406
US2006229577 AA	20061012	US20050100653	20050407
US2006229578 AA	20061012	US20060400633	20060407
US7834234 BB	20101116	US20050100653	20050407
US7838720 BB	20101123	US20060400633	20060407
WO06110428 A1	20061019	WO2006US12716	20060406
WO06110502 A1	20061019	WO2006US12935	20060404

Priority:

US20050100653 20050407 WO2006US12935 20060404 WO2006US12716 20060406
 US20060400633 20060407

Probable Assignee: PROCTER AND GAMBLE CO**Assignee(s):** (std): HAYDEN MICHAEL PATRICK ; KLOFTA THOMAS JAMES ; MCKIERNAN ROBIN LYNN ; PROCTER AND GAMBLE ; ROE DONALD CARROLL**Assignee(s):** THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE CO**Inventor(s):** (std): HAYDEN MICHAEL P ; HAYDEN MICHAEL PATRICK ; JAMES KLOFTA THOMAS ; KLOFTA THOMAS J ; KLOFTA THOMAS JAMES ; LYNN MCKIERNAN ROBIN ; CARROLL ROE DONALD ; MCKIERNAN ROBIN L ; MCKIERNAN ROBIN LYNN ; ROE DONALD C ; ROE DONALD CARROLL ; PATRICK HAYDEN MICHAEL**Inventor(s):** ROBIN LYNN MCKIERNAN ; ROE DONALD ; ROE DONALD CARROLL MCKIERNAN ROBIN LYNN ; THOMAS JAMES KLOFTA ; MICHAEL PATRICK HAYDEN ; DONALD CARROLL ROE ; HAYDEN MICHAEL ; MCKIERNAN ROBIN ; KLOFTA THOMAS**Agent(s):** DIMOCK STRATTON LLP; WILSON LUE LLP; LLOVET; NAGAI HIROSHI; THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; LAURA L; JAY A; GEORGE H; JOHN G; AMY 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 KN KP KR KZ LC LI LK LR LS LT LU LV LY 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 TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW**15) Family number: 65663499** (CN106618114A)

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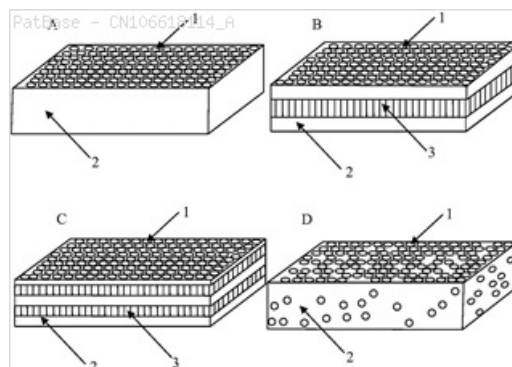
Title: MULTIFUNCTIONAL PAD AND PROCESSING METHOD THEREOF**Abstract:** The invention discloses a multifunctional pad and a processing method thereof. The pad is composed of multiple

capillary tubes adhering together, and the two ends of each capillary tube are communicated with the outside. A coating can be arranged on the inner wall of each capillary tube, is made of titanium dioxide, silicon dioxide, essence, perfume, kieselguhr, activated carbon, pyrosulfurous acid and pyrosulfite or pyrophosphoric acid and is 0.1-300 micrometer thick. The capillary tubes can be arrayed vertically and horizontally, and parts of outer walls of the capillary tubes adhere together. The processing method of the pad includes the following steps that the outer wall of each capillary tube is coated with adhesive, and the pad is obtained through extrusion and curing forming. The multifunctional pad has the functions of ventilating, absorbing water, buffering, fresh keeping and specific gas releasing and can be applied to all the fields of home life, product package, air freshening and fruit and vegetable preservation, the processing method is simple, and the raw materials are easy to obtain.

Classifications:

International (IPC 8-9): A47G27/02 (Advanced/Invention)

CPC: A47G27/02



Family:

Publication number	Publication date	Application number	Application date
CN106618114 A	20170510	CN201710056191	20170125
CN106618114 B	20180525	CN201710056191	20170125

Priority:

CN201710056191 20170125

Probable Assignee: BEIJING ACAD AGRIC AND FORESTRY

Assignee(s): (std): BEIJING ACAD AGRIC AND FORESTRY ; BEIJING ACADEMY OF AGRICULTURE AND FORESTRY SCIENCES

Inventor(s): (std): LI WU ; MA YUE ; WANG YUBIN ; ZHANG CHAO ; ZHAO XIAOYAN

16) Family number: 30994580 (W00062729A1)

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Title: FILM MADE OF HOLED PLASTIC MATERIAL THREE-DIMENSIONALLY SHAPED AND RELATED MATRIX FOR ITS REALISATION

Abstract: The present invention relates to a film made of holed plastic material three-dimensionally shaped, having an upper surface presenting a multiplicity of opening extending in the form of through holes (303) in the direction of a lower surface of the same film; mutually adjacent through holes (303) being separated by segments (301) of film having a profile in the shape of a conic section as a cross section with symmetric sides (304, 305) converging towards the upper surface.

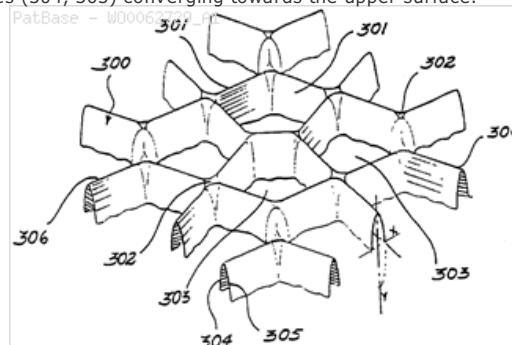
Classifications:

International (IPC 8-9): A61F13/15 A61F13/511 A61F13/512 A61F5/44 B23P15/24 B23P15/34 B26F1/00 B26F1/26 B29C59/00 B32B15/00 B32B3/10 B32B3/12 C08J5/18 (Advanced/Invention); A61F5/44 B23P15/24 (Advanced/Non-invention); A61F13/00 A61F13/15 A61F5/00 A61F5/44 B23P15/00 B23P15/24 B26F1/00 B29C59/00 B32B3/10 C08J5/00 C08J5/18 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/511 A61F5/44 B23P15/00 B23P15/24 B29D B32B15/00 B32B3/12 C08J5/18 C08L23/06

CPC: A61F13/51121 A61F13/514 A61F13/512 B26F1/26

European: A61F13/512 B26F1/26



Family:

Publication number	Publication date	Application number	Application date
AT262875 E	20040415	AT19990954342T	19991019
AU200010745 A1	20001102	AU20000010745	19991019
AU200010745 A5	20001102	AU20000010745	19991019
AU769708 B2	20040129	AU20000010745	19991019
BG105052 A	20010731	BG20000105052	20001214
BG64163 B1	20040331	BG20000105052	20001214
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CA2334915 AA	20001214	CA19992334915	19991019
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CN1305362 A	20010725	CN19998007406	19991019
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CZ299255 B6	20080528	CZ20000004673	19991019
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EP1087742 B1	20040331	EP19990954342	19991019
ES2216582 T3	20041016	ES19990954342T	19991019
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JP2002542340 T2	20021210	JP20000611866T	19991019
KR20010052815 A	20010625	KR20007014137	19991019
PL198783 B1	20080731	PL19990344991	19991019
PL344991 A1	20011119	PL19990344991	19991019
RU2001101480 A	20030227	RU20010101480	19991019
RU2222300 C2	20040127	RU20010101480	19991019
SK200001927 A5	20010710	SK20000001927	19991019
SK286224 B6	20080506	SK20000001927	19991019
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WO0062729 A1	20001026	WO1999IT00330	19991019

Priority:

IT1999RM00229 19990415 CZ20000004673 19991019 WO1999IT00330 19991019

Probable Assignee: TREDEGAR FILM PRODUCTS ITALIA

Assignee(s): (std): ADMA S R L ; ADMA SRL ; IULIANETTI LINO ; TREDEGAR FILM PRODUCTS ITALIA

Assignee(s): TREDEGAR FILM PRODUCTS ITALIA S R L ; TREDEGAR FILM PRODUCTS ITALIA S R L S GIOVANNI TEATINO ; TREDEGAR FILM PRODUCTS ITALIA SRL ; LINO JULIANETTI ; ADMA S R L S GIOVANNI TEATINO

Inventor(s): (std): LINO IULIANETTI ; JULIANETTI LINO ; IULIANETTI LINO

Inventor(s): LINO JULIANETTI

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SHAPIRO COHEN; AVENTUM IP LAW LLP; SIMON LAVIE

Designated states: AL AT AU BA BE BG BR BY CA CH CN CY CZ DE DK EE ES FI FR GB GR HR HU ID IE IL IN IS IT JP KR LI LT LU LV MC MD MK MX NL NO PL PT RO RU SE SG SI SK TR UA US YU

17) Family number: 54080596 (US2014303581A)

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Title: SIGNAL LAYER FOR AN ABSORBENT ARTICLE

Abstract: A signal layer for an absorbent article provided to absorb menstrual fluid includes a pattern of capillary channels allowing capillary action such that discharged menstrual fluid that comes across one of the openings in the capillary channels enters into the capillary channels and is retained therein due to the capillary force. The color of the retained menstrual discharge dyes or colors the pattern for signaling purpose, and the pattern is directly or indirectly visible to an observer.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/42 A61F13/472 A61F13/475 A61F13/51 A61F13/512 A61F13/537 A61F13/84

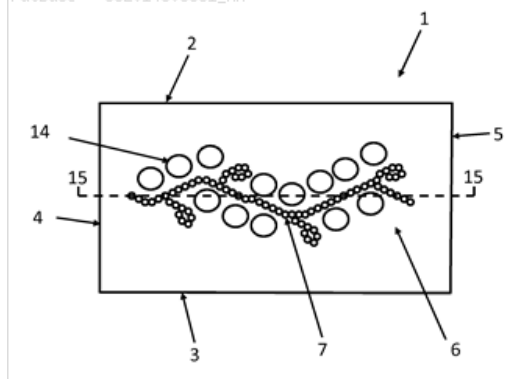
A61F5/455 (Advanced/Invention); A61F13/00 A61F13/472 A61F13/51 A61F13/84

A61F5/455 (Advanced/Non-invention)

CPC: A61F2013/422 A61F13/42 A61F13/00055 A61F13/00059 A61F5/455 A61F13/472 A61F13/4756 A61F13/512 A61F13/5376 A61F2013/53778 A61F2013/53782 A61F2013/8497

US: 604/361

PatBase - US2014303581_AH



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US9775750 BB	20171003	US20110362929	20111209
WO13085447 A1	20130613	WO2011SE51497	20111209

Priority:

EP20110877099 20111209 WO2011SE51497 20111209 CO20140147438 20140709

Probable Assignee: SCA HYGIENE PRODUCTS AB

Assignee(s): (std): KARLSSON ELISABETH ; SCA HYGIENE PROD AB

Assignee(s): SCA HYGIENE PRODUCTS AB ; SKA KHAJDZHIN PRODAKTS AB ; ESSITY HYGIENE AND HEALTH

AKTIEBOLAG

Inventor(s): (std): ELISABETH KARLSSON ; KARLSSON ELISABETH ; KARLSSON ELIZABET

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; LUZ CLEMENCIA DE PAEZ; EKWALL PETER; ZACCO SWEDEN AB; DRINKER BIDDLE AND REATH LLP; ALBIHNSZACCO AB

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

18) Family number: 28673640 (US5401267A)

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Title: ABSORBENT ARTICLE HAVING ENHANCED WICKING CAPACITY

Abstract: An absorbent article is disclosed which exhibits enhanced wicking capacity. The absorbent article includes a liquid-permeable cover, a liquid-impermeable baffle and an absorbent enclosed therebetween. The absorbent is constructed of first, second and third members. Each member has a wicking capacity for body fluids discharged by a human body. The first member has a high wicking capacity, the second member has a lower wicking capacity than the first member, and the third member has a greater wicking capacity than the second member. The different wicking capacities of the three members promotes a systematic distribution of body fluid away from the body-side cover down into the absorbent article. The second member also has an equal or greater width than either the first or third members so as to provide a visual cue of when the absorbent article is in need of changing. By changing the absorbent article when the second member appears to be soiled, the user can prevent side leakage and soiling of an adjacent undergarment.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/42 A61F13/49 A61F13/53 A61F13/534 A61F13/56 (Advanced/Invention); A61F13/15 A61F13/42 A61F13/56 (Advanced/Non-invention); A61F13/46 (Core/Non-invention)

International (IPC 1-7): A61F13/15 A61F13/20 A61F13/46 A61F13/56
CPC: A61F13/53418 A61F13/476 A61F13/53717 A61F2013/15308 A61F2013/15357 A61F2013/15365 A61F2013/15406 A61F2013/15487 A61F2013/15967 A61F2013/53445 A61F2013/8488 A61F2013/8491 A61F2013/8497

European: A61F13/476 A61F13/534B2 A61F13/537B4 K61F13/15F2 K61F13/15F2B K61F13/15J8A2 K61F13/15J8C K61F13/15J8D K61F13/15J8E K61F13/15J8P K61F13/15M11H4 K61F13/42 K61F13/511E1 K61F13/512F K61F13/514A4A K61F13/514C4B K61F13/534C K61F13/537B5 K61F13/537B5B K61F13/537E3 K61F13/537E4 K61F13/53L2 K61F13/58D K61F13/84E K61F13/84E1 K61F13/84G

US: 604/358 604/361 604/378 604/384 604/385.1 604/386 604/387 604/389

PatBase - US5401267_A

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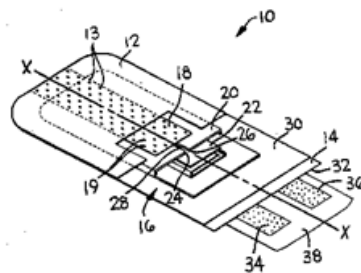


FIG. 1

Family:

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WO9426220 A1	19941124	WO1994US05007	19940505

Priority:

US19930058247 19930512 CA19932104282 19930817 EP19940917311 19940505
WO1994US05007 19940505 US19940263178 19940621

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): KIMBERLY CLARK CO ; KIMBERLY CLARK CORP

Assignee(s): KIMBERLY CLARK CORPUS ; KIMBERLY CLARK WORLDWIDE INC ; NICHOLS ANN MARIE ; KING DAVID RUSSELL ; COUTURE DORSCHNER LAURIE ; FINCH VALERIE VICTORIA ; GILMAN THOMAS HARRY

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Inventor(s): Couture-Dorschner ; ANN MARIE NICHOLS ; Laurie

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; BORDEN LADNER GERVAIS LLP; CABINET SAUVAGE

Designated states: AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LI LK LU LV MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA UZ VN

19) Family number: 33093651 (US2006142710A)

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Title: ABSORBENT ARTICLE

Abstract: An absorbent article having a substantially oblong rectangular absorbent body A composed of a topsheet 2, a backsheet 3, and an absorbent core 4 between the topsheet 2 and the backsheet 3. The absorbent article further has a pair of side sheets 5 as leak preventive side members on its skin facing side C of the absorbent body A. The leak preventive side members have a pattern P printed with ink in a configuration such that the printed ink is substantially kept away from contact with the skin of a wearer.

Classifications:

International (IPC 8-9): A61F13/00 A61F13/15 A61F13/472 A61F13/475 A61F13/49 A61F13/494 A61F13/511 A61F13/513

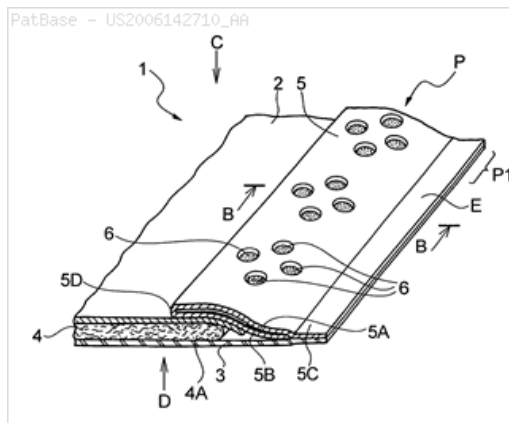
A61F5/44 (Advanced/Invention);

A61F13/15 (Core/Invention)

CPC: A61F13/4751 A61F2013/8497

European: A61F13/475A K61F13/84G

US: 604/361 604/361P 604/362 604/364 604/365 604/366 604/367 604/385.01 604/385.04 604/385.040S



Family:

Publication number	Publication date	Application number	Application date
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US2006142710 AA	20060629	US20050284901	20051123
US7432412 BB	20081007	US20050284901	20051123

Priority:

JP20040379412 20041228 JP20040379413 20041228

Probable Assignee: KAO CORP

Assignee(s): (std): KAO CORP

Assignee(s): KAO CORP TOKIO TOKYO

Inventor(s): (std): KIGATA TETSUYUKI ; NAGAHARA SHINSUKE

Agent(s): MATSUSHIMA YOSHIYUKI; HATORI OSAMU; BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

20) 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.

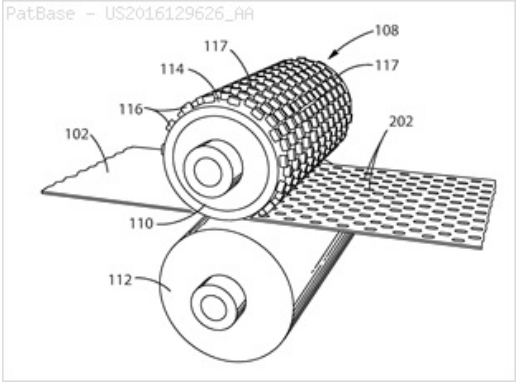
Classifications:

International (IPC 8-9): A61F13/15 A61F13/45 A61F13/47 A61F13/472 A61F13/476 A61F13/493 A61F13/51 A61F13/511 A61F13/512 A61F13/513 A61F13/514 A61F13/515 A61F13/533 A61F13/537 A61F13/551 A61F13/84 B29C55/10 B32B3/10 B32B3/24 B32B3/26 B32B37/02 B32B5/02 B32B5/14 B32B5/18 B32B5/24 B32B5/26 B32B7/02 B32B7/12 D04H1/4374 D04H1/50 D04H13/00 D04H3/147 D04H3/16 D04H5/06 D06C23/04 (Advanced/Invention); A61F13/15 A61F13/51 A61F13/512 A61F13/514 A61F13/515 A61F13/551 A61F13/84 B29L7/00 B32B5/26 B44F99/00 (Advanced/Non-invention)

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

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

US: 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



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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): 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

Inventor(s): (std): ARORA KELYN ANNE ; MULLANE TIMOTHY IAN ; STRUBE JOHN BRIAN ; ORR JILL MARLENE ; ROE DONALD CARROLL ; PORTER MARGARET ELIZABETH ; WALTHER RACHAEL EDEN ; RODIC JENNIFER ; DUSOLD JENNIFER LYNN ; TAPP ANN CECILIA ; NIEZGODA STEPHANIE MICHELLE ; SCHUTTE JENNIFER ; DENG RONG ; BICKING AMANDA MARGARET ; MOSS STEPHANIE NIEZGODA ; WHITELY NATHAN RAY ; HAMMONS JOHN LEE ; POONDRU SHRIDISH ; GIOVANNI SARA LYN ; RITTER MATTHEW STEVEN ; GROSS SARAH BETH ; POONDRU SHRIDISH ; JENNIFER LYNN DUSOLD ; JOHN BRIAN STRUBE ; SARA LYN GIOVANNI ; JENNIFER SCHUTTE ; KELYN ANNE ARORA ; AMANDA MARGARET BICKING ; RACHAEL EDEN WALTHER ; TIMOTHY IAN MULLANE ; JILL MARLENE ORR ; ANN CECILIA TAPP ; MARGARET ELIZABETH PORTER ; DONALD CARROLL ROE

Inventor(s): ARORA KELYN ANNE CINCINNATI ; MULLANE TIMOTHY IAN CINCINNATI ; ORR JILL MARLENE CINCINNATI ; ROE DONALD CARROLL CINCINNATI ; STRUBE JOHN BRIAN CINCINNATI ; 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 ; DZHOVANNI SARA LYN ; MYULLANE TIMOTI JEN ; OR DZHILL MARLIN ; SHTRUBE DZHON

Agent(s): BRAJAN ; TEPP ENN SESILIYA ; VALTER REJCHEL IDEN
WILSON LUE LLP; LLOVET AHUMADA RAUL; L HUILIER FLORENT CHARLES; KREMER VERONIQUE MARIE
JOSEPHINE; 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
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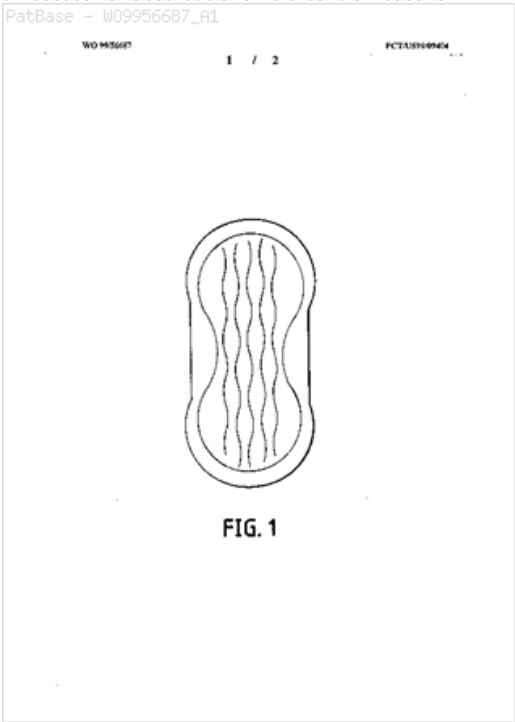
21) Family number: 29781690 (ZA200005880A) © PatBase

Title: STABILIZED ABSORBENT MATERIAL FOR PERSONAL CARE PRODUCTS AND METHOD FOR MAKING.

Abstract: There is provided a material for personal care products having a body side layer with a basis weight of from about 10 to about 100 gsm, a density of from about 0.05 to about 0.5 g/cc and comprising synthetic fibers and binder, and a fluid retention layer having a basis weight of from about 50 to about 250 gsm, a density of from about 0.05 to about 0.5 g/cc and comprising synthetic fibers, binder and natural fibers, where a boundary between any two adjacent fibrous layers is indistinct in that fibers at or near the surfaces of such adjacent layer are significantly intermingled. The material may optionally include a fluid distribution layer and a fluid transfer layer and a garment side liner. Other optional components include superabsorbents and odor control compounds and the layers may be embossed for aesthetic and fluid control reasons.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61F13/49
A61F13/534 A61F5/44 A61L15/42 B32B5/02
D04H1/58 (Advanced/Invention);
A61F13/15 A61F5/44 B32B5/02 D04H1/58 (Advanced/Non-invention);
A61F13/15 A61F5/44 A61L15/16 B32B5/02 D04H1/58 (Core/Invention)
International (IPC 1-7): A61F13/15 A61F13/472 A61F13/49
A61F13/534 A61F5/44 A61L15/42 B32B5/02 D04H1/54 D04H1/58
D04H13/00
CPC: A61F13/51 A61F13/53713 A61F13/53717 A61F13/53747
A61F13/5376 A61F2013/15284 A61F2013/15406 A61F2013/15422
A61F2013/15463
European: A61F13/51 A61F13/537B2 A61F13/537B4 A61F13/537C2
A61F13/537D K61F13/15J8 K61F13/15J8E K61F13/15J8H
K61F13/15J8M



Family:

Publication number	Publication date	Application number	Application date
AR018822 AA	20011212	AR1999P101472	19990331
AU199940701 A1	19991123	AU19990040701	19990430
AU740658 B2	20011108	AU19990040701	19990430
BRPI9910172 A	20010130	BR1999PI10172	19990430
CN1299258 A	20010613	CN19998005785	19990430
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EP1082079 A1	20010314	EP19990924127	19990430
ID29460 A	20010830	ID20000002246	19990430
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KR20010043320 A	20010525	KR20007012288	19990430
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RU2000130706 A	20021020	RU20000130706	19990430
RU2221529 C2	20040120	RU20000130706	19990430
TH40085 A	20000907	TH19991001412	19990427
TR200003247 T2	20010321	TR20000003247T	19990430
TW431885 B	20010501	TW19990107115	19990512
WO9956687 A1	19991111	WO1999US09404	19990430
ZA200005880 A	20010523	ZA20000005880	20001020

Priority:

US19980073160 19980505 WO1999US09404 19990430

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): KIMBERLY CLARK CO ; KIMBERLY CLARK CORP

Assignee(s): KIMBERLY CLARK WORLDWIDE INC

Inventor(s): (std): CHARLES W COLMAN ; CHARLES WILSON COLMAN ; COLMAN C W ; COLMAN CHARLES W ; COLMAN
CHARLES WILSON ; CW COLMAN ; DAVID M JACKSON ; DAVID M MATELA ; DAVID MARTIN JACKSON ;
DAVID MICHAEL MATELA ; DM JACKSON ; HAUNSCHILD S M ; HAUNSCHILD SUSAN M ; HAUNSCHILD
SUSAN MARIE ; JACKSON D M ; JACKSON DAVID M ; JACKSON DAVID MARTIN ; MATELA DAVID M ;
MATELA DAVID MICHAEL ; MITCHLER PATRICIA ANN ; MITCHLER PATRICIA ANN AND ; PATRICIA ANN

MITCHLER ; RIDDELL WILFRED EU ; RIDDELL WILFRED EUGENE ; SM HAUNSCHILD ; SUSAN M HAUNSCHILD ; SUSAN MARIE HAUNSCHILD ; WILFRED EU RIDDELL ; WILFRED EUGENE RIDDELL ; RIDDELL VILFRID JUDZHIN ; MITCHLER PATRISIJA EHNN ; MATELA DEHVID MAJKL ; KOLMAN CHARL Z VILSON ; KHAUNSCHAJLD S JUZAN MEHRI ; DZHEKSON DEHVID MARTIN

Inventor(s): D M JACKSON ; C W COLMAN ; S M HAUNSCHILD ; KHAUNSCHAJLD S'JUZAN MEHRI ; KOLMAN CHARL'Z VILSON ; EUGENE RIDDELL WILFRED

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; RAMIRO CASTRO DUQUE

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZA ZW

22) Family number: 32839852 (US2008108966A)

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Title: ABSORBENT ARTICLE

Abstract: In a disposable absorbent article structured such that an article body is composed of at least a top sheet arranged in a front face side, a back sheet arranged in a back face side and an absorber interposed between both of top sheet and back sheet, and a feces pocket is provided in a hip contact portion of the article body, wherein an opening portion of the feces pocket is covered with a mesh sheet.

Classifications:

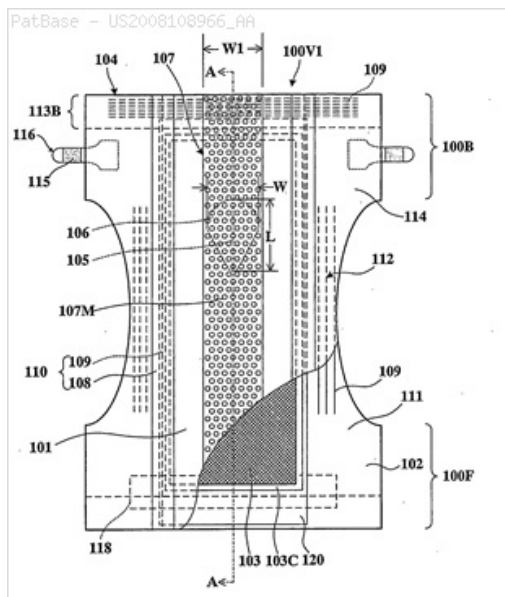
International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/53 A61F5/44 A61F5/452 (Advanced/Invention);

A61F13/15 A61F5/44 A61F5/451 (Core/Invention)

CPC: Y10T156/109 Y10T156/1092 Y10T156/1093 Y10T156/1095 Y10T156/1768 A61F13/495 A61F13/512 A61F13/47 A61F13/5633 A61F13/622

European: A61F13/495 A61F13/512

US: 156/164 156/291 156/292 156/298 156/299 156/300 156/301 156/566 604/302 604/324 604/358 604/365 604/366 604/378 604/381 604/385.01 604/385.010S 604/385.19 604/385.190P 604/389 604/389S



Family:

Publication number	Publication date	Application number	Application date
AT519465 E	20110815	AT20050795328T	20051014
CN101027026 A	20070829	CN200580031955	20051014
CN101027026 B	20100526	CN200580031955	20051014
DE602005029486 D1	20111006	DE200560029486T	20051014
EP1803430 A1	20070704	EP20050795328	20051014
EP1803430 A4	20091202	EP20050795328	20051014
EP1803430 B1	20110810	EP20050795328	20051014
JP2006136702 A2	20060601	JP20050059461	20050303
JP4729314 B2	20110720	JP20050059461	20050303
RU2007117735 A	20081120	RU20070117735	20051014
RU2387430 C2	20100427	RU20070117735	20051014
US2008108966 AA	20080508	US20050665469	20051014
US7867210 BB	20110111	US20050665469	20051014
WO06041227 A1	20060420	WO2005JP19361	20051014

Priority:

JP20040300459 20041014 JP20050059461 20050303 EP20050795328 20051014
WO2005JP19361 20051014

Probable Assignee: DAIO PAPER CORP

Assignee(s): (std): DAIO SEISHI KK ; DAJO PEJPER CORP ; KAMOTO TOMOKA ; MORI YOSUKE ; KOUNO SHINICHI

Assignee(s): DAJO PEJPER KOPOREJSHN ; DAIO PAPER CORP ; DAIO PAPER CORP SHIKOKUCHUO

Inventor(s): (std): MORI YOSUKE ; KOUNO SHINICHI ; KAMOTO TOMOKA ; KAMOTO TOMOTAKA ; KONO SHINICHI ; TOMOKA MORI YOSUKE KOUNO SHINI ; MORI JOSUKE ; KOUNO SINIITI ; SHINICHI KOUNO ; YOSUKE MORI ; TOMOKA KAMOTO

Inventor(s): MORI YOSUKE C O DAIO PAPER CONVERTING CO LTD SHIKOKUCHUO SHI ; KOUNO SHINICHI C O DAIO PAPER CONVERTING CO LTD SHIKOKUCHUO SHI ; KAMOTO TOMOKA C O DAIO PAPER CONVERTING CO LTD SHIKOKUCHUO SHI ; MORI YOSUKE C O DAIO PAPER CONVERTING CO LTD ; KAMOTO TOMOKA C O DAIO PAPER CONVERTING CO LTD ; KOUNO SHINICHI C O DAIO PAPER CONVERTING CO LTD ; MORI YOSUKE KOUNO SHINICHI KAMOTO TOMOKA

Agent(s): ARNOLD AND SIEDSMA; HOOVELD ARJEN JAN WINFRIED; SUGHRUE MION PLLC

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 KE KG KM KP KR KZ LC LI LK LR LS LT LU LV LY 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

23) Family number: 20706852 (US5647863A)

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Title: Absorbent article with clean appearance and capacity signal means

Abstract: An absorbent article, such as a sanitary napkin, comprising a topsheet, a backsheet, and an absorbent core is described. The absorbent core comprises an acquisition member, a storage/distribution member, and an indicator member. The absorbent article further has a longitudinally oriented middle region defined by the storage/distribution member and a pair of longitudinally oriented side regions that lie laterally outboard of the middle region. The acquisition member is disposed on the storage/distribution member and the indicator member is disposed, at least partially, in the side regions. The storage/distribution member has a higher capillary suction than the acquisition member such that absorbed bodily fluids are drawn from the acquisition member into the storage/distribution member providing a clean appearance. The capillary suction of the storage/distribution member is also higher than the capillary suction of the indicator member so that the indicator member is not noticeably stained until the absorbent capacity of the storage/distribution member is substantially exhausted thus providing a signal that it is time to change when such staining becomes apparent.

Classifications:**International (IPC 8-9):** A61F13/00 A61F13/15 A61F13/42

A61F13/532 A61F13/534 A61F13/537 A61F5/44 (Advanced/Invention);

A61F13/00 A61F13/15 A61F13/42 A61F5/44 (Advanced/Non-invention);

A61F13/00 A61F13/15 A61F13/42 A61F5/44 (Core/Invention);

A61F13/15 (Core/Non-invention)

International (IPC 1-7): A61F13/00 A61F13/15 A61F13/20 A61F13/42 A61F5/44**CPC:** A61F13/42 A61F13/4757 A61F13/532 A61F13/5323

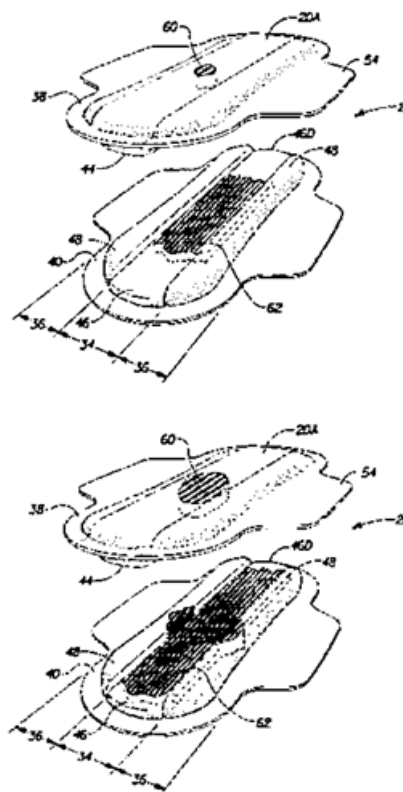
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European: A61F13/42 A61F13/475A4 A61F13/532 A61F13/532B

A61F13/537C2 A61F13/537D K61F13/15J8D1

US: 604/361 604/366 604/367 604/378 604/385.04

PatBase - US5647863_A

**Family:**

Publication number	Publication date	Application number	Application date
AR003625 AA	19980805	AR19960104413	19960919
AU199670739 A1	19970409	AU19960070739	19960913
BRPI9610509 A	19990504	BR1996PI10509	19960913
CA2232531 A	19980319	CA19962232531	19960913
CA2232531 C	20020122	CA19962232531	19960913
CN1137670 C	20040211	CN19961098221	19960913
CN1202099 A	19981216	CN19961098221	19960913
CO4770931 A1	19990430	CO19960050585	19960923
EP0851749 A1	19980708	EP19960931609	19960913
JP11504839 T2	19990511	JP19970512822T	19960913
KR100266492 B1	20000915	KR19980702071	19980320
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MX9802219 A1	19981129	MX19980002219	19980320
MX9802219 A1	19981130	MX19980002219	19980320
PE30698 A1	19980710	PE19960000679	19960923
TH24880 A	19970429	TH19961003132	19960919
TW311883 B	19970801	TW19960113281	19961030
US5647863 A	19970715	US19950531533	19950921
WO9710789 A1	19970327	WO1996US14859	19960913
ZA9607714 A	19980227	ZA19960007714	19960912

Priority:

US19950531533 19950921 WO1996US14859 19960913

Probable Assignee: PROCTOR AND GAMBLE CO**Assignee(s):** (std): PROCTOR AND GAMBLE ; PROCTOR AND GAMBLE CO ; THE PROCTOR AND GAMBLE COMPANY**Assignee(s):** THE PROCTOR AND GAMBLE CO ; THE PROCTOR AND GAMBLE COUS ; PROCTOR AND GAMBLE CO ; HAMMONS JOHN LEE ; HENNESSY SHANNON JULIA ; MARTIN ALVIN DOYLE JR**Inventor(s):** (std): DOYLE MARTIN ALVIN JR ; HAMMONS JOHN L ; HAMMONS JOHN LEE ; HENNESSY SHANNON J ;

HENNESSY SHANNON JULIA ; JOHN L HAMMONS ; JOHN LEE HAMMONS ; JR ; MARTIN ALVIN D ; MARTIN ALVIN D JR ; MARTIN ALVIN DOYLE JR ; MARTIN JR ALVIN D ; SHANNON J HENNESSY ; SHANNON JULIA HENNESSY ; ALVIN D MARTIN ; ALVIN D MARTIN JR ; ALVIN DOYLE MARTIN JR

Inventor(s):

ALVIN JR DOYLE MARTIN JR

Agent(s):

WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; CARLOS REINALDO OLARTE GARCIA

Designated states:

AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CZ DE DK EE ES FI FR GA GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

24) Family number: 41884872 (US2008132864A)

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Title: DISPOSABLE ABSORBENT ARTICLES HAVING AN INTERIOR DESIGN SIGNAL

Abstract: Disposable absorbent article comprising an interior design signal indicating absorbency and an absorbent core including first and second absorbent layers, the first absorbent layer including a first substrate and the second absorbent layer including a second substrate, the first and second absorbent layers further including absorbent particulate polymer material deposited on the first and second substrates and thermoplastic material covering the absorbent particulate polymer material on the respective first and second substrates, the first and second absorbent layers combined together such that at least a portion of the thermoplastic material of the first absorbent layer contacts at least a portion of the thermoplastic material of the second absorbent layer, the absorbent particulate polymer material is disposed between the first and second substrates in an absorbent particulate polymer material area, and the absorbent particulate polymer material is substantially continuously distributed across the absorbent particulate polymer material area.

Classifications:

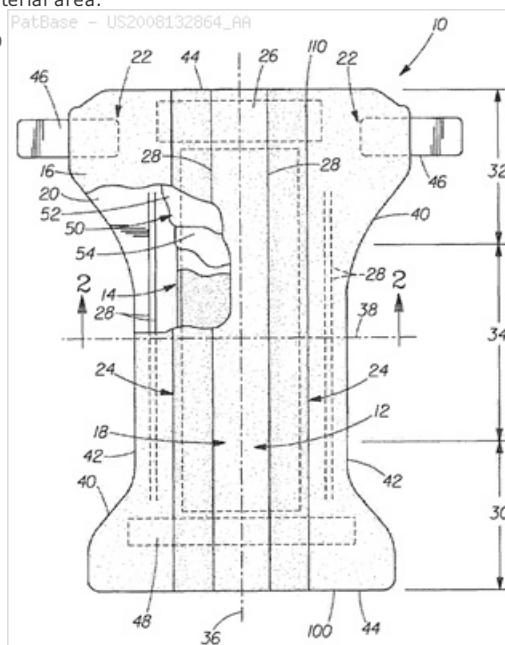
International (ipc 8-9): A61F13/15 A61F13/20 A61F13/42 A61F13/49 A61F13/511 A61F13/53 A61F13/532 A61F13/534 A61F13/537 A61F13/56 A61F13/84 A61L15/22 A61L15/28 (Advanced/Invention); A61F13/513 A61F13/539 (Advanced/Non-invention); A61F13/15 A61F13/42 (Core/Invention); A61F (Subclass/Invention)

International (ipc 1-7): A61F13/511

CPC: A61F2013/53908 A61F13/5323 A61F13/532 A61F13/534 A61F2013/51377 A61F13/53 A61L15/225 A61L15/28 A61F13/84 A61F13/5638 A61F2013/8497 A61F13/565 A61F2013/530868 A61F13/537

European: A61F13/532 A61F13/532B A61F13/534 K61F13/513H

US: 1/1 604/361 604/367 604/367S 604/368 604/370 604/370P 604/374 604/385.01 604/385.101



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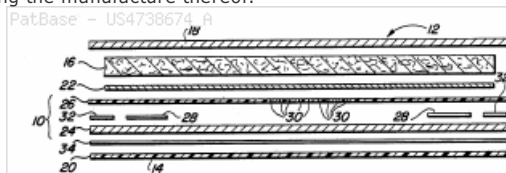
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CA2670648 C	20130122	CA20072670648	20071129
CN101541285 A	20090923	CN200780043756	20071129
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EP2086487 B1	20180919	EP20070849293	20071129
IN02823DN2009 A	20090619	IN2009DN02823	20090429
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RU2414204 C2	20110320	RU20090114592	20071129
SG177146 A1	20120130	SG20110088168	20071129
US2008132864 AA	20080605	US20070942999	20071120
US2012296301 AA	20121122	US20120562353	20120731
US2014171893 AA	20140619	US20140150859	20140109
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Priority:

US20060861909P 20061129 US20070942999 20071120 JP20090537758 20071129
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Probable Assignee: PROCTER AND GAMBLE CO**Assignee(s):** (std): BERUDA HOLGER ; BLESSING HORST ; CIESKO MARK JOHN ; SCHMIDT MATTIAS ; RICE ALIZHA VICTORIA ; FUCHS CHRISTOFER ; PROCTER AND GAMBLE ; HUNDORF HARALD HERMANN ; LAWSON KATHLEEN MARIE ; DZIEZOK PETER ; EHRSNERGER BRUNO JOHANNES**Assignee(s):** PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; DZE PROKTER EHND GEHMBL KOMPANI**Inventor(s):** (std): EHRSNERGER BRUNO JOHANNES ; RAJS ALIZHA VIKTORIJA ; BLESSING KHORST ; BERUDA GOL GER ; TSIESHKO MARK DZHON ; FUKHS KRISTOFER ; GUNDORF GARAL D GERMANN ; SHMIDT MATTIAS ; EHRSNERGER BRUNO JOHANNES ; LOUSON KEHTLIN MEHRI ; JOHN CIESKO MARK ; JOHANNES EHRSNERGER BRUNO ; CHRISTOFER FUCHS ; VICTORIA RICE ALIZHA ; HORST BLESSING ; MATTIAS SCHMIDT ; HERMANN HUNDORF HARALD ; MARIE LAWSON KATHLEEN ; HOLGER BERUDA ; PETER DZIEZOK ; BERUNA HOLGER ; SMITH ALIZHA VICTORIA ; ALIZHA VICTORIA RICE ; MARK JOHN CIESKO ; KATHLEEN MARIE LAWSON ; LAWSON KATHLEEN MARIE ; EHRSNERGER BRUNO JOHANNES ; BLESSING HORST ; CIESKO MARK JOHN ; DZIEZOK PETER ; FUCHS CHRISTOFER ; BERUDA HOLGER ; HUNDORF HARALD HERMANN ; RICE ALIZHA VICTORIA ; SCHMIDT MATTIAS**Inventor(s):** GUNDORF GARAL'D GERMANN ; BERUDA GOL'GER ; RICE ALIZAHA ; HUNDORF HARALD ; CIESKO MARK ; LAWSON KATHLEEN ; BRUNO JOHANNES EHRSNERGER ; RICE ALIZAHA VICTORIA ; HARALD HERMANN HUNDORF ; BRUNO JOHANNES EHRSNERGER ; HOLGER BERUNA**Agent(s):** WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; DIMOCK STRATTON LLP; WILSON LUE LLP; KREMER VERONIQUE MARIE JOSEPHINE; L HUIILLIER FLORENT CHARLES; NAGAI HIROSHI; PATRICK MIRANDAH CO S PTE LTD; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION WEST BLDG; ANDREW A; LAURA L; AMY M; WEDNESDAY G; 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 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**25) Family number: 10200887 (US4738674A)**

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Title: Moisture indicator apparatus and method**Abstract:** Moisture indicator strips of the capillary action type which provide a visual indication of wetness for diapers, hospital underpads, and the like, are located at a point removed from the actual point of wetness, such as at the edge of the diaper or surgical dressing. This invention further relates to a method for automatically and continuously incorporating a wetness indicator within the structure of the diaper or under pad during the manufacture thereof.**Classifications:****International (IPC 8-9):** A61F13/42 A61F5/48 (Advanced/Invention); A61F13/15 (Advanced/Non-invention)**International (IPC 1-7):** A61F13/16**CPC:** A61F5/485 A61F13/42 A61F2013/15821 A61F2013/53445**European:** A61F13/42 A61F5/48B K61F13/15A3A K61F13/15M11**K61F13/42 K61F13/534C****US:** 5/484 604/361**Family:**

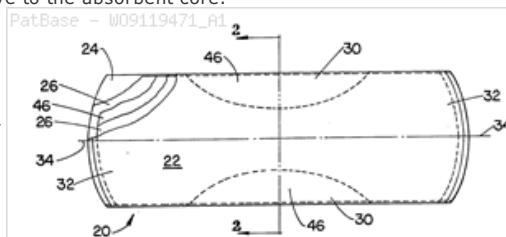
Publication number	Publication date	Application number	Application date
US4738674 A	19880419	US19860865038	19860519

Priority:

US19830496836 19830523 US19850797753 19851112 US19860865038 19860519

Probable Assignee: EIDUS MILDRED**Assignee(s):** (std): EIDUS MILDRED ; TODD HENRY E**Inventor(s):** (std): TODD HENRY E ; EIDUS MILDRED**26) Family number: 31806887 (WO9119471A1)**

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Title: CAPACITY INDICIA FOR ABSORBENT ARTICLES**Abstract:** Disclosed are indicia for use in conjunction with the core of an absorbent article, such as a sanitary napkin, disposable diaper, or adult incontinence product. The indicia are absorbent or liquid pervious to obviate reduction in the target area for loading of the absorbent core of such product. The indicia provide a means for visually indicating to the wearer incipient failure of the core when the capacity of the core may be exceeded by lateral migration of liquids deposited on the absorbent core. The indicia may be separate or integral relative to the absorbent core.**Classifications:****International (IPC 8-9):** A61F13/15 A61F13/42 A61F13/472 A61F13/56 A61F5/44 (Advanced/Invention); A61F5/44 (Advanced/Non-invention);**A61F13/15 A61F13/42 A61F13/56 A61F5/44 (Core/Invention)****International (IPC 1-7):** A61F13/15 A61F13/42 A61F13/472 A61F5/44**CPC:** A61F13/42 A61F13/47227 A61F13/47263 A61F13/47272**A61F13/5605****European:** A61F13/42 A61F13/472B1 A61F13/472D A61F13/472E**A61F13/56B****Family:**

Publication number	Publication date	Application number	Application date
AU199179735 A1	19920107	AU19910079735	19910530
AU663052 B2	19950928	AU19910079735	19910530
BRPI9106567 A	19930601	BR1991PI06567	19910530
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EP0535047 A1	19930407	EP19910911027	19910530
EP0535047 B1	19941207	EP19910911027	19910530
JP3178534 B2	20010618	JP19910510472T	19910530
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KR0165694 B1	19990115	KR19920073272	19921217
KR100165694 B1	19990115	KR19920703272	19910530
KR19937000054 A	19930313	KR19927003272	19910530
MX173334 B	19940216	MX19910026268	19910617
WO9119471 A1	19911226	WO1991US03780	19910530

Priority:

US19900539779 19900618 WO1991US03780 19910530

Probable Assignee: PROCTER AND GAMBLE CO

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Designated states: AT AU BE BR CA CH DE DK ES FR GB GR IT JP KR LI LU NL SE

27) Family number: 41469933 (CN201005873Y)

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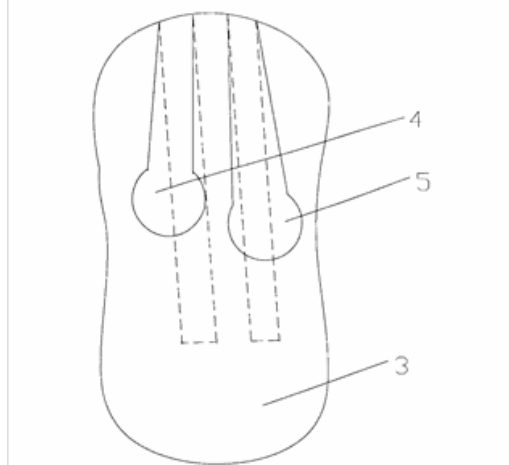
Title: Alarm diaper

Abstract: The utility model relates to an alarm napkin, comprising a penetration layer, a liquid storage layer, and an impervious layer, arranged from inner to outer. The utility model is characterized in further composed of an impervious layer, which one end is in the penetration layer or the liquid storage layer and another end is adhered at the outer surface of the impervious layer. The utility model has the advantages that the utility model can avoid pollution of excrement on clothes and quilt, and on-time alarm to prompt nursing people and exchange napkin, to realize wet-proof and health-care function. The utility model can be used on infant or urinary-fecal incontinence patient.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/42 (Advanced/Invention); A61F13/15 A61F13/42 (Core/Invention)

PatBase - CN201005873_Y



Family:

Publication number	Publication date	Application number	Application date
CN201005873 Y	20080116	CN200720019608U	20070319

Priority:

CN200720019608U 20070319

Probable Assignee:

QIN GAO

Assignee(s): (std):

QIN GAO

Assignee(s):

GAO QIN

Inventor(s): (std):

QIN GAO

Inventor(s):

GAO QIN

Title: ABSORBENT ARTICLE

Abstract: It is intended to provide an absorbent article wherein high-density areas formed in an absorbent are provided inside in the width direction with respect to grooves at least formed on the surface sheet so as to establish excellent performance of shielding menstrual blood having been absorbed by the absorbent. A sanitary napkin (1) which comprises a pair of first pressed grooves (5, 5) being formed so as to extend along the longitudinal direction (Y) on an absorbent (4) and having high-density areas (5a) continuously or intermittently formed in the longitudinal direction (Y) and a pair of second pressed grooves (6, 6) being formed so as to extend along the longitudinal direction (Y) at least on a front face sheet (2), wherein the first pressed grooves (5, 5) are formed in the both sides of a center line (CL) bisecting the sanitary napkin (1) along the width direction (X) while the second pressed grooves (6, 6) are formed outside the first pressed grooves (5, 5) along the width direction (X).

Classifications:

International (ipc 8-9): A61F13/15 A61F13/53

A61F13/539 (Advanced/Invention);

A61F13/15 (Core/Invention);

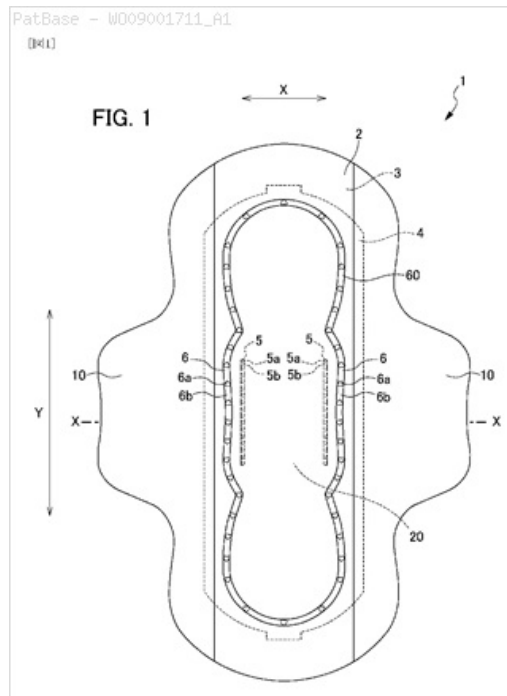
A61F13/15 (Core/Non-invention)

International (ipc 1-7): A61F 13/15 A61F 13/539 A61F13/15

A61F13/539

CPC: A61F13/4756

European: A61F13/475A3

**Family:**

Publication number	Publication date	Application number	Application date
JP2009000351 A2	20090108	JP20070165026	20070622
JP5123579 B2	20130123	JP20070165026	20070622
TH109200 A	20110713	TH20081003203	20080620
TW200938171 A	20090916	TW20080123080	20080620
WO09001711 A1	20081231	WO2008JP61034	20080617

Priority:

JP20070165026 20070622

Probable Assignee: UNI CHARM CORP

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Assignee(s): UNI CHARM CO LTD

Inventor(s): (std): NISHITANI KAZUYA ; NODA YUKI

Agent(s): SHOBAYASHI MASAYUKI; FUJITA KAZUKO; SHOBAYASHI MASAYUKI ET AL

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 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 KE KG KM KN KP KR 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 PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW