

ESCOBAR - URIBE ASOCIADOS

A B O G A D O S

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2963/P.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO DIVISION DE NUEVAS CREACIONES

E. S. D.

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

Rad: 06-031935- -00001-0000

Fec. 2006-05-24 14:40:00 Dep. 2020 NUECREACIONES

Tra. 2 PATENTES

Eve. 1 REGDEPOSITO

Act. 444 RESPUESTA REQUE Folios. 52

Ref.: Expediente No. 06-031.935
Solicitud de Patente a nombre de
McNeil-PPC, Inc.

Yo, JIMENA ESCOBAR URIBE, identificada como aparece al pie de mi firma, domiciliada en la Carrera 11 A No. 94-76, of. 305, obrando como apoderada de la sociedad **McNeil-PPC, Inc.**, domiciliada en Skillman, New Jersey, Estados Unidos de América, solicitante de la patente de la referencia, en respuesta al oficio No. 4556 notificado por fijación en lista el día 27 de abril de 2006, atentamente me permito presentar:

1. Copia certificada de la solicitud de patente número 11/095,049 presentada en Estados Unidos de América el día 31 de marzo de 2005, con la debida traducción de lo pertinente.
2. Artes finales en tamaño 12 x 12 centímetros (por duplicado) de la figura característica.
3. Documento (1) en que consta la cesión del derecho a la patente otorgado por los inventores a favor de mi mandante.

Sobre el particular, es importante resaltar que de conformidad con las normas legales vigentes, artículo 1 de la Resolución 210 de 2001, expedida por el Superintendente de Industria y Comercio y artículo 2 de la Convención de la Haya, el documento en inglés que se pretenda aportar como parte de los trámites de propiedad industrial ante la Superintendencia de Industria y Comercio no requieren traducción. Por otro lado, la legalización consular y/o diplomática de los documentos expedidos en el extranjero no es necesaria. Por lo tanto, el documento de cesión anexo a este memorial es válidamente presentado en idioma inglés y con la correspondiente Apostilla.

Espero con esto haber dado cabal cumplimiento a lo solicitado por ese despacho y de conformidad con lo indicado en los artículos 3º, inciso 3; 35, inciso 2 y 59, inciso 2 del CCA, al analizar este memorial, atentamente ruego se traten todas las cuestiones planteadas con motivo del mismo

Señor Superintendente,



JIMENA ESCOBAR URIBE

C.C.39.779.452 de Usaquén

T.P. 68228

Cód. 5376

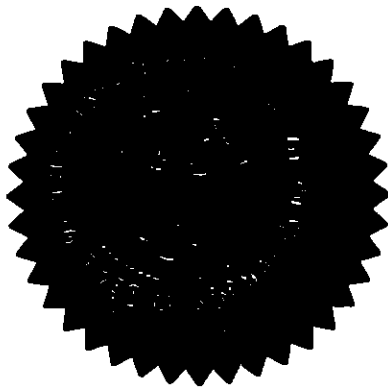
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APOSTILLE

(CONVENTION DE LA HAYE DU 5 OCTOBRE 1961)

1. COUNTRY: UNITED STATES OF AMERICA
2. THIS PUBLIC DOCUMENT HAS BEEN SIGNED BY:
CHRISTINA A CLICKNER
3. ACTING IN THE CAPACITY OF:
NOTARY PUBLIC OF NEW JERSEY
4. BEARS THE SEAL/STAMP OF:
CHRISTINA A CLICKNER, NOTARY

CERTIFIED

5. AT TRENTON, NEW JERSEY
6. THE 11TH DAY OF MAY 2006
7. BY: Bradley I. Abelow, NEW JERSEY TREASURER
8. NO. A259618
9. SEAL/STAMP: 10. SIGNATURE



Bradley Abelow

47 2

CERTIFICATION

I hereby certify that I have compared the attached document with the original, and that such said document is a true copy of the original Assignment document as filed in the U. S. Patent Office in connection with USSN 11/095,049 filed MARCH 31, 2005.



Christina A. Clickner
(Notary Public of New Jersey)
My Commission Expires:
March 2, 2010

A S S I G N M E N T

Serial No. 11/095,049
Filed March 31, 2005

WHEREAS, Joseph M. Luizzi, Elaine M. Gannon, Bruce C. Johnson, H. Michael Moscherosch and Leonard G. Rosenfeld, residing at 6 Periwinkle Place, Newtown, PA 18940; 120 Bloomfield Street, Apt. 4, Hoboken, NJ 07030; 2001 Bayonne Avenue, Whiting, NJ 08759; 106 East Oakland Avenue, Doylestown, PA 19801; and 1260 Madison Avenue, Yardley, PA 19067 respectively (hereinafter called "Assignors"), have made certain new and useful inventions or discoveries relating to

BODY ATTACHABLE SANITARY PROTECTION ARTICLE INCLUDING
NON-STAINING RELEASE MEMBER

for which an application for a United States Patent was filed on March 31, 2005, Application No. 11/095,049.

WHEREAS, McNeil-PPC, Inc., a corporation of the State of New Jersey, having its principal place of business at 199 Grandview Road, Skillman, New Jersey 08558 (hereinafter called "Assignee"), is desirous of acquiring Assignors' entire right, title, and interest therein:

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar and other valuable considerations, the receipt of which is hereby acknowledged, Assignors have sold, assigned, and transferred, and do hereby sell, assign and transfer unto said Assignee their entire right, title and interest in and to all said inventions and discoveries disclosed in said application whose identification above by serial number and filing date, when available is hereby authorized, and in and to said application, all substitutions, divisions, and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made;

And Assignors hereby authorize and request the Commissioner of Patents of the United States to issue said Letters Patent in accordance with this Assignment;

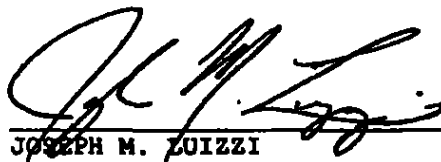
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And for the consideration aforesaid, Assignors covenant and agree with said Assignee that he has a full and unencumbered title to the inventions and discoveries above described and hereby assigned, which title they warrant unto said Assignee, its successors and assigns;

And for the consideration aforesaid, Assignors further covenant and agree that they will, whenever requested, but without cost to them promptly communicate to said Assignee or its representatives any facts known to them relating to said inventions and discoveries, testify in any interference or legal proceedings involving said inventions and discoveries, and execute any additional papers that may be necessary to enable said Assignee or its representatives, successors, nominees, or assigns to secure full and complete protection for the said inventions and discoveries or that may be necessary to vest in said Assignee the complete title to the said inventions and discoveries and patents hereby conveyed and to enable it to record said title.

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IN TESTIMONY WHEREOF, Assignors have hereunto set his hands and seal this 20th day of June 2005.


JOSEPH M. LUZZI (L.S.)

STATE OF NJ,
COUNTY OF ~~monmouth~~) ss.

BE IT REMEMBERED, That on this 20th day of June, 2005, before me, a Notary Public, personally appeared JOSEPH M. LUZZI, who I am satisfied is the person named in and who executed the foregoing instrument in my presence, and I having first made known to him the contents thereof, he did acknowledge that he signed, sealed, and delivered the same as his voluntary act and deed for the uses and purposes therein expressed.


Notary Public

MICHAEL TYERICH
Notary Public of New Jersey
My Commission Expires Oct. 23, 2008

51 #
IN TESTIMONY WHEREOF, Assignors have hereunto set her hands and seal this 20th day of JUNE, 2005.


ELAINE M. GANNON (L.S.)

STATE OF NJ,
COUNTY OF Somerset,) ss.

BE IT REMEMBERED, That on this 20th day of June, 2005, before me, a Notary Public, personally appeared ELAINE M. GANNON, who I am satisfied is the person named in and who executed the foregoing instrument in my presence, and I having first made known to her the contents thereof, she did acknowledge that she signed, sealed, and delivered the same as her voluntary act and deed for the uses and purposes therein expressed.


Notary Public

MICHAEL TYEREGH
Notary Public of New Jersey
My Commission Expires Oct. 23, 2008

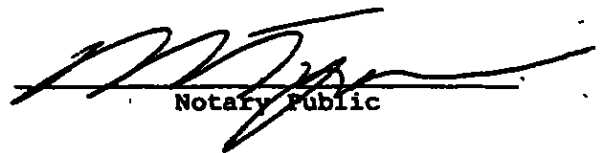
52 16
IN TESTIMONY WHEREOF, Assignors have hereunto set his hands and
seal this 14 day of JUNE, 2005.



BRUCE C. JOHNSON (L.S.)

STATE OF NJ)
COUNTY OF Somerset) ss.

BE IT REMEMBERED, That on this 14th day of June,
2005, before me, a Notary Public, personally appeared BRUCE C.
JOHNSON, who I am satisfied is the person named in and who
executed the foregoing instrument in my presence, and I having
first made known to him the contents thereof, he did acknowledge
that he signed, sealed, and delivered the same as his voluntary
act and deed for the uses and purposes therein expressed.



Notary Public

MICHAEL TYEREGH
Notary Public of New Jersey
My Commission Expires Oct. 23, 2008

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IN TESTIMONY WHEREOF, Assignors have hereunto set his hands and seal this 20th day of June, 2005.

H. Michael Moscherosh (L.S.)
H. MICHAEL MOSCHEROSH
C M 6/20/05

STATE OF NY,
COUNTY OF Saratoga, ss.

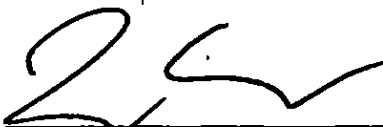
BE IT REMEMBERED, That on this 20th day of June 2005, before me, a Notary Public, personally appeared H. MICHAEL MOSCHEROSH, who I am satisfied is the person named in and who executed the foregoing instrument in my presence, and I having first made known to him the contents thereof, he did acknowledge that he signed, sealed, and delivered the same as his voluntary act and deed for the uses and purposes therein expressed.

Michael Tyeregh
Notary Public

MICHAEL TYEREGH
Notary Public of New Jersey
My Commission Expires Oct. 23, 2008

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IN TESTIMONY WHEREOF, Assignors have hereunto set his hands and seal this 20th day of June, 2005.



LEONARD G. ROSENFELD

(L.S.)

STATE OF

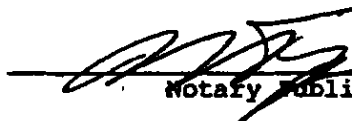
HJ

) ss.

COUNTY OF

Somerset

BE IT REMEMBERED, That on this 20th day of June, 2005, before me, a Notary Public, personally appeared LEONARD G. ROSENFELD, who I am satisfied is the person named in and who executed the foregoing instrument in my presence, and I having first made known to him the contents thereof, he did acknowledge that he signed, sealed, and delivered the same as his voluntary act and deed for the uses and purposes therein expressed.


Notary Public

MICHAEL TYERECH
Notary Public of New Jersey
My Commission Expires Oct. 23, 2006

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ESTADOS UNIDOS DE AMERICA
A TODOS AQUELLOS A QUIENES EL PRESENTE LLEGUE:

DEPARTAMENTO DE COMERCIO DE LOS ESTADOS UNIDOS
Oficina de Patentes y Marcas de los Estados Unidos

12 de abril de 2006

La presente es para certificar que el anexo es una copia fiel de los registros de la Oficina de Patentes y Marcas de los Estados Unidos, de los documentos de la solicitud de patente identificada más adelante, que cumplieron con los requerimientos para concederse una fecha de presentación de acuerdo con 35 USC 111.

Número de Solicitud: 11/095,049

Fecha de Presentación: 31 de marzo de 2005

EL CÓDIGO DEL PAÍS Y EL NÚMERO DE SU SOLICITUD DE PRIORIDAD, PARA SER USADA EN LA PRESENTACIÓN EXTRANJERA BAJO EL CONVENIO DE PARÍS ES US11/095,049.

Por la autoridad de
Bajo el Secretario de Comercio para la Propiedad Intelectual y el Director de la Oficina de Patentes y Marcas de los Estados Unidos de América

(fdo) L. Edelen
Oficial Certificador
Sello oficial de la Oficina de Patentes y Marcas de los Estados Unidos de América

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PA 7007096



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

April 12, 2006

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: 11/095,049

FILING DATE: March 31, 2005

THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS US11/095,049

**By Authority of the
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office**

L. Edelen

**L. EDELEN
Certifying Officer**



57 +3

UTILITY PATENT APPLICATION TRANSMITTAL (only for new nonprovisional applications under 37 CFR 1.53(b))		Attorney Docket No	PPC-5149-USNP
		First Inventor	Joseph M. Luizzi
		Title	BODY ATTACHABLE SANITARY PROTECTION ARTICLE INCLUDING NON-STAINING RELEASE MEMBER
		Express Mail Label No.	EL 980327455 US
APPLICATION ELEMENTS See MPEP Chapter 800 concerning utility patent application contents.		ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
1. ☒ Fee Transmittal Form (e.g., PTO/SB/17) (submit an original and a duplicate for fee processing) 2. ☐ Applicant claims small entity status. 3. ☒ Specification [Total Pages 23] (Preferred arrangement set forth below) - Descriptive Title of the Invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R&D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure 4. ☒ Drawing(s) (35 USC 113) [Total Sheets 3] 5. Oath or Declaration [Total Pages] a. ☐ Newly executed (original or copy) b. ☐ Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) i. ☐ DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. ☐ Application Data Sheet. See 37 CFR 1.76		7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. ☐ Computer Readable Form (CRF) b. ☐ Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☐ paper c. ☐ Statement verifying identity of above copies ACCOMPANYING APPLICATION PARTS 9. ☐ Assignment Papers (cover sheet & document(s)) 10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney (when there is an assignee) 11. ☐ English Translation Document (if applicable) 12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations 13. ☐ Preliminary Amendment 14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. ☐ Request and Certifications under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. ☐ Other	
18. ☐ If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76. ☐ Continuation ☐ Divisional ☐ Continuation-in-Part (CIP) of prior application No.: , filed Prior application information: Examiner Group Art Unit: For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation <u>can only</u> be relied upon when a portion has been inadvertently omitted from the submitted application parts.			
19. CORRESPONDENCE ADDRESS ☒ Customer Number or Bar Code Label 000027777 or ☐ Correspondence Address below Name: Phillip S. Johnson, Esq. Address: Johnson & Johnson One Johnson & Johnson Plaza New Brunswick, NJ 08933-7003 USA			
20. TELEPHONE CONTACT Please direct all telephone calls or telefaxes to Paul J. Higgins at: Telephone: (732) 524-1728 Fax: (732) 524-2808			
21. SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED			
NAME	Paul J. Higgins		Reg. No. 44,152
SIGNATURE	/Paul J. Higgins/		
DATE	March 31, 2005		

113007 U.S. PTO
11/095049

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FEE TRANSMITTAL	<i>Complete if Known</i>	
	Application Number	Unassigned
	Filing Date	March 31, 2005
	First Named Inventor	Joseph M. Luizzi
	Group Art Unit	Unassigned
	Examiner Name	Unassigned
	Attorney Docket Number	PPC-5149-USNP

FEE CALCULATION**CLAIMS AS FILED**

(1)	(2)	(3)	(4)	(5)
FOR:	NUMBER FILED	NUMBER EXTRA	RATE	BASIC FEE \$300.00
TOTAL CLAIMS	29 - 20 =	9	x 50.00	\$ 450.00
INDEPENDENT CLAIMS	3 - 3 =	0	x 200.00	\$ 0.00
SEARCH FEE	NA	NA	NA	\$ 500.00
EXAMINATION FEE	NA	NA	NA	\$ 200.00
APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 25 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(e).	0 - 100 =		x 5.00 (for each additional sheet over 100)	\$
MULTIPLE DEPENDENT CLAIMS ☒		N/A	\$380.00	
			TOTAL FEES	\$ 1450.00

METHOD OF PAYMENT

- ☒ Please charge Deposit Account No. 10-0750/PPC-5149-USNP/PJH in the amount of \$1,450.00. Three copies of this sheet are enclosed.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required in connection with the filing of this communication, or credit any overpayment, to Account No. 10-0750/PPC-5149-USNP/PJH. Three copies of this sheet are enclosed.

SUBMITTED BY:			<i>Complete (if applicable)</i>
Typed or Printed Name	Paul J. Higgins		Reg. No. 44,152
Signature	/Paul J. Higgins/	Date: March 31, 2005	Deposit Account No. 10-0750

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Serial No. _____	Docket No. <u>PPC-5149-4006</u> By <u>PJH</u>
Application of: <u>Joseph M. Guzzi</u>	Mailed: <u>March 31, 2005</u>
Entitled: <u>Body Attachable Sanitary Protection Article</u> <u>including non-staining release member</u>	
THE FOLLOWING HAS BEEN RECEIVED IN THE U.S. PATENT OFFICE ON THE DATE STAMPED HEREON:	
☐ Provisional ☒ Nonprovisional ☐ CPA ☐ RCE ☐ CIP ☐ Divisional ☐ Design ☐ PCT	
☐ Continuation ☐ Other _____	
☐ Oath or Declaration _____	Express Mail Certificate
☐ Assignment	☒ # <u>EL 9603 27455 US</u>
☐ Fee Transmittal	☐ Specification: <u>23</u> pgs
☒ Charge to Deposit Account 10-0750	☒ Claims: <u>29</u>
☐ Priority Document	☒ Drawings: <u>3</u> sheets
☐ Data Sheet	☐ Preliminary Amendment
☐ IDS Form 1449	☐ Sequence Listings/Diskette
☐ Extension of Time	☐ Biological Deposit Declaration
☐ PTO 1390 (PCT)	☒ Other: <u>Transmittal Sheet</u>

BEST AVAILABLE COPY

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DOCKET NO. PPC-5149-USNP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Joseph M. Luizzi

For : BODY ATTACHABLE SANITARY PROTECTION ARTICLE
INCLUDING NON-STAINING RELEASE MEMBER

Express Mail Certificate

"Express Mail" mailing number: EL 960327455 US

Date of Deposit: March 31, 2005

I hereby certify that this complete application, including specification pages, claims, and informal drawings is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A Combined Declaration and Power of Attorney will be submitted to the United States Patent and Trademark Office upon receipt of the U.S. Serial Number for this patent application.

Laurie A. Phillips

(Typed or printed name of person mailing paper or fee)

/Laurie A. Phillips/

(Signature of person mailing paper or fee)

**BODY ATTACHABLE SANITARY PROTECTION ARTICLE INCLUDING
NON-STAINING RELEASE MEMBER**

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FIELD OF THE INVENTION

The present invention relates to a body attachable sanitary protection article, such as a sanitary napkin, and in particular a body attachable sanitary protection article including a non-staining release member.

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BACKGROUND OF THE INVENTION

Various absorbent articles configured to be arranged adjacent the body to absorb body fluids such as menses, urine and the like are well known. With respect to feminine hygiene, napkins and liners have been developed for external use about the pudendal region of a female.

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Securement of a sanitary napkin or liner during use is normally accomplished by attaching the sanitary garment by pressure sensitive adhesive to the wearer's undergarment. Napkins having wings or flaps that fold over the edges of the garment and are attached to the underside of the garment using an adhesive are also known.

20

The prior art also teaches sanitary protection articles that are intended to be secured directly to the body by an adhesive arranged on a body-facing surface of the article. For example, GB2284767A purports to disclose an absorbent article including an absorbent and an adhesive arranged adjacent the absorbent, the adhesive being designed to contact the wearer's body during use. U.S. Patent No. 6,213,993 purports to disclose a self-adhering absorbent article including a liquid permeable cover, an absorbent core, a

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liquid impermeable baffle, and a bodyside adhesive arranged on the cover for securing the article to the body.

Body attachable sanitary articles disclosed in the prior art are typically provided with a with a removable member, such as a release paper, that serves to protect the adhesive from inadvertently adhering to a surface prior to use. The release member often comprises a densified, bleached paper, formed from a fibrous slurry. The release paper may have a coating of silicone applied to a surface thereof to facilitate the easy removal of the paper prior to use.

A problem with body attachable sanitary articles of the type discussed above is that the adhesives used to secure the article body often stain the release paper covering the adhesive prior to use. This staining, which resembles "grease spots", creates an aesthetic concern for consumers since it suggests that the product is not hygienic. The staining of the release paper is caused by the migration of the plasticizing components in these types of adhesives being absorbed by the release paper. In addition to the aesthetic problems caused by the migration of the adhesive into the release paper, the migration of the adhesive may also compromise the body attachment performance of the product.

In view of the above there is a need for an improved body attachable sanitary article that overcomes the drawbacks and shortcomings of the articles disclosed in the prior art.

SUMMARY OF THE INVENTION

According to one aspect of the invention, the present invention relates to an
5 absorbent article including a liquid pervious cover, a liquid impermeable barrier; a body
facing surface, an adhesive for securing the article to the body arranged on the body
facing surface, a removable release member for covering the adhesive prior to use, the
release member being impervious to the migration of any component of the adhesive
therethrough.

10 According to another aspect of the invention, the present invention relates to an
absorbent article including a liquid pervious cover, a liquid impermeable barrier, a body
facing surface, an adhesive for securing the article to the body arranged on the body
facing surface, wherein the adhesive is an adhesive gel based upon a styrene-ethylene-
butylene-styrene (SEBS) block copolymer, a removable release member for covering the
15 adhesive prior to use, the release member being impervious to the migration of any
component of the adhesive therethrough.

According to yet another aspect of the invention, the present invention relates to
a method for preventing a migration of an adhesive through a removable release member
in a body attachable sanitary article, the method included the steps of providing a body
20 facing surface, applying an adhesive to the body facing surface for securing the article to
a user's body, applying a removable release member over the adhesive to protect the
adhesive prior to use, providing said release member with a nonporous structure to
prevent the migration of any component of the adhesive through the release member.

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BRIEF DESCRIPTION OF THE DRAWINGS

Examples of embodiments of the present invention will now be described with

5 reference to the drawings, in which:

Fig. 1 is a perspective view a body attachable sanitary napkin in accordance with the prior art;

Fig. 2 is a perspective view of body attachable sanitary napkin according to the present invention, the release member thereof being partially broken away to show the
10 cover layer;

Fig. 3 is an exploded perspective view of the sanitary napkin shown in Fig. 2;

Fig. 4a is a sectional view of the release member used in the sanitary napkin according to the present invention;

Fig. 4b is a sectional view of an alternate release member used in the sanitary
15 napkin according to the present invention;

Fig. 5 is a perspective view of a body attachable sanitary napkin according to another embodiment of the present invention, the release member thereof being partially broken away to show the cover layer;

Fig. 6 is an exploded perspective view of the sanitary napkin shown in Fig. 5; and

20 Fig. 6a is a detailed perspective view of a portion of the sanitary napkin shown in Figs. 5 and 6.

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DETAILED DESCRIPTION OF THE INVENTION

Referring to Fig. 1, there is shown a body attachable sanitary napkin 1 in
5 accordance with the prior art. As shown, the sanitary napkin 1 includes a main body 2
including a cover 3 and a liquid impermeable barrier 4. Applied to the body facing
surface 5 of the cover 3 is an adhesive 6 for securing the napkin to the body of a user.
The napkin 1 further includes a release member 7 for covering the adhesive 6 prior to
use. The release member 7 comprises a densified, bleached kraft paper, formed from a
10 fibrous slurry, the paper having a coating of silicone applied thereto.

As shown in Fig. 1, a portion of the adhesive 6 has migrated through the release
paper 7 thereby forming a stain 8. The stain 8 creates an aesthetic concern for consumers
since it suggests that the product is not hygienic. It has been found that this staining
problem is particularly troublesome when the adhesive 6 is an adhesive gel based upon a
15 styrene-ethylene-butylene-styrene (SEBS) block copolymer.

Referring to FIGS. 2 and 3, there is shown an embodiment of the present
invention, a feminine sanitary napkin 20. The sanitary napkin 20 has a main body 22
with a first transverse side 26 defining a front portion thereof and a second transverse
side 28 defining a rear portion thereof. The main body also has two longitudinal sides,
20 namely a longitudinal side 30 and a longitudinal side 32.

As depicted in FIG. 3, the main body 22 is of a laminate construction and
preferably comprises a fluid-permeable cover layer 42, an absorbent system 44 and a
fluid-impervious barrier layer 50. The absorbent system 44 may comprise a single layer
of material or may comprise multiple layers. For example, the absorbent system 44 may

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comprise a single layer core or it may include a transfer layer and a core.

In the embodiment of the invention shown in Figures 2 and 3, an adhesive 33 for securing the napkin 20 to the body of a user is applied to the body facing surface 45 of the cover 42.

5 The adhesive 33 employed in the article according to the present invention preferably has more than about 50% by weight of a liquid plasticizer, preferably more than about 65% by weight of a liquid plasticizer, and most preferably more than about 80% by weight of a liquid plasticizer. Suitable liquid plasticizers may include white oils, mineral oils, paraffinic process oils, polyethylene glycol, glycerin, polypropylene glycol,
10 napthenic oils, and liquid polyterpenes. The liquid plasticizer preferably has a molecular weight of less than 1000 g/mole, more preferably less than 750 g/mole and most preferably less than 500 g/mole.

 The adhesive 33 used in the article according to the present invention is preferably an adhesive based upon block copolymers, preferably, those which may
15 include linear or radial co-polymer structures having the formula (A-B)_x wherein block A is a polyvinylarene block, block B is a poly(monoalkenyl) block, x denotes the number of polymeric arms, and wherein x is an integer greater than or equal to one. Suitable block A polyvinylarenes include, but are not limited to Polystyrene, Polyalpha-methylstyrene, Polyvinyltoluene, and combinations thereof. Suitable Block B poly(monoalkenyl) blocks
20 include, but are not limited to conjugated diene elastomers such as for example polybutadiene or polyisoprene or most preferably hydrogenated elastomers such as ethylene-butylene or ethylene-propylene or polyisobutylene, or combinations thereof, specifically, adhesives consisting of styrene-ethylene-butylene-styrene (SEBS) block

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copolymer and mineral oils, paraffinic or naphthenic process oils, and optionally a suitable tackifying resins include natural and modified resins; glycerol and pentaerythritol esters of natural and modified resins; polyterpene resins; copolymers and terpolymers of natural terpenes; phenolic modified terpene resins and the hydrogenated derivatives thereof; aliphatic petroleum resins and the hydrogenated derivatives thereof; aromatic petroleum resin and the hydrogenated derivatives thereof; and aliphatic/aromatic petroleum resins and the hydrogenated derivatives thereof, and combinations thereof

The adhesive 33 may be of the type described in US Patent No. 6,191,189 to Cinelli et al. In particular, the adhesive may comprise:

10 from 0.5 to 20%, preferably 5% to 15%, by weight of a macromolecular polymeric substance or a mixture of such substances soluble or swellable in the below mentioned plasticiser(s). As not limiting examples such macromolecular or polymeric substances can be natural and/or synthetic such as natural gums or derivatives such as natural gums and gelatins, their derivatives and alginates; polyacrylics; polyvinyl alcohol; 15 polyethylene oxide; polyvinylpyrrolidone (PVP) or polyvinylethers, their copolymers and derivatives; cellulose derivatives; Block Copolymer Thermoplastic Elastomers and preferably Styrenic Block Copolymers and more preferably the hydrogenated grades Styrol/Ethylene-Butylene/Styrol (SEBS), Styrene/Isoprene/Styrene (SIS), and Styrol/Ethylene-Propylene/Styrol (SEPS);

20 from 45 to 99.5% by weight, preferably from 51 to 99.5% by weight, of a plasticising substance or a mixture of plasticising substances, which are liquid at room temperature. As non-limiting examples the plasticiser can be water, various alcohols (like in particular glycerol), glycols and their ethers, polyglycols, liquid polybutenes, esters

such phthalates, adipates, stearates, palmitates, sebacates, or myristates, natural or synthetic oils such as vegetable oils, mineral oils, or combinations thereof;

from 0% to 50% by weight of the composition, preferably from 0 to 600% by weight of the macromolecular polymeric substance of a tackifying resin whose main scope is to tailor the Tg especially in systems based on synthetic polymers;

from 0 to 10% and more preferably from 0 to 5% by weight of substances for facilitating and stabilising the gel and the gel forming process both of hydrophilic or hydrophobic liquid plasticisers. These may be for oily systems, e.g. the fatty acids of C₈ to C₂₂, their metallic salts and their polyoxo-derivatives; lanolin derivatives; silica; bentonite, montmorillonite and their derivatives; polyamides, waxes or mixtures thereof.

The adhesive may also be of the type described in US Patent No. 6,213,993 to Zacharias et al.. In particular the adhesive may comprise:

a rubber-based adhesive such as styrenebutadiene, polyisobutylene, polybutadiene and polyisoprene; a water soluble adhesive such as polyvinyl alcohol, polyvinyl acetate, and methyl cellulose; a hot melt adhesive such as block copolymers of styrene-butadiene-styrene, styrene-isoprene-styrene, styrene-ethylenepropylene-styrene, styrene-ethylenebutylene-styrene and tetrablock copolymers such as styrene-ethylenepropylene-styrene-ethylenepropylene. Incorporated with the adhesives can be suitable tackifying resins and, if appropriate, oils.

Other adhesive types here include anhydrous gels consisting of 2-hydroxyethyl methacrylate polymer, polyethylene glycol and optionally water as taught in U.S. Patent No. 4,303,066 and polyurethane gels, as disclosed in U.S. Patent No. 4,661,099 , or

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silicone gels including commercial products such as Silgel 612 from Wacker Silicones (Adrian, MI) or SSA-9700 Soft Skin Adhesives Dow-Corning (Midland, MI).

5 The adhesive 33 is covered prior to use by a removable release member 47. As shown in Fig 4a, the release member 47 may comprise a laminate structure including a first layer 49 formed from a cellulosic paper and a film coating 51 applied to the internal surface of layer 49. The film coating 51 is preferably formed from either polypropylene or polyethylene. Polycoated papers of this type are commercially available, for example POLY SLIK® brand papers are available from Loparex Inc., Willowbrook, IL. The internal surface of layer 51 is provided with a release coating 53. The release coating 53 is arranged such that prior to the removal of the release member 47 the coating 53 is in abutting face to face relationship with the adhesive 33. The release coating 53 facilitates the removal of the release member 47 prior to use. The film coating 51 preferably has a thickness between about .4 mils and about 2 mils and more preferably between about .6 to about 1.2 mils.

15 As shown in Fig. 4b, the release member 47 may alternatively comprise a sheet 55 of nonporous film such as polypropylene or polyethylene. The internal surface of sheet 55 is provided with a release coating 53 to facilitate the removal of the release member 47 prior to use. The sheet 55 preferably has thickness between about .5 mils and about 2 mils and more preferably between about .6 and about 1.2 mils.

20 Reference is made to the CD-Rom "PDL Chemical Resistance of Plastics and Elastomers" published William Andrew Publishing, © 2001, ISBN 1-884207-90-1, which is hereby incorporated by reference. Reference is made to the "Mineral Oil Exposure Medium Table" provided in the above referenced publication, said table

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discloses PDL ratings of various materials. The PDL rating is a measure of the chemical resistivity of the particular listed material to an exposure medium. The film coating 51 and/or the film sheet 55 is preferably made from a material having a PDL rating of at least 7, preferably at least 8, and most preferably at least 9 wherein the exposure medium is mineral oil at 20° C.

The release coating 49 may be a material based on polydimethylsiloxane chemistries, generically referred to as "silicones". Polydimethylsiloxane coatings are typically cured or crosslinked through a variety of methods. These methods may include crosslinked systems based on:

- Condensation reactions, such as those using tin catalysts, silanol functional siloxane, and silane hydride functional crosslinkers.
- Noble metal catalyzed systems using a vinyl-functional siloxane and a silane-hydride functional polymer.
- Electron beam or ultraviolet light cured silicone chemistries which are based on epoxidized or acrylated siloxane moieties.
- Fluorosilicone chemistries based on acrylated fluorosiloxanes.

The release coating 49 may also be a material based on other non-silicone chemistries, such as fluropolymers, alkyds, carbamates, urethanes, chromium complexes, acrylics, poly vinyl alcohols, or olefins.

The release member 47 as described above prevents the migration of the adhesive 33 through the release member. Thus a stain does not form on the surface of the release member, resulting in a aesthetic pleasing and hygienic appearance, nor is the body attachment performance of the adhesive compromised .

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Another embodiment of the present invention, a sanitary napkin 20b, is shown in Figs. 5 and 6. In the sanitary napkin 20b the barrier layer 55 is dimensioned so a portion 61 thereof extends outward relative to an terminal edge 63 of the cover 42. The adhesive 33 for attaching the article to the body is applied to a body facing surface 65 of the barrier portion 61. The napkin 20b is provided with a removable release member 47 to cover the adhesive 33 prior to use. As shown in Figs. 5 and 6, the release member 47 may be shaped such that it extends over the entire top surface of the cover 42 and barrier portion 61. Alternatively, the removable release member 47 may have a substantially oval shape (not shown) such that the release member 47 corresponds in shape to the barrier portion 61 and has a central open area (i.e. a central oval shaped through hole) that corresponds to the shape of the cover 42. In all other respects the embodiment of the invention shown in Figs. 5 and 6 is the same as the embodiment described above with reference to Figs. 2- 4b.

Main Body--Cover Layer

The cover layer 42 may be a relatively low density, bulky, high-loft non-woven web material. The cover layer 42 may be composed of only one type of fiber, such as polyester or polypropylene or it may include a mixture of more than one fiber. The cover may be composed of bi-component or conjugate fibers having a low melting point component and a high melting point component. The fibers may be selected from a variety of natural and synthetic materials such as nylon, polyester, rayon (in combination with other fibers), cotton, acrylic fiber and the like and combinations thereof. Preferably, the cover layer 42 has a basis weight in the range of about 10 gsm to about 75 gsm.

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Bi-component fibers may be made up of a polyester layer and a an polyethylene sheath. The use of appropriate bi-component materials results in a fusible non-woven fabric. Examples of such fusible fabrics are described in U.S. Pat. No. 4,555,430 issued Nov. 26, 1985 to Chicopee. Using a fusible fabric increases the ease with which the cover layer may be mounted to the absorbent layer and/or to the barrier layer.

The cover layer 42 preferably has a relatively high degree of wettability, although the individual fibers comprising the cover may not be particularly hydrophilic. The cover material should also contain a great number of relatively large pores. This is because the cover layer 42 is intended to take-up body fluid rapidly and transport it away from the body and the point of deposition. Therefore, the cover layer contributes little to the time taken for the napkin to absorb a given quantity of liquid (penetration time).

Advantageously, the fibers which make up the cover layer 42 should not lose their physical properties when they are wetted, in other words they should not collapse or lose their resiliency when subjected to water or body fluid. The cover layer 42 may be treated to allow fluid to pass through it readily. The cover layer 42 also functions to transfer the fluid quickly to the other layers of the absorbent system 44. Thus, the cover layer 42 is advantageously wettable, hydrophilic and porous. When composed of synthetic hydrophobic fibers such as polyester or bi-component fibers, the cover layer 42 may be treated with a surfactant to impart the desired degree of wettability.

In one preferred embodiment of the present invention the cover is made from a spunlace nonwoven material having from about 0 to about 100% polyester and from about 0 to about 100% rayon. The spunlace material may also be made from about 10% to about 65% rayon and from about 35% to about 90% polyester. In lieu of, and/or in

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combination with the polyester, polyethylene, polypropylene or cellulosic fiber may be used with the rayon. Optionally, the material used for the cover layer may include binders such as thermoplastic binders and latex binders.

Alternatively, the cover layer 42 can also be made of polymer film having large pores. Because of such high porosity, the film accomplishes the function of quickly transferring body fluid to the inner layers of the absorbent system. Apertured co-extruded films such described in U.S. Pat. No. 4,690,679 and available on sanitary napkins sold by Johnson & Johnson Inc. of Montreal, Canada could be useful as cover layers in the present invention.

The cover layer 42 may be embossed to the remainder of the absorbent system 44 in order to aid in promoting hydrophilicity by fusing the cover to the next layer. Such fusion may be effected locally, at a plurality of sites or over the entire contact surface of cover layer 42 and absorbent system 44. Alternatively, the cover layer 42 may be attached to the absorbent system 44 by other means such as by adhesion.

Main Body – Absorbent System

The absorbent system 44 may comprise a single layer of material or may comprise multiple layers. In one embodiment, the absorbent system 44 is a blend or mixture of cellulosic fibers and superabsorbent disposed in and amongst fibers of that pulp.

Cellulosic fibers that can be used in the absorbent system 44 are well known in the art and include wood pulp, cotton, flax and peat moss. Wood pulp is preferred. Pulps can be obtained from mechanical or chemi-mechanical, sulfite, kraft, pulping reject

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materials, organic solvent pulps, etc. Both softwood and hardwood species are useful.

Softwood pulps are preferred. It is not necessary to treat cellulosic fibers with chemical debonding agents, cross-linking agents and the like for use in the present material. Some portion of the pulp may be chemically treated as discussed in U.S. Pat. No. 5,916,670 to improved flexibility of the product. Flexibility of the material may also be improved by mechanically working the material or tenderizing the material.

The absorbent system 44 can contain any superabsorbent polymer (SAP), which SAPs are well known in the art. For the purposes of the present invention, the term "superabsorbent polymer" (or "SAP") refers to materials which are capable of absorbing and retaining at least about 10 times their weight in body fluids under a 0.5 psi pressure. The superabsorbent polymer particles of the invention may be inorganic or organic crosslinked hydrophilic polymers, such as polyvinyl alcohols, polyethylene oxides, crosslinked starches, guar gum, xanthan gum, and the like. The particles may be in the form of a powder, grains, granules, or fibers. Preferred superabsorbent polymer particles for use in the present invention are crosslinked polyacrylates, such as the product offered by Sumitomo Seika Chemicals Co., Ltd. Of Osaka, Japan, under the designation of SA70N and products offered by Stockhausen Inc..

Main Body-Barrier Layer

Underlying the absorbent layer 44 is a barrier layer 50 comprising liquid-impervious film material so as to prevent liquid that is entrapped in the absorbent system 44 from egressing the sanitary napkin and staining the wearer's undergarment. The barrier layer 50 is preferably made of polymeric film, although it may be made of liquid

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impervious, air-permeable material such as repellent-treated non-woven or micropore films or foams.

The barrier layer may be breathable, i.e., permits vapor to transpire. Known materials for this purpose include nonwoven materials and microporous films in which microporosity is created by, inter alia, stretching an oriented film. Single or multiple layers of permeable films, fabrics, melt-blown materials, and combinations thereof that provide a tortuous path, and/or whose surface characteristics provide a liquid surface repellent to the penetration of liquids may also be used to provide a breathable backsheet. The cover layer 42 and the barrier layer 50 are joined along their marginal portions so as to form an enclosure or flange seal that maintains the absorbent layer 44 captive.

Any or all of the cover, absorbent layer, transfer layer, backsheet layer, and adhesive layers may be colored. Such coloring includes, but is not limited to, white, black, red, yellow, blue, orange, green, violet, and mixtures thereof. Color may be imparted according to the present invention through dying, pigmentation, and printing.

Colorants used according the present invention include dyes and inorganic and organic pigments. The dyes include, but are not limited to, anthraquinone dyes (Solvent Red 111, Disperse Violet 1, Solvent Blue 56, and Solvent Green 3), Xanthene dyes (Solvent Green 4, Acid Red 52, Basic Red 1, and Solvent Orange 63), azine dyes (Jet black), and the like. Inorganic pigments include, but are not limited to, titanium dioxide (white), carbon black (black), iron oxides (red, yellow, and brown), chromium oxide (green), ferric ammonium ferrocyanide (blue), and the like.

Organic pigments include, but are not limited to diarylide yellow AAOA (Pigment Yellow 12), diarylide yellow AAOT (Pigment Yellow 14), phthalocyanine blue

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(Pigment Blue 15), lithol red (Pigment Red 49:1), Red Lake C (Pigment Red), and the like.

The absorbent article may include other known materials, layers, and additives, such as, foam, net-like material, perfumes, medicaments or pharmaceutical agents, moisturizers, odor control agents, and the like. The absorbent article can optionally be embossed with decorative designs.

The absorbent article may be packaged as unwrapped absorbent articles within a carton, box or bag. The consumer withdraws the ready-to-use article as needed. The absorbent article may also be individually packaged (each absorbent article encased within an overwrap).

Also contemplated by the present invention are asymmetrical and symmetrical absorbent articles having parallel longitudinal edges, dog bone- or peanut-shaped, as well as articles having a tapered construction for use with thong-style undergarments.

From the foregoing description, one skilled in the art can ascertain the essential characteristics of this invention, and without departing from the spirit and scope thereof, can make various changes and modifications. Embodiments set forth by way of illustration are not intended as limitations on the variations possible in practicing the present invention.

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REIVINDICACIONES

Reivindicamos

1. Un artículo absorbente que comprende:

Una cubierta permeable a los líquidos;

Una barrera impermeable a los líquidos;

Una superficie que se enfrenta al cuerpo;

Un adhesivo para asegurar el artículo al cuerpo
dispuesto sobre la superficie que enfrenta al cuerpo;

Un miembro de liberación removible para cubrir el
adhesivo antes de uso, dicho miembro de liberación es
impermeable a la migración de cualquier componente de
dicho adhesivo a través de éste.

2. El artículo absorbente de acuerdo con la
reivindicación 1, en donde dicho miembro de
liberación removible es una estructura laminada que
comprende una primer capa formada de papel celulósico
y al menos una segunda capa formada de un
recubrimiento de película no poroso.

3. El artículo absorbente de acuerdo con la
reivindicación 2, en donde dicho recubrimiento de
película tiene un grado PDL de al menos 7 cuando un

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medio de exposición es aceite mineral a una temperatura de 20° C.

4. El artículo absorbente de acuerdo con la reivindicación 3, en donde dicho recubrimiento de película tiene un grado PDL de al menos 8.
5. El artículo absorbente de acuerdo con la reivindicación 4, en donde dicho recubrimiento de película tiene un grado PDL de al menos 9.
6. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicho miembro de liberación removible se forma de un material de película no poroso.
7. El artículo absorbente de acuerdo con la reivindicación 6, en donde dicho material de película tiene un grado PDL de al menos 7 cuando un medio de exposición es aceite mineral a una temperatura de 20° C.
8. El artículo absorbente de acuerdo con la reivindicación 7, en donde dicho material de película tiene una proporción PDL de al menos 8.

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9. El artículo absorbente de acuerdo con la reivindicación 8, en donde dicho material de película tiene un grado PDL de al menos 9.
10. El artículo absorbente de acuerdo con la reivindicación 2, en donde dicho miembro de liberación comprende un recubrimiento de silicona.
11. El artículo absorbente de acuerdo con la reivindicación 2, en donde dicho recubrimiento de película es uno de polipropileno y polietileno.
12. El artículo absorbente de acuerdo con la reivindicación 6, en donde dicho material de película es uno de polipropileno y polietileno.
13. El artículo absorbente de acuerdo con la reivindicación 6, en donde dicho miembro de liberación comprende además un recubrimiento de silicona.
14. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicho adhesivo tiene un contenido de plastificador líquido de más de cerca del 50% en peso.

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15. El artículo absorbente de acuerdo con la reivindicación 14, en donde dicho adhesivo tiene un contenido de plastificador líquido de más de cerca del 65% en peso.
16. El artículo absorbente de acuerdo con la reivindicación 15, en donde dicho adhesivo tiene un contenido de plastificador líquido de más de cerca del 80% en peso.
17. El artículo absorbente de acuerdo con la reivindicación 14, en donde dicho plastificador líquido tiene un peso molecular de menos de 1000 g/mol
18. El artículo absorbente de acuerdo con la reivindicación 17, en donde dicho plastificador líquido tiene un peso molecular de menos de 750 g/mol.
19. El artículo absorbente de acuerdo con la reivindicación 18, en donde dicho plastificador líquido tiene un peso molecular de menos de 500 g/mol
20. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicho adhesivo se

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selecciona del grupo que consiste adhesivos que tienen estructuras de copolímero radial o lineal que tienen la fórmula $(A-B)_x$ en donde el bloque A es un bloque de polivinilareno, el bloque B es bloque poli(monoalquénilo), x denota el número de bazos poliméricos, y en donde x es un entero mayor que o igual a uno.

21. El artículo absorbente de acuerdo con la reivindicación 20, en donde dichos polivinilarenos de bloque A se seleccionan del grupo que consiste esencialmente de poliestireno, polialfa-metilestireno, poliviniltolueno, y combinaciones de estos.

22. El artículo absorbente de acuerdo con la reivindicación 21, en donde dicho poli(monoalquénilo) de bloque B se selecciona del grupo que consiste esencialmente de elastómeros dieno que incluyen polibutadieno, poliisopreno, elastómeros hidrogenados que incluyen etileno-butileno o etileno-propileno o poliisobutileno, o combinaciones de estos, adhesivos que consisten de copolímeros de bloque estireno-etileno-butileno-estirenos (SEBS) y aceites minerales, aceites de procesos nafténicos o parafínicos, y opcionalmente una resina pegajosa que

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incluye resinas modificadas y naturales; ésteres de pentaeritritol y glicerol de resinas naturales y modificadas; resinas de politerpeno; copolímeros y terpolímeros de terpenos naturales; resinas de terpeno fenólicas modificadas y derivados hidrogenados de éstos; resinas de petróleo alifáticas y los derivados hidrogenados de éstos; resinas de petróleo aromático y derivados hidrogenados de éstos; y derivados alifáticos/aromáticos

23. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicha cubierta se hace de material hilado no tejido que tiene de cerca de 0 a cerca de 100% poliéster y de cerca de 0 a cerca de 100% rayón.

24. El artículo absorbente de acuerdo con la reivindicación 23, en donde dicha cubierta es material hilado hecho de cerca de 10% a cerca 75% rayón y de cerca de 35% a cerca de 90% poliéster.

25. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicha cubierta se hace de un material de película abierto.

26. El artículo absorbente de acuerdo con la reivindicación 1, en donde dicha barrera se forma de un material de película respirable.

27. El artículo absorbente de acuerdo con la reivindicación 1 en donde dicho artículo absorbente es uno de una toalla sanitaria, protector y un producto para incontinencia de adultos.

28. Un artículo absorbente comprende:

Una cubierta permeable a los líquidos;

Una barrera impermeable a los líquidos;

Una superficie que enfrenta al cuerpo;

Un adhesivo para asegurar el artículo al cuerpo dispuesto sobre la superficie que enfrenta al cuerpo, en donde dicho adhesivo es un gel adhesivo basado en un copolímero de bloque estireno-etileno-butileno-estireno (SEBS);

Un miembro de liberación removible para cubrir el adhesivo antes de uso, dicho miembro de liberación es impermeable a la migración de cualquier componente de dicho adhesivo a través de este.

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29. Un método para evitar una migración de un adhesivo aunque un miembro de liberación removible en un artículo sanitario adherible al cuerpo, comprende:

Suministrar una superficie que enfrenta el cuerpo;

Aplicar un adhesivo a la superficie que enfrenta al cuerpo para asegurar el artículo al cuerpo del usuario;

Aplicar un miembro de liberación removible sobre dicho adhesivo para proteger el adhesivo antes de uso;

Suministrar dicho miembro de liberación con una estructura no porosa para evitar la migración de cualquier componente de dicho adhesivo a través de dicho miembro de liberación.

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CLAIMS

We claim:

1. An absorbent article comprising:

- 5 a liquid pervious cover;
 a liquid impermeable barrier;
 a body facing surface;
 an adhesive for securing the article to the body arranged on the body facing
surface;
10 a removable release member for covering the adhesive prior to use, said release
member being impervious to the migration of any component of said adhesive
therethrough.

2. The absorbent article according to claim 1, wherein said removable release member is
15 a laminate structure comprising a first layer formed from cellulosic paper and at least a
second layer formed from a nonporous film coating .

3. The absorbent article according to claim 2, wherein said film coating has a PDL rating
of at least 7 when an exposure medium is mineral oil at a temperature of 20° C.

20 4. The absorbent article according to claim 3, wherein said film coating has a PDL rating
of at least 8.

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5. The absorbent article according to claim 4, wherein said film coating has a PDL rating of at least 9.

6. The absorbent article according to claim 1, wherein said removable release member is
5 formed from a nonporous film material.

7. The absorbent article according to claim 6, wherein said film material has a PDL rating of at least 7 when an exposure medium is mineral oil at a temperature of 20° C.

10 8. The absorbent article according to claim 7, wherein said film material has a PDL rating of at least 8.

9. The absorbent article according to claim 8, wherein said film material has a PDL rating of at least 9.

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10. The absorbent article according to claim 2, wherein said release member comprises a coating of silicone.

11. The absorbent article according to claim 2, wherein said film coating is one of
20 polypropylene and polyethylene.

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12. The absorbent article according to claim 6, wherein said film material is one of polypropylene and polyethylene.

13. The absorbent article according to claim 6, wherein said release member further
5 comprises a coating of silicone.

14. The absorbent article according to claim 1, wherein said adhesive has a liquid plasticizer content of more about 50% by weight.

10 15. The absorbent article according to claim 14, wherein said adhesive has a liquid plasticizer content of more than about 65% by weight.

16. The absorbent article according to claim 15, wherein said adhesive has a liquid plasticizer content of more than about 80% by weight.

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17. The absorbent article according to claim 14, wherein said liquid plasticizer has a molecular weight of less than 1000 g/mole.

18. The absorbent article according to claim 17, wherein said liquid plasticizer has a
20 molecular weight of less than 750 g/mole.

19. The absorbent article according to claim 18, wherein said liquid plasticizer has a molecular weight of less than 500 g/mole.

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20. The absorbent article according to claim 1, wherein said adhesive is selected from the group consisting of adhesives having linear or radial co-polymer structures having the formula (A-B)_x wherein block A is a polyvinylarene block, block B is a

5 poly(monoalkenyl) block, x denotes the number of polymeric arms, and wherein x is an integer greater than or equal to one.

21. The absorbent article according to claim 20, wherein said block A polyvinylarenes is selected from the group consisting essentially of Polystyrene, Polyalpha-methylstyrene,
10 Polyvinyltoluene, and combinations thereof.

22. The absorbent article according to claim 21, wherein said block B poly(monoalkenyl) is selected from the group consisting essentially of conjugated diene elastomers including polybutadiene, polyisoprene, hydrogenated elastomers including
15 ethylene-butylene or ethylene-propylene or polyisobutylene, or combinations thereof, adhesives consisting of styrene-ethylene-butylene-styrene (SEBS) block copolymer and mineral oils, paraffinic or napthenic process oils, and optionally a suitable tackifying resin including natural and modified resins; glycerol and pentaerythritol esters of natural and modified resins; polyterpene resins; copolymers and terpolymers of natural terpenes;
20 phenolic modified terpene resins and the hydrogenated derivatives thereof; aliphatic petroleum resins and the hydrogenated derivatives thereof; aromatic petroleum resin and the hydrogenated derivatives thereof; and aliphatic/aromatic

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23. The absorbent article according to claim 1, wherein said cover is made from a spunlace nonwoven material having from about 0 to about 100% polyester and from about 0 to about 100% rayon.

5 24. The absorbent article according to claim 23, wherein said cover is as spunlace material made from about 10% to about 65% rayon and from about 35% to about 90% polyester.

10 25. The absorbent article according to claim 1, wherein said cover is made from an apertured film material.

26. The absorbent article according to claim 1, wherein said barrier is formed from a breathable film material.

15 27. The absorbent article according to claim 1, wherein said absorbent article is one of a sanitary napkin, liner and a adult incontinence product.

20 28. An absorbent article comprising:

a liquid pervious cover;

a liquid impermeable barrier;

a body facing surface;

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an adhesive for securing the article to the body arranged on the body facing surface, wherein said adhesive is an adhesive gel based upon a styrene-ethylene-butylene-styrene (SEBS) block copolymer;

5 a removable release member for covering the adhesive prior to use, said release member being impervious to the migration of any component of said adhesive therethrough.

29. A method for preventing a migration of an adhesive through a removable release member in a body attachable sanitary article, comprising:

- 10 providing a body facing surface;
- applying an adhesive to the body facing surface for securing the article to a user's body;
- applying a removable release member over said adhesive to protect the adhesive prior to use;
- 15 providing said release member with a nonporous structure to prevent the migration of any component of said adhesive through said release member.

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ABSTRACT

An absorbent article including a liquid pervious cover, a liquid impermeable barrier, a body facing surface, an adhesive for securing the article to the body arranged on
5 the body facing surface, and a removable release member for covering the adhesive prior to use, the release member being impervious to the migration of adhesive therethrough.

FIG. 1
(Prior Art)

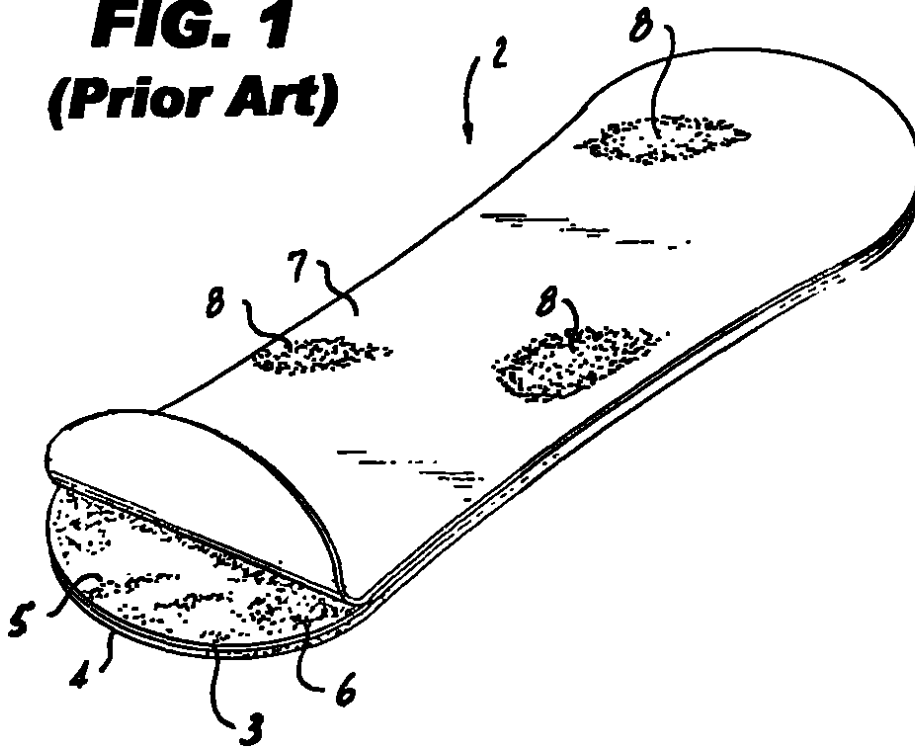
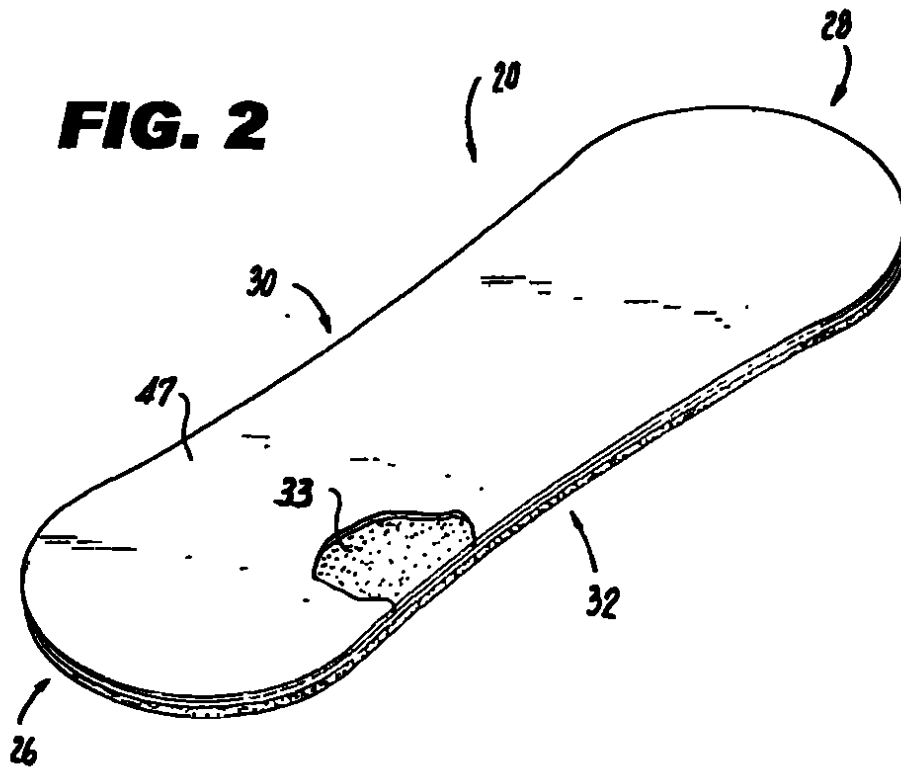


FIG. 2



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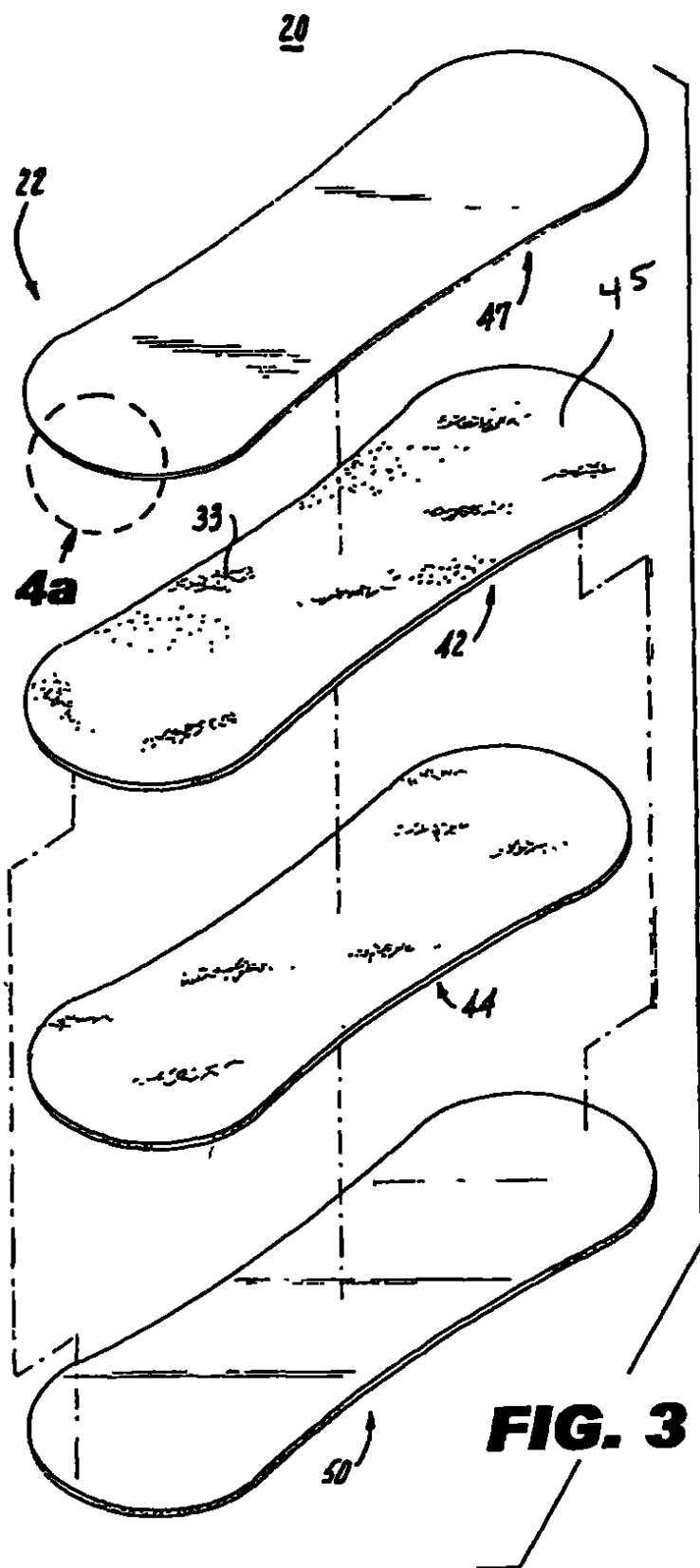


FIG. 3

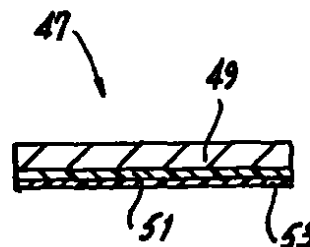


FIG. 4a

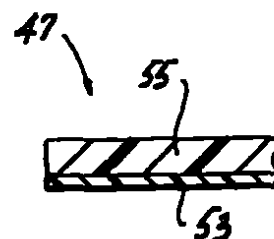


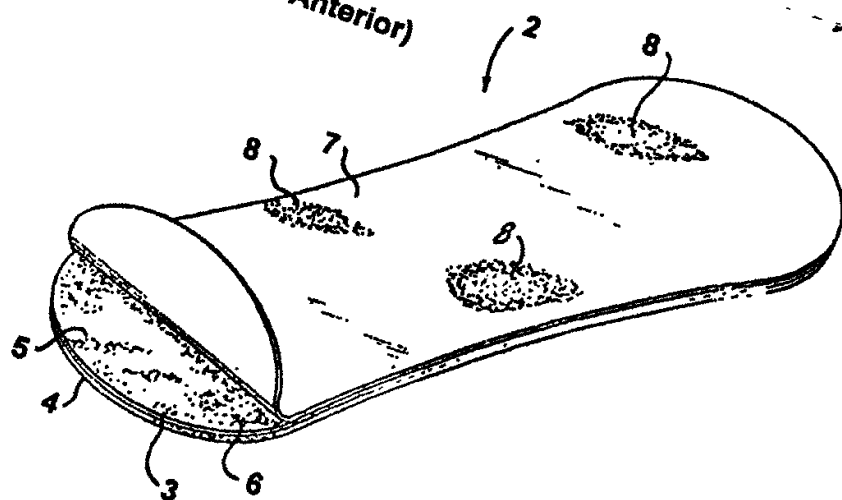
FIG. 4b

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FIG. 1
(Técnica Anterior)



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REPUBLICA DE COLOMBIA
SUPERINTENDENCIA DE INDUSTRIA Y C MERCIO

Folio 100

2020
Bogotá D.C.,

Doctor(a)
ESCOBAR URIBE JIMENA
Apoderado(a) y/o Representante de
MCNEIL PPC. INC

REFERENCIA	Radicación No. 06 31935
	Trámite 2
	Evento 1
	Actuación 416
	Oficio No. 3029
	Folios 1

Teniendo en cuenta que la solicitud de privilegio de patente que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en los artículos 26 y 27 de la Decisión 486 de la Comisión de la Comunidad Andina, y en las demás disposiciones vigentes sobre la materia, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial, conforme lo establece el artículo 40 de la misma Decisión.

Siendo manifestación expresa del interesado de efectuar la publicación "inmediato", está se realizará en la próxima gaceta de Propiedad Industrial.

Cúmplase
Dado en Bogotá DC.,

15 Mayo 2007

ALIX CARMENZA CESPEDES DE VERGEL
Jefe de la división de Nuevas Creaciones

adpa10