

1) Family number: 34548679 (US2001017102A)

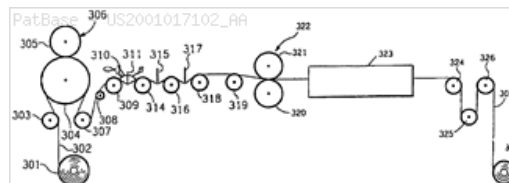
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Title: METHOD AND APPARATUS FOR CONTROLLED PLACEMENT OF A POLYMER COMPOSITION INTO A WEB

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 A61F13/49 A61F13/53 A61F5/44 A61L15/16 A61L15/22 A61L15/26 A61L15/44 A61L15/52 B05C11/00 B05C11/02 B05C11/04 B05C3/172 B05C3/18 B05D1/26 B05D1/28 B05D3/12 B32B5/18 C07K1/22 C08J9/40 C08J9/42 C08L83/07 C09D183/07 C12Q1/70 C14C11/00 C14C9/00 D04H1/40 D04H1/42 D04H1/58 D04H1/64 D04H13/00 D06B15/08 D06M10/00 D06M10/10 D06M11/00 D06M15/256 D06M15/263 D06M15/356 D06M15/37 D06M15/564 D06M15/643 D06M15/653 D06M15/657



D06M23/00 D06M23/14 D06N3/00 D06N3/04 D06N3/12 D06N7/00 D21H17/59 D21H19/32 D21H23/38 D21H25/06 G01N33/544 G01N33/569 G01N33/573 (Advanced/Invention); A41D31/00 A61F5/44 A61L15/16 B05C11/04 B05D1/26 B05D3/12 B32B5/18 D04H1/40 D06M10/00 D06M11/00 D06N7/00 (Advanced/Non-invention); A41D31/00 A61F13/00 A61F13/15 A61F5/44 A61L15/16 B05C11/02 B05C3/00 B05C3/02 B05D1/26 B05D3/12 B32B5/18 C08J9/00 C09D183/07 C14C11/00 C14C9/00 D04H1/40 D04H1/42 D04H1/58 D04H1/64 D04H13/00 D06B15/00 D06M10/00 D06M11/00 D06M15/21 D06M15/37 D06N3/00 D06N3/12 D06N7/00 D21H17/00 D21H19/00 D21H23/00 D21H25/00 (Core/Invention); B05C11/02 (Core/Non-invention)

International (IPC 1-7): A01N25/34 A41D31/00 A61B19/08 A61F13/00 A61F13/15 A61F13/46 A61F13/49 A61F13/53 A61F5/44 A61L15/16 A61L15/22 A61L15/44 A61L15/44 A61L15/52 A61L15/52 B05C11/00 B05C11/02 B05C11/04 B05C3/172 B05C3/18 B05C5/00 B05C5/02 B05D1/00 B05D1/26 B05D1/28 B05D1/42 B05D3/12 B05D5/00 B05D5/12 B21F9/00 B32B3/06 B32B3/14 B32B5/18 B32B5/32 B32B7/02 B32B9/04 C07K1/22 C07K1/22 C08J7/00 C08L83/07 C09D183/07 C12N15/48 C12N15/86 C12N7/01 C12Q1/68 C12Q1/70 D03D3/00 D04H1/40 D04H1/42 D04H1/64 D04H1/65 D04H1/66 D06C3/00 D06C5/00 D06H1/64 D06H13/00 D06M10/00 D06M11/00 D06M15/256 D06M15/263 D06M15/364 D06M15/364 D06M15/37 D06M15/37 D06M15/564 D06M15/643 D06M15/70 D06M23/00 D06M23/14 D06N3/12 D06N7/00 D21H23/38 G01N33/543 G01N33/544 G01N33/544 G01N33/569 G01N33/573 G01N33/573

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US: 118/123 118/304 118/33 118/33P 118/413 118/419 118/643 118/663 118/664 118/665 118/67 118/679 118/68 118/683 118/688 118/712 128/849 128/888 156/145 156/167 156/229 156/229S 156/272.2 156/278 2/114 2/83 2/901 424/278.1 424/402 424/404 424/443 424/499 427/10 427/171 427/171S 427/173 427/176 427/209 427/245 427/299 427/324 427/356 427/358 427/359 427/365 427/369 427/387 427/389 427/389.9 427/391 427/392 427/393.3 427/393.4 427/412 427/8 428/138 428/213 428/215 428/216 428/221 428/224 428/225 428/234 428/235 428/240 428/241 428/242 428/244 428/246 428/248 428/252 428/260 428/264 428/272 428/274 428/283 428/286 428/287 428/289 428/290 428/304.4 428/305.5 428/306.6 428/308.4 428/309.9 428/311.1 428/311.11 428/311.5 428/311.51 428/311.7 428/311.71 428/315.5 428/315.7 428/315.9 428/316.6 428/317.1 428/317.9 428/319.3 428/339 428/422 428/425.5 428/447 428/77 428/78 428/904 428/907 428/913 428/920 435/5 435/7.92 436/518 436/535 442/102 442/104 442/123 442/152 442/153 442/164 442/281 442/381 442/417 442/61 442/71 442/76 442/79 442/81 442/82 442/87 442/88 523/103 523/122 528/15 602/48 602/50 604/367 604/372 604/374 604/377 604/378 604/381 604/385.01 604/385.1 977/788 977/891 977/918

JP F-Term: 3B029 3B029/BC03 3B029/BC05 3B029/BD22 3B036 3B200 3B200/AA01 3B200/AA09 3B200/BA05 3B200/BA07 3B200/BB03 3B200/BB04 3B200/BB05 3B200/BB06 3B200/BB08 3B200/BB14 3B200/BB21 3B200/BB24 3B200/CA11

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Family:

Publication number	Publication date	Application number	Application date	
AT191523 E	20000415	AT19960920271T	19960517	
AT195772 E	20000915	AT19960914668T	19960516	
AT200114 E	20010415	AT19960915838T	19960516	
AT254510 E	20031215	AT19960908808T	19960315	
AU198933460 A1	19891005	AU19890033460	19890313	
AU198934368 A1	19891005	AU19890034368	19890313	
AU198934406 A1	19891005	AU19890034406	19890313	
AU199475925 A1	19950504	AU19940075925	19941019	
AU199652527 A1	19961016	AU19960052527	19960315	
AU199657500 A1	19961129	AU19960057500	19960516	
AU199657958 A1	19961129	AU19960057958	19960516	
AU199658625 A1	19961129	AU19960058625	19960517	
AU689799 B2	19980409	AU19940075925	19941019	
CA1338232 A1	19960409	CA19890593680	19890314	
CA1339587 A1	19971216	CA19890593681	19890314	
CA2215758 AA	19970916	CA19962215758	19960315	
CA2215758 C	20040928	CA19962215758	19960315	
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DE69609971 T2	20010329	DE19966009971T	19960516	
DE69612281 D1	20010503	DE19966012281	19960516	
DE69612281 T2	20010705	DE19966012281T	19960516	
DE69630778 D1	20031224	DE19966030778	19960315	
DE69630778 T2	20040930	DE19966030778T	19960315	
DK0826082 T3	20010507	DK19960915838T	19960516	

EP0814918 A2	19980107	EP19960908808	19960315
EP0814918 A4	20020417	EP19960908808	19960315
EP0814918 B1	20031119	EP19960908808	19960315
EP0826082 A2	19980304	EP19960915838	19960516
EP0826082 B1	20010328	EP19960915838	19960516
EP0826083 A2	19980304	EP19960920271	19960517
EP0826083 B1	20000405	EP19960920271	19960517
EP0832318 A2	19980401	EP19960914668	19960516
EP0832318 B1	20000823	EP19960914668	19960516
ES2159029 T3	20010916	ES19960915838T	19960516
IL117511 A0	19960723	IL19960117511	19960315
IL117511 A1	20000229	IL19960117511	19960315
JP10511024 T2	19981027	JP19960535088T	19960517
JP10511309 T2	19981104	JP19960529452T	19960315
JP10511750 T2	19981110	JP19960535065T	19960516
JP10512023 T2	19981117	JP19960535032T	19960516
JP2986218 B2	19991206	JP19960535032T	19960516
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JP3220466 B2	20011022	JP19960535088T	19960517
JP3233641 B2	20011126	JP19960529452T	19960315
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US2001017102 AA	20010830	US19970962700	19971130
US2002088396 AA	20020711	US20010982250	20011016
US5004643 A	19910402	US19890319778	19890310
US5004643 C1	20160315	US19890319778	19890310
US5209965 A	19930511	US19910680645	19910402
US5418051 A	19950523	US19930017855	19930216
US5698303 A	19971216	US19950486212	19950607
US5846604 A	19981208	US19950487004	19950607
US5856245 A	19990105	US19950479919	19950607
US5869172 A	19990209	US19950442983	19950517
US5869172 C1	20140721	US19950442983	19950517
US5869172 C2	20141202	US19950442983	19950517
US5874164 A	19990223	US19950472568	19950607
US5876792 A	19990302	US19950407191	19950317
US5876792 C1	20130513	US19950407191	19950317
US5876792 C2	20141014	US19950407191	19950317
US5912116 A	19990615	US19950486651	19950607
US5935637 A	19990810	US19970963663	19971103
US5954902 A	19990921	US19950476465	19950607
US5954902 C1	20130211	US19950476465	19950607
US5958137 A	19990928	US19970962698	19971103
US6040251 A	20000321	US19950472480	19950607
US6071602 A	20000606	US19980014316	19980127
US6083602 A	20000704	US19950487683	19950607
US6129978 A	20001010	US19970963636	19971103
US6129978 C1	20150804	US19970963636	19971103
US6289841 BA	20010918	US19970962700	19971130
US6289841 C1	20150129	US19970962700	19971130
US6312523 BA	20011106	US19990406080	19990927
WO8908553 A1	19890921	WO1989US01006	19890313
WO8908554 A1	19890921	WO1989US01008	19890313
WO8908555 A1	19890921	WO1989US01009	19890313
WO9630432 A2	19961003	WO1996US03501	19960315
WO9630432 A3	19970103	WO1996US03501	19960315
WO9636757 A2	19961121	WO1996US07156	19960517
WO9636757 A3	19970403	WO1996US07156	19960517
WO9636758 A2	19961121	WO1996US07000	19960516
WO9636758 A3	19970213	WO1996US07000	19960516
WO9636761 A2	19961121	WO1996US07102	19960516
WO9636761 A3	19970206	WO1996US07102	19960516

Priority:

US19880319776	19880310	US19880319777	19880310	US19880319778	19880310
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Probable Assignee: NEXTEC APPLICATIONS INC**Assignee(s):** (std): SCHMERMUND GEORGE ; SILI TEX INC ; FABRIC COATING CORP ; NEXTEC APPLIC INC ; NEXTEC APPLICATIONS INC ; VIAGENE INC ; CALDWELL J MICHAEL ; CALDWELL JAMES MICHAEL ; CHIRON CORP**Assignee(s):** ELLMAN PETER ; NEKUSUTETSUKU APURIKEESHONZU INC ; SILICON VALLEY BANK**Inventor(s):** (std): CALDWELL J MICHAEL ; CALDWELL JAMES M ; CALDWELL JAMES MICHAEL ; CALDWELL MICHAEL ; ELLMAN PETER ; GRUBER HARRY E ; JOLLY DOUGLAS J ; LAIKIND PAUL K ; RESPESS JAMES G ; SCHMERMUND GEORGE ; JAMES MICHAEL CALDWELL**Inventor(s):** PAUL K LAIKIND ; PETER ELLMAN ; KOORUDOERU JEIMUZU MAIKERU ; HARRY E GRUBER ; JAMES G RESPESS ; GEORGE SCHMERMUND ; DOUGLAS J JOLLY**Agent(s):** FB RICE; FB RICE PTY LTD; RICHES MCKENZIE AND HERBERT LLP; REINHOLD COHN AND PARTNERS**Designated states:** AL AM AT AU AZ 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 LS LT LU LV MC MD MG MK ML MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN**2) Family number: 52216844 (US2012273146A)**

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Title: BULKED ABSORBENT MEMBERS

Abstract: Absorbent members, especially bulked absorbent members, and methods of making the same are disclosed. The absorbent member may be in the form of a unitary absorbent fibrous layer comprising at least some cellulose fibers. The unitary absorbent fibrous layer is at least partially stratified through its thickness. The absorbent member may also have a plurality of discrete deformations, such as depressions and/or apertures in its surfaces. The method involves subjecting a precursor web to at least one cycle (or pass) through a mechanical deformation process. The mechanical deformation process utilizes a first forming member and a second forming member that form a nip therebetween through which the precursor web is passed. The first and second forming members are moving at different speeds relative to each other when they come together to form the nip.

Classifications:

International (IPC 8-9): A41B13/04 A61F A61F13/00 A61F13/15
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A61F13/533 A61F13/535 A61F13/536 A61L15/20 A61L15/22 B26F1/10
B26F1/14 B26F1/20 B26F1/24 B29C43/24 B29C53/22 B29C53/24
B29C55/08 B29C55/18 B29C59/04 B29C70/46 B29D28/00 B31F1/00
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B32B3/24 B32B3/26 B32B3/28 B65H35/00 B65H35/02 C08F110/02
C08G63/183 D04H1/26 D04H1/425 D06C23/04 D06C3/00 D06C3/06
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A61F13/00 A61F13/511 B26F1/10 B29C43/22 B29C43/46 B29C53/22
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D21H27/00 (Advanced/Non-invention)

International (IPC 1-7): A61F13/15 A61F13/533 A61F13/536 B26F1/20
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CPC: B31F2201/0756 B31F2201/0748 A61F13/532 B29C59/04
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European: A61F13/15M6 A61F13/15M6C B29C55/18 D21H27/00D D21H27/02

US: 1/1 162/109 162/204 264/156 264/175 264/258 264/286 425/296 425/336 425/363 428/131 428/137 428/156 428/174
428/182 526/352 528/308.1 604/374

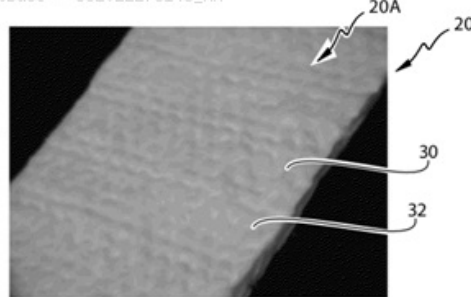
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3E078/BB51 3E078/BC06 3E078/DD07 3B154 3B154/AB20 3B154/AB22 3B154/AB27 3B154/BA38 3B154/BA44 3B154/BB02
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3B200/BB03 3B200/CA02 3B200/EA30 4F209 4F209/AA01 4F209/AA04 4F209/AA11 4F209/AC03 4F209/AF01 4F209/AG01
4F209/AG03 4F209/AG05 4F209/AH63 4F209/AR12 4F209/AR13 4F209/PA04 4F209/PB02 4F209/PN06 4F209/PQ03 3E078/AA20
3E078/DD09 3B154/AB18 3B154/CA39 3B154/DA10 3B154/DA24 3B200/DC01 3B200/DC02 3B154/BB12 3B154/BF01
3B154/DA13

JP F-Index: A41B13/02/S A41B13/02/Z A61F13/15/140 A61F13/15/329 A61F13/15/350 A61F13/15/352 A61F13/15/353
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A41B13/02/E A41B13/02/F D06C23/04/B D06C3/00 D06C3/06/Z A41B13/04 A61F13/15/354 B29C59/04/C B31F1/07
D06C23/04/Z

Family:

Publication number	Publication date	Application number	Application date
BR112013025715 A2	20170301	BR20131125715	20120425
BR112013025721 A2	20161213	BR20131125721	20120426
BR112013025721 A8	20170926	BR20131125721	20120426
BR112013025723 A2	20170808	BR20131125723	20120425
BR112013025859 A2	20161220	BR20131125859	20120425
BR112013025859 A8	20170919	BR20131125859	20120425
BR112014026579 A2	20170627	BR20141126579	20130425
CA2833024 AA	20131010	CA20122833024	20120425
CA2833024 C	20160216	CA20122833024	20120425
CA2871673 AA	20141021	CA20132871673	20130425
CA2871673 C	20180417	CA20132871673	20130425
CA2871680 AA	20141021	CA20132871680	20130425
CA2871680 C	20180109	CA20132871680	20130425
CL2014002884 A1	20150213	CL20140002884	20141024

PatBase - US2012273146_AA



CL2014002885 A1	20150213	CL20140002885	20141024
CN103476375 A	20131225	CN201280018474	20120425
CN103476375 B	20151209	CN201280018474	20120425
CN103491911 A	20140101	CN201280018381	20120426
CN103491911 B	20160810	CN201280018381	20120426
CN103491912 A	20140101	CN201280019727	20120425
CN103491915 A	20140101	CN201280020524	20120425
CN103491915 B	20170426	CN201280020524	20120425
CN103717388 A	20140409	CN201280020454	20120426
CN103717388 B	20170322	CN201280020454	20120426
CN104302257 A	20150121	CN201380021529	20130425
CN104302257 B	20170412	CN201380021529	20130425
CN104394822 A	20150304	CN201380021776	20130425
CN104394822 B	20180727	CN201380021776	20130425
CN105997366 A	20161012	CN201610471091	20130425
DE602012020704 D1	20160901	DE201260020704T	20120425
DE602012020705 D1	20160901	DE201260020705T	20120425
DE602012020707 D1	20160901	DE201260020707T	20120426
DE602012036910 D1	20171019	DE201260036910T	20120425
EP2701650 A1	20140305	EP20120719865	20120425
EP2701650 B1	20160720	EP20120719865	20120425
EP2701651 A1	20140305	EP20120719868	20120425
EP2701651 B1	20160720	EP20120719868	20120425
EP2701652 A1	20140305	EP20120719869	20120425
EP2701652 B1	20170906	EP20120719869	20120425
EP2701653 A1	20140305	EP20120719871	20120426
EP2701653 B1	20160720	EP20120719871	20120426
EP2701902 A1	20140305	EP20120720325	20120426
EP2841037 A2	20150304	EP20130725229	20130425
EP2841039 A1	20150304	EP20130721864	20130425
IL235259 A0	20141231	IL20130235259	20130425
IN08083DN2014 A	20150501	IN2014DN08083	20140927
IN08181DN2013 A	20141219	IN2013DN08181	20130918
IN08255DN2013 A	20160624	IN2013DN08255	20130920
IN08442DN2013 A	20141219	IN2013DN08442	20130927
IN08688DN2013 A	20141219	IN2013DN08688	20131007
IN08773DN2014 A	20150522	IN2014DN08773	20141018
IN08817DN2013 A	20141219	IN2013DN08817	20131010
JP2014512914 T2	20140529	JP20140508529T	20120426
JP2014516300 T2	20140710	JP20140508499T	20120425
JP2014516302 T2	20140710	JP20140508510T	20120425
JP2014516323 T2	20140710	JP20140508530T	20120426
JP2014517879 T2	20140724	JP20140508511T	20120425
JP2015519227 T2	20150709	JP20150507260T	20130425
JP2015523232 T2	20150813	JP20150509127T	20130425
JP2016138358 A2	20160804	JP20160042134	20160304
JP2016188458 A2	20161104	JP20160138667	20160713
JP5841239 B2	20160113	JP20140508510T	20120425
JP5956062 B2	20160720	JP20150507260T	20130425
JP5972968 B2	20160817	JP20140508530T	20120426
JP6006294 B2	20161012	JP20140508529T	20120426
JP6017676 B2	20161102	JP20150509127T	20130425
JP6105557 B2	20170329	JP20140508499T	20120425
JP6134025 B2	20170524	JP20160042134	20160304
KR20140135843 A	20141126	KR20147029508	20130425
KR20140137449 A	20141202	KR20147029629	20130425
MX2013011147 A1	20131030	MX20130011147	20120425
MX2013011238 A1	20131017	MX20130011238	20120425
MX2013011310 A1	20131030	MX20130011310	20120426
MX2013011785 A1	20131101	MX20130011785	20120426
MX2013011909 A1	20131030	MX20130011909	20120425
MX2014011630 A1	20141017	MX20140011630	20130425
MX337673 B	20160314	MX20130011310	20120426
MX337692 B	20160314	MX20130011238	20120425
MX345446 B	20170131	MX20130011909	20120425
MX350477 B	20170907	MX20150001548	20120426
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MX355545 B	20180423	MX20150015340	20120426
MX356083 B	20180514	MX20140011630	20130425
RU2013144258 A	20150610	RU20130144258	20120425
RU2014137399 A	20160410	RU20140137399	20130425
RU2573975 C2	20160127	RU20130144258	20120425
RU2628858 C2	20170822	RU20140137399	20130425
SG11201406852R A1	20141127	SG20141106852	20130425
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US2012276337 AA	20121101	US20120455532	20120425
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US2012282436 AA	20121108	US20120455857	20120425
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WO13163360 A2	20131031	WO2013US38091	20130425
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WO13163388 A1	20131031	WO2013US38156	20130425

Priority:

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Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): CIMINI CARMINE ; COE RICHARD GEORGE ; CURRO JOHN JOSEPH ; DI PILLA MARIO ; DIPILLA MARIO ; MARINELLI LUIGI ; LAKE KIRK WALLACE ; ORR JILL MARLENE ; PRIESSMAN KEITH ROBERT ; GROSS SARAH BETH ; HAMMONS JOHN LEE ; MULLANE TIMOTHY IAN ; KOCHER LEROY JOSEPH ; ISBURGH ROBERT KARL ; MUHS KEVIN GERARD ; STRUBE JOHN BRIAN ; PROCTER AND GAMBLE ; PROCTER AND GAMBLE COMAPNY

Assignee(s): PROCTOR AND GAMBLE COONE PROCTER & GAMBLE PLAZACINCINNATIOH45202US ; PROCTOR AND GAMBLE COONE PROCTER & GAMBLE PLAZACINCINNATIOH45202US ; PROCTOR AND GAMBLE CO ; PROCTOR AND GAMBLE CO CINCINNATI ; THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE CO

Inventor(s): (std): ISBURG ROBERT KARL ; JILL MARLENE ORR ; JOHN BRIAN STRUBE ; JOHN JOSEPH CURRO ; JOHN LEE HAMMONS ; KEITH ROBERT PRIESSMAN ; KOCHER JOSEPH LEROY ; RICHARD GEORGE COE ; SARAH BETH GROSS ; TIMOTHY IAN MULLANE ; STRUBE JOHN BRIAN ; PRIESSMAN KEITH ROBERT ; PILLA MARIO DI ; ORR JILL MARLENE ; MULLANE TIMOTHY IAN ; MARIO DIPILLA ; MULLANTE TIMOTHY IAN ; MARINELLI LUIGI ; LUIGI MARINELLI ; LEROY JOSEPH KOCHER ; LAKE KIRK WALLACE ; KOCHER LEROY JOSEPH ; KIRK WALLACE LAKE ; JOSEPH LEROY KOCHER ; JOHNSON KEITH ROBERT ; HAMMONS JOHN LEE ; GROSS SARAH BETH ; DIPILLA MARIO ; CURRO JOHN JOSEPH ; COE RICHARD GEORGE ; CIMINI CARMINE ; CARMINE CIMINI ; MUHS KEVIN GERARD ; ISBURGH ROBERT KARL ; DI PILLA MARIO ; CUPRO JOHN JOSEPH

Inventor(s): KEITH ROBERT JOHNSON ; ORR JILL MARLENEUS ; MUHS KEVIN GERARDUS ; MULLANE TIMOTHY IANUS ; MARIO DI PILLA ; KOCHER LEROY JOSEPHUS ; ISBURGH ROBERT KARLUS ; COE RICHARD GEORGEUS ; GROSS SARAH BETHUS ; HAMMONS JOHN LEEUS

Agent(s): TORYS LLP; DIMOCK STRATTON LLP; MBM INTELLECTUAL PROPERTY LAW LLP; LLOVET AHUMADA RAUL; HEIDE UTE; KREMER VERONIQUE MARIE JOSEPHINE; TANI AND ABE PC; NAGAI HIROSHI; JEFFREY V; KIM W; MEGAN C; GEORGE H; CHRISTIAN M; CHARLES R; THE PROCTER AND GAMBLE COMPANY; GUFFEY TIMOTHY B

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 IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW 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

3) Family number: 31534107 (US019062A)

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Title: BICOMPONENT MATERIAL

Abstract: A bicomponent material which allows liquids to pass in a first direction, but substantially prevents the liquids from passing in the opposite direction, is disclosed. The material also exposes any gases attempting to pass in the direction opposite to that of the liquid transmission to an odor control lamina. The material is especially suitable for use with articles which deal with bodily fluids and the gases generated therefrom.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61F13/49 A61F5/44
A61F5/441 A61L9/00 B01J20/28 B32B27/12 B32B5/18 B32B5/24
B32B5/30 B32B5/32 B32B7/02 B32B9/00 (Advanced/Invention);
A61F5/44 B01J20/28 B32B5/18 B32B7/02 B32B9/00 (Advanced/Non-

invention);

A61F13/15 A61F5/441 A61L9/00 B32B27/12 B32B5/22

B32B7/02 (Core/Invention)

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B32B5/30 B32B7/02 B32B9/00

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A61F2013/8411 A61F2013/842 A61F2013/8423 A61F2013/8426

A61F13/51121 A61F13/5116 A61F13/512 A61F13/84B B32B5/32

B32B2266/06 B32B2305/026 B32B2307/41 B32B2307/726

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European: A61F13/511 A61F13/512 A61F13/84B B32B5/32

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K61F13/51R K61F13/84B1A K61F13/84B1C K61F13/84B1D K61F13/84B1E

US: 428/137 428/323 604/359 604/383

JP F-Term: 3B029 3B029/BB02 3B029/BB03 3B029/BB05 3B029/BB06

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4F100/AC04 4F100/AC10 4F100/AJ04 4F100/AJ05 4F100/AK01

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Family:

Publication number	Publication date	Application number	Application date
AR242711 A1	19930531	AR19890314234	19890623
AT147962 E	19970215	AT19890201497T	19890615
AT83369 E	19930115	AT19890110859T	19890615
AU198936714 A1	19900104	AU19890036714	19890622
AU639206 B2	19930722	AU19890036714	19890622
CA1325965 A1	19940111	CA19890603512	19890621
CN1041108 A	19900411	CN19891004369	19890623
CN1056971 C	20001004	CN19891004369	19890623
DE68903886 D1	19930128	DE19896003886	19890615
DE68903886 T2	19930506	DE19896003886T	19890615
DE68927711 D1	19970306	DE19896027711	19890615
DE68927711 T2	19970522	DE19896027711T	19890615
EP0347746 A1	19891227	EP19890110859	19890615
EP0347746 B1	19921216	EP19890110859	19890615
EP0513933 A1	19921119	EP19920201497	19890615
EP0513933 B1	19970122	EP19920201497	19890615
ES2036752 T3	19930601	ES19890110859T	19890615
ES2096707 T3	19970316	ES19920201497T	19890615
GR3006570 T3	19930630	GR19920402894T	19921217
GR3022364 T3	19970430	GR19970400009T	19970123
HK1007277 A1	19990409	HK19980106520	19980624
HK3096 A	19960112	HK19960000030	19960104
IE63999 B	19950628	IE19890002051	19890623
IE75743 B	19970924	IE19940000738	19890623
IE892051 L	19891223	IE19890002051	19890623
IE940738 L	19891223	IE19940000738	19890623
IN175183 A	19950513	IN1989DE00557	19890627
IN184953 A	20001007	IN1993DE00654	19930628
JP2243329 A2	19900927	JP19890162482	19890623
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KR0130648 B1	19980403	KR19890008694	19890623
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MX166243 B	19921224	MX19890016566	19890622
NZ229676 A	19950427	NZ19890229676	19890622
NZ244755 A	19950427	NZ19890244755	19890622
PH26791 A	19921013	PH19890038834	19890623
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US5019062 A	19910528	US19880210672	19880623

Priority:

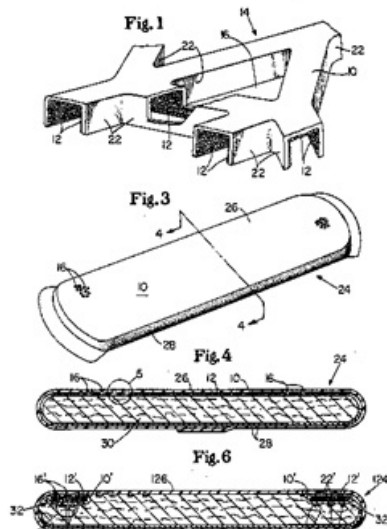
PatBase - US5019062_A

U.S. Patent

May 28, 1991

Sheet 1 of 3

5,019,062



Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): BASF AG ; BRUCE PETER ; PORCTER AND GAMBLE CO ; PROCTER AND GAMBLE ; RYAN LESLIE D ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

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Inventor(s): (std): RYAN LESLIE D ; RYAN LESLIE DARRYL RYAN ; SPAHNI MILTON D ; SPAHNI MILTON DANIEL ; SPAHNY MILTON DANIEL ; STEINHARDT MARK J ; STEINHARDT MARK JOHN ; BAIRD JAMES C ; BAIRD JAMES CLARK ; RESURII DAARIRU RAIAN ; MIRUTON DANIERU SUPAANI ; MILTON DANIEL SPAHNY ; MILTON DANIEL SPAHNI ; MARK JOHN STEINHARDT ; MAAKU JIYON SUTEINHAADO ; LESLIE DARRYL RYAN ; JIEEMUZU KURAAKU BEAADO ; RYAN LESLIE DARRYL ; JAMES CLARK BAIRD

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

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

4) Family number: 29528223 (US2002035354A)

© PatBase

Title: Absorbent barrier structures having a high convective air flow rate and articles made therefrom

Abstract: The present invention relates to absorbent articles with improved protection and comfort by use of an absorbent barrier structure. This is achieved by the selection of individual components meeting specific requirements such that the combination thereof provides the absorbent articles having desired performance.

Classifications:

International (IPC 8-9): A61F13/00 A61F13/14 A61F13/15 A61F13/472 A61F13/49 A61F13/514 A61F13/53 A61F13/534 A61F13/537 A61F13/539 A61F5/44 A61L15/28 A61L15/60 B32B27/04 B32B27/08 B32B27/12 B32B5/02 B32B5/22 B32B5/26 B32B5/30 D04H1/00 (Advanced/Invention); A61F13/49 A61L15/52 (Advanced/Non-invention); A61F13/00 A61F13/14 A61F13/15 A61F5/44 A61L15/16 B32B27/08 B32B27/12 B32B5/22 (Core/Invention); A61L15/16 (Core/Non-invention)

International (IPC 1-7): A61F13/00 A61F13/14 A61F13/15 A61F13/20 A61F13/472 A61F13/49 A61F13/514 A61F13/53 A61F13/534 A61F13/539 A61F5/44 B32B27/12

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European: A61F13/15C3 A61F13/15J A61F13/514B A61F13/514B1A A61F13/514B1B A61F13/514C2 A61F13/537A A61F13/537C8 A61F13/537D B32B27/02 B32B27/08 B32B27/12 B32B27/32 B32B5/22 B32B5/26 K61F13/15J K61F13/15J8M K61F13/15J8T1 K61F13/15J8T2 K61F13/514A4A K61F13/514A4A5 K61F13/514C2

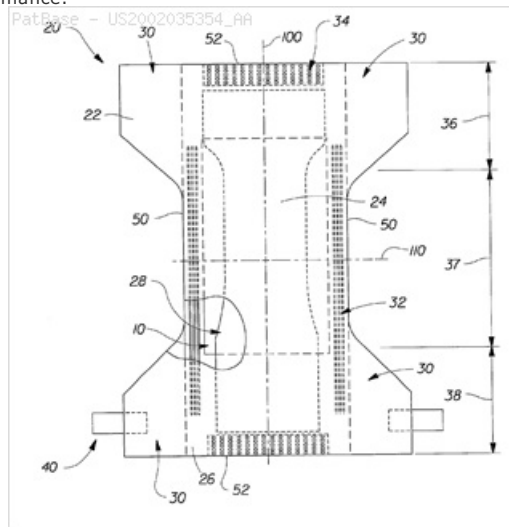
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JP F-Term: 3B029 3B029/BA01 3B029/BA15 3B029/BC03 3B200 3B200/AA01 3B200/AA11 3B200/AA12 3B200/BA01 3B200/BA04 3B200/BA07 3B200/BA20 3B200/BB05 3B200/BB09 3B200/BB14 3B200/CA02 3B200/DA14 3B200/DA15 3B200/DB01 3B200/DD01 3B200/DD02 3B200/DD04 3B200/DD07 3B200/DF20 4C003 4C003/AA00 4C003/AA07 4C003/AA11 4C003/AA12 4C003/CA00 4C003/DA04 4C003/HA00 4C079 4C098 4C098/AA09 4C098/CC14 4C098/CE05 4C098/CE06 4C098/DD01 4C098/DD10 4C098/DD13 4C098/DD30 3B029/BA12 3B029/BC07 3B029/BD18 3B029/BD22 3B200/AA03 3B200/BA05 3B200/BA16 3B200/BB03 3B200/BB04 3B200/BB13 3B200/BB17 3B200/BB20 3B200/BB21 3B200/BB22 3B200/BB24 3B200/CA11 3B200/DA16 3B200/DB29 4C003/AA16 4C003/AA18 4C003/AA26 4C003/BA03 4C003/BA04 4C003/BA06 4C003/CA01 4C003/CA05 4C003/CA10 4C003/DA08 4C003/HA01 4C003/HA02 4C098/CC03 4C098/DD02 4C098/DD05 4C098/DD06

JP F-Index: A41B13/02/B A41B13/02/F A41B13/02/G A61F13/00/351/F A61F13/18/300 A61F13/18/320 A61F13/18/333 A61F13/514/213 A61F13/537/200 A61F13/537/310 A61F5/44/H A41B13/02/N A61F13/14/A A61F13/15/141 A61F13/15/142 A61F13/18/302 A61F13/18/303 A61F13/18/307/E A61F13/18/380/Z A61F13/18/381 A61F13/537/330 A61F13/537/400

Family:

Publication number	Publication date	Application number	Application date
AU2000258819 AA	20020102	AU20000258819	20000621
AU200058819 A1	20020102	AU20000058819	20000621
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CA2672562 C	20130827	CA20002672562	20000621
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EP1294333 A2	20030326	EP20000944774	20000621
EP1294335 A2	20030326	EP20010946614	20010621
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MXPA02012873 A1	20030514	MX2002PA12873	20000621
TH51282 A	20020606	TH20011002419	20010620
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US2006160452 AA	20060720	US20060384771	20060320
US7179951 BB	20070220	US20020265813	20021007
US7291763 BB	20071106	US20060384771	20060320
WO0197731 A2	20011227	WO2001US19817	20010621
WO0197731 A3	20020516	WO2001US19817	20010621
WO0197734 A2	20011227	WO2000US17084	20000621
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Priority:

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CA20092412442	20090812				

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): EHRNSPERGER BRUNO JOHANNES ; HIPPE MATTHIAS KONRAD ; MCKIBBEN JOHN F ; PROCTER AND GAMBLE ; SPRENGARD EICHEL CORNELIA ; SCHMIDT MATTIAS ; POLAT SUNA ; MIRLE SRINIVAS K ; PROCTER AND GAMBLE CO

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Inventor(s): (std): EHRNSPERGER BRUNO JOHANNES ; HIPPE MATTHIAS KONRAD ; KRISHNASWAMY MIRLE SRINIVAS ; MIRLE SRINIVAS KRISHNASWA ; MIRLE SRINIVAS KRISHNASWAMY ; POLAT SUNA ; SCHMIDT MATTIAS ; SPRENGARD EICHEL CORNELIA ; MCKIBBEN JOHN FERNEY ; MCKIBBIN JOHN FERNEY ; MIRLE SRINIVAS K ; MCKIBBEN JOHN F

Inventor(s): MIRLE SRINIVAS ; SRINIVAS KRISHNASWA MIRLE ; SUNA POLAT ; SPRENGARD EICHEL ; MATTHIAS KONRAD HIPPE ; MATTIAS SCHMIDT ; MCKIBBEN JOHN ; JOHN FERNEY MCKIBBIN ; EHRNSPERGER BRUNO SCHMIDT MATTIAS ; BRUNO JOHANNES EHRNSPERGER ; CORNELIA SPRENGARD EICHEL

Agent(s): WILSON LUE LLP ; DIMOCK STRATTON LLP ; HARNECKER ; NAGAI HIROSHI ; THE PROCTER AND GAMBLE COMPANY ; INTELLECTUAL PROPERTY DIVISION ; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION ; DARA M ; KEN K ; MATTHEW P ; DARA ; JOHN P

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

5) Family number: 10645023 (US5429628A)

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Title: ARTICLES CONTAINING SMALL PARTICLE SIZE CYCLODEXTRIN FOR ODOR CONTROL

Abstract: The present invention relates to compositions and articles such as catamenials, diapers, pantliners, paper towels, tissues, underarm shields, etc., which minimize odor caused from body fluids through the incorporation of an effective amount of cyclodextrin, having a particle size of less than 12 microns. Combinations of small particle size cyclodextrins with other odor-controlling materials are also disclosed.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61F13/49 A61K8/02

A61K8/19 A61K8/25 A61K8/26 A61K8/73 A61L15/20 A61L15/28

A61L15/46 A61L9/01 A61Q13/00 A61Q15/00 C08B37/16 C08L5/16

C11D3/20 (Advanced/Invention);

A61F13/15 A61L15/16 A61L9/00 A61L9/01 (Advanced/Non-invention)

International (IPC 1-7): A61F13/15 A61K7/00 A61K7/32 A61K7/46

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C08B37/16 C08L5/16 C11D3/20

CPC: C08L5/16 A61K8/0208 A61K8/19 A61K8/25 A61K8/26 A61K8/738

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A61L2300/802 A61Q13/00 A61Q15/00

European: A61K8/02C A61K8/19 A61K8/25 A61K8/26 A61K8/73T

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K61L300/404 K61L300/622 K61L300/802

US: 502/401 510/102 510/103 510/295 510/438 510/439 510/507 604/359

JP F-Term: 3B029 3B029/BD22 3B029/HB05 3B200 3B200/AA01

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3B200/BB05 3B200/BB06 3B200/BB09 3B200/BB14 3B200/BB18

3B200/BB20 3B200/BB23 3B200/BB24 3B200/BB25 3B200/DB02

3B200/DB13 3B200/DB17 3B200/DB19 3B200/DB20 3B200/DC02

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JP F-Index: A41B13/02/N A61F13/15/141 A61F13/18/380/A

A61F13/18/380/B A61F13/18/382 A61L15/20/200 A61L15/46/200

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Family:

Publication number	Publication date	Application number	Application date
AT218374 E	20020615	AT19940910957T	19940317
AU199463663 A1	19941024	AU19940063663	19940317
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DE69430741 D1	20020711	DE19946030741	19940317
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EP0691856 A1	19960117	EP19940910957	19940317
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HK1013032 A1	20030417	HK19980114398	19981221
JP8508424 T2	19960910	JP19940522112T	19940317
KR100322308 B1	20020814	KR19950704223	19940317
KR19960701668 A	19960328	KR19950704223	19940317
KR19967001668 A	19960328	KR19957004223	19940317
NZ263094 A	19980325	NZ19940263094	19940317
SG52314 A1	19980928	SG19960002687	19940317
US5429628 A	19950704	US19930040822	19930331
US5714445 A	19980203	US19960704319	19960912
WO9422501 A1	19941013	WO1994US02859	19940317

Priority:

US19930040822 19930331 WO1994US02859 19940317 US19940328645 19941025
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Probable Assignee: PROCTER AND GAMBLE CO**Assignee(s):** (std): PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO**Assignee(s):** PROCTER AND GAMBLE CO CINCINNATI ; PROCTER AND GAMBLE CO THE ; PROCTER AND GAMBLE COMPANY THE ; THE PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; THE PROCTER AND GAMBLE CO ; TRINH TOAN ; CRYOVAC INC ; PHAN DEAN VAN**Inventor(s):** (std): PHAN VAN DEAN ; PHAN VAN ; PHAN DEAN VAN ; PHAN DEAN V ; TRINH TOAN NMN ; TRINH TOAN**Inventor(s):** TOAN NMN TRINH ; PHAM DEAN VAN ; DEAN VAN PHAN**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 BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KG KP KR KZ LI LK LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA UZ VN**6) Family number: 2268808 (US4690679A)**

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Title: COEXTRUDED APERTURED FILM SANITARY NAPKIN COVER**Abstract:** An apertured film, suitable for use as a sanitary napkin cover which passes body fluids, is provided. The film comprises a first layer of a first polymeric material and a second layer of a second polymeric material. Both layers are apertured for the transmission of body fluids therethrough. The first polymeric material exhibits a melting point temperature which is greater than

the melting point temperature exhibited by the second polymeric material. The apertured film may be thermally bonded by heating the film to a temperature in excess of the melting point temperature of the second layer material and below the melting point temperature of the first layer material. The unmelted first layer will thereby maintain the integrity of the apertured film when the second layer is in its thermally softened condition.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/49 A61F13/511 A61F13/56 B32B3/24 (Advanced/Invention); A61F13/15 A61F13/56 (Core/Invention)

International (IPC 1-7): A41B13/02 A61F13/15 A61F13/16 A61F13/18 A61F13/46 A61F13/54 A61L15/20 B32B27/08 B32B3/10 B32B3/24 B32B7/02 C08J5/18

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European: A61F13/512 A61F13/515 A61F13/56B2 K61F13/15E10C K61F13/15E2 K61F13/15E2A K61F13/15H10 K61F13/511 K61F13/56A2

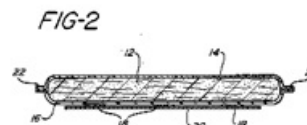
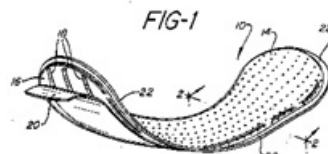
US: 428/139 428/212 604/383

JP F-Term: 3B029 3B029/BA12 3B029/BA14 3B029/BA18 3B029/BB02 3B029/BB03 3B029/BB05 3B029/BC06 3B029/BC08 3B029/BD15 3B200 3B200/AA01 3B200/AA03 3B200/AA09 3B200/BA06 3B200/BA15 3B200/BB09 3B200/DC01 3B200/DC02 3B200/DC04 3B200/DC05 3B200/DC07 3B200/DC09 4C003 4C003/BA02 4C003/BA03 4C003/BA06

JP F-Index: A41B13/02/E A61F13/18/310 A61F13/18/310/Z A61F13/511/300 A61F13/511/400 A61F13/511/500 A61F13/512 A61F13/512/100 A61L15/24/200 A61L15/42/200

PatBase - US4690679_A

U.S. Patent Sep. 1, 1987 Sheet 1 of 4 4,690,679



Family:

Publication number	Publication date	Application number	Application date
AT137661 E	19960515	AT19870103702T	19870313
AU198770027 A1	19870917	AU19870070027	19870313
AU605760 B2	19910124	AU19870070027	19870313
BRPI8701166 A	19880105	BR1987PI01166	19870313
CA1288923 A1	19910917	CA19870532072	19870313
DE3751799 D1	19960613	DE19873751799	19870313
DE3751799 T2	19970102	DE19873751799T	19870313
EP0237990 A2	19870923	EP19870103702	19870313
EP0237990 A3	19920422	EP19870103702	19870313
EP0237990 B1	19960508	EP19870103702	19870313
GR870421 B	19870720	GR19870100421	19870313
JP2543356 B2	19961016	JP19870056992	19870313
JP62270154 A2	19871124	JP19870056992	19870313
MX169422 B	19930705	MX19870005561	19870313
PH24838 A	19901030	PH19870035024	19870313
PH25806 A	19911105	PH19900039987	19900202
PT84476 A	19870401	PT19870084476	19870313
PT84476 B	19891110	PT19870084476	19870313
US4690679 A	19870901	US19860840290	19860314
US4806411 A	19890221	US19870033552	19870402
ZA8701857 A	19881026	ZA19870001857	19870313

Priority:

US19860840290 19860314 CA19870532072 19870313 US19870033552 19870402

Probable Assignee: CHICOPEE

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Assignee(s): WILMINGTON TRUST CO ; TECHNETICS GROUP INC ; WILMINGTON TRUST CO SECOND LIEN COLLATERAL AGENT A ; WILMINGTON TRUST CO SECOND LIEN COLLATERAL AGENT AS ; PERSONAL PROD CO ; JOHNSON AND JOHNSON A CORP OF NJ ; MCNEIL PPC INC SKILLMAN N J US ; MATTINGLY WILLIAM B III ; SAMPSON ARTHUR J ; JOHNSON AND JOHNSON A CORP ; JPMORGAN CHASE BANK ; FABPRO ORIENTED POLYMERS INC ; FABRENE CORP ; FABRENE GROUP LLC ; FIBERGOL CORP ; FIBERTECH GROUP INC ; FNA ACQUISITION INC ; FNA POLYMER CORP ; LORETEX CORP ; PGI EUROPE INC ; PGI POLYMER INC ; PNA CORP ; POLY BOND INC ; POLYLONIX SEPARATION TECHNOLOGIES INC ; POLYMER GROUP INC ; PRISTINE BRANDS CORP ; PERSONAL PRODUCTS COMPANY ; CITICORP NORTH AMERICA INC FIRST LIEN COLLATERAL A ; DOMINION TEXTILE (USA) INC ; CHASE MANHATTAN BANK (NATIONAL ASSOCIATION) ; CHASE MANHATTAN BANK (THE) ; CHICOPEE INC NORTH CHARLESTON US ; CHASE MANHATTAN BANK NATIONAL ASSOCIATION ; CHASE MANHATTAN BANK THE ; DOMINION TEXTILE USA INC ; CITICORP NORTH AMERICA INC FIRST LIEN COLLATERAL AGENT AS ; CHASE MANHATTAN BANK ; CHICOPEE NC ; CITICORP NORTH AMERICA INC ; CHICOPEE INC ; DOMINION TEXTILE INC ; BONLAM (SC) INC ; BONLAM INC ; BONLAM SC INC ; CABE ALEX W JR

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Inventor(s): RICHARD B ; MATTINGLY III WILLIAM B ; MATTINGLY WILLIAM B III ; RICHARD B CHAPAS ; SAMPSON ARTHUR J ; SAMPSON ARTHUR J JR ; SAMPSON JR ARTHUR J ; UIRIAMU BII MATSUTEINGURII SAA ; WILLIAM B MATTINGLY ; WILLIAM B MATTINGLY III ; RICHYAADO BII CHIYAPASU ; MATTINGLY WILLIAM B ; CABE ALEX W ; ARTHUR J SAMPSON JR ; AASAA JIEI SANPUSON JIYUNIA ; AASAA JEI SANPUSON JUNIA ; ARTHUR JSAMPSON JR ; ALEX W CABE ; UIRIAMU BII MATSUTEINGURII SAADO ; RICHAAADO BII CHAPASU ; ARETSUKUSU DABURIYU KEIBU JIYUNIA ; ARETSUKUSU DABURYU KEIBU JUNIA ; ARTHUR J SAMPSON

Agent(s): GRIFFITH HACK; OGILVY RENAULT LLP SENCRL SRL

Designated states: AT BE CH DE ES FR GB IT LI LU NL SE

7) Family number: 34616336 (US2007148432A)

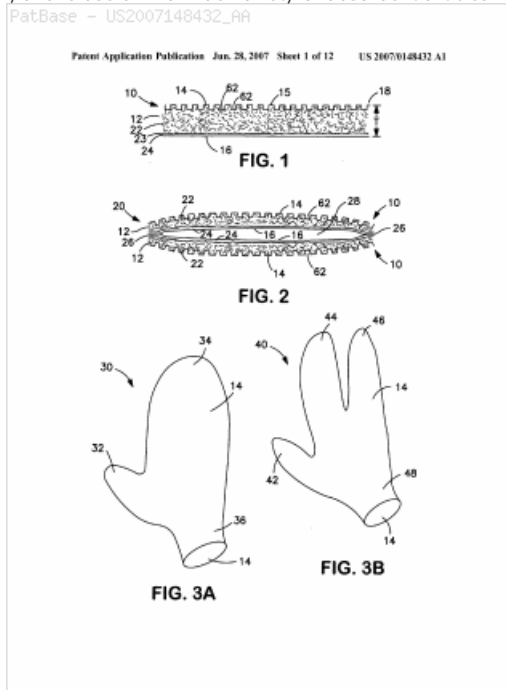
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Title: HYBRID ABSORBENT FOAM AND ARTICLES CONTAINING IT

Abstract: A hybrid absorbent foam includes an integrated hybrid foam layer having an open surface, a closed surface, and a foam body extending between the open and closed surfaces. The integrated hybrid foam layer has an open-cell content of at least 50 percent, while the closed surface provides a barrier to aqueous liquids. The integrated hybrid foam layer is formed as a single layer, and has a substantially uniform polymer composition throughout its thickness. The integrated hybrid foam layer combines the functions of liquid absorbency, retention, and barrier into a single layer, and is useful in a wide variety of absorbent articles.

Classifications:

International (IPC 8-9): A61L15/00 A61L15/42 B32B27/00 B32B3/26 C08J9/00 (Advanced/Invention); A61L15/00 A61L15/16 B32B27/00 B32B3/26 C08J9/00 (Core/Invention)
CPC: B32B5/14 B32B5/20 B32B5/245 B32B5/32 B32B2266/0207 B32B2266/0228 B32B2266/025 B32B2266/0264 B32B2266/0292 B32B2266/06 B32B2307/54 B32B2307/5825 B32B2307/726 B32B2307/7265 B32B2432/00 B32B2437/02 B32B2555/02 A61L15/425 B32B5/18 Y10T428/24504 Y10T428/249953 B29C44/5663 B29K2007/00
European: A61L15/42E B32B25/14 B32B5/18
US: 428/159 428/304.4 428/304.400P 521/50 521/50S



Family:

Publication number	Publication date	Application number	Application date
US2007148432 AA	20070628	US20050315576	20051222
US8158689 BB	20120417	US20050315576	20051222
WO07078361 A2	20070712	WO2006US37846	20060928
WO07078361 A3	20080508	WO2006US37846	20060928

Priority:

US20050315576 20051222

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): MALLORY MARY F ; FISH JEFFREY E ; GARVEY MICHAEL J ; KRUEGER JEFFREY J ; GARVEY MICHAEL JOSEPH ; MALLORY MARY FRANCES ; KRUEGER JEFFREY JENNINGS ; KIMBERLY CLARK CO ; BAKER ANDREW T ; BLENKE TIMOTHY J ; BLENKE TIMOTHY JAMES ; COLMAN CHARLES W ; COLOMBO EDWARD A ; RADWANSKI FRED R ; WALDROUP DONALD E ; RANGANATHAN SRIDHAR ; PIERCE JOSEPH E ; YANG KAIYUAN ; RADWANSKI FRED ROBERT

Assignee(s): KIMBERLY CLARK WORLDWIDE INC ; KIMBERLY CLARK CORP

Inventor(s): (std): BAKER ANDREW T ; BLENKE TIMOTHY J ; BLENKE TIMOTHY JAMES ; COLMAN CHARLES W ; COLOMBO EDWARD A ; FISH JEFFREY E ; GARVEY MICHAEL J ; GARVEY MICHAEL JOSEPH ; KRUEGER JEFFREY J ; KRUEGER JEFFREY JENNINGS ; MALLORY MARY F ; MALLORY MARY FRANCES ; RADWANSKI FRED R ; RADWANSKI FRED ROBERT ; RANGANATHAN SRIDHAR ; PIERCE JOSEPH E ; WALDROUP DONALD E ; YANG KAIYUAN

Inventor(s): RADWANSKI FRED ; WALDROUP DONALD ; BAKER ANDREW ; PIERCE JOSEPH ; MALLORY MARY ; KRUEGER JEFFREY ; GARVEY MICHAEL ; FISH JEFFREY ; COLOMBO EDWARD ; COLMAN CHARLES ; BLENKE TIMOTHY

Agent(s): PAULEY PETERSEN AND ERICKSON, SUITE 365; PAULEY PETERSEN AND ERICKSON SUITE 365; ARMSTRONG TEASDALE LLP

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 HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU 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: ABSORBENT ARTICLES CONTAINING ANTIBACTERIAL AGENTS IN THE TOPSHEET FOR ODOR CONTROL

Abstract: The present invention provides an article of manufacture which minimizes odor caused by bodily fluids, i.e. perspiration, comprising: a liquid pervious topsheet; a liquid impervious backsheet; an absorbent core positioned between the topsheet and the backsheet; and optionally, a means for supporting the article in an appropriate position to perform its absorbency and odor control function; wherein the topsheet comprises an apertured plastic film containing an effective amount of zeolite impregnated with a heavy metal ion; The articles of the present invention provide an increase in the topsheet surface area available for contact with external body fluids such as perspiration, places the antibacterial active in the closest proximity to the skin of the wearer, the active reducing the perspiration malodor by minimizing its formation.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61F13/56 A61L15/18 A61L15/46 (Advanced/Invention);
A61F13/15 A61F13/56 (Advanced/Non-invention);
A61F13/15 A61L15/16 (Core/Invention);
A61F13/56 (Core/Non-invention)

International (IPC 1-7): A61F13/15 A61L15/18 A61L15/46 B32B1/64

CPC: A61F13/51113 A61F13/512 A61F13/8405 A61F13/5148 A61F13/537 A61F2013/47281 A61F2013/51033 A61F2013/51066 A61F2013/51078 A61F2013/5109 A61F2013/51147 A61F2013/51449 A61F2013/51452 A61F2013/530029 A61F2013/530051 A61F2013/530087 A61F2013/530167 A61F2013/530189 A61F2013/530197 A61F2013/530335 A61F2013/53035 A61F2013/530481 A61F2013/530802 A61F2013/53916 A61F2013/53925 A61F2013/583 A61F2013/586 A61F2013/8414 A61F2013/842 A61F2013/8423

European: A61F13/84B K61F13/15C3D1E1 K61F13/15C3D3C K61F13/15C3D3G K61F13/15C5J5 K61F13/15C7B K61F13/15C8 K61F13/15C9 K61F13/15E10A1 K61F13/15E10A2 K61F13/15E2D K61F13/15E3C K61F13/15E3E2 K61F13/15E3M1B K61F13/15E4C1 K61F13/15E4D1 K61F13/15E4D2 K61F13/15E4L K61F13/15E4M1 K61F13/15E7 K61F13/15E8 K61F13/15F5 K61F13/15H8 K61F13/15H8A2 K61F13/15H8A3 K61F13/15H8A4 K61F13/472F K61F13/511D6 K61F13/514A6C K61F13/514A6E K61F13/514C2A K61F13/51M6D K61F13/51N2 K61F13/51P K61F13/51R K61F13/537 K61F13/539A1 K61F13/539A2 K61F13/53L3 K61F13/53L4B K61F13/53L5A2 K61F13/53M2A K61F13/53M3A K61F13/53M3B K61F13/53M6 K61F13/53M7A K61F13/53Q K61F13/53R K61F13/56A2 K61F13/56A3 K61F13/58D K61F13/58E K61F13/84B K61F13/84B1B K61F13/84B1C K61F13/84B1D

US: 428/131 428/245 428/323 428/40 428/409 428/68 428/905 604/359 604/360

JP F-Term: 3B200 3B200/AA03 3B200/AA15 3B200/BA01 3B200/BA03 3B200/BA08 3B200/BB03 3B200/BB04 3B200/BB09 3B200/BB13 3B200/BB22 3B200/BB23 3B200/BB24 3B200/CA11 3B200/DC01 3B200/DC02 3B200/DC04 4C003 4C003/BA03 4C003/BA06 4C003/HA01

JP F-Index: A61F13/15/142 A61F13/18/380/B A61F13/18/381 A61F13/511/200 A61F13/512/100

PatBase - USH1732_H1

U.S. Patent Jun. 3, 1998 Sheet 1 of 2 H1732

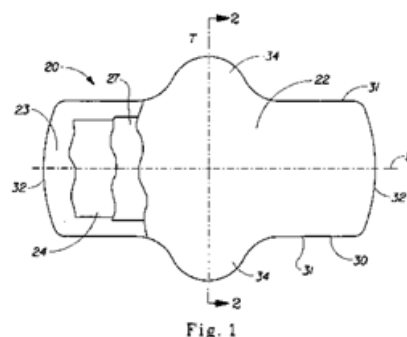


Fig. 1

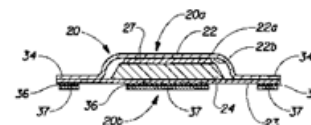


Fig. 2

Family:

Publication number	Publication date	Application number	Application date
AT194278 E	20000715	AT19950911941T	19950227
AU199519321 A1	19950925	AU19950019321	19950227
AU199889334 A1	19990121	AU19980089334	19981015
AU723187 B2	20000817	AU19980089334	19981015
CA2185107 AA	19960909	CA19952185107	19950227
CA2185107 C	20001205	CA19952185107	19950227
DE69517799 D1	20000810	DE19956017799	19950227
DE69517799 T2	20010201	DE19956017799T	19950227
EP0749295 A1	19961227	EP19950911941	19950227
EP0749295 B1	20000705	EP19950911941	19950227
ES2149973 T3	20001116	ES19950911941T	19950227
HK1012939 A1	20010330	HK19980114374	19981221
JP9509870 T2	19971007	JP19950523490T	19950227
KR19970701525 A	19970412	KR19960704975	19960909
KR19977001525 A	19970412	KR19967004975	19950227
MX9604009 A1	19980531	MX19960004009	19950227
USH1732 H1	19980602	US19940212441	19940310
WO9524173 A2	19950914	WO1995US02381	19950227
WO9524173 A3	19951005	WO1995US02381	19950227

Priority:

US19940212441 19940310 AU19950019321 19950227 WO1995US02381 19950227
AU19980089334 19981015

Probable Assignee: PROCTER AND GAMBLE CO

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

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

Inventor(s): (std): THERESA LOUISE JOHNSON ; JOHNSON LOUISE ; JOHNSON THERESA LOUISE

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

9) Family number: 28111334 (US2001014796A)

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Title: TOP SHEET FOR ABSORBENT ARTICLES, AND METHOD FOR PRODUCING IT

Abstract: Provided is a top sheet for absorbent articles including a number of perforations for covering a liquid-receiving surface of an absorbent article. The top sheet is formed of a thermoplastic resin containing a particulate material. The top sheet is provided with fine convex portions of the particulate material on the surface thereof and a plurality of protrusions extending from the surface thereof, and the height of each protrusion from the surface is larger than that of each fine convex portion therefrom.

Classifications:

International (IPC 8-9): A41B13/02 A61F13/15 A61F13/47 A61F13/49 A61F13/51 A61F13/511 A61F13/512 A61F5/44 A61L15/18

B32B3/30 (Advanced/Invention);
A61F5/44 (Advanced/Non-invention);
E01F9/00 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 A61F13/47 A61F13/49 A61F13/51 A61F13/511 A61F13/512 A61F5/44 A61L15/42 B26F1/26 B32B3/10 B32B3/30

CPC: Y10T428/24273 Y10T428/24355 Y10T428/24372 Y10T428/24405 Y10T428/24479 A61F13/512 A61F13/51104 A61F13/51121

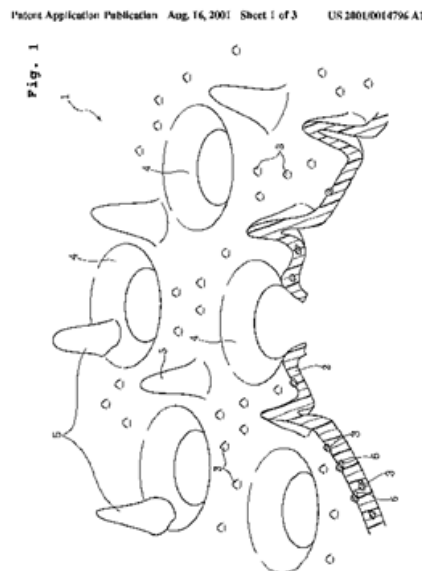
European: A61F13/512

US: 428/131 428/131P 428/141 428/143 428/147 428/156 428/156S 604/367 604/367P 604/37 604/370 604/370S 604/38 604/380 604/380S 604/383 604/383S 604/385.01

JP F-Term: 3B029 3B029/BB03 3B029/BB05 3B200 3B200/AA01 3B200/AA03 3B200/BA07 3B200/BB09 3B200/BB30 3B200/DC02 3B200/DC05 3B200/EA07 4C003 4C003/BA03 4C003/BA08 4C098 4C098/AA09 4C098/CC05 4C098/CC07 4C098/DD05 4C098/DD24 4F100 4F100/AA08 4F100/AK01 4F100/AK06 4F100/AK63 4F100/BA02 4F100/CA23 4F100/DC11 4F100/DD03 4F100/DD07 4F100/DE01 4F100/DJ06 4F100/EH17 4F100/EJ24 4F100/EJ33 4F100/EJ37 4F100/EJ42 4F100/GB66 4F100/JB16 4F100/JD05 4F100/JD14

JP F-Index: A41B13/02/E A41B13/02/S A61F13/15/353 A61F13/15/354 A61F13/18/310/A A61F13/511/100 A61F13/511/300 A61F13/512/100 A61F5/44/H B32B3/30

PatBase - US2001014796_RH



Family:

Publication number	Publication date	Application number	Application date
AT306239 E	20051015	AT20010300812T	20010130
AU200116776 A1	20010809	AU20010016776	20010201
AU200116776 A5	20010809	AU20010016776D	20010201
AU775775 B2	20040812	AU20010016776	20010201
BRPI0100320 A	20010904	BR2001PI00320	20010202
BRPI0100320 B1	20131022	BR2001PI00320	20010202
CA2332742 AA	20010802	CA20012332742	20010130
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CN1164248 C	20040901	CN20011016549	20010202
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DE60113885 T3	20120503	DE20016013885T	20010130
EP1121916 A2	20010808	EP20010300812	20010130
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ID29115 A	20010802	ID20010000106D	20010202
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JP2001212897 A2	20010807	JP20000025116	20000202
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KR20010078233 A	20010820	KR20010004791	20010201
SG94747 A1	20030318	SG20010000455	20010130
TH47309 A	20010921	TH20011000347	20010131
US2001014796 AA	20010816	US20010771131	20010126
US2005019526 AA	20050127	US20040920113	20040817
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VN5676 A1	20060725	VN2001000097	20010131
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Priority:

JP20000025116 20000202 US20010771131 20010126 CA20012332742 20010130
EP20010300812 20010130 US20040920113 20040817

Probable Assignee: UNI CHARM CORP

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

Assignee(s): UNI CHARM CORP SHIKOKUCHUO ; MIZUTANI SATOSHI ; NODA YUUKI ; TAMURA TATSUYA ; UNI CHARM CO LTD

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Inventor(s): NODA YUKI C O TECHNICAL CENTER ; TAMURA TATSUYA C O TECHNICAL CENTER ; MITZUTANI SATOSHI C O TECHNICAL CENTER

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; PARRY CHRISTOPHER STEPHEN; DARBY AND DARBY PC; DARBY AND DARBY

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

10) Family number: 41578248 (US2008058738A)

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Title: DERIVATIZED EXPANDED STARCH FOR ODOR CONTROL

Abstract: An absorbent article includes a plurality of derivatized expanded starch particles to control odor. The derivatized expanded starch particles include an expanded starch particle base and at least one transition metal chemically bonded to the expanded starch particle base. The transition metal is coordinatively bonded to a bridging compound and the bridging compound is covalently bonded or physically absorbed to a surface of the expanded starch particle bases.

Classifications:

International (IPC 8-9): A61F13/15 A61L15/28

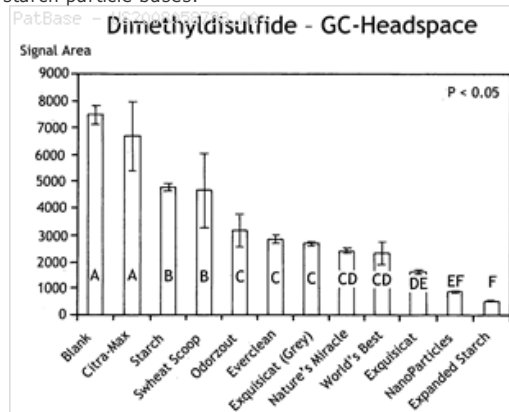
A61L15/46 (Advanced/Invention);

A61F13/15 A61L15/16 (Core/Invention)

CPC: A61L15/46 A61L15/28 A61L2300/102

European: A61L15/28 A61L15/46 K61L300/102

US: 604/359 604/359P 604/360 604/360S



Family:

Publication number	Publication date	Application number	Application date
US2008058738 AA	20080306	US20060513587	20060831
WO08026122 A2	20080306	WO20071B53235	20070814
WO08026122 A3	20090604	WO20071B53235	20070814

Priority:

US20060513587 20060831

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): CUNNINGHAM COREY THOMAS ; KIMBERLY CLARK CO ; ROBERTS FRANK GROSCH

Assignee(s): KIMBERLY CLARK CORP ; KIMBERLY CLARK WORLDWIDE INC

Inventor(s): (std): CUNNINGHAM COREY THOMAS ; ROBERTS FRANK GROSCH

Agent(s): KIMBERLY CLARK WORLDWIDE INC CATHERINE E WOLF; ARTEMAN DAVID J ET AL

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

11) Family number: 30670056 (US2004122386A)

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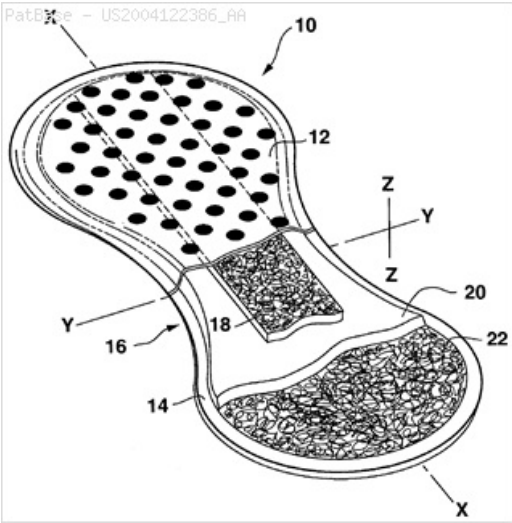
Title: ABSORBENT ARTICLES WITH A PATTERNED VISIBLE ACTIVE AGENT

Abstract: An absorbent article includes an odor control agent deposited in a visible pattern on a material layer of the article. The odor control agent presents a stark contrasting pattern against a background defined by the material layer. In one particular embodiment, the absorbent article is a feminine care article.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/20 A61L15/18 A61L15/46

A61L15/56 (Advanced/Invention);
A61L15/46 A61L15/56 (Advanced/Non-invention);
A61L15/16 (Core/Invention)
International (IPC 1-7): A61F13/15 A61F13/20 A61L15/18 A61L15/46 A61L15/56
CPC: A61F13/84 A61F13/8405 A61L15/18 A61L2300/108 A61L2300/442 A61L2300/606 A61L15/46
European: A61F13/84 A61F13/84B A61L15/18 A61L15/46 K61L300/108 K61L300/442 K61L300/606
US: 604/359 604/359P 604/360 604/361 604/385.01



Family:

Publication number	Publication date	Application number	Application date
AR042489 AA	20050622	AR2003P104656	20031216
AU2003285181 AA	20040729	AU20030285181	20031107
BRPI0317141 A	20051025	BR2003PI17141	20031107
BRPI0317141 B1	20160322	BR2003PI17141	20031107
CN100349617 C	20071121	CN200380105210	20031107
CN1720069 A	20060111	CN200380105210	20031107
DE60315890 D1	20071004	DE20036015890	20031107
DE60315890 D1	20071004	DE20036015890T	20031107
DE60315890 T2	20080117	DE20036015890T	20031107
EP1575629 A1	20050921	EP20030779506	20031107
EP1575629 B1	20070822	EP20030779506	20031107
KR101053276 B1	20110801	KR20057010315	20031107
KR20050085423 A	20050829	KR20057010315	20031107
MXPA05006062 A1	20050816	MX2005PA06062	20031107
US2004122386 AA	20040624	US20020328338	20021223
US7626072 BB	20091201	US20020328338	20021223
WO04060421 A1	20040722	WO2003US35783	20031107

Priority:

US20020328338 20021223 WO2003US35783 20031107

Probable Assignee: KIMBERLY CLARK CORP

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

Assignee(s): KIMBERLY CLARK WORLDWIDE INC ; MOCADLO CHERYL A

Inventor(s): (std): CHERYL A MOCADLO ; MOCADLO CHERYL A ; MOCADLO CHERYL ANN

Inventor(s): CHERYL ANN MOCADLO

Agent(s): DORITY AND MANNING PA

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

12) Family number: 41578261 (US2008058739A)

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Title: EXPANDED STARCH FOR ODOR CONTROL

Abstract: An absorbent article includes a liquid pervious topsheet, a liquid impervious backsheet, and an absorbent core located between the topsheet and the backsheet. The absorbent article includes expanded starch particles to control odors. The expanded starch particles may be corn starch with an amylase content of at least 20 percent and a surface area of at least 100 m²/g.

Classifications:

International (IPC 8-9): A61F13/15 A61L15/28 A61L15/42

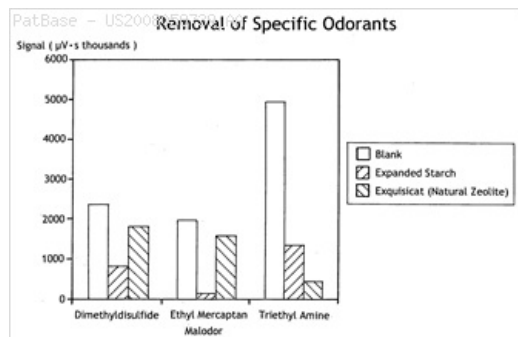
A61L15/46 (Advanced/Invention);

A61F13/15 A61L15/16 (Core/Invention)

CPC: A61F13/8405 A61F2013/8435 A61L15/28 A61L15/46 A61L2300/404

European: A61F13/84B A61L15/28 A61L15/46 K61F13/84B1H K61L300/404

US: 604/359 604/359P 604/367 604/367S



Family:

Publication number	Publication date	Application number	Application date
US2008058739 AA	20080306	US20060513598	20060831
WO08026114 A2	20080306	WO2007IB53069	20070803
WO08026114 A3	20090604	WO2007IB53069	20070803

Priority:

US20060513598 20060831

Probable Assignee: KIMBERLY CLARK CORP

Assignee(s): (std): CUNNINGHAM COREY THOMAS ; KIMBERLY CLARK CO ; ROBERTS FRANK GROSCH

Assignee(s): KIMBERLY CLARK CORP ; KIMBERLY CLARK WORLDWIDE INC

Inventor(s): (std): CUNNINGHAM COREY THOMAS ; ROBERTS FRANK GROSCH

Agent(s): KIMBERLY CLARK WORLDWIDE INC CATHERINE E WOLF; ARTEMAN DAVID J ET AL

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

13) Family number: 10726221 (US5733272A)

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Title: Absorbent articles for odor control with positive scent signal

Abstract: The present invention comprises compositions and articles such as catamenials, diapers, pantliners, adult incontinence garments, and underarm shields which minimize odor caused by body fluids and which provide a pleasant scent signal to indicate that the odor is being removed. This scent signal, provided by cyclodextrin/perfume inclusion complexes and/or matrix perfume microcapsules, assures the wearer that the product is working.

Classifications:

International (IPC 8-9): A61F13/15 A61F13/472 A61F13/49 A61K8/02 A61K8/19 A61K8/25 A61K8/26 A61K8/73 A61L15/18 A61L15/46 A61L9/01 A61Q13/00 A61Q15/00 (Advanced/Invention);

A61F13/15 A61K8/02 A61L15/46 A61L9/01 (Advanced/Non-invention);

A61F13/15 A61K8/02 A61K8/19 A61K8/72 A61L15/16 A61L9/01 A61Q13/00 A61Q15/00 (Core/Invention)

International (IPC 1-7): A61F13/00 A61F13/15 A61F13/20 A61K7/32 A61K7/46 A61K9/50 A61L15/18 A61L15/46 A61L9/01

CPC: A61K8/0208 A61K8/19 A61K8/25 A61K8/26 A61K8/738 A61K2800/56 A61L15/46 A61L2300/404 A61L2300/622

A61L2300/802 A61Q13/00 A61Q15/00

European: A61K8/02C A61K8/19 A61K8/25 A61K8/26 A61K8/73T A61L15/46 A61Q13/00 A61Q15/00 K61K800/56 K61L300/404 K61L300/622 K61L300/802

US: 424/688 424/724 424/76.3 604/359 604/360

JP F-Term: 3B029 3B029/BD22 3B029/HB05 3B200 3B200/AA01 3B200/AA03 3B200/AA09 3B200/AA15 3B200/BB02

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3B200/DB13 3B200/DB17 3B200/DB19 3B200/DB20 3B200/DC02 3B200/DC10 3B200/EA01 4C003 4C003/AA12 4C003/AA16

4C003/AA23 4C003/HA01 4C003/HA03

JP F-Index: A41B13/02/N A61F13/15/141 A61F13/15/142 A61F13/15/143 A61F13/18/380/A A61F13/18/380/B A61F13/18/382

A61F13/511/200 A61F13/53/300 A61F13/532/100

Family:

Publication number	Publication date	Application number	Application date
AU199464470 A1	19941024	AU19940064470	19940317
AU693091 B2	19980625	AU19940064470	19940317
CA2157465 AA	19950901	CA19942157465	19940317
CA2157465 C	20010731	CA19942157465	19940317
EP0691857 A1	19960117	EP19940912241	19940317
JP8508423 T2	19960910	JP19940522110T	19940317
KR100322307 B1	20020727	KR19950704222	19940317
KR19960701670 A	19960328	KR19950704222	19950929
KR19967001670 A	19960328	KR19957004222	19940317
NZ263688 A	19980527	NZ19940263688	19940317
SG54200 A1	19981116	SG19960003977	19940317
US5733272 A	19980331	US19950469153	19950606
WO9422500 A1	19941013	WO1994US02857	19940317

Priority:

US19930040705 19930331

WO1994US02857 19940317

US19950469153 19950606

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): PROCTER AND GAMBLE COMPANY THE ; THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; TRINH TOAN ; BRUNNER GORDON FRANCIS ; INGLIN THOMAS ALFRED

Inventor(s): (std): BRUNNER GORDON FRANCIS ; INGLIN THOMAS ALFRED ; TRINH TOAN

Inventor(s): BRUMMER GORDON FRANCIS ; THOMAS ALFRED INGLIN ; TOAN TRINH ; GORDON FRANCIS BRUNNER

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 BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GE GN GR HU IE IT JP KG KP KR KZ LI LK LU LV MC MD MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SI SK SN TD TG TJ TT UA UZ VN

14) Family number: 30670065 (US2004122396A)

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Title: APERTURED, FILM-COATED NONWOVEN MATERIAL

Abstract: An apertured, film-coated nonwoven fabric or material and a process for making the film-coated nonwoven fabric or material are provided. A nonwoven material layer is formed and extrusion coated with a polymer film to form a film-coated nonwoven material, the film-coated nonwoven material including a film layer having a thickness not greater than about 0.30 mils. A plurality of apertures may be formed in at least the film layer to form the apertured, film-coated nonwoven material. In alternative embodiments of this invention, a plurality of "peaks" or "cones" may be formed in the film layer having an aperture at a "valley" formed between adjacent peaks or cones.

Classifications:

International (IPC 8-9): A61F13/15 D04H13/00 (Advanced/Invention); B32B27/12 B32B3/24 (Advanced/Non-invention);

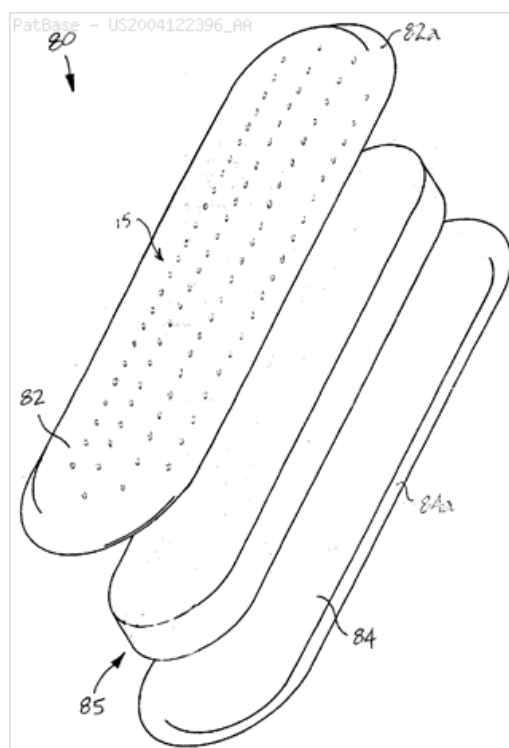
A61F13/15 D04H13/00 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 B32B27/12 B32B3/24 D04H13/00

CPC: A61F13/512 A61F2013/51165 B32B3/266 B32B3/28 B32B5/022 B32B5/06 B32B5/08 B32B7/12 B32B25/08 B32B25/10 B32B27/08 B32B27/20 B32B27/32 B32B2262/02 B32B2262/0253 B32B2262/0261 B32B2262/0276 B32B2262/0292 B32B2262/12 B32B2270/00 B32B2307/718 B32B2307/726 B32B2437/02 B32B2479/00 B32B2535/00 B32B2555/00 B32B2555/02 A61F13/15577 A61F13/51113 A61F13/51394 B32B27/12

European: A61F13/512 D04H13/00B2 K61F13/511E1

US: 604/383 604/383P



Family:

Publication number	Publication date	Application number	Application date
AU2003275256 AA	20040729	AU20030275256	20030926
BRPI0317737 A	20051129	BR2003PI17737	20030926
EP1575773 A1	20050921	EP20030759528	20030926
KR20050090135 A	20050912	KR20057011838	20030926
MXPA05006873 A1	20050816	MX2005PA06873	20030926
US2004122396 AA	20040624	US20020329021	20021224
WO04060664 A1	20040722	WO2003US30254	20030926

Priority:

US20020329021 20021224 WO2003US30254 20030926

Probable Assignee: KIMBERLY CLARK CORP

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

Assignee(s): KIMBERLY CLARK CORP ; KIMBERLY CLARK WORLDWIDE INC ; MALDONADO JOSE E ; STOPPER STEVE

Inventor(s): (std): MALDONADO JOSE E ; STEVE STOPPER ; STOPPER STEVE ; STOPPER STEVEN R

Inventor(s): STEVEN R STOPPER ; JOSE E MALDONADO

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 EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

Title: ABSORBENT ARTICLE COMPRISING A FRAGRANCE OR ODOR CONTROL COMPOSITION

Abstract: An absorbent article selected from a sanitary napkin, an incontinence pad and a panty liner, comprises a topsheet layer, a backsheet layer, optionally one or more intermediate layers enclosed between the topsheet and the backsheet a fastening adhesive applied on said backsheet garment facing surface and a liquid fragrance or odor control composition applied on or within a layer of said absorbent article. The fastening adhesive and the liquid fragrance or odor control composition are applied in patterns which do not overlap for more than 3 percent of the total surface of the backsheet when the absorbent article is in a flattened configuration and said patterns are seen along a direction perpendicular to the body facing and garment facing surfaces of the article. The resulting articles present reduced degradation of the fastening adhesive layer due to the migration of components of the fragrance or odor control composition into the fastening adhesive layer.

Classifications:

International (IPC 8-9): A61F A61F13/15 A61F13/47 A61F13/472 A61F13/53 A61F13/56 A61F13/58 A61F13/84 A61L15/46

A61M25/02 (Advanced/Invention);

A61F (Subclass/Invention)

CPC: A61F13/5611 A61F2013/5109 A61F2013/8408 A61F13/8405 A61F13/47

US: 427/2.31 604/359

JP F-Term: 3B200 3B200/AA03 3B200/BB16 3B200/BB20 3B200/BB22 3B200/BB25 3B200/CA11 3B200/DE03 3B200/DE05

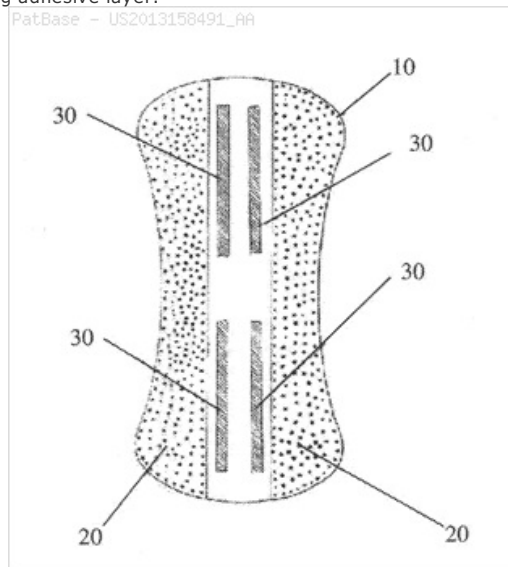
JP F-Index: A61F13/15/141 A61F13/15/143 A61F13/18/B

A61F13/18/307 A61F13/18/380/B A61F13/18/382 A61F13/47

A61F13/53/300 A61F13/534/100 A61F13/56/110 A61L15/22/200

A61L15/46/200

PatBase - US2013158491_AA



Family:

Publication number	Publication date	Application number	Application date
BR112014014636 A2	20170613	BR20141114636	20121217
BR112014014636 A8	20170613	BR20141114636	20121217
BR112014014636 A8	20170627	BR20141114636	20121217
CA2859888 AA	20140619	CA20122859888	20121217
CL2014001634 A1	20141128	CL20140001634	20140619
CN103998001 A	20140820	CN201280062872	20121217
CN103998001 B	20160302	CN201280062872	20121217
EP2793790 A1	20141029	EP20120805903	20121217
IL233155 A0	20140731	IL20120233155	20121217
IN04998DN2014 A	20150320	IN2014DN04998	20140618
JP2015500713 T2	20150108	JP20140547545T	20121217
KR20140091608 A	20140721	KR20147016479	20121217
MX2014007155 A1	20140829	MX20140007155	20121217
RU2014123416 A	20160210	RU20140123416	20121217
SG11201403436S A1	20140730	SG20141103436	20121217
US2013158491 AA	20130620	US20120717847	20121218
WO13096185 A1	20130627	WO2012US70068	20121217

Priority:

US20110557693P 20111220 US20110577693P 20111220 WO2012US70068 20121217
US20120717847 20121218

Probable Assignee: PROCTER AND GAMBLE CO

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

Assignee(s): THE PROCTER AND GAMBLE COMPANY ; SILVA SEGARRA VANESSA ; DENTI FEDERICA ; PROCTER AND GAMBLE COONE PROCTER & GAMBLE PLAZACINCINNATIOH45224US ; BELLUCCI REMO ; CAPUTI MARIANGELA ; D ERCOLE LUIGIA ; DELGADO LILIANA ; PROCTER AND GAMBLE CO

Inventor(s): (std): SILVA SEGARRA VANESSA ; D ERCOLE LUIGIA ; DENTI FEDERICA ; DELGADO LILIANA ; CAPUTI MARIANGELA ; BELLUCII REMO ; BELLUCCI REMO ; LILIANA DELGANO ; LUIGIA DERCOLE ; CAPUTI MARIANGELA ; MARIANGELA CAPUTI ; REMO BELLUCCI ; VANESSA SILVA SEGARRA ; ERCOLE LUIGIA D ; SEGARRA VANESSA SILVA ; LUIGIA D ERCOLE ; FEDERICA DENTI

Inventor(s): LILIANA DELGADO ; SILVA SEGARRA VANESSAUS ; DENTI FEDERICADE ; BELLUCCI REMOIT ; DELGADO LILIANADE ; CAPUTI MARIANGELAIT ; D ERCOLE LUIGIAIT ; DERCOLE LUIGIA

Agent(s): DIMOCK STRATTON LLP; MBM INTELLECTUAL PROPERTY LAW LLP; LLOVET AHUMADA RAUL; KREMER VERONIQUE MARIE JOSEPHINE; NAGAI HIROSHI; GUFFEY TIMOTHY B

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 IS IT JP KE KG KM KN KP KR KZ LA LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW 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: VOLATILE SUBSTANCE-CONTROLLING COMPOSITION

Abstract: The present invention relates to a volatile substance-controlling composition comprising: a) a sorbent have a plurality of surfaces; and b) a fragrance component comprising at least one PRM, wherein said fragrance component is impregnated onto said surfaces of said sorbent and wherein in the presence of one or more volatile substances said fragrance component is released from said sorbent and said volatile substances are adsorbed by said sorbent.

Classifications:

International (IPC 8-9): A61L15/46 A61L9/00 A61L9/014 A61L9/04 B05D7/22 (Advanced/Invention); A61L15/16 A61L9/00 A61L9/01 A61L9/04 B05D7/22 (Core/Invention)

International (IPC 1-7): A61L9/014 A61L9/04 B01J21/00 B01J23/00 B32B5/16

CPC: Y10T428/258 A61L9/014 A61L9/042 A61L15/46 A61L2300/20 A61L2300/602

European: A61L15/46 A61L9/014 A61L9/04B K61L300/20 K61L300/602

US: 239/53 239/55 239/56 239/6 264/4.1 422/5 422/5P 427/230 427/238 428/329 428/330 428/330P 428/331 502/527.24 502/527.240S 510/441

Family:

Publication number	Publication date	Application number	Application date
EP1677839 A1	20060712	EP20040796349	20041020
US2005096220 AA	20050505	US20030699470	20031031
US2007224078 AA	20070927	US20070803603	20070515
US7234648 BB	20070626	US20030699470	20031031
US7549598 BB	20090623	US20070803603	20070515
WO05044320 A1	20050519	WO2004US35354	20041020

Priority:

US20030699470 20031031 WO2004US35354 20041020 US20070803603 20070515

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s): (std): PROCTER AND GAMBLE ; RANATUNGA RAVINDRA ; TEPPER BRUCE ERNEST ; URTEAGA RAMON ANDRES ; VEGA VICTOR NICHOLAS

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

Inventor(s): (std): RANATUNGA RAVINDRA ; TEPPER BRUCE E ; TEPPER BRUCE ERNEST ; URTEAGA RAMON A ; URTEAGA RAMON ANDRES ; VEGA VICTOR N ; VEGA VICTOR NICHOLAS

Inventor(s): VEGA VICTOR ; URTEAGA RAMON ; TEPPER BRUCE

Agent(s): THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION WEST BLDG; DARA; MATTHEW P; JOHN 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 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 NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

Title: CATAMENIAL DEVICE WITH ODOR CONTROL.

Abstract: The invention relates to an absorbent product having a body-facing, fluid-permeable cover sheet (24) overlying an absorbent core (34). The fluid-permeable cover sheet comprises a polymeric material arranged in a discontinuous pattern (30). An odor control material such as sodium bicarbonate (18) is affixed to the polymeric material (16). The odor control material is positioned to be in direct contact with body fluid upon its discharge onto the absorbent product.

Classifications:

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

A61F13/472 (Advanced/Invention);

A61F13/15 A61F13/20 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 D04H1/42

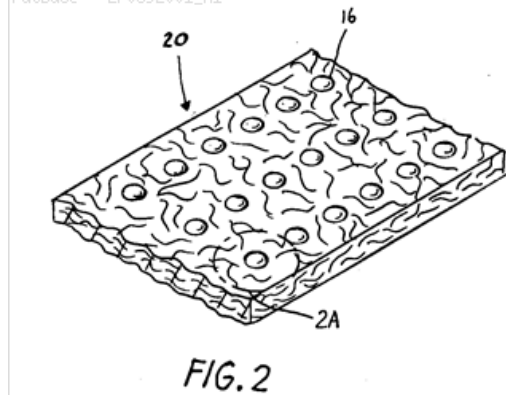
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European: A61F13/84B K61F13/511 K61F13/51M6C K61F13/51M6D K61F13/51M7B

JP F-Term: 3B200/AA01 3B200/AA03 3B200/AA15 3B200/BA02 3B200/BA05 3B200/BA15 3B200/BB03 3B200/BB04 3B200/BB05 3B200/BB06 3B200/BB09 3B200/BB13 3B200/BB17 3B200/BB22 3B200/BB23 3B200/CA02 3B200/CA11 3B200/DC01 3B200/DC02 3B200/DC06 3B200/DC07 3B200/DD01 3B200/DD02 3B200/DE03 3B200/DE05 3B200/DE10 3B200/EA07 3B200/EA08 4C003 4C003/BA01 4C003/HA01 4C079

JP F-Index: A61F13/15/141 A61F13/15/300 A61F13/18/380/Z A61F13/20/338 A61F13/511/200

PatBase - EP0592001_A1



Family:

Publication number	Publication date	Application number	Application date
AT160929 E	19971215	AT19930116357T	19931008
BRPI9304192 A	19940426	BR1993PI04192	19931008
DE69315657 D1	19980122	DE19936015657	19931008
DE69315657 T2	19980514	DE19936015657T	19931008

DE69315657 T3	20030220	DE19936015657T	19931008
EP0592001 A1	19940413	EP19930116357	19931008
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EP0592001 B2	20020605	EP19930116357	19931008
GR1002550 B	19970128	GR19930100398	19931007
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JP6190005 A2	19940712	JP19930277321	19931012

Priority:

US19920959013 19921009

Probable Assignee: MCNEIL PPC INC

Assignee(s): (std): CHICOPEE ; JOHNSON AND JOHNSON ; MCNEIL PPC INC

Assignee(s): MAKUNIILE P P C INC ; MCNELL PPC INC ; JOHNSON AND JOHNSON CONSUMER INC ; CHICOPEE INC ; CHICOPEE INC NORTH CHARLESTON US

Inventor(s): (std): LASCO VINCENT P ; LASKO VINCENT P ; LASKO VICENT P ; BINSENTO PII RASUKO

Inventor(s): VICENT P LASKO

Designated states: AT BE CH DE DK ES FR GB IE IT LI LU MC NL PT SE

18) Family number: 30670055 (US2004122385A)

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Title: ABSORBENT ARTICLES INCLUDING AN ODOR ABSORBING AND/OR ODOR REDUCING ADDITIVE

Abstract: An absorbent article comprising a capturing agent and a liquid, wherein the liquid is captured by the capturing agent, for example disposed within or otherwise encapsulated within an encapsulating agent or complexed with a complexing agent is provided.

Classifications:

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

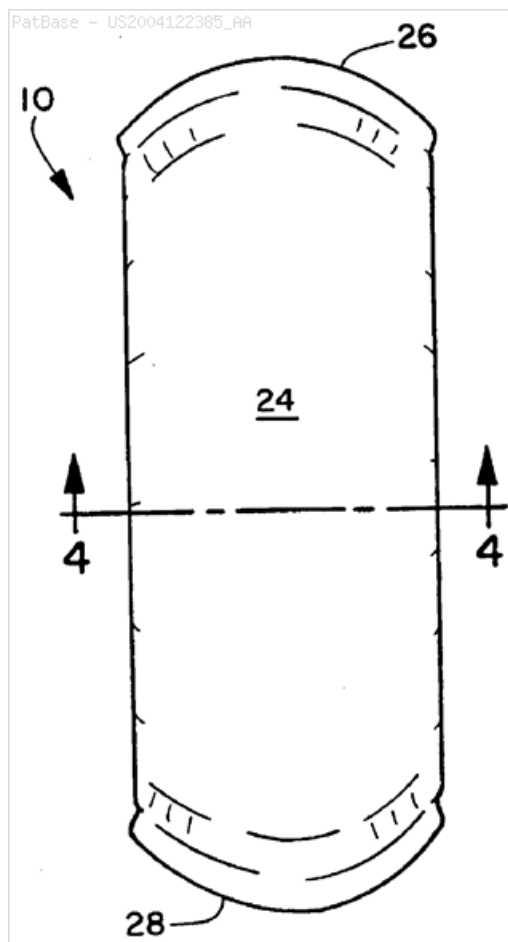
A61L15/16 (Core/Invention)

International (IPC 1-7): A61F13/15 A61F13/20 A61L15/46 A61L15/60

CPC: A61L15/46 A61L2300/10 A61L2300/62 A61L2300/802

European: A61L15/46 K61L300/10 K61L300/620 K61L300/802

US: 604/359 604/359P 977/841 977/841S



Family:

Publication number	Publication date	Application number	Application date
AU2003297238 AA	20040722	AU20030297238	20031215
MXPA05006013 A1	20050818	MX2005PA06013	20031215
US2004122385 AA	20040624	US20020327822	20021223
WO04058316 A2	20040715	WO2003US40160	20031215
WO04058316 A3	20040923	WO2003US40160	20031215

Priority:

US20020327822 20021223 WO2003US40160 20031215

Probable Assignee: KIMBERLY CLARK CORP

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