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Title: METHOD AND APPARATUS FOR **CONTROLLING** PLACEMENT OF A POLYMER COMPOSITION INTO A WEB

Abstract: The present invention relates to an apparatus for **controlling** the placement of a curable, shear-thinnable polymer composition into a porous web. The apparatus comprises means for applying tension, means for applying the polymer composition to one **surface** of the tensioned web, and means for shear thinning the composition and placing it into the web to encapsulate at least some of the structural elements of the web, leaving most of the interstitial spaces open. A preferred apparatus includes one or more process heads that has mounted thereto a rigid knife blade for engagement with the web. The knife blade is movable vertically and rotationally. The process head is also movable horizontally along the path of the web. The invention also relates to an apparatus for selectively placing the polymer composition in a substantially continuous region extending through the web so that the polymer composition fills the interstitial spaces and adheres adjacent structural elements of the web in the region. In the areas of the web above and below the filled region, at least some of the structural elements are encapsulated and most of the interstitial spaces are open.

Classifications:

International (IPC 8-9): A41D31/00 A61F13/00 A61F13/15

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D06M15/256 D06M15/263 D06M15/356 D06M15/37 D06M15/564

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D06N3/00 D06N3/04 D06N3/12 D06N7/00 D21H17/59

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D06N7/00 (Advanced/Non-invention);

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B05C11/02 (Core/Non-invention)

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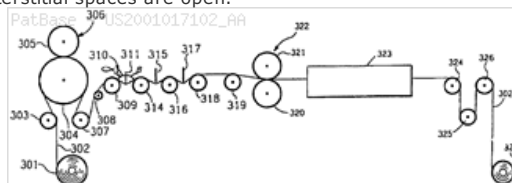
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Title: **Absorbent articles** containing interparticle crosslinked aggregates

Abstract: **Absorbent articles** such as diapers or sanitary napkins incorporating particulate, **absorbent**, polymeric compositions comprising interparticle crosslinked aggregates. The interparticle crosslinked aggregates comprise precursor **particles** of substantially water-insoluble, **absorbent**, hydrogel-forming, polymer material; and an interparticle crosslinking agent reacted with the polymer material of the precursor **particles** to form crosslink **bonds** between the precursor **particles**. The polymeric compositions of the present invention may be incorporated into **absorbent articles** as the sole **absorbent** material; as an **absorbent** core comprising a mixture of fiber material and discrete **particles** of the polymeric composition; or as a laminate (a **layered absorbent** core) containing such polymeric compositions. The performance of **absorbent articles** is enhanced by the use of such polymeric compositions due to the high rate of fluid uptake and minimal gel blocking properties of the interparticle crosslinked aggregates.

Classifications:

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

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A61F13/00 A61F13/15 A61L15/00 A61L15/16 B32B23/00 C08G18/00 C08G59/00 C08L101/00 C08L51/00 (Core/Invention);

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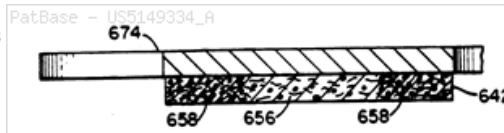
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K61F13/58F K61F13/84E K61F13/84E1

US: 428/192 428/212 428/218 428/219 428/283 428/284 428/286 428/288 428/290 428/302 428/323 428/326 428/327

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Family:

Publication number	Publication date	Application number	Application date
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SG76468 A1	20001121	SG19960007993	19920409
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Priority:

US19900503500 19900402	US19900503501 19900402	WO1991US01892 19910325
US19910684633 19910412	US19910685255 19910412	US19910684712 19910412
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Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): GILKESON GARY B ; PROCTER AND GAMBLE CO ; DZE PROKTER EHND GEHMBL KOMPANI ; LAHRMAN FRANK HENRY ; GILKESON GARY BERNARD ; PROCTER AND GAMBLE COMPANY THE ; THE PROCTOR AND GAMBLE COMPANY ; ROE DONALD C ; THE PROCTER AND GAMBLE COMPANY ; TEH PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO US ; THE PROCTER AND GAMBLE CO US ; THE PROCTER AND GAMBLE CO CINCINNATI ; ROE DONALD CARROLL ; PROCTER AND GAMBLE CO THE ; BERG CHARLES JOHN ; DRAGOO JERRY L ; DRAGOO JERRY LAYNE

Inventor(s): (std): BERG C J ; BERG CHARLES ; BERG CHARLES J ; BERG CHARLES JOHN ; CHARL Z DZHON BERG ; CHARLES JOHN BERG ; DONAL D KEHRROL ROU ; DONAL D KEHRROLL RO ; DRAGOO J L ; DRAGOO JERRY L ; DRAGOO JERRY LAYNE ; DRAGOO LAYNE JERRY ; DZHERRI LEJN DRAGO ; GEHRI BERNARD DZHILKESON ; GILKESON G B ; GILKESON GARY B ; GILKESON GARY BERNARD ; LAHRMAN F H ; LAHRMAN FRANK ; LAHRMAN FRANK H ; LAHRMAN FRANK HENRY ; LAHZMAN F H ; ROE D C ; ROE DONALD ; ROE DONALD C ; ROE DONALD CAROLL ; ROE DONALD CARROLL ; FREHNK GENRI LEHRMAN

Inventor(s): G B GILKESON ; GARY BERNARD GILKESON ; FREHNK GENRI LEHRMAN[US] ; DONAL'D KEHRROL ROU[US] ; CHARL'Z DZHON BERG[US] ; ROE DC ; LAHZMAN FH ; DONAL'D KEHRROLL RO ; ROE DONALD CAROLL US ; LAHRMAN FRANK HENRY US ; GILKESON GARY BERNARD US ; J L DRAGOO ; JERRY LAYNE DRAGOO ; F H LAHRMAN ; FRANK HENRY LAHRMAN ; DRAGOO JERRY LAYNE US ; DONALD CARROLL ROE ; D C ROE ; BERG CHARLES JOHN US ; C J BERG

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

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IT JP KP KR LI LK LU MC MG ML MN MR MW NL NO PL RO RU SD SE SN SU TD TG

Title: **Absorbent** composites comprising a porous macrostructure of **absorbent** gelling **particles** and a substrate

Abstract: An **absorbent** composite having a porous **absorbent** macrostructure and a substrate. The porous macrostructure has interconnected **absorbent** gelling **particles** that are **surface** crosslinked with cationic, preferably polymeric, amino-epichlorohydrin adducts. Upon contacting liquids such as water or body exudates (e.g., urine), the porous **absorbent** macrostructure can swell and imbibe the liquids. The composite is useful in **absorbent articles** such as diapers, adult incontinence pads, and sanitary napkins are disclosed.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/53 A61L15/60 B01J20/26 B01J20/28 D06M15/11 D06M15/263 D06M15/285

D06M15/31 D06M15/356 D06M23/08 (Advanced/Invention);

A61F13/15 B01J20/26 B01J20/28 (Advanced/Non-invention);

A61F13/15 A61L15/16 B01J20/22 B01J20/28 D06M15/01 D06M15/21

D06M23/08 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 A61F13/46 A61L15/60 B01J20/26 B01J20/28 B29C55/08 B29C55/14 B29C67/20

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A61F2013/53791 A61F13/15658 A61F13/532 A61F2013/15406

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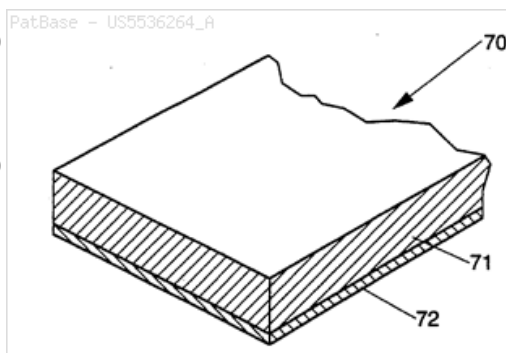
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K61F13/53Q3A K61F13/53Q4A1 K61F13/53Q6 K61F13/53Q8B3

US: 264/154 264/288.8 264/290.2 502/401 604/365 604/367 604/368 604/369 604/372 604/375 604/378 604/379 604/382



Family:

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Priority:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE ; PLISCHKE MANFRED ; SCHMIDT MATTIAS ; REZAI EBRAHIM ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): DIERCKES ALBERT CHARLES JR ; DIERCKES JR ALBERT C ; THE PROCTER AND GAMBLE CO ; TAI YUNG WEI ; PROCTER AND GAMBLE COMPANY THE ; THE PROCTER AND GAMBLE CO CINCINNATI ; PROCTER AND GAMBLE GMBH ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; NAGA KYOKO ; HSUEH KESYIN ; KOLODESH MICHAEL S ; KOLODESH MICHAEL SULYA

Inventor(s): (std): ALBERT CHARLES DIERCKES JR ; EBRAHIM REZAI ; HAYNES NANCY A ; HSUEH KESYIN RENE ; KESYIN HSUEH ; KOLODESH MICHAEL ; KYOKO NAGA ; MANFRED PLISCHKE ; MATTIAS SCHMIDT ; MICHAEL SULYA KOLODESH ; PLISCHKE MANFRED ; PLISCHKE MANFRED DR ; REZAI EBRAHIM ; SCHMIDT DR ; SCHMIDT MATTIAS ; SCHMIDT MATTIAS DR ; TAI YUNG WEI ; NAGA KYOKO ; KOLODESH MICHAEL SULYA ; KOLODESH MICHAEL S ; YUNG WEI TAI ; HSUEH KESYIN ; DIERCKES JR ALBERT C ; DIERCKES ALBERT CHARLES JR

Inventor(s): Albert Charles ; Hsueh ; EbrahimTai ; Yung-WeiKolodesh ; KesyinRezai ; Jr.Naga ; Michael SulyaDierches ; Kyoko ; TAI

Agent(s): SIM AND MCBURNEY

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GH GN GR HU IE IS 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 SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN ZW

Title: **ABSORBENT** MEMBERS FOR BODY FLUIDS HAVING GOOD WET INTEGRITY AND RELATIVELY HIGH CONCENTRATIONS OF HYDROGEL-FORMING **ABSORBENT** POLYMER HAVING HIGH POROSITY

Abstract: **Absorbent** members useful in the containment of body fluids such as urine, that have at least one region containing hydrogel-forming **absorbent** polymer in a concentration of from about 60 to 100 percent by weight and providing a gel-continuous fluid transportation zone when in a swollen state. This hydrogel-forming **absorbent** polymer has: (a) a porosity of at least about 0.15; (b) a Performance under Pressure (PUP) capacity value of at least about 23 g/g under a confining pressure of 0.7 psi (5 kPa); (c) a basis weight of at least about 10 gsm; and (d) optionally, but preferably, a Saline Flow Conductivity (SFC) value of at least about 30x10⁻⁷ cm³ sec/g. In addition, the region where this hydrogel-forming **absorbent** polymer is present has, even when subjected to normal use conditions, sufficient wet integrity such that the gel-continuous zone substantially maintains its ability to acquire and transport body fluids through the gel-continuous zone.

Classifications:

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

A61F5/44 A61L15/16 A61L15/22 A61L15/42

A61L15/60 (Advanced/Invention);

A61F5/44 A61L15/42 A61L15/60 (Advanced/Non-invention);

A61F13/15 A61F5/44 A61L15/16 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 A61F13/46 A61F5/44

A61L15/22 A61L15/42 A61L15/60 C08F10/04

CPC: A61F13/15658 A61F2013/15967 A61F2013/530496 A61F13/534

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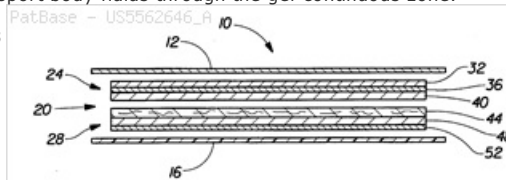
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K61F13/53P2 K61F13/53Q2E K61F13/53Q3 K61F13/53Q6 K61F13/53Q8B1 K61F13/84E1

US: 428/339 604/366 604/368 604/372 604/375 604/378

**Family:**

Publication number	Publication date	Application number	Application date
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Priority:

US19940219574 19940329 WO1995US02442 19950227 US19950416396 19950406

US19960725010 19961001

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE COMPANY THE ; PLISCHKE MANFRED ; RETZSCH HERBERT LOUIS ; PROCTER AND GAMBLE CO CINCINNATI ; PROCTOR AND GAMBLE CO ; PROCTER AND GAMBLE CO THE ; THE PROCTOR AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; WALKER TREVOR ; YOUNG GERALD ALFRED ; GOLDMAN STEPHEN ALLEN ; HAYNES NANCY ANN ; MANSFIELD TODD LEON

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Inventor(s): GERALD ALFRED YOUNG ; YONG G A ; RETZCH H L ; STEHPEN ALLEN GOLDMAN ; STEPHEN ALLEN GOLDMAN ; TODD LEON MANSFIELD ; TREVOR WALKER ; WALKER T ; NANCY ANN HAYNES ; PLISCHKE M ; MANSFIELD T L ; GOLDMAN S A ; HERBERT LOUIS RETZSCH ; LOUIS RETZCH HERBERT ; MANFRED PLISCHKE ; HAYNES N A ; HAYNES NA

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; HARNECKER; JAMES WF RAISBECK

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 SG SI SK SN SZ TD TG TJ TT UA UG UZ VN

Title: HIGH PERFORMANCE **ABSORBENT PARTICLES** AND METHODS OF PREPARATION

Abstract: A high performance **absorbent** particulate composition and a method of preparation in which non-colloidal solid filler core is substantially encapsulated within a bounding **layer** of hydrogel forming polymer is disclosed. In preferred embodiments, the size of the solid filler core is about 10 to about 1500 microns contributing about 20 percent to about 90 percent by weight of the composition. The **particles** of the present invention provide rapid **absorption** of a large volume of aqueous fluids. A wide range of performance properties are achieved through selection of the filler core and the polymer.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/53 A61F5/44 A61L15/24 A61L15/60 B01J20/26 B65D81/26 C08F251/00 C08F292/00 C08F8/00 C08L101/00 C08L101/14 C08L3/00 C08L33/08 D04H1/40 (Advanced/Invention); A61F5/44 B65D81/26 C08F8/00 C08L101/00 C08L3/00 D04H1/40 (Advanced/Non-invention); A61F13/15 A61F5/44 A61L15/16 B01J20/22 B65D81/26 C08F251/00 C08F292/00 C08F8/00 C08L101/00 C08L3/00 C08L33/00 D04H1/40 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/46 A61F5/44 A61L15/24 A61L15/60 B01J20/26 B01J20/32 B32B27/02 B65D81/26 C07J7/04 C08F8/00 C08K3/00 C08K3/34 C08L1/14 C08L101/00 C08L101/14 C08L3/00 C08L33/02 C08L33/08 D04H1/40

CPC: Y10T428/2998 A61F13/534 A61F2013/15463 A61F2013/530489 A61F2013/530547 A61F2013/530569 A61F2013/530583 A61F2013/5307 A61F2013/530766 A61L15/60 C08F251/00 C08F292/00

European: A61F13/534 A61L15/60 C08F251/00 C08F292/00 K61F13/15J8M K61F13/53Q1 K61F13/53Q2E K61F13/53Q3 K61F13/53Q4 K61F13/53Q6 K61F13/53Q8B3

US: 428/407 523/201 523/202 523/204 604/358 604/368

PatBase - US5539019_A



Family:

Publication number	Publication date	Application number	Application date
AU199529663 A1	19960304	AU19950029663	19950707
BRPI9508490 A	19981103	BR1995PI08490	19950707
CA2172847 AA	19960327	CA19952172847	19950707
CA2172847 C	20010619	CA19952172847	19950707
CA2256098 AA	19980731	CA19972256098	19970130
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IL114709 A0	19951127	IL19950114709	19950724
IL114709 A1	20000716	IL19950114709	19950724
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JP2979047 B2	19991115	JP19950506504	19950707
JP9503954 T2	19970422	JP19960506504T	19950707
MX9700779 A1	19970531	MX19970000779	19950707
US5539019 A	19960723	US19950456920	19950601
US5549590 A	19960827	US19940283559	19940801
US5849816 A	19981215	US19960593332	19960131
WO9604024 A1	19960215	WO1995US08578	19950707
WO9727884 A1	19970807	WO1997US01588	19970130
ZA9506359 A	19960611	ZA19950006359	19950731

Priority:

US19940283559	19940801	US19950456920	19950601	US19950460625	19950602
US19950460623	19950602	WO1995US08578	19950707	US19960593332	19960131
WO1997US01588	19970130				

Probable Assignee: PEARLSTEIN LEONARD

Assignee(s): (std): CONFAB HOLDING CORP ; ESPOLIO DE LEONARD PEARLSTEIN ; PEARLSTEIN MELBA AND LF ; PEARLSTEIN LEONARD ; LEONARD PEARLSTEIN ; LENSTAR L L C ; PEARLSTEIN MELBA EXECUTRIX FOR ; SUSKIND STUART

Assignee(s): PEARLSTEIN MELBA EXECUTRIX FOR DECEASED INVENTOR ; PEARLSTEIN MELBA EXECUTRIX FOR DECEASED INVEN ; STUART SUSKIND ; LORIE PETERS LUNN ; PEARLSTEIN LEONARD DECEASED ; LENSTAR LLC ; LENMARK LLC ; PAARUSUTAIN REONARUDO ; HAYLEY PEARLSTEIN FINK ; JOHN PEARLSTEIN ; ABBIE SIMON DEAN

Inventor(s): (std): PEARLSTEIN LEONARD ; SUSKIND STUART ; SUSKIND STUART P ; PEARLSTEIN LEONARD DI

Inventor(s): LEONARD PEARLSTEIN ; PAARUSUTAIN REONARUDO ; PEARLSTEIN LEONARD AND DI ; PEARLSTEIN LEONARD DECEASED ; SASUKAINDO SUCHUAATO ; STUART SUSKIND

Agent(s): SIM AND MCBURNEY; KIRBY EADES GALE BAKER; WOLFF BREGMAN AND GOLLER

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS 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 SG SI SK SN SZ TD TG TJ TM TT UA UG UZ VN

Title: **ABSORBENT** FOAM MATERIALS FOR AQUEOUS FLUIDS MADE FROM HIGH INTERNAL PHASE EMULSIONS HAVING VERY HIGH WATER-TO-OIL RATIOS

Abstract: Low density collapsed **absorbent** foams materials that, upon contact with aqueous fluids, in particular urine, can expand and **absorb** these fluids. These low density foams typically have an expanded thickness from about 6 to about 10 times the thickness of the foams in their collapsed state. These low density foams are made by polymerizing high internal phase emulsions (HIPEs) where the volume to weight ratio of the water phase to the oil phase is in the range of from about 55:1 to about 100:1.

Classifications:

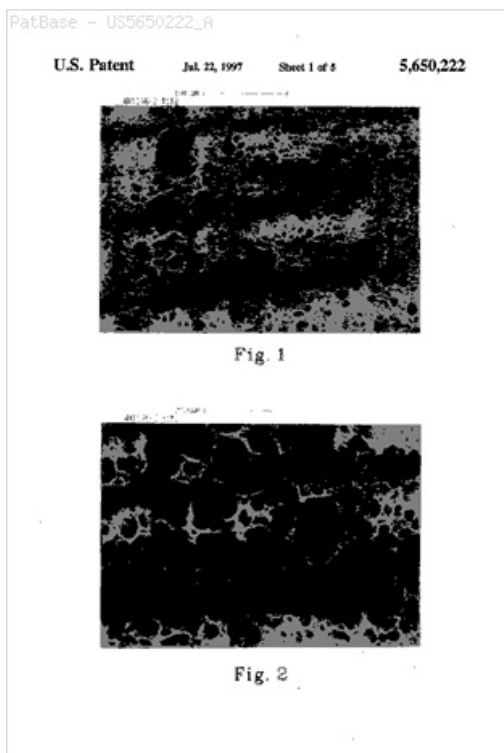
International (IPC 8-9): A43B17/10 A61F13/00 A61F13/15
A61F13/472 A61F13/49 A61F13/53 A61F13/534 A61F5/44 A61L15/00
A61L15/24 A61L15/42 A61L15/60 B32B5/18 C08F2/32 C08F20/10
C08F20/56 C08F265/06 C08F265/10 C08J3/02 C08J9/00 C08J9/28
C08J9/30 C08L25/00 (Advanced/Invention);
A61F13/00 A61F13/15 A61F5/44 A61L15/00 A61L15/60 B32B5/18
C08F2/32 C08J9/00 (Advanced/Non-invention);
A43B17/00 A61F13/15 A61F5/44 A61L15/00 A61L15/16 B32B5/18
C08F2/32 C08F20/00 C08F265/00 C08J9/00 (Core/Invention);
A61L15/60 (Core/Non-invention)

International (IPC 1-7): xx A61F13/00 A61F13/15 A61F13/46
A61F13/472 A61F13/49 A61F13/53 A61F13/534 A61F5/44 A61L15/60
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B32B5/22 C08F12/08 C08F2/32 C08F20/10 C08F20/56 C08F265/06
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CPC: Y10S428/913 A61F13/15658 A61F13/534 A61F2013/15967
A61F2013/530496 A61F2013/530649 A61F2013/530708
A61F2013/530744 A61F2013/530759 A61F2013/530802
A61F2013/15463 A61F2013/530328 C08L101/14 Y10T442/3325
Y10T442/647 Y10T428/249986 A43B1/0036 A43B17/102 A61L15/24
A61L15/425 C08F2/32 A61F13/53 A61F2013/530817
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European: A43B1/00C10 A43B17/10A A61F13/53 A61L15/24
A61L15/42E A61L15/60 C08F2/32 C08L101/14 K61F13/15J8M
K61F13/53M5 K61F13/53R1A K61F13/53R4

US: 428/284 428/317.9 428/913 442/221 442/370 521/146 521/149
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Family:

Publication number	Publication date	Application number	Application date
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AU200151052 A5	20011015	AU20010051052	20010328
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BRPI9606740 A	19971230	BR1996PI06740	19960111
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CO4700309 A1	19981229	CO19960000742	19960110
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EP0802929 A1	19971029	EP19960905112	19960111
EP0802929 B1	20010919	EP19960905112	19960111
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WO9621680 A1	19960718	WO1996US00084	19960111
WO9947090 A1	19990923	WO1999IB00406	19990312
WO9947184 A1	19990923	WO1999IB00405	19990312
ZA9600137 A	19960730	ZA19960000137	19960109
ZA9901991 A	19991214	ZA19990001991	19990311
ZA9901992 A	19990913	ZA19990001992	19990311

Priority:

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US19960655041	19960528	US19960721648	19960926	US19980041930	19980313
US19980042435	19980313	US19990258889	19990301	WO1999IB00405	19990312
WO1999IB00406	19990312	US20000497619	20000203	US20000538170	20000330
WO2001US09938	20010328				

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): STONE KEITH JOSEPH ; PEACE MICHELLE RENEE ; SEIDEN PAUL ; SCHMIDT MATTHIAS ; SCHMIDT MATTIAS ; PALUMBO GIANFRANCO ; HORNEY JAMES CAMERON ; PROCTER AND GAMBLE CO CINCINNATI ; THE PROCTER AND GAMBLE ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANYUS ; YOUNG GERALD ALFRED ; ASHRAF ARMAN ; DESMARAI THOMAS ALLEN ; DYER JOHN COLLINS ; GOLDMAN STEPHEN ALLEN ; HIRD BRYN ; PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO THE

Inventor(s): (std): CAMERON HORNEY JAMES ; DESMARAI THOMAS ALLEN ; DYER JOHN COLLINS ; GOLDMAN STEPHEN ALLEN ; GOLDMAN STEPHEN ALLEN ; OUNG GERALD ALFRED ; PEACE MICHELLE RENEE ; PEACE RENEE ; SCHIMDT MATTIAS ; SCHMIDT MATTIAS ; SEIDEDN PAUL ; SEIDEN PAUL ; STONE JOSEPH ; STONE KEITH JOSEPH ; YOUNG ALFRED ; YOUNG GERALD A ; YOUNG GERALD ALFRED ; ARMAN ASHRAF ; PALUMBO GIANFRANCO ; MARAIS THOMAS ALLEN DES ; HORNEY JAMES CAMERON ; HORNEY JAMES C ; HORNEY CAMERON ; GOLDMAN STEPHEN A ; GOLDMAN ALLEN ; DYER COLLINS ; DESMARAI THOMAS ALLAN ; DESMARAI ALLEN ; DANNENBERG ANDREA ; STONE KEITH J ; HIRD BRYN ; DYER JOHN C ; DESMARAI THOMAS A ; PEACE MICHELLE R ; ASHRAF ARMAN

Inventor(s): ANDREA DANNENBERG ; ALLEN DESMARAIS THOMAS ; BRYN HIRD ; GIANFRANCO PALUMBO ; GERALD ALFRED YOUNG ; GERALD A YOUNG ; GOLDMAN STEPHEN ALLEN AND ; KEITH JOSEPH STONE ; KEITH J STONE ; JOHN COLLINS DYER ; JOHN C DYER ; JAMES CAMERON HORNEY ; MICHELLE RENEE PEACE ; MATTIAS SCHMIDT ; ASHRAF ; PAUL SEIDEN ; THOMAS A DESMARAIS ; THOMAS ALLEN DES MARAIS ; THOMAS ALLEN DESMARAIS ; THOMASA DESMARAIS ; STEPHEN ALLEN GOLDMAN ; PALUMBO
Agent(s): GLANFRANCO SCHMIDT MATTIAS GOLDMAN STEPHEN ALLEN ; PAUL SEIDEDN ; GERALDA YOUNG WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; HARNECKER; JIMENA ESCOBAR URIBE; CARLOS REINALDO OLARTE GARCIA
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 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 MZ 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 UZ VN YU ZA ZW

Title: ARTICULOS **ABSORBENTES** FLEXIBLES Y CAPACES DE RESPIRAR QUE SE ADHIEREN A ROPA INTERIOR FLEXIBLE **ABSORBENT ARTICLES** AND ABLE TO BREATHE TO ADHERE TO UNDERWEAR (Machine translation)

Abstract: Source: CO4520221A [ES] UN ARTICULO **ABSORBENTE** FLEXIBLE Y CAPAZ DE RESPIRAR PARA USO EN UNA PRENDA INTERIOR, DICHO ARTICULO COMPRENDE OPCIONALMENTE ALETAS LATERALES PROTECTORAS, DICHO ARTICULO COMPRENDE UNA CUBIERTA POSTERIOR CAPAZ DE RESPIRAR QUE TIENE UNA SUPERFICIE QUE ENFRENTA LA PRENDA Y DICHO ARTICULO COMPRENDE UN NUCLEO **ABSORBENTE**; DICHA SUPERFICIE QUE ENFRENTA LA PRENDA COMPRENDE UN ADHESIVO PARA ADHERIR DICHO ARTICULO A DICHA PRENDA INTERIOR, DICHO ADHESIVO TIENE UNA SUPERFICIE REAL DE ADHESION Y DICHO DEFINE UNA SUPERFICIE TEORICA DE ADHESION POR DENTRO DE UNA LINEA SINFIN, LA CUAL ES LA LINEA ENVOLVENTE MAS CORTA DEL ADHESIVO SIN EXTENDERSE MAS ALLA DE LA PERIFERIA DE LA SUPERFICIE QUE ENFRENTA LA PRENDA; DICHA CUBIERTA POSTERIOR COMPRENDE UNA CAPA INTERNA Y UNA CAPA EXTERNA, SIENDO DICHA CAPA INTERNA MAS CERCANA A DICHO NUCLEO **ABSORBENTE** QUE DICHA CAPA EXTERNA; DICHO ARTICULO SE CARACTERIZA EN QUE - DICHA CAPA EXTERNA COMPRENDE UNA CAPA DE TEJIDO FIBROSO, HIDROFOBO, **PERMEABLE** AL GAS COMPUESTA DE FIBRAS POLIMERICAS; - DICHA CAPA INTERNA COMPRENDE UNA PELICULA POLIMERICA, HIDROFOBA, **PERMEABLE** AL GAS; - LA RELACION DE SUPERFICIE DE DICHA SUPERFICIE ADHESIVA REAL A DICHA SUPERFICIE QUE ENFRENTA LA PRENDA ESTA EN EL RANGO DE 0.2 A 0.8; - LA RELACION DE SUPERFICIE DE DICHA SUPERFICIE TEORICA DE ADHESION A DICHA SUPERFICIE QUE ENFRENTA LA PRENDA ES EN EL RANGO DE 0.6 A 1.0 PARA ARTICULOS SIN DICHAS ALETAS LATERALES PROTECTORAS, Y EN EL RANGO DE 0.5 A 1.0 PARA ARTICULOS CON DICHAS ALETAS LATERALES PROTECTORAS; Y - DICHO ARTICULO TIENE UNA FLEXIBILIDAD DE 1.300 mg x cm MEDIDOS DE ACUERDO AL ASTM D1388 MODIFICADO. **Machine translation:** **ABSORBENT** flexible and capable of breathing **ARTICLE** FOR USE IN an undergarment, this **article** optionally comprises SIDE FINS PROTECTIVE, that **article** comprises a back cover RESPIRABLE CAPABLE OF HAVING A **surface** FACING THE PLEDGE And that **article** comprises an **absorbent** core; Said **surface** facing the garment comprises an adhesive for adhering said **article** to said undergarment, THAT HAS A **surface** ADHESIVE ROYAL ACCESSION AND THAT DEFINE A theoretical **bonding surface** within SIN- END LINE, WHICH IS THE LINE MORE SHORT ADHESIVE ENVELOPE WITHOUT MORE EXTENDED BEYOND THE PERIPHERY OF **SURFACE** FACING THE GARMENT; COVER SUCH comprises a **layer** INTER AND OUTER **LAYER** NA, said closer to said **absorbent** core EXTERNAL said **layer** inner **layer**; That **article** CHARACTERIA THAT - said outer **layer** comprises a **layer** of fibrous tissue, hydrophobic gas **permeable** POLYMER COMPOSITE FIBRE; - Said inner **layer** comprises a film POLIMERICA, hydrophobic gas **permeable**; - THE RELATIONSHIP OF REAL **surface** of said adhesive **surface** to said **surface** facing the garment is in the range of 0.2 to 0.8; - THE RELATIONSHIP OF THEORETICAL **SURFACE** AREA OF SUCH ACCESSION TO THIS AREA IS FACING THE PLEDGE ON RANGO 0.6 to 1.0 WITHOUT SUCH **ARTICLES** FOR PROTECTIVE SIDE SKIRTS AND THE RANGE OF 0.5 TO 1.0 TO THESE **ARTICLES** WITH PROTECTIVE side flaps; And - that **article** is flexibility 1300 mg x cm measured according to ASTM D1388 modified TO DO..

Classifications:

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

International (IPC 1-7): A61F13/15

Family:

Publication number	Publication date	Application number	Application date
CO4520221 A1	19971015	CO19950053299	19951110

Priority:

CO19950053299 19951110

Probable Assignee: PROCTER AND GAMBLE

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

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

Inventor(s): (std): HIRSCH UWE THOMAS M H

Inventor(s): THOMAS MH HIRSCH UWE

Agent(s): JIMENA ESCOBAR URIBE

Title: ARTICULOS FLEXIBLES, **ABSORBENTES**, CON CUBIERTAS POSTERIORES **PERMEABLES** AL VAPOR DE AGUA, CAPAS **IMPERMEABLES** A LOS LIQUIDOS PERO **PERMEABLES** AL VAPOR DE AGUA Y UN SISTEMA DE ADHESION DE ESTOS ARTICULOS A LA PRENDA DE ROPA INTERIOR FLEXIBLE **ABSORBENT** WITH COVER AFTER WATER vapor **permeable**, liquid **impervious LAYERS** vapor **permeable** BUT WATER SUPPLIES AND A SYSTEM OF ACCESSION OF THESE ITEMS TO undergarment (Machine translation)

Abstract: Source: CO4520220A [ES] LA PRESENTE INVENCION SE REFIERE A ARTICULOS AB- SORBENTES FLEXIBLES PARA USO EN UNA PRENDA INTE- RIOR, DICHOS ARTICULOS NO TIENEN ALETAS LATERALES PROTECTORAS, DICHOS ARTICULOS TIENEN UNA CUBIERTA POSTERIOR QUE TIENE UNA SUPERFICIE QUE ENFRENTA LA PRENDA Y DICHOS ARTICULOS TIENEN UN NUCLEO **ABSOR- BENTE**; DICHA SUPERFICIE QUE ENFRENTA LA PRENDA TIENE UN ADHESIVO PARA ADHERIR DICHOS ARTICULOS A DICHA PRENDA INTERIOR, DICHO ADHESIVO TIENE UNA SUPERFICIE REAL DE ADHESION Y DICHO ADHESIVO DEFI- NE UNA SUPERFICIE TEORICA DE ADHESION DENTRO DE UNA LINEA SINFIN, LA CUAL ES LA LINEA ENVOLVENTE MAS CORTA DEL ADHESIVO SIN EXTENDERSE MAS ALLA DE LA PERIFERIA DE LA SUPERFICIE QUE ENFRENTA LA PRENDA; DICHA CUBIERTA POSTERIOR ES **PERMEABLE** AL VAPOR DE AGUA Y TIENE UNA CAPA **IMPERMEABLE** AL LI- QUIDO PERO **PERMEABLE** AL VAPOR DE AGUA; DICHO AR- TICULO SE CARACTERIZA EN QUE 1) LA RELACION DE SUPERFICIE DE DICHA SUPERFICIE ADHESIVA REAL A DI- CHA SUPERFICIE QUE ENFRENTA LA PRENDA ESTA EN EL RANGO DE 0,2 A 0,8; 2) LA RELACION DE SUPERFICIE DE DICHA SUPERFICIE TEORICA DE ADHESION A DICHA SUPERFICIE QUE ENFRENTA LA PRENDA ESTA EN EL RAN- GO DE 0.6 A 1.0 PARA ARTICULOS SIN DICHAS ALETAS LATERALES PROTECTORAS; Y 3) DICHO ARTICULO TIENE UNA FLEXIBILIDAD DE 1.300 MG X CM A 5.000 MG X CM MEDIDOS DE ACUERDO AL ASTM D1388 MODIFICADO. **Machine translation:** The present invention relates to **articles absorbent** FLEXIBLE FOR USE IN A GARMENT INTERIOR, THESE **ARTICLES** ARE NOT PROTECTIVE SIDE SKIRTS, those **articles** is a back cover having a **surface** facing the pledge and said **articles** having a core **ABSOR - BENTE**; Said **surface** facing the garment is ADHESIVO TO ADHERE TO THESE **ARTICLES** said undergarment, THAT HAS A REAL ADHESIVO **bonding surface** and said adhesive defines a theoretical FOR MEMBERSHIP IN A LINE **SURFACE** WORM, WHICH IS MORE HOUSING LINE SHORT ADHESIVE without extending beyond the periphery **SURFACE** FACING THE GARMENT; THIS COVER is **permeable** to water vapor and has a waterproof **layer** LI LIQUID but **permeable** to water vapor; SUCH AR- TICLE characterized in that 1) THE RELATIONSHIP OF **SURFACE** AREA SUCH A REAL ADHESIVA said **surface** facing the garment is in the range of 0.2 to 0.8; 2) THE LIST OF THEORETICAL **SURFACE** AREA OF SUCH ACCESSION TO THIS AREA FACING THE PLEDGE IS IN THE RANDOM GO TO 0.6 1.0 WITHOUT SUCH **ARTICLES** FOR PROTECTIVE SIDE FINIS; And 3) that **article** is flexibility CM X 1300 MG 5000 mg x cm measured in accordance with ASTM D1388 modified.

Classifications:

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

A61F13/15 (Core/Invention)

International (IPC 1-7): A61F13/15

Family:

Publication number	Publication date	Application number	Application date
CO4520220 A1	19971015	CO19950053298	19951110

Priority:

CO19950053298 19951110

Probable Assignee: PROCTER AND GAMBLE

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

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

Inventor(s): (std): QUERQUI DANIELA

Inventor(s): DANIELA QUERQUI

Agent(s): JIMENA ESCOBAR URIBE

Title: **ABSORBENT** COMPOSITE HAVING IMPROVED **SURFACE** DRYNESS

Abstract: The present invention provides an **absorbent** composite having improved **surface** dryness. The composite has three strata with adjacent strata separated by a transition zone. The composite's first stratum includes synthetic fibers and provides the composite with improved **surface** dryness. Methods for forming the composite and **absorbent articles** that incorporated the composite are also provided.

Classifications:

International (IPC 8-9): A61F13/00 A61F13/15 A61F13/20 A61F13/472 A61F13/49 A61F13/53 A61F13/534 A61F13/535 A61F13/539 A61F13/56 A61F15/00 A61F5/44 A61L15/00 A61L15/22 A61L15/28 A61L15/60 B32B5/02 B32B5/12 B32B5/14 B32B5/16 B32B5/22 B32B5/26 B32B7/04 D03D15/08 D04H1/40 D04H1/74 D04H13/00 D06M15/263 D06M15/59 D21F11/00 D21F11/04 D21F9/00 D21F9/02 D21H11/20 D21H17/20 D21H21/22 D21H23/00 D21H27/00 D21H27/32 D21H27/38 (Advanced/Invention); A61F13/00 A61F13/15 A61F13/534 A61F13/535 A61F13/538 A61F13/56 A61F15/00 A61F5/44 B32B5/02 B32B5/26 D04H1/40 D21H21/22 D21H23/00 D21H27/00 (Advanced/Non-invention); A61F13/00 A61F13/15 A61F5/44 A61L15/00 B32B5/14 B32B5/22 D04H1/40 D04H1/70 D04H13/00 D06M15/21 D06M15/37 D21F11/00 D21F9/00 D21H17/00 D21H21/22 D21H23/00 D21H27/00 D21H27/30 (Core/Invention)

International (IPC 1-7): A61F13/00 A61F13/15 A61F13/20 A61F13/472 A61F13/49 A61F13/53 A61F13/534 A61F13/535 A61F13/538 A61F13/539 A61F13/56 A61F15/00 A61F5/44 A61L15/00 A61L15/22 A61L15/28 A61L15/60 B32B5/02 B32B5/12 B32B5/14 B32B5/16 B32B5/22 B32B5/26 B32B7/04 D03D15/08 D04H1/40 D04H1/74 D04H13/00 D06M15/263 D06M15/59 D21F11/04 D21F9/00 D21F9/02 D21H11/20 D21H17/20 D21H21/22 D21H23/00 D21H27/00 D21H27/32 D21H27/38 **CPC:** A61F2013/53765 Y10T442/643 Y10T442/692 Y10T442/699 A61F13/53747 A61F13/5376 A61F2013/530985 Y10T428/249943 Y10T428/249949 A61F13/5323 A61F2013/15406 A61F2013/530051 A61F2013/53051 B32B5/22 A61F13/531 A61F13/537 A61F13/539 A61F13/535 B32B7/02 B32B2307/7265 B32B2555/02 B32B3/26 B32B2307/726 A61F13/532 A61F13/53743 A61F2013/15422 D21F9/006 D21F11/002 D21F11/04 D21H27/32 D21H27/38 B32B5/04 B32B2262/0253 B32B2262/0261 B32B2262/0284 B32B2262/04 B32B2307/73 B32B5/26 A61F13/534

European: A61F13/531 A61F13/532 A61F13/532B A61F13/534 A61F13/535 A61F13/537 A61F13/537C A61F13/537C2 A61F13/537D A61F13/539 B32B5/22 B32B5/26 D04H13/00B5 D21F11/00B D21F11/04 D21F9/00B2 D21H27/32 D21H27/38 K61F13/15J8E K61F13/15J8H K61F13/537E K61F13/53L4B K61F13/53Q2 K61F13/53S5B4

US: 162/100 162/123 162/125 162/127 162/129 162/146 162/157.6 162/158 162/164.1 162/168.1 162/183 162/207 424/402 428/298.4 428/300.4 442/366 442/411 442/417 604/327 604/365 604/365P 604/365S 604/366 604/366S 604/367 604/367P 604/367S 604/368 604/368P 604/368S 604/369 604/369S 604/37 604/370 604/370P 604/370S 604/372 604/372S 604/374 604/374P 604/374S 604/375 604/378 604/378P 604/378S 604/383 604/384



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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US20060381693	20060504				

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Inventor(s): BUNKER DANIEL ; GRAEF PETER ; EINO LAINE ; KAY ROKMAN ; JUHANI JANSSON ; HOWARD FRED ; MILLER CHARLES ; MATHEWS JEFFREY ; MELISSA L DOPPS ; YONG LI ; RICHARD A EDMARK ; CLIFFORD R BOLSTAD ; TERRY M GRANT ; NAIENI SHAHROKH ; MARSH DAVID ; GRANT TERRY

Agent(s): SMART AND BIGGAR; OYEN WIGGS GREEN AND MUTALA LLP; MASUI CHUJI; SHAMOTO ICHIO; TOMITA HIROYUKI; KOBAYASHI YASUSHI; TOMIZU TATSUO; NAKAMURA MITSUTOSHI; CHIBA AKIO; WEYERHAEUSER CO INTELLECTUAL PROPERTY DEPT CH 1J27; HOVEY WILLIAMS LLP; CHRISTENSEN OCONNOR JOHNSON KINDNESS PLLC; GREGORY J

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 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 MZ 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 ARTICLES**

Abstract: An **absorbent article** containing a composite mixture of **absorbent** macroporous **particles** and **binder particles**. Preferably, the **absorbent** macroporous **particles** are those having a macroporous structure which allow for the rapid flow of liquid therein, e.g., aerogels, xerogels, cryogels, or mixtures thereof. The **absorbent articles** produced thereby are preferably thin and lightweight, but maintain an ample rate of **absorption** allowing for a more rapid uptake of higher volumes of liquids.

Classifications:

International (IPC 8-9): A01N25/34 A61F13/15 A61L15/18 A61L15/20 A61L15/32 A61L15/46 A61L15/60 B01D39/00 B01D39/14 B01J20/28 B01J20/32 B05D1/28 B05D1/30 B05D1/34 B05D3/02 B05D3/12 B05D5/06 B29C43/28 B29C67/24 B29C70/58 B32B27/12 B32B27/18 B32B37/24 B32B5/02 B32B5/12 B32B5/16 B32B5/26 B32B7/02 B32B7/12 B41J2/16 C02F1/50 C02F1/62 D06M11/48 D06M11/74 D06M11/76 D06M11/79 D06M13/46 D06M15/15 D06M15/227 D06M15/333 D06M16/00 D06M17/06 D06M23/08 D06N3/00 D06N3/04 D21H19/58 D21H21/14 D21H21/36 D21H23/64 D21H25/06 D21H27/08 (Advanced/Invention);

A01N25/08 A01N31/16 B05D1/30 B05D5/06 B32B27/18 D21H19/58 D21H21/14 D21H23/64 D21H25/06 (Advanced/Non-invention);

A61F13/15 A61L15/16 B01D39/00 B01D39/14 B01J20/28 B01J20/30 B05D1/28 B05D3/02 B05D3/12 B29C43/22 B29C70/00 B32B27/12 B32B37/14 B32B5/16 B41J2/16 C02F1/50 C02F1/62 D06M11/70 D06N3/00 D21H23/00 (Core/Invention);

B05D1/00 B05D5/06 D21H19/00 D21H21/14 D21H25/00 (Core/Non-invention);

A01N A61F A61L B05D B29C B32B D06M D06N D21H (Subclass/Invention)

International (IPC 1-7): A61F13/15 A61L15/60 A61M1/00 B01D39/00 B01D39/14 B01J20/32 B05D1/28 B05D1/34 B05D3/02 B05D3/12 B29C70/58 B32B27/14 B32B27/18 B32B37/06 B32B31/20 B32B5/12 B32B5/16 B32B5/18 B32B5/22 B32B5/30 B32B7/02 B32B7/14 C02F1/50 C02F1/62 D06M17/06

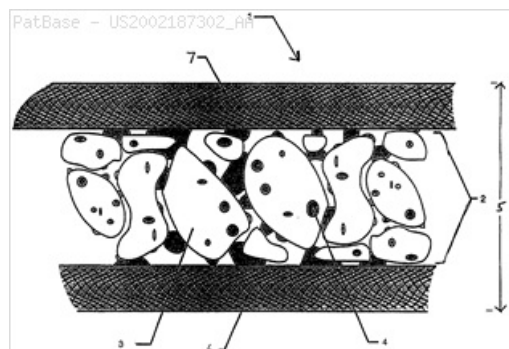
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Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO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

Title: MICROCHANNELED ACTIVE FLUID HEAT EXCHANGER METHOD

Abstract: A heat exchanger utilizing active fluid transport of a heat transfer fluid is manufactured with multiple discrete flow passages provided by a simple but versatile construction. The microstructured channels are replicated onto a film **layer** which is utilized in the fluid transfer heat exchanger. The **surface** structure defines the flow channels which are generally uninterrupted and highly ordered. These flow channels can take the form of linear, branching or dendritic type structures. A cover **layer** having favorably thermal conductive properties is provided on the structured bearing film **surface**. Such structured bearing film **surfaces** and the cover **layer** are thus used to define microstructure flow passages. The use of a film **layer** having a microstructured **surface** facilitates the ability to highly distribute a potential across the assembly of passages to promote active transport of a heat transfer fluid. The thermally conductive cover **layer** then effects heat transfer to an object, gas, or liquid in proximity with the heat exchanger.

Classifications:

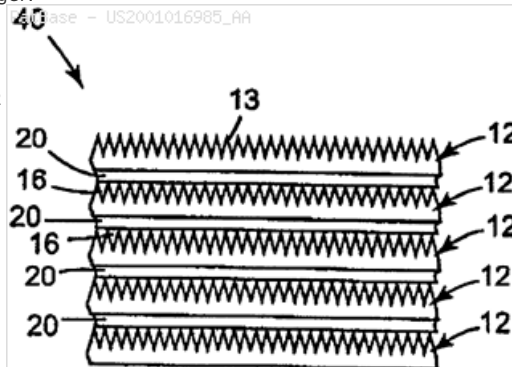
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US7781639 BB	20100824	US20020961091	20020114
US7910790 BB	20110322	US20100860967	20100823
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Priority:

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US19980099555	19980618	US19980099562	19980618	US19980099632	19980618
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WO1998US15575	19980727	WO1998US22612	19981027	US19990235720	19990122
WO1999US02647	19990209	EP19990925660	19990518	EP20090176871	19990518
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WO1999US11022	19990518	WO1999US11045	19990518	WO1999US11020	19990518
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US20020961091	20020114	US20020108069	20020327	US20100860967	20100823

Probable Assignee: 3M CO

Assignee(s): (std): 3M INNOVATIVE PROPERTIES CO ; 3M INNOVATIVE PROPERTIES COMPANY ; 3M CO ; 3M CO MINNESOTA MINING AND MFG COMPANY ; MINNESOTA MINING AND MFG ; THREE M INNOVATIVE PROPERTIES ; 3M COMPANY N D GES D STAATES D

Assignee(s): 3M COMPANY N D GES D STAATES DELAWARE ST PAUL ; MINNESOTA MINING AND MFG CO ST PAUL ; QIU JEAN ; WILLIAMS MICHAEL G ; KREJCAREK GARY E ; WEI AI PING ; SCHOLZ MATTHEW T ; JOHNSTON RAYMOND P ; INSLEY THOMAS I ; MINNESTOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO ; MINNESTOTA MINING AND MFG ; MINNESOTA MINING AND MANUFACTURING COMPANY ST PAUL ; MINNESOTA MINING AND MANUFACTURING COMPANY ; THREE M INNOVATIVE PROPERTIES CO ; 3M CO N D GES D STAATES D ; 3M CO N D GES D STAATES DELAWARE ST PAUL ; 3M INNOVATIVE PROPERTIES CO SAINT PAUL ; CALHOUN CLYDE D ; HUNTLEY DOUGLAS A ; BENTSEN JAMES G ; BERG JAMES G ; HALVERSON KURT J ; HEINECKE STEVEN B ; HENTZEN CHARLES A

Inventor(s): (std): BENTSEN G ; BENTSEN J G ; BIERNATH R W ; HEINECKE STEVEN B ; INSLEY I ; KNOLL R L ; POIRIER J ; RANDALL L KNOLL ; QIU JUN ; MICHAEL G WILLIAMS ; MATTHEW T SCHOLZ ; KURT J HALVERSON ; KREJCAREK GARY E ; KNOLL RANDALL L ; JUN QIU ; JOHNSTON RAYMOND P ; JAMES G BERG ; JAMES G BENTSEN ; HUNTLEY DOUGLAS A ; HALVERSON KURT J ; GARY E KREJCAREK ; DOUGLAS A HUNTLEY ; CLYDE D CALHOUN ; CHARLES A HENTZEN ; CALHOUN CLYDE D ; BERG JAMES G ; BENTSEN JAMES G ; AI PING WEI ; WILLIAMS G ; KREJCAREK E ; JOHNSTON R P ; INSLEY T I ; HUNTLEY A ; HALVERSON J ; CALHOUN D ; BERG G ; JOHNSTON P ; HENTZEN CHARLES A ; SCHOLZ MATTHEW T ; THOMAS I INSLEY ; TI INSLEY ; WEI AI PING ; WILLIAMS MICHAEL G ; RP JOHNSTON ; RL KNOLL ; STEVEN B HEINECKE ; BIERNATH W ; QIU JEAN ; POIRIER RICHARD J ; MCCLURE DONALD J ; INSLEY THOMAS I ; BIERNATH ROLF W ; KNOLL L

Inventor(s): R L KNOLL ; T I INSLEY ; RAYMOND P JOHNSTON ; SCHOLZ MATTHEW T SAINT PAUL ; HENTZEN CHARLES A SAINT PAUL ; JEAN QIU ; R P JOHNSTON ; R W BIERNATH ; RICHARD J POIRIER ; ROLF W BIERNATH ; RW BIERNATH ; J G BENTSEN ; JG BENTSEN ; JOHNSTON RAYMOND P SAINT PAUL ; HEINECKE STEVEN B SAINT PAUL

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; OYEN WIGGS GREEN AND MUTALA LLP; VOSSIUS AND PARTNER; HOFMANN URSULA; Hofmann Ursula; WEINBERGER RUDOLF; TSURUTA JUNICHI; NISHIYAMA MASAYA; HIGUCHI SOTOJI; ISHIDA TAKASHI; KOGA TETSUJI; 3M INNOVATIVE PROPERTIES COMPANY; 3M INNOVATIVE PROPERTIES CO; CHRISTOPHER D; JAMES A; ROBERT W; HANSON KARL G; ROGERS JAMES A; GRAM CHRISTOPHER D; KARL G; MICHAEL G

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 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 UZ VN YU ZA ZW

Title: COMPACTED ODOUR **CONTROL PARTICLES** FOR USE IN **ABSORBENT ARTICLES**

Abstract: The present invention relates to odour **control particles** which find particular utility in **absorbent article** applications such as sanitary napkins, panty liners, diapers and the like which are provided to combat a broad range of odorous compounds found therein. In particular the present invention relates to the provision of odour **control particles** which are produced using a simplified method and thereby also provide odour **control particles** delivering an improved odour **control** performance benefit. The odour **control particles** comprise odour **control** active materials which have a density less than that of the odour **control particles** and which are formed by dry pressure compacting the active materials in the absence of a **binder** to form the odour **control particles**.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61L15/46 (Advanced/Invention);

A61F13/15 A61L15/46 (Advanced/Non-invention)

International (IPC 1-7): A61F13/15 A61F13/472 A61L15/46

CPC: A61L15/18 A61L15/20 A61L15/46 A61L15/60

European: A61L15/18 A61L15/20 A61L15/46 A61L15/60

Family:

Publication number	Publication date	Application number	Application date
AT228020 E	20021215	AT19980963006T	19981209
AU199918122 A1	19990705	AU19990018122	19981209
AU729316 B2	20010201	AU19990018122	19981209
BRPI9813832 A	20010925	BR1998PI13832	19981209
CA2315863 AA	20000619	CA19982315863	19981209
CN1302212 A	20010704	CN19988013697	19981209
DE69809593 D1	20030102	DE19986009593	19981209
DE69809593 T2	20030717	DE19986009593T	19981209
EP0933086 A1	19990804	EP19970122343	19971218
EP1042017 A1	20001011	EP19980963006	19981209
EP1042017 B1	20021120	EP19980963006	19981209
JP2002508223 T2	20020319	JP20000538732T	19981209
KR20010052125 A	20010625	KR20007006604	19981209
WO9930754 A1	19990624	WO1998US26170	19981209
ZA9811581 A	19990825	ZA19980011581	19981217

Priority:

EP19970122343 19971218 EP19980963006 19981209 WO1998US26170 19981209

Probable Assignee: PROCTER AND GAMBLE

Assignee(s): (std): CARLUCCI GIOVANNI ; DIVO MICHAEL ; GAGLIARDI IVANO ; PROCTER AND GAMBLE ; THE PROCTER AND GAMBLE COMPANY

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

Inventor(s): (std): CARLUCCI GIOVANNI ; DIVO MICHAEL ; GAGLIARDI IVANO ; IVANO GAGLIARDI ; MICHAEL DIVO ; GIOVANNI CARLUCCI

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

Designated states: 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 GE GH GM GN GR GW HR 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

Title: **ABSORBENT** STRUCTURES COMPRISING FLUID STORAGE MEMBERS WITH IMPROVED ABILITY TO DEWATER DISTRIBUTION MEMBERS

Abstract: The invention relates to **absorbent** structures for use in **absorbent articles**. The structures include a first region for distribution of fluid and a second region for storage of fluid. The first region contains materials, with a relatively high capillary desorption pressure, while the second region contains materials exhibiting a sufficiently high capillary **absorption** pressure efficiently drain the first region. Exemplary materials have a CSDH **50** of more than 40 cm, and a second region containing a material which satisfies at least one of following requirements: (a) an **absorption** capacity of at least 15 g/g at 35 cm (b) an **absorption** capacity of at least 15 g/g at 0 cm and an **absorption** efficiency of at least 55 percent at 40 cm; and (c) a Capillary Sorption **Absorption** height at 50 percent of its capacity at 0 cm **absorption** height (CSAH **50**) of at least 35 cm.

Classifications:

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

A61F13/534 A61F5/44 B01J20/26 (Advanced/Invention);

A61L15/00 (Advanced/Non-invention);

A61F13/15 A61F5/44 B01J20/22 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/49 A61F13/53

A61F13/534 A61F5/44 B01J20/26

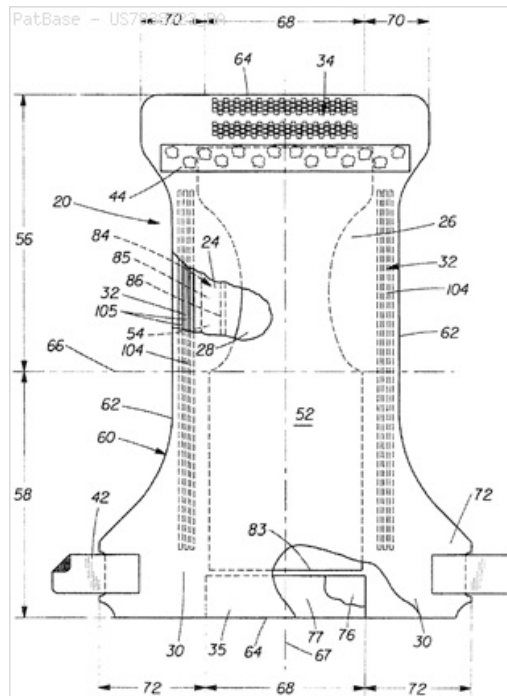
CPC: A61F13/15203 A61F13/537 A61F2013/530459

A61F2013/530467 A61F2013/530817

European: A61F13/15J K61F13/537 K61F13/53P2A K61F13/53P2B

K61F13/53R1A

US: 604/368 604/369 604/378 604/385.01



Family:

Publication number	Publication date	Application number	Application date
AR014710 AA	20010328	AR1999P101059	19990311
AU199865560 A1	19990927	AU19980065560	19980313
AU199926340 A1	19991011	AU19990026340	19990312
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EP1061882 A1	20001227	EP19990906379	19990312
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HU0102660 AC	20011228	HU20010002660	19990312
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JP2002506682 T2	20020305	JP20000536333T	19990312
KR20010041839 A	20010525	KR20007010129	19990312
MXPA00008957 A1	20010501	MX2000PA08957	19980313
PE05232000 A1	20000723	PE19990000208	19990315
TH39601 A	20000731	TH19991000815	19990312
TR200002631 T2	20001221	TR20000002631T	19990312
TW526053 B	20030401	TW19990109634	19990609
US7838723 BA	20101123	US19990623943	19990312
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ZA9901997 A	20000711	ZA19990001997	19990311

Priority:

US19980805042 19980313 WO1998US05042 19980313 CZ20000003277 19990312
 WO1999IB00409 19990312 WO1999IB00408 19990312

Probable Assignee: PROCTER AND GAMBLE

Assignee(s): (std): PALUMBO GIANFRANCO ; SCHMIDT MATTIAS ; THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; YOUNG GERALD ALFRED ; PROCTER AND ; DESMARIS THOMAS ALLEN ; GAMBLE CO

Inventor(s): (std): GIANFRANCO PALUMBO ; MATTHIAS SCHMIDT ; MATTIAS SCHMIDT ; PALUMBO GIAFRANCO ; PALUMBO GIANFRANCO ; SCHMIDT MATTHIAS ; SCHMIDT MATTIAS ; ALFRED YOUNG GERALD ; ALLEN

DESMARAIS THOMAS ; DESMARAIS THOMAS ALLEN ; YOUNG GERALD ALFRED

Inventor(s): EHRNSPERGER BRUNO JOHANNES ; GERALD YOUNG ; DESAI FRED ; THOMAS DERMARAIS

Agent(s): SIM AND MCBURNEY; HARNECKER; DAVID M; CHARLES R; WILLIAM E

Designated states: 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
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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

Title: **Absorbent articles** with improved distribution properties under sub-saturation

Abstract: An **absorbent article** contains at least one fluid storage member and at least one fluid distribution member. The fluid distribution member has an improved fluid handling property especially under sub-saturation conditions. Such members exhibit, at 50 percent of their saturation capacity, an increased permeability of at least about 14 percent of one at saturation. The fluid storage member has a higher Capillary Sorption **Absorbency** Height than the fluid distribution member.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/46 A61F13/49 A61F13/53 A61F5/44 A61L15/00 A61L15/60 B32B5/00

B32B5/18 (Advanced/Invention);

A61F5/44 A61L15/00 B32B5/00 (Advanced/Non-invention);

A61F13/15 A61F5/44 A61L15/16 B32B5/00 (Core/Invention)

International (IPC 1-7): A61F13/00 A61F13/15 A61F13/49 A61F13/53

A61F5/44 A61L15/00 A61L15/60 B32B5/00 B32B5/18

CPC: A61F13/15203 A61F13/537 A61F2013/530459

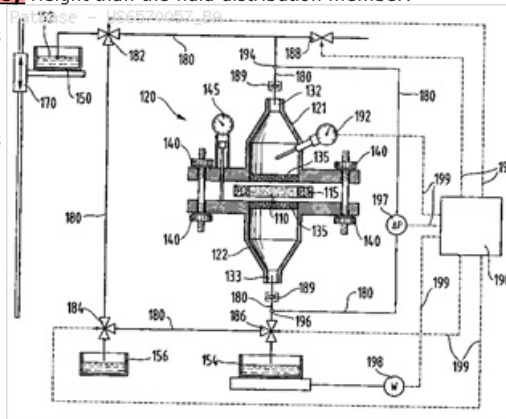
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A61F2013/530328

European: A61F13/15J A61F13/534 A61F13/537D K61F13/537

K61F13/53M5 K61F13/53P2A K61F13/53P2B K61F13/53R1A

US: 604/378



Family:

Publication number	Publication date	Application number	Application date
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JP2002505964 T2	20020226	JP20000535291T	19980313
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KR20010041703 A	20010525	KR20007009924	19980313
MY132925 A	20071031	MY19990000935	19990313
PE05242000 A1	20000723	PE19990000207	19990315
TH39602 A	20000731	TH19991000817	19990312
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US6570057 BA	20030527	US20000646090	20000913
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ZA9901998 A	19990913	ZA19990001998	19990311

Priority:

WO1998US05040 19980313 US20000646090 20000913

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): DESAI FRED ; EHRNSPERGER BRUNO JOHANNES ; PROCTER AND GAMBLE ; SCHMIDT MATTIAS ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

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

Inventor(s): (std): BRUNO ; BRUNO JOHANNES EHRNSPERGER ; DESAI FRED ; EHRNSPERGER ; EHRNSPERGER BRUNO JOHANNES ; EHRNSPERGER JOHANNES ; FRED DESAI ; MATTIAS SCHMIDT ; SCHMIDT MATTIAS ; JOHANNES EHRNSPERGER BRUNO

Agent(s): DIMOCK STRATTON LLP; HARNECKER; CARLOS REINALDO OLARTE GARCIA

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

Title: **Absorbent** structures comprising fluid storage members with improved ability to dewater acquisition/distribution members

Abstract: The present invention is an **absorbent** structure to be used in **absorbent articles**, having at least a first region for acquisition/distribution of fluid and a second region for storage of fluid. The first region can contain materials which have a relatively high capillary desorption pressure, as the materials in the second region exhibit a sufficiently high capillary **absorption** pressure so as to still efficiently drain the first region. The first region material has a Capillary Sorption Desorption Height (CSDH 90) of more than 40 cm and the second region material satisfies at least one of following requirements: (a) an **absorption** capacity of at least 15 g/g at 35 cm in the caporsorption test; (b) an **absorption** capacity of at least 15 g/g at 0 cm in the caporsorption test and an **absorption** efficiency of at least 55 percent at 40 cm; (c) a Capillary Sorption **Absorption** height at 50 percent of its capacity at 0 cm **absorption** height (CSAH 50) of at least 35 cm in the caporsorption test.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/53 A61F5/44 B01J20/26 (Advanced/Invention);

A61F5/44 A61L15/00 (Advanced/Non-invention);

A61F13/15 A61F5/44 B01J20/22 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/49 A61F13/53 A61F5/44 B01J20/26

CPC: A61F13/15203 A61F13/537 A61F13/5376 A61F2013/15463

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A61F2013/530817

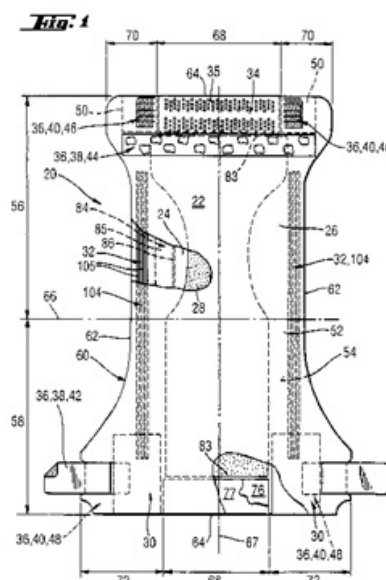
European: A61F13/15J A61F13/537D K61F13/15J8M K61F13/537

K61F13/53M5 K61F13/53P2A K61F13/53P2B K61F13/53R1A

US: 604/385.01

PatBase - US6551295_BA

U.S. Patent Apr. 22, 2003 Sheet 1 of 3 US 6,551,295 B1



Family:

Publication number	Publication date	Application number	Application date
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AU199865562 A1	19990927	AU19980065562	19980313
BRPI9815729 A	20001226	BR1998PI15729	19980313
CA2322457 AA	20000907	CA19982322457	19980313
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CN1292670 A	20010425	CN19988014015	19980313
CO5090862 A1	20011030	CO19990015439	19990312
CZ20013199 A3	20010411	CZ20010003199	19980313
DE69827416 D1	20041209	DE19986027416	19980313
DE69827416 T2	20051020	DE19986027416T	19980313
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EP1061878 B1	20041103	EP19980911653	19980313
HU0102559 AB	20011128	HU20010002559	19980313
HU0102559 AC	20011228	HU20010002559	19980313
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JP2002505912 T2	20020226	JP20000535295T	19980313
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MXPA00008954 A1	20010331	MX2000PA08954	19980313
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TH41401 A	20001124	TH19991000813	19990312
TR200002636 T2	20010221	TR20000002636T	19980313
TW413632 B	20001201	TW19990109587	19990609
US6551295 BA	20030422	US20000623941	20000912
WO9945879 A1	19990916	WO1998US05044	19980313
ZA9901993 A	19990913	ZA19990001993	19990311

Priority:

TR19980002636T 19980313 WO1998US05044 19980313 US20000623941 20000912

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PALUMBO GIANFRANCO ; PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO ; SCHMIDT MATTIAS ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; YOUNG GERALD

ALFRED ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; DESMARAIS THOMAS ALLEN

Inventor(s): (std): GIANFRANCO PALUMBO ; MATTIAS SCHMIDT ; PALUMBO GIANFRANCO ; SCHMIDT MATTIAS ; YOUNG GERALD ALFRED ; YOUNG GERALD ALFED ; YOUNG ALFED ; DESMARAIS ALLEN ; DESMARAIS THOMAS ALLEN

Inventor(s): GERALD ALFRED YOUNG ; GERALD YOUNG ; THOMAS ALLEN DESMARAIS ; THOMAS DESMARAIS

Agent(s): DIMOCK STRATTON LLP; HARNECKER

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

Title: **ABSORBENT** STRUCTURES COMPRISING FLUID STORAGE MEMBERS WITH IMPROVED ABILITY TO DEWATER HIGH FLUX DISTRIBUTION MEMBERS.

Abstract: Abstract The present invention relates to **absorbent** structures for use in **absorbent articles**, comprising a first region for acquisition / distribution of fluid and a second region for storage of fluid. The first region comprises materials, which may have a relatively high capillary desorption pressure, as the second region comprises materials or members exhibiting a sufficiently high capillary **absorption** pressure so as to still efficiently drain the first region. Thus, the first region comprises material having a cumulative flux of more than 0.075 g/cm²/sec at 12.4 cm heights, and / or a wicking time of less than 120 seconds at this height, and second region comprises material which satisfies at least one of following requirements: (a) an **absorption** capacity of at least 15 g/g at 35 cm in the caporption test; and/or (b) an **absorption** capacity of at least 15 g/g at 0 cm in the caporption test and an **absorption** efficiency of at least 55 percent at 40 cm; and/or (c) a Capillary Sorption **Absorption** height at 50 percent of its capacity at 0 cm **absorption** height (CSAH 50) of at least 35 cm in the caporption test.

Classifications:

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

A61F13/534 A61F5/44 B01J20/26 (Advanced/Invention);

A61F5/44 A61L15/00 (Advanced/Non-invention);

A61F13/15 A61F5/44 B01J20/22 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/49 A61F13/53

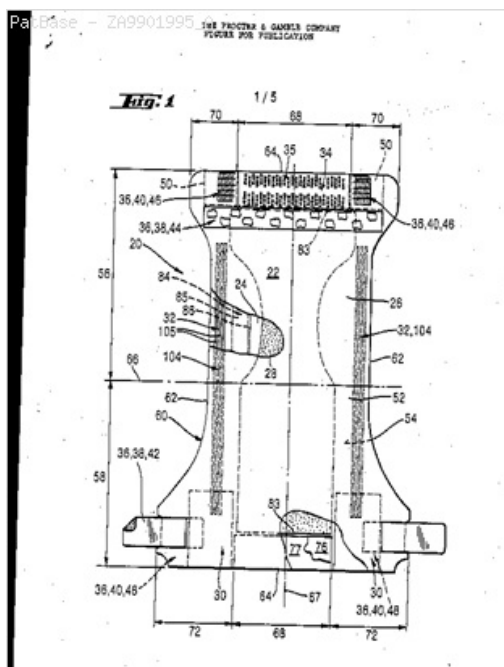
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European: A61F13/15J K61F13/537 K61F13/53P2A K61F13/53P2B

K61F13/53R1A



Family:

Publication number	Publication date	Application number	Application date
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Priority:

CZ20000003200 19980313 WO1998US05043 19980313

Probable Assignee: PROCTER AND GAMBLE

Assignee(s): (std): SCHMIDT MATTIAS ; THE PROCTER AND GAMBLE COMPANY ; PALUMBO GIANFRANCO ; PROCTER AND GAMBLE

Assignee(s): PROCTER AND GAMBLE CO ; DESMARAI THOMAS ALLEN ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; YOUNG GERALD ALFRED

Inventor(s): (std): DESMARAI THOMAS ALLEN ; GIANFRANCO PALUMBO ; GIANFRANCO PALUMBOI ; MATTIAS SCHMIDT ; PALUMBO GIANFRANCO ; PALUMBOI GIANFRANCO ; SCHMIDT MATTIAS ; YOUNG GERALD ALFRED

Inventor(s): DESMARAI THOMAS ; YOUNG GERALD

Agent(s): SIM AND MCBURNEY; HARNECKER

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

Title: **Absorbent articles** with distribution materials positioned underneath storage material

Abstract: An **absorbent article** having an ultimate fluid storage region and a fluid distribution region, positioned between the ultimate storage region and the garment oriented **surface** of the **article**, in fluid communication with the ultimate fluid storage region, the ultimate fluid storage region includes a material which has: (1) a Capillary Sorption Desorption Capacity at 100 cm (CSDC 100) of at least 10 g/g; (2) a Capillary Sorption Desorption Capacity at 0 cm (CSDC 0) higher than the CSDC 100; (3) a Loosely Bound Liquid Capacity (LBLC); and (4) a Capillary Sorption Desorption Release Height when 50 percent of the LBLC are released (CSDRH 50) less than 60 cm. Further, the liquid distribution **layer** material has a Capillary Sorption **Absorption** Height at 30 percent of its maximum capacity (CSAH 30) of at least 35 cm. Distribution material can be foam materials, particularly those derived from high internal phase water-in-oil emulsions.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/53
A61F13/534 A61F5/44 A61L15/60 B32B5/00 (Advanced/Invention);
A61F13/15 A61F5/44 A61L15/00 B32B5/00 (Advanced/Non-invention);
A61F13/15 A61F5/44 A61L15/16 B32B5/00 (Core/Invention)

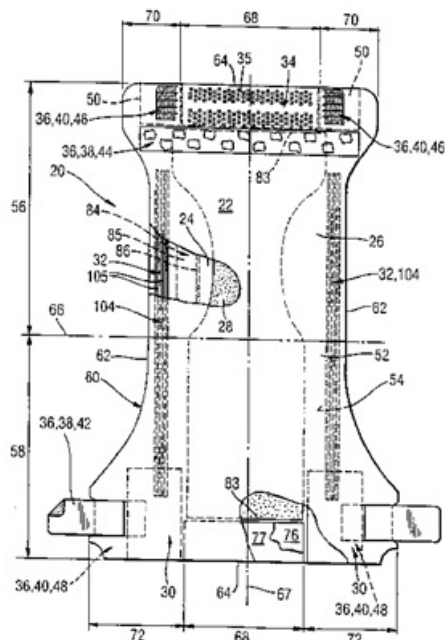
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604/385.101

PatBase - US6664439_BA



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Priority:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): ARNDT SILKE ; EHRNSPERGER BRUNO JOHANNES ; KREUZER CARSTEN HEINRICH ; LAVON GARY DEAN ; LINK ANDREA LIESELOTTE ; NEUMANN FRANK ; PROCTER AND GAMBLE ; SCHMIDT MATTIAS ; STOELZEL CLAUS PETER ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

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

Inventor(s): (std): STOELZEL PETER CLAUS ; TOELZEL CLAUS PETER ; STOELZEL CLAUS PETER ; STOELZEL CLAUS P ; SILKE ARNDT ; SCHMIDT MATTIAS ; SCHMIDI MATTIAS ; NEUMANN FRANK AND ; NEUMANN FRANK ; MATTIAS SCHMIDT ; MATTIAS SCHMIDI ; LINK ANDREA LIESELOTTE ; LINK ANDREA LIESELOTTE ; LAVON GARY DEAN ; LAVON GARY DEA ; LAVON DEAN ; KRUEZER CARSTEN HEINRICH ; KREUZER CARSTEN HEINRICH AND ; KREUZER CARSTEN H ; JOHANNES EHRNSPERGER BRUNO ; JEAN VIAUD ; ISHAI DORON ; HENRY DENNIS ANSTEY ; GARY DEAN LAVON ; GARY DEA LAVON ; GARRY DEAN LAVON ; FRANK NEUMANN ; EHRNSPERGER JOHANNES ; EHRNSPERGER BRUNO JOHANNES ; EHRNSPERGER BRUNO H ; CLAUS PETER STOELZEL ; CLAUS P STOELZEL ; CARSTEN HEINRICH KREUZER ; CARSTEN H KREUZER ; BURNO JOHANNES EHRNSPERGER ; BRUNO JOHANNES EHRNSPERGER ; BRUNO J EHRNSPERGER ; BRUNO H EHRNSPERGER ; ARNDT SILKE ; ANDREA LIESELOTTE LINK ; ANDREA LIESELOTTE LINK ; DEAN LAVON GARY ; EHRNSPERGER BURNO JOHANNES ; KREUZER CARSTEN HEINRICH ; LAVON GARRY DEAN ; LIESELOTTE LINK ANDREA ; LINK LIESELOTTE ; SHCMIDT MATTIAS ; EHRNSPERGER BRUNO J

Inventor(s): ARDT SILKE ; STOEIZEL CLAUS PETER ; SLIKE ARNDT

Agent(s): SIM AND MCBURNEY; DIMOCK STRATTON LLP; WILSON LUE LLP; NAGAI HIROSHI

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 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 ZA ZW

Title: MATERIALES RESPIRABLES EN FORMA DE ROLLO CONTINUO QUE TIENEN TEXTURA SIMILAR A LA TELA RESPIRABLE
MATERIALS IN THE FORM OF CONTINUOUS ROLL LIKE HAVING A FABRIC TEXTURE (Machine translation)

Abstract: Source: CO5050413A [ES] LA PRESENTE INVENCION ESTA DIRIGIDA A UN MATERIAL EN FORMA DE ROLLO CONTINUO, SUAVE QUE COMPRENDE UNA PLURALIDAD DE PRIMERAS REGIONES Y UNA PLURALIDAD DE SEGUNDAS REGIONES QUE ESTAN COMPUESTAS DE LA MISMA COMPOSICION DE MATERIAL. **Machine translation:** The present invention is directed to a shaped material ROLL CONTINUOUS SOFT comprising a plurality of first regions PLURALITY AND REGIONS OF SECOND THAT ARE MADE OF THE SAME COMPOSITION OF MATERIAL.

Classifications:

International (IPC 8-9): A61L15/00 D04H1/00 (Advanced/Invention);

A61L15/00 D04H1/00 (Core/Invention)

International (IPC 1-7): A61F13/15 A61L15/00 D04H1/00 D04H1/54

Family:

Publication number	Publication date	Application number	Application date
AR012762 AA	20001108	AR1998P106603	19981222
CO5050413 A1	20010627	CO19980076189	19981222
TH39392 A	20000714	TH19981004895	19981217

Priority:

US19970023459 19971222

Probable Assignee: PROCTER AND GAMBLE

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

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

Inventor(s): (std): DOBRIN GEORGE CHRISTOPHER ; FLEMING JAMES MICHAEL ; GOENS THOMAS MASAZI ; GRANDISON KEVIN EUGENE ; JAY ANDERSON BARRY ; KALNITZ HOWARD JAY ; MONSTER ROBERT WILLEM ; SUE PHILLIPS DONNA

Inventor(s): THOMAS MASAZI GOENS ; BARRY JAY ANDERSON ; ROBERT WILLEM MONSTER ; KEVIN EUGENE GRANDISON ; HOWARD JAY KALNITZ ; JAMES MICHAEL FLEMING ; GEORGE CHRISTOPHER DOBRIN ; DONNA SUE PHILLIPS

Agent(s): CARLOS REINALDO OLARTE GARCIA

Title: **ABSORBENT** PRODUCTS WITH IMPROVED VERTICAL WICKING AND REWET CAPABILITY

Abstract: The present invention relates to an **absorbent** core for use in an **absorbent article** and methods to make the **absorbent** core and **absorbent articles**. The **absorbent** core has a discrete wicking **layer** made with compressible fibers such as eucalyptus or chemically treated fibers. The **absorbent** core and **articles** made with it have improved vertical wicking capacity and superior rewet characteristics.

Classifications:

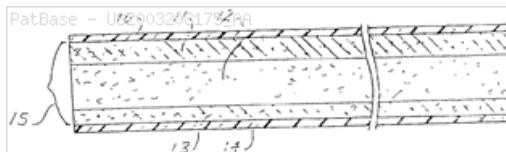
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International (IPC 1-7): A41B9/12 A61B19/08 A61F13/00 A61F13/15 A61F13/46 A61F13/49 A61F13/51 A61F13/53 A61F13/534 A61F13/536 A61F13/537 A61F5/44 A61L15/16 A61L15/18 A61L15/60 B32B27/02 B32B31/00 B32B5/26 B32B5/30 D02G3/00 D04H1/42 D04H1/70 D04H13/00

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European: A61F13/15M3 A61F13/532B A61F13/535 A61F13/536 A61F13/537C2 A61F13/537C8 A61F13/537D D04H13/00B2 D04H13/00B3 D04H13/00B4 D04H13/00B5 K61F13/15J8H K61F13/15J8H1

US: 128/849 128/849S 428/165 428/166 428/167 428/168 428/196 442/385 442/392 442/393 442/411 442/415 442/416 442/417 602/43 602/43P 604/367 604/375 604/375S 604/378 604/378S 604/38 604/380



Family:

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Probable Assignee: GEORGIA PACIFIC NONWOVENS LLC

Assignee(s): (std): BKT HOLDING CORP ; ERSPAMER JOHN ; BOEHMER BRIAN E ; ERSPAMER JOHN P ; HOOD RYAN K ; DUTKIEWICZ JACEK K ; CAMPBELL ALAN JEFFREY ; GROSS JAMES R ; BAKER JOHN PERRY ; BETTS DERRIX ; BKI HOLDING CORP ; BUCKEYE TECHNOLOGIES INC ; HURLEY JEFFREY S ; WAHAL SANJAY ; KALMAN MICHAEL ; KALMON MICHAEL

Assignee(s): DUTKIEWICZ JACEK K ; GEORGIA PACIFIC NONWOVENS LLC ; BKI HOLDING CORP WILMINGTON ; BANK OF AMERICA NA COLLATERAL AGENT AS ; FLEET NATIONAL BANK

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Inventor(s): WAHAL SANJAYHOOD RYAN K ; SANJAY WAHAL ; WAHAL SAJAY ; MICHAEL KALMAN ; JAMES R GROSS ; JOHN P ERSPAMER ; JOHN PERRY BAKER ; JS HURLEY ; KALMA MICHAEL ; J ERSPAMER ; J S HURLEY ; JACEK K DUTKIEWICZ ; HURLEY JEFF S ; GROSS JAMES ; DUTKIEWICZ JACEK ; B E BOEHMER ; BAKER JOHN ; BRIAN BOEHMER ; BE BOEHMER ; BETIS DERRIX

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; ROBIC; GOUDREAU GAGE DUBUC; BARROS; LUIS FELIPE CASTILLO GIBSON; GERMAN CASTILLO GRAU; BAKER BOTTS LLP

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 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 MZ 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: INTERMEDIATE **ABSORBENT** STRUCTURE WITH INTEGRATED **PARTICLE** BARRIER

Abstract: The invention relates to an intermediate **absorbent** structure comprising an upper **layer** that is liquid **permeable**, a lower **layer** that is **impervious** to the penetration of **particles** of **absorbent** material or **odor absorbing** material in the form of **particles** or small fibers, said **layer** having a mean pore size in the range 5-25 μm , wherein at least 70 percent of the pores have a diameter in the range 5-15 μm , and an intermediate **layer** comprising **absorbent** material, preferably superabsorbent polymer in the form of **particles** or small fibers, between said upper **layer** and said lower **layer**, wherein said lower **layer** has an air permeability less than 1000 m/s at 196 Pa, a tensile strength in the machine direction of at least 20 N/5 cm and a tensile strength in the cross direction of at least 10 N/5 cm. Preferred embodiments include structures where said lower **layer** comprises continuous filaments and fine fibers.

Classifications:

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

A61F13/15 (Core/Invention)

International (IPC 1-7): A61F13/15

CPC: A61F13/15203 A61F13/15634 A61F13/15658 A61F13/15699

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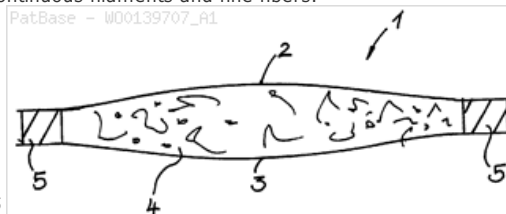
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K61F13/15J8P1 K61F13/15J8T1 K61F13/531B K61F13/531C K61F13/53Q2E K61F13/53Q4A K61F13/53Q4B K61F13/84B1



Family:

Publication number	Publication date	Application number	Application date
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AU200018624 A5	20010612	AU20000018624	19991203
DE69938066 D1	20080313	DE19996038066	19991203
DE69938066 T2	20090122	DE19996038066T	19991203
EP1242023 A1	20020925	EP19990962214	19991203
EP1242023 B1	20080123	EP19990962214	19991203
ES2303388 T3	20080801	ES19990962214T	19991203
WO0139707 A1	20010607	WO1999EP09490	19991203

Priority:

WO1999EP09490 19991203

Probable Assignee: KORMA SPA

Assignee(s): (std): GERLACH HERBERT ; KORMA SPA

Assignee(s): KORMA S P A

Inventor(s): (std): GERLACH HERBERT

Inventor(s): HERBERT GERLACH

Agent(s): MAXTON LANGMAACK AND PARTNER

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 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 TZ UA UG US UZ VN YU ZA ZW

Title: DRYER-ADDED FABRIC SOFTENING **ARTICLES** AND METHODS

Abstract: A fabric conditioning **article** for use in a clothes dryer. The fabric conditioning **article** having a flexible sheet and a fabric conditioning composition deposited on the sheet. The fabric conditioning composition includes a fabric conditioning agent, perfumed **particles** and minor components. The perfume **particles** are a perfume composition incorporated into a porous mineral carrier such as clay and/or zeolite. Optionally, the perfume composition comprises low levels of unstable perfume components. Alternatively, the perfumed **particles** have a coating material encapsulating at least a portion of the **particles**. Optionally, the **articles** are packaged in a container having a moisture barrier to prevent premature release of the perfume therefrom.

Classifications:

International (IPC 8-9): A61L9/01 A61L9/012 A61L9/014 A61L9/04 A61L9/12 B65D81/24 C11D17/00 C11D17/04 C11D3/00 C11D3/50 (Advanced/Invention);

A61L9/01 C11D17/04 C11D3/00 C11D3/50 (Core/Invention)

International (IPC 1-7): A61K7/46 A61L9/00 A61L9/01 A61L9/012 A61L9/014 A61L9/04 A61L9/12 B65D81/24 C11D1/00 C11D17/04 C11D3/00 C11D3/50 C11D9/20

CPC: A61L9/042 A61L9/048 A61L9/12 C11D3/001 C11D17/047

A61L9/01 A61L9/012 A61L9/014 C11D3/0052 C11D3/505

C11D17/041 D06M13/005

European: A61L9/01 A61L9/012 A61L9/014 A61L9/04B A61L9/04G

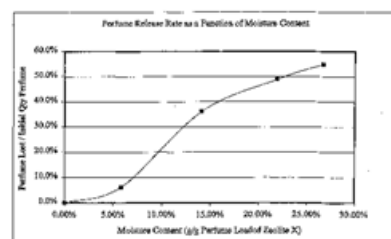
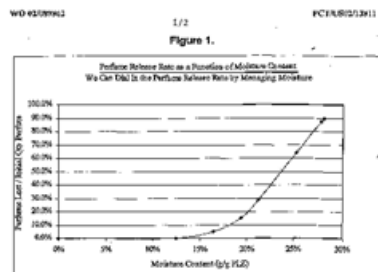
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US: 239/53 239/53P 422/305 422/305S 422/4 422/4S 510/100

510/101 510/101S 510/505 510/505S 510/515 510/516 510/52

510/520 510/520S 512/1 512/1S

PatBase - W002089862_A2



Family:

Publication number	Publication date	Application number	Application date
AU2002303583 AA	20021118	AU20020303583	20020501
AU2002305316 AA	20021118	AU20020305316	20020501
CA2442751 AA	20030930	CA20022442751	20020501
CA2442753 AA	20030930	CA20022442753	20020501
EP1383547 A2	20040128	EP20020731612	20020501
EP1383858 A1	20040128	EP20020734127	20020501
JP2004535223 T2	20041125	JP20020586994T	20020501
MXPA03010130 A1	20040310	MX2003PA10130	20020501
US2003013632 AA	20030116	US20020137467	20020502
US2003024997 AA	20030206	US20020137529	20020502
US2003036489 AA	20030220	US20020137528	20020502
US2005003996 AA	20050106	US20040903674	20040730
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US7071157 BB	20060704	US20040903674	20040730
WO02089862 A2	20021114	WO2002US13811	20020501
WO02089862 A3	20030123	WO2002US13811	20020501
WO02090479 A1	20021114	WO2002US13809	20020501
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Priority:

US20010288767P 20010504	US20010323302P 20010919	US20010341128P 20011213
US20020352808P 20020130	US20020352802P 20020130	US20020352829P 20020130
US20020352807P 20020130	WO2002US13810 20020501	WO2002US13811 20020501
US20020137467 20020502	US20020137528 20020502	US20020137529 20020502
US20040903674 20040730		

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): PROCTER AND GAMBLE CO ; WAHL ERROL HOFFMAN ; WELCH GARY ROBERT ; TRINH TOAN ; WILLIAMS BARBARA KAY ; SANTOS BIENVENIDO ALVAREZ ; WELLING STANLEY JAMES ; GABRIEL STEVEN MATTHEW ; HEIST BRENT MICHAEL ; LIU ZAIYOU ; PEGOLI RONALD EDWARD ; MORGAN GEORGE KAVIN III ; MAIER GREGORY CHARLES ; JACKSON RHONDA JEAN ; DAHLINGER DAVID JAMES ; DIHORA JITEN ODHAVJI ; DOWNEY LYNN ELLEN ; FINLEY KRISTIN MARIE

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MARK WILLIAM ; SANTOS BIENVENIDO ALVAREZ ; SAYERS EDWARD ; SCHROEDER TIMOTHY JAMES ; STEVEN MATTHEW GABRIEL ; TOAN TRINH ; TRINH TOAN ; WAHL ERROL HOFFMAN ; WELCH GARY ROBERT ; WELCH ROBERT GARY ; WELLING STANLEY JAMES ; WILLIAMS BARBARA KAY ; YORK DAVID WILLIAM ; ZAIYOU LIU

Inventor(s): WILLIAMS BARBARA ; WELLING STANLEY ; WAHL ERROL ; SANTOS BIENVENIDO ; MORGAN ; MORGAN GEORGE ; PEGOLI RONALD ; MAIER GREGORY ; III GEORGE KAVIN ; JACKSON RHONDA ; FINLEY KRISTIN ; DIHORA JITEN ; DAHLINGER DAVID

Agent(s): DIMOCK STRATTON LLP; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; DAVID V

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 LI 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

Title: SYSTEM AND METHOD FOR DRY FORMING **ABSORBENT** CORES

Abstract: An apparatus and method for dry forming **absorbent** cores are disclosed. The apparatus has a rotatable drum having a substantially cylindrical **surface**. A vacuum **surface** having one or more holes is located substantially circumferentially around at least a portion of the substantially cylindrical **surface**. A vacuum chamber is located within the rotatable drum. The vacuum chamber has one or more vacuum passages forming a vacuum zone subadjacent at least a portion of the vacuum **surface**. A first casing sheet is supplied to overlie the vacuum **surface** at a first location, and a fibrous material is supplied to overlie the first casing sheet at a second location. A supply of particulate matter is deposited onto the fibrous material at a third location, and a second casing sheet is supplied to overlie the first casing sheet, fibrous material and particulate matter at a fourth location, thereby forming an **absorbent** core composite.

Classifications:

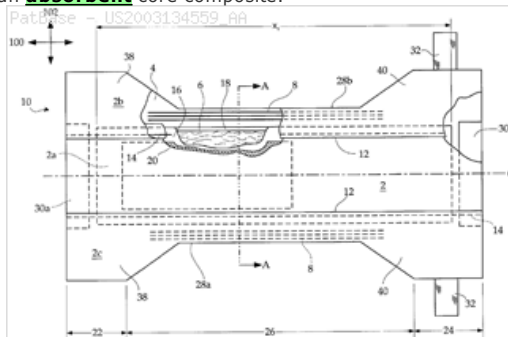
International (IPC 8-9): A01J21/00 A01J25/12 A21C11/00 A21C3/00 A61F13/00 A61F13/15 A61F13/20 A61F13/49 A61F13/53 A61F13/534 A61F13/539 A61F13/56 A61F13/58 A61F15/00 A61F5/44 A61L15/28 A61L15/60 B27N1/00 B27N3/00 B28B5/00 B29C43/22 B29C44/20 B32B5/30 D04H1/20 (Advanced/Invention); A61F13/494 (Advanced/Non-invention); A61F13/00 A61F13/15 A61F13/56 A61F5/44 (Core/Invention); A61F (Subclass/Invention)

International (IPC 1-7): A01J21/00 A01J25/12 A21C11/00 A21C3/00 A61F0/00 A61F13/00 A61F13/15 A61F13/20 A61F13/49 A61F13/53 A61F13/534 A61F13/539 A61F13/56 A61F13/58 A61F15/00 A61F5/44 B27N1/00 B27N3/00 B28B5/00 B29C43/22 B29C44/20 B32B27/12 B32B31/00 B32B5/16 B32B5/26 C09J1/00 D04H1/00 D04H1/20 D04H13/00 D04H3/00 D04H5/00 D29D7/00

CPC: A61F13/5323 A61F13/534 A61F13/539 A61F13/49017 A61F13/53418 A61F13/53427 A61F13/53436 A61F13/535 A61F13/537 A61F13/8405 A61F2013/49038 A61F2013/5315 Y10T156/1008 Y10T156/1015 Y10T156/1051 Y10T156/1798 Y10T156/1098 A61F13/15658 B32B5/30 A61F13/1565 Y10T442/659 Y10T442/674 Y10T442/699 Y10T442/60 A61F2013/530532 A61F2013/530554

European: A61F13/15M3F A61F13/15M3G A61F13/532B A61F13/534 A61F13/535 A61F13/539 B32B5/30 K61F13/49D2E K61F13/49D2J K61F13/531B K61F13/534B2 K61F13/534B4 K61F13/534B6 K61F13/537 K61F13/53Q2C K61F13/53Q2E1 K61F13/84B

US: 156/200 156/204 156/227 156/276 156/276S 156/285 156/285S 156/303 156/442.1 156/442.2 156/443 156/578 264/119 264/119S 264/517 264/518 425/363 425/363S 425/388 425/388S 425/403 425/403.1 425/405.1 425/470 425/504 425/504S 425/505 425/505P 425/80.1 425/801 425/82.1 425/83.1 442/327 442/327S 442/381 442/381S 442/394 442/394P 442/394S 442/417 442/417P 604/358 604/358P 604/367 604/367P 604/368 604/368P 604/378 604/378P 604/378S 604/385.28 604/385.280S 604/386 604/386S 604/387 604/387S



Family:

Publication number	Publication date	Application number	Application date
AT373456 E	20071015	AT20030701283T	20030110
AU2003202268 AA	20030902	AU20030202268	20030110
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EP1474070 A2	20041110	EP20030701283	20030110
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WO06039191 A3	20061221	WO2005US34065	20050926
WO06041507 A1	20060420	WO2005US00964	20050112

Priority:

US20020046279	20020116	US20020050045	20020117	WO2003US00612	20030110
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US20050072957	20050307	WO2005US34041	20050926		

Probable Assignee: PARAGON TRADE BRANDS INC

Assignee(s): (std): FIRST QUALITY RETAIL SERVICES LLC ; GLAUG FRANK ; LITVAY JOHN ; LITVAY JOHN D ; TYCO HEALTHCARE RETAIL SERVICE ; PARAGON TRADE BRANDS INC ; TYCO HEALTHCARE RETAIL SERV AG ; TYCO HEALTHCARE RETAIL SERVICES AG ; PARAGON TRADE BRANDS ; EGTED WALTER ; WALTER JOHN ; WAKSMUNDZKI ANDREW ; TYCO HELTHCARE RETAIL SERVICES ; TYCON HEALTHCARE RETAIL SERVIC

Assignee(s): TYCO HOALTHCARE RETAIL SERVICES AG ; TYCON HEALTHCARE RETAIL SERVICES AG ; TYCO HELTHCARE RETAIL SERVICES AG ; EGYED WALTER ; JP MORGAN CHASE BANK NA ; PARAGON TRADE BRANDS LLC ; TYCO HEALTHCARE RETAIL GROUP INC ; JPMORGAN CHASE NA ; HANSEN EBBA A ; DELZER TROY

Inventor(s): (std): EBBA A HANSEN ; EGYED WALTER ; GLAUG FRANK ; HANSEN EBBA ; HANSEN EBBA A ; LITVAY JOHN ; WALTER JOHN ; WAKSMUNDZKI ANDREW ; LITVAY JOHN D ; EGTED WALTER ; DELZER TROY ; JOHN D LITVAY

Inventor(s): ANDREW WAKSMUNDZKI ; JOHN LITVAY ; FRANK GLAUG ; WALTER EGTED

Agent(s): PIASETZKI AND NENNIGER LLP; BERESKIN AND PARR LLP SENCRL SRL; BLAKE CASSELS AND GRAYDON LLP; ITO TAKAMI; MASUI CHUJI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; TOMITA HIROYUKI; CHIBA AKIO; CHRISTOPHER C CAMPBELL ESQUIRE HUNTON AND WILLIAMS; CHRISTOPHER C CAMPBELL ESQ HUNTON AND WILLIAMS; HUNTON AND WILLIAMS LLP, INTELLECTUAL PROPERTY DEPARTMENT; HUNTON AND WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT; MARK S LEONARDO ESQ BROWN RUDNICK BERLACK ISRAELS LLP; HUNTON AND WILLIAMS; SPILMAN THOMAS AND BATTLE 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 JP 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 TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: ELECTRONIC SENSING OF CHEMICAL AND BIOLOGICAL AGENTS USING FUNCTIONALIZED NANOSTRUCTURES

Abstract: This invention provides for an apparatus and a method for detecting the presence of pathogenic agents with sensors containing functionalized nanostructures integrated into circuits on silicon chips. The nanostructures are functionalized with molecular transducers that recognize and bind targeted analytes which are diagnostic of the pathogenic agent of interest. The molecular transducer includes a receptor portion, which binds the analyte, and an anchor portion that attaches to the nanostructure. Upon binding of the analyte, a change in molecular configuration represented by the newly formed receptor-analyte complex creates a force that is transmitted to the nanostructure via the anchor portion of the transducer. The effect of the force transmitted to the nanostructure is to alter its conductivity. The change in conductivity of the nanotube thus represents a signal that indicates the presence of the pathogenic agent of interest.

Classifications:

International (IPC 8-9): A61B5/05 A61B5/08 A61B5/083 A61B5/145 A61K31/202 A61K31/395 A61N1/36 B01D53/94 B01J19/00 B01J23/42 B01J23/44 B01J23/46 B01J35/06 B01J8/06 B05D5/12 B82B1/00 B82B3/00 B82Y10/00 B82Y15/00 B82Y30/00 C01B31/02 C12M1/00 C12M1/34 C12M3/00 C12N11/14 C12N11/16 C12Q1/00 C12Q1/68 C30B25/00 C40B60/12 D01F9/12 F02M25/06 G01N1/00 G01N1/28 G01N21/00 G01N21/75 G01N27/00 G01N27/02 G01N27/12 G01N27/22 G01N27/26 G01N27/28 G01N27/30 G01N27/327 G01N27/40 G01N27/403 G01N27/411 G01N27/414 G01N27/416 G01N31/12 G01N31/22 G01N33/00 G01N33/483 G01N33/497 G01N33/53 G01N33/543 G01N33/551 G01N33/566 G01N33/58 G01N33/66 G01N37/00 G01N7/00 G01R27/08 G05D23/00 G06F19/00 G08B21/00 H01B1/24 H01J1/02 H01J1/62 H01J63/04 H01L21/288 H01L23/48 H01L27/108 H01L27/14 H01L29/00 H01L29/06 H01L29/66 H01L29/768 H01L29/82 H01L51/00 H01L51/30 H05K13/00 (Advanced/Invention);

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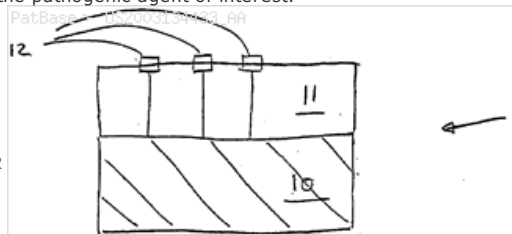
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Assignee(s): UNIV OF CALIFORNIA ; THE UNIV OF CALIFORNIA ; THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ; ALTERNATIVE ENERGY RESOURCES INC ; ARMITAGE N P ; MORGAN STANLEY SENIOR FUNDING INC ; NXP BV ; NXP F K A FREESCALE SEMICONDUCTOR INC BV ; THE UNIV ; DAVIS ALONA J ; SILICON VALLEY BANK

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MYERS LLP; ATTN DAVID B MURPHY NANOMIX INC; O"MELVENY AND MYERS LLP, IP AND T CALENDAR DEPARTMENT LA-1118; OMELVENY AND MYERS LLP IP AND T CALENDAR DEPARTMENT LA 1118; BEYER WEAVER LLP; WEAVER AUSTIN VILLENEUVE AND SAMPSON LLP; NANOMIX INC; DENNIS ROBERT F; ROBERT F; WEAVER AUSTIN VILLENEUVE AND SAMSPSON LLP; BERGIN DENISE S ET AL; BERGIN DENISE 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 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 ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: FIBROUS MATERIAL WITH HIGH FUNCTIONAL **PARTICLE** LOAD

Abstract: This invention relates to fibrous **absorbent articles** containing **particles** useful in the manufacture of disposable diapers, adult incontinence pads, sanitary napkins and the like. More particularly, the invention is directed to a multistrata fibrous web including a plurality of first strata including matrix fibers and thermoplastic fibers and a plurality of second strata including functional **particles** arranged in separated lanes. The first and second strata alternate through the web and the lanes of the second strata are arranged such that the lanes of adjacent second strata do not superimpose.

Classifications:

International (IPC 8-9): A61F13/15 A61L15/22 D04H13/00
D04H3/00 (Advanced/Invention);
D04H13/00 (Core/Invention)

International (IPC 1-7): A61F13/15 A61L15/22 D04H3/00

CPC: Y10T442/60 A61F13/53 A61F13/15658 A61F13/5323
A61F13/535 A61F2013/530562 D04H1/407 D04H1/732

European: A61F13/15M3G A61F13/53 A61F13/532B A61F13/535
D04H13/00B2 K61F13/53Q2E2

US: 442/327 442/327P

PatBase - US2005153615_AA

Patent Application Publication: Jan. 14, 2006 Sheet 1 of 7 US 2005/0153615 A1

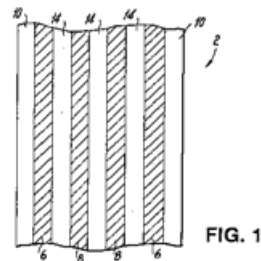


FIG. 1

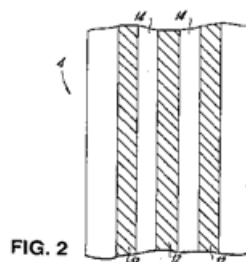


FIG. 2

Family:

Publication number	Publication date	Application number	Application date
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TW200302112 A	20030801	TW20030101024	20030117
TW583001 B	20040411	TW20030101024	20030117
US2005153615 AA	20050714	US20030501696	20030115
WO03061541 A2	20030731	WO2003US01252	20030115
WO03061541 A3	20040226	WO2003US01252	20030115

Priority:

US20020350324P 20020118 US20020373410P 20020416 US20030501696 20030115
WO2003US01252 20030115 US20040501696 20040716

Probable Assignee: BKI HOLDING CORP

Assignee(s): (std): BKI HOLDING CORP ; BOEHMER BRIAN E ; DUTKIEWICZ JACEK K ; KALMON MICHAEL

Inventor(s): (std): BOEHMER BRIAN E ; DUTKIEWICZ JACEK K ; KALMON MICHAEL

Inventor(s): MICHAEL KALMON ; BOEHMER BRIAN ; JACEK K. DUTKIEWICZ ; BRIAN E. BOEHMER ; DUTKIEWICZ JACEK

Agent(s): SMART AND BIGGAR; DARBY AND DARBY PC

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 LI 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 SC 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: DEODORIZING SUPER-**ABSORBENT** COMPOSITION

Abstract: The invention relates generally to an **odor-absorbing** superabsorbing composition, a process for production of an **odor-absorbing** superabsorbing composition, a composite comprising an **odor-absorbing** superabsorbing composition, a hygiene **article** comprising a composite, chemical products comprising or based on an **odor-absorbing** superabsorbing composition or a composite, as well as the use of an **odor-absorbing** superabsorbing composition or of a composite in chemical products.

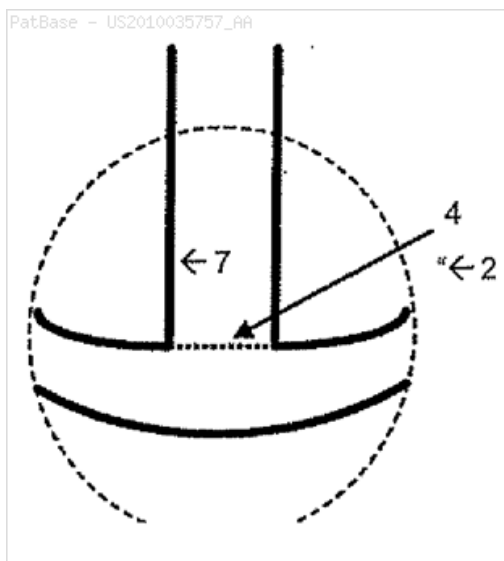
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European: A61L15/60 B01J20/26 B01J20/28D32 B01J20/32 B01J20/32D4B B01J20/32F8B8 L01J220/68

US: 424/486 424/486S 424/501 424/501S 424/76.1 424/76.100S 502/402 502/402S 504/360 514/772.3 514/772.300S 604/358 604/367 604/385.23 604/385.230S



Family:

Publication number	Publication date	Application number	Application date
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JP2013163818 A2	20130822	JP20130096038	20130430
KR101407781 B1	20140620	KR20087014683	20061117
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TW200734393 A	20070916	TW20060142567	20061117
TWI402305 B	20130721	TW20060142567	20061117
US2010035757 AA	20100211	US20060093548	20061117
US8653320 BB	20140218	US20060093548	20061117
WO07057203 A2	20070524	WO2006EP11055	20061117
WO07057203 A3	20071213	WO2006EP11055	20061117

Priority:

DE200510055497 20051118 EP20060818628 20061117 WO2006EP11055 20061117
JP20080540523 20061117 JP20080540523T 20061117

Probable Assignee: EVONIK STOCKHAUSEN GMBH

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Inventor(s): FURNO FRANCK MUELLER FELIX PEGGAU JOERG KEUP... ; FURNO FRANCK MUELLER FELIX PEGGAU JOERG KEUP MICHAEL SCHMIDT HARALD

Agent(s): HERZOG MARTIN; SMITH MOORE LEATHERWOOD LLP; JOHN P; PHILIP P

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 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 MG MK ML MN MR 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

Title: PROCESS FOR MAKING AN EMBOSSED WEB

Abstract: A process for making an embossed web. A precursor web is provided between a forming structure and a compliant substrate. The forming structure has a plurality of discrete apertures or depressions. Pressure is provided between the compliant substrate and the forming structure to force the precursor web into the apertures or depressions of forming structure to form the embossed web. The resulting embossed web has a plurality of discrete extended elements.

Classifications:

International (IPC 8-9): A47L13/16 A61C13/01 A61F13/15
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G02B5/30 (Advanced/Invention);

A61F13/15 A61F13/538 B29C59/04 B29C59/06 B29C65/70
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A61F13/15 B26F1/00 B28B11/08 B29C43/32 B29C55/18 B29C59/02
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B32B3/00 B32B3/10 B32B3/28 B32B3/30 (Core/Invention);
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International (IPC 1-7): B32B3/28

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US: 1/1 156/219 156/219S 162/133 206/524.6 206/524.600S 264/154 264/155 264/156 264/175 264/175S 264/273 264/284
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383/105S 428/131 428/131S 428/132 428/132S 428/133 428/133P 428/138 428/156 428/156P 428/156S 428/158 428/158S
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Family:

Publication number	Publication date	Application number	Application date
AR075827 AA	20110427	AR2010P100783	20100312
AR075828 AA	20110427	AR2010P100784	20100312
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PatBase - US2010230857_AA

Patent Application Publication Sep. 16, 2010 Sheet 1 of 8 US 2010/0230857 A1

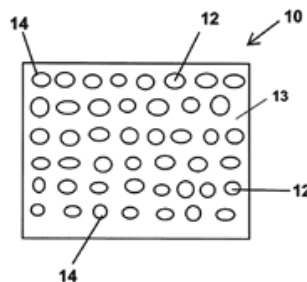


FIGURE 1

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Priority:

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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

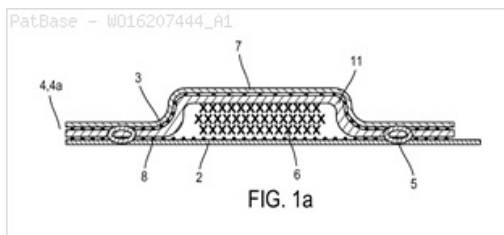
Title: NEW **ABSORBENT ARTICLE** COMPRISING AN ACQUISITION/DISTRIBUTION **LAYER** AND PROCESS FOR MAKING IT

Abstract: The invention provides a fluid-**absorbent** core comprising: (a) an upper **layer**, (b) a lower **layer**, (c) fluid-**absorbent** polymer **particles** between upper **layer** and lower **layer**, the upper **layer** and the lower **layer** being at least partially joined together by attachments forming a sandwich-like structure with at least some of the unattached regions between the upper **layer** and the lower **layer** forming pockets containing fluid-**absorbent** polymer **particles**, the fluid-**absorbent** core further comprising an acquisition-distribution **layer**, said acquisition-distribution **layer** being either totally joined to the upper **layer** and at most partially joined to the lower **layer** or totally joined to the lower **layer** and at most partially joined to the upper **layer**.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/532 A61F13/537 A61F13/539 (Advanced/Invention)

CPC: A61F13/5323 A61F13/15577 A61F13/537 A61F13/539 A61F2013/53908 A61F13/534



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Probable Assignee: BASF SE

Assignee(s): (std): BASF SE ; BOSTIK INC

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Agent(s): AUGUST AND DEBOUZY AVOCATS

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