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Señora Jefe de la
DIVISION DE NUEVAS CREACIONES
Superintendencia de Industria y Comercio
E. S. D.

IMPRESION DE LA SOLICITUD DE PATENTE DE INVENCION



No. 05-000592-00005 0000

El presente documento es una copia de la solicitud de patente de invención
registrada en el Registro Nacional de Patentes de la Superintendencia de Industria y Comercio
y no debe ser utilizado para fines de explotación industrial.

Trámite : 011
Evento : 379
Actuación : 444

Referencia : Expediente No. 05-000592
Asunto : Solicitud de patente para: **ARTÍCULO ABSORBENTE QUE CONTIENE UNA COMPOSICIÓN PARA EL CUIDADO DE LA PIEL**
Solicitante : SCA HYGIENE PRODUCTS AB
Clase : A61K 007/048, A61K 007/050, A61L 015/034, A61L 015/050
Fecha solicitud: Enero 05 de 2005

1. Yo, Emilio FERRERO, obrando como apoderado del solicitante en el asunto antes identificado me refiero al oficio No. 8361 notificado por fijación en lista del 27 de junio de 2008.

2. Mediante oficio No. 8361 se puso en conocimiento del solicitante el informe que contiene las observaciones hechas por su Despacho sobre la presente solicitud de patente. Atiendo a las observaciones de la manera siguiente:

2.1 Reivindicaciones

De acuerdo con su Despacho, para la reivindicación 1 se ha señalado que las frases resaltadas: "el artículo tiene una composición para el cuidado de la piel aplicada en al menos una porción de la misma manera que es transferible a la piel del usuario", y "la composición es sólida a 21°C", no son aceptadas por corresponder a la aplicación de una composición durante el uso y un resultado a alcanzar, de manera correspondiente.

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De la misma manera, la reivindicación 9 ha sido objetada por señalar un resultado a alcanzar con la elección y formulación de cada uno de los componentes que forman la composición, a través de la frase señalada: "la composición para el cuidado de la piel tiene un punto de fusión en el rango de 35 a 65°C, preferiblemente 35 a 50°C y en particular de 35 a 45°C".

2.2 Novedad

El Examinador ha considerado que el documento D1: WO 00/64502, afecta la novedad de la presente solicitud, por cuanto revela un producto absorbente que según él presenta las mismas características técnicas que el producto absorbente reivindicado para esta solicitud.

3. Con el fin de subsanar las objeciones presentadas para la presente solicitud, se presentan las siguientes modificaciones y argumentos:

3.1 Modificación de una solicitud en trámite

De acuerdo con el artículo 34 de la Decisión 486 de la Comisión de la Comunidad Andina, donde se establece que la modificación de una solicitud es posible en cualquier momento del trámite mientras no implique una ampliación de la solicitud inicial, me permito presentar un nuevo capítulo reivindicatorio conformado por 17 reivindicaciones.

Respecto al pliego reivindicatorio originalmente presentado, las modificaciones son las siguientes:

- La reivindicación 1 se ha limitado especificando que el acelerador de cristalización (componente c) será una cera polimérica.
- Se ha eliminado la reivindicación 9.

Aclaración sobre la reivindicación 1

En relación con la objeción que se ha presentado a la reivindicación 1, para la cual el Examinador ha solicitado eliminar las frases señaladas, se desea citar lo que el Manual Andino de Patentes establece para la forma como deben ser presentadas las reivindicaciones:

Las reivindicaciones pueden presentarse en dos partes: preámbulo y parte caracterizante. En este caso la estructura es la siguiente:

El preámbulo indicará primero cuál de la materia de la invención (...) y seguidamente las características técnicas necesarias para definir la invención.

A este respecto se desea hacer notar que las frases señaladas por el Examinador no se encuentran en la parte caracterizante de la reivindicación y que por lo tanto no hacen parte de las características técnicas que caracterizan la invención. Por esta razón no han sido eliminadas ya que simplemente se limitan a ser parte del preámbulo indicando cuál es la materia de la invención. Se solicita por lo tanto y de manera atenta, que esta objeción se tenga por superada.

Por el contrario, mi representada si está de acuerdo con la objeción formulada a la reivindicación 9, en la cual la frase en negrita sí presenta un resultado a alcanzar y se encuentra en la parte caracterizante de la misma, razón por la cual esta reivindicación ha sido eliminada del pliego reivindicatorio.

De acuerdo a lo anterior, con las modificaciones y argumentos presentados, consideramos que se han superado las objeciones presentadas para las reivindicaciones.

3.2 Novedad

Para la evaluación de este requisito el Manual de patentes precisa:
"Para determinar la novedad de la invención, se debe comprobar si

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existen anticipaciones del estado de la técnica que contengan explícitamente todas las características técnicas esenciales de la invención".

Se solicita entonces tener en cuenta la modificación realizada sobre la reivindicación 1, para la cual se ha limitado el componente de cristalización (componente c) a una cera polimérica. Este acelerador de cristalización equivale en D1, según el Examinador, a un componente que mejora la viscosidad y contrario a lo que indica el mismo, no es una cera polimérica sino que es seleccionado del grupo que consiste en resinas de poliolefina, polímeros de poliolefina, polietileno, espesante lipofilico/aceite y mezclas de los mismos.

Dado que D1 no está revelando una cera polimérica como componente que mejora la viscosidad, no se están revelando explícitamente todas las características técnicas reivindicadas para la presente invención.

De esta forma y de acuerdo con la modificación, D1 no es una anterioridad válida capaz de afectar la novedad de la presente solicitud.

3.3 Nivel inventivo

Aunque dentro de las objeciones presentadas para esta solicitud no se encuentra la de nivel inventivo, mi Representada ha querido exponer el siguiente argumento para demostrar el nivel inventivo de la invención a la luz del documento D1:

Dentro de la composición de D1 se encuentra una cera como componente (b). De acuerdo con esto, un técnico versado en la materia no se vería motivado a incluir una cera diferente (una cera polimérica con un punto de fusión distinto). Por el contrario, D1 enseña que un componente que mejora la viscosidad debería ser utilizado en su lugar.

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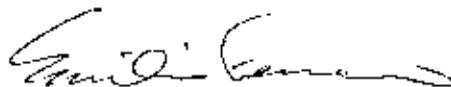
Por esta razón y dado que la presente invención no se derivaría de manera obvia a partir de las enseñanzas de D1, no es una anterioridad válida que afecte su nivel inventivo.

4. Puesto que se han atendido a cabalidad las observaciones hechas por su Despacho sobre la presente solicitud de patente, atentamente solicito que se continúe su tramitación.

5. ANEXOS

- Nuevo pliego reivindicatorio conformado por 17 reivindicaciones.
- Formulario para modificaciones.
- Recibo por concepto de modificaciones en solicitud pendiente.

Señora Jefe,



EMILIO FERRERO

T.P.A. No. 31.929

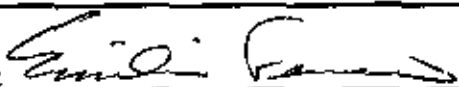
COLO-11256-841-060-2

♂ JMS\JMS\ID-134691\WPC11256

No. M-2008-134691\JMS

Espacio reservado para el adhesivo de radicación

FORMULARIO UNICO DE CORRECCIONES Y MODIFICACIONES

1 SOLICITUD DE: ☐ Corrección de Error Material ☒ Modificación a una solicitud		
2 SOLICITANTE	Nombre: SCA HYGIENE PRODUCTS AB Sociedad constituida y existente bajo las leyes de Suecia.	IDENTIFICACION C.C. ☐ NIT ☐ C.E. ☐ Otro ☐ Número: _____
	Dirección: 405 03 Göteborg, Suecia Domicilio: Göteborg, Suecia Teléfono: 546 09 70 Fax: 249 40 70 E-mail: clientes@camyp.com	
3 REPRESENTANTE O APODERADO	Nombre: Emilio FERRERO Dirección: Carrera 4ª No. 72-35	IDENTIFICACION C.C. ☒ NIT ☐ C.E. ☐ Otro ☐ Número: <u>438.019 TP 31.929</u>
	Teléfono: 347 36 11 Fax: 217 92 11 E-mail: cavelier@cavelier.com	
4 Número de expediente: <u>05.000.592</u>		
5 Descripción de la corrección o modificación solicitada: Presento nuevo capítulo reivindicatorio compuesto por 17 reivindicaciones con el fin de superar las objeciones hechas por Su Despacho a la presente solicitud de patente y pido respetuosamente que el examen de patentabilidad sea realizado sobre estas nuevas reivindicaciones presentadas.		
6 Comprobante de pago No. <u>08-71.311</u> Fecha: <u>8 de septiembre de 2008</u>		
7 Anexos ☒ Comprobante de pago de la tasa por \$103.000, por concepto de modificaciones. ☐ Poderes, si fuere el caso ☐ Documento que acredita la existencia y representación legal de las partes, cuando sean personas jurídicas.		
8 NOMBRE: EMILIO FERRERO FIRMA:  C.C. 438.019 de Usaquén T.P.A. 31.929		

REIVINDICACIONES

1. Un artículo tal como pañal, calzoncillo, protector para incontinencia de adulto, toalla sanitaria y similares que comprenden una capa superior permeable al líquido, una capa base impermeable al líquido y un cuerpo absorbente encerrado entre ellos, el artículo tiene una composición para el cuidado de la piel aplicada en al menos una porción de la misma, de manera que es transferible a la piel del usuario, la composición es sólida a 21°C y comprende al menos:

a) de 5 a 70% en peso de un componente que se funde en el rango de 25 a 37°C elegido a partir del grupo de ceras sintéticas, parafinas, ésteres de ácido graso, ésteres de ácido graso polihidroxi, alcoholes grasos, ésteres del ácido graso alcoxilados, alcoholes ácidos alcoxilados y mezclas de estos compuestos y

b) de 5 a 70% en peso de un componente cuyo punto de fusión es al menos 5°C más elevado que el punto de fusión del componente a), y el componente b) se elige a partir del grupo de parafinas, ésteres de ácido graso polihidroxi, alcoholes grasos de C_{14} - C_{22} , ácidos grasos de C_{12} - C_{22} , los derivados alcoxilados de los alcoholes grasos y ésteres grasos, y mezclas de estos componentes, en donde las composiciones adicionalmente comprenden como componente,

caracterizado en,

que la composición comprende adicionalmente como componente,

c) de 5 a 25% en peso de un acelerador de cristalización que es una cera polimérica, con la condición de que el acelerador de cristalización tiene un punto de fusión en el rango de 45 a 70°C,

y que las composiciones comprenden menos de 5% en peso de agua.

2. El artículo absorbente de acuerdo con la reivindicación 1, caracterizado en que el componente b) tiene un punto de fusión en el rango de 40 a 60°C.

3. El artículo absorbente de acuerdo con la reivindicación 1 ó 2, caracterizado en que el componente a) se elige de las mezclas de

glicéridos de ácidos grasos que tienen de 8 a 18 átomos de carbono, preferiblemente de mezclas de grado técnico de glicéridos parciales y/o mezclas con glicéridos.

4. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que el componente b) se elige de las mezclas de glicérido de ácidos grasos que tienen de 8 a 18 átomos de carbono, preferiblemente de mezclas de grado técnico de glicéridos parciales y/o mezclas con glicéridos.

5. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que el componente a) y/o el componente b) cada uno comprende triésteres de glicerol o ésteres parciales de ácidos grasos de coco, las mezclas en cada caso tienen un punto de fusión en el rango reivindicado.

6. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que ésteres parciales de glicerol con ácidos grasos de C_{12} - C_{21} , preferiblemente monolaurato de glicerol, se presenta como el componente c).

7. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que un éter de polivinilo estearílico se presenta como el componente c).

8. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición para el cuidado de la piel comprende el componente a) en cantidades de 10 a 60% en peso, el componente b) en cantidades de 10 a 60% en peso y el componente c) en cantidades de 10 a 25% en peso.

9. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición para el cuidado de la piel comprende ceras de silicona en cantidades de 1 a 6% en peso, preferiblemente de 1,5 a 5,5% en peso y en particular de 2 a 5% en peso.

10. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición

para el cuidado de la piel comprende sustancias para el cuidado de la piel y adherente a la piel en cantidades de 0,1 a 10% en peso, preferiblemente de 1 a 8% en peso y en particular de 2 a 6% en peso.

11. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición para el cuidado de la piel comprende agua en cantidades de 0,5 a 2% en peso y en particular de 0,5 a 1,5% en peso.

12. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición para el cuidado de la piel comprende de 50 a 60% en peso de una mezcla de ésteres de glicerol de ácidos grasos de coco que tienen un punto de fusión de 30 a 33°C como el componente a), de 10 a 20% en peso de un alcohol graso no saturado, lineal, que tiene el punto de fusión de 57 a 50°C como el componente b), de 15 a 20 partes de éter de polivinilo estearílico que tiene un punto de fusión de 45 a 48°C como el componente c), y opcionalmente de 2 a 5% en peso de cera de silicona, y de 5 a 10% en peso de una sustancia para el cuidado de la piel.

13. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición para el cuidado de la piel se aplica en al menos parte de la capa superior del artículo.

14. El artículo absorbente de acuerdo con la reivindicación 13, caracterizado en que diferentes cantidades de la composición para el cuidado de la piel se aplican en diferentes zonas de la capa superior.

15. El artículo absorbente de acuerdo con la reivindicación 14, caracterizado en que la región húmeda pretendida del material de capa superior contiene o no una pequeña cantidad de composición para el cuidado de la piel cuando se compara con las regiones circundantes del material de capa superior.

16. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que la composición

para el cuidado de la piel se aplica en cualquier material y componente del artículo, tal como miembros elásticos, cintas, fibras, etc., las cuales durante el uso del artículo están en contacto con la piel del usuario a través de, por ejemplo, la capa superior permeable al líquido.

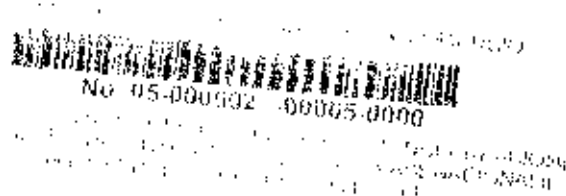
17. El artículo absorbente de acuerdo con cualquiera de las reivindicaciones anteriores, caracterizado en que al menos dos diferentes composiciones para el cuidado de la piel se aplican en diferentes regiones del artículo.

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COMPTENSADEMIAS DE INDUSTRIA Y COMERCIO

NIT : 900170009-2

RECIBO OFICIAL DE CABA : 05 - 71,311
FECHA : SEPTIEMBRE 8 DE 2008



===== CONSIGNACION =====

DEBITANTE	TIPO PASO	BANCO	CUENTA	No. PASO	FECHA PASO	VR. PASO
CABELLER ASOCIADOS	CONSIGNACION	BANCO DE BOGOTA	642754397	7436804	09/09/2008	21,250,000.00

===== CONCEPTO =====

CANT.	CONCEPTO	TOTAL CONCEPTO
1	50005-01-03 CARRIO DE LOCALIDAD Y MODIFICA	103,000.00
	12 MARCHAS Y LEYES COMERCIALES	
	TOTAL :	\$ 103,000.00

SON: DIECITA TRES MIL PESOS

RESPONSABLE : _____

RESIDIO DE CABA APLICANDO AL EXPEDIENTE No. _____

COLO: 11256 - 8A1 - 060 - 2 .

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
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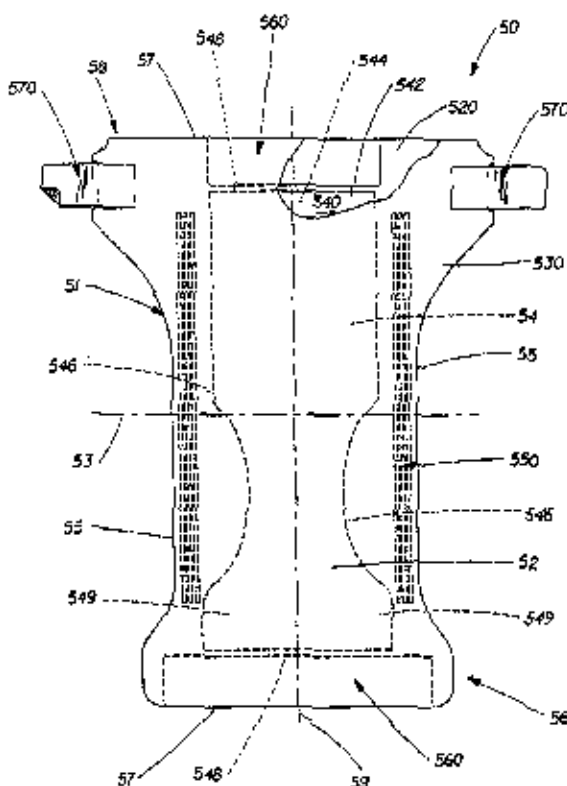
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- (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).
- (81) Designated States (national): AE, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID,

[Continued on next page]

(54) Title: ABSORBENT ARTICLE HAVING A SKIN CARE COMPOSITION



(57) Abstract: The present invention relates to an absorbent article having a stable skin care composition disposed on its skin-contacting surface. The skin care composition is readily transferable to the skin via normal contact, wearer motion, and/or body heat. Importantly, the skin care composition contains at least one skin care ingredient imparting visible skin benefits to the skin upon transfer to the skin and at least one rheological agent for stabilizing the composition such that agglomeration, stratification and/or settling of the composition are minimized. The present invention also relates to a process for making the absorbent articles having a stable skin care composition disposed thereon.

WO 00/71177 A1

SUMMARY OF THE INVENTION

The present invention relates to an absorbent article having a stable skin care composition disposed on at least a portion of its skin-contacting surface. The skin care composition is readily transferable to the skin via normal contact, wearer motion, and/or body heat. *The skin care composition contains at least one skin care ingredient imparting skin benefits to the skin upon transfer to the skin and at least one rheological agent for stabilizing the composition such that agglomeration, stratification and/or settling are minimized.*

It has been found that the rheological properties of the composition can be modified with suitable rheological agents to provide a substantially stable suspension at the processing temperature such that it can be applied to a skin-contacting surface of an absorbent article in a continuous or a batch process. Suitable compositions typically have an elastic modulus of at least about 5 dynes/cm² (measured at a strain rate of 0.2%, an oscillation frequency of 10 rad/sec and a temperature of 77°C). When cooled, the composition becomes a solid or semi-solid such that it is substantially non-flowable and remains "locked-in" on the skin-contacting surface of the absorbent article, yet it is readily transferable to a wearer's skin via contact, normal wearer's motion, and body heat.

The present invention also relates to a process for making the absorbent articles having a substantially stable skin care composition disposed thereon. The rheological agent modifies the viscosity of the composition and stabilizes the composition. The substantially stable composition can be readily transported through pipes, slots, or other elements of a processing equipment without the suspended particulates settling out or building up in the equipment. *The composition can remain substantially stable even in the stationary state, e.g., while in the holding tank or in storage.* Furthermore, the composition can be easily applied to a surface of a substrate without the particulates plugging up the application element of the processing equipment. Additionally, the stable lotion composition can be applied to a substrate surface in a continuous or batch process to deliver a fairly constant concentration of skin care ingredients onto the substrate surface and produce products of consistent quality throughout the run.

As used herein, the term "stable composition" or "stable suspension" means the composition or suspension shows no visible stratification, phase separation or settling for at least about 20 minutes under stationary condition at or above its melt temperature.

As used herein, the term "substantially anhydrous" means the skin care composition or the carrier typically contains 10% or less free water, preferably 5% or less free water, more preferably 1% or less free water, and most preferably 0.5% or less free water.

As used herein, the term "free water" means the water that is added in making the composition of the present invention. The term "bound water" means the water found naturally occurring in certain ingredient/component and before it is mixed with other components to make the composition of the present invention. A person of ordinary skill in the art would recognize that once the components are mixed in a composition, water can no longer be distinguished by its origin.

As used herein, the term "semisolid" means that the composition has a rheology typical of pseudoplastic or plastic liquids. When no shear is applied, the compositions can have the appearance of a semi-solid but can be made to flow as the shear rate is increased. Without intending to be bound by theory, it is believed that while the composition contains primarily solid components, it also includes some liquid components.

As used herein, the term "skin-contacting surface" or "wearer-contacting surface" of an absorbent article is one or more surfaces of any article components that may contact the wearer's skin or body at some time while the article is worn. Skin or body contacting surfaces include, but are not limited to, portions of the topsheet, the backsheet, secondary layers underlying the topsheet or the absorbent core, leg cuffs, waist regions, side panels, liners, and the like.

Other terms are defined herein where initially discussed.

All percentages, ratios and proportions used herein are defined by weight unless otherwise specified.

II. SKIN CARE COMPOSITIONS

The skin care compositions are directed to maintain and/or improve the skin appearance and/or condition of the areas under the absorbent article or other conditions susceptible to diaper dermatitis. It is preferred that the skin care composition should provide a protective, non-occlusive function (e.g., a relatively liquid impervious but vapor pervious barrier) to avoid skin overhydration and skin exposure to materials contained in body exudates; an abrasion minimizing function to reduce skin irritation in the areas where the absorbent article is in contact with the wearer's skin; or contains ingredients that deliver, either directly or indirectly, skin care benefits.

For example, the direct benefits may be directed towards redness reduction or anti-inflammatory action. The indirect benefits may be directed towards removal or reduction of skin irritants in urine or feces, or reduction in overhydration of the skin. It is also preferred that the skin care composition contains emollients or other skin care ingredients that protect or improve the skin condition against chaffing, overhydration or itchiness. Furthermore, the skin care composition preferably has a smooth, silky, non-grainy skin feel to minimize abrasion of sensitive or compromised skin having chronic conditions such as chaffing, dryness, or rashes.

The stable skin care composition of the present invention comprises a substantially anhydrous, oil-based carrier comprising an emollient and, optionally, an immobilizing agent, at least one skin care ingredient, and at least one rheological agent. The skin care ingredients of the present invention may be insoluble or partially soluble solids in the substantially anhydrous, oil-based carrier. It is to be understood that oil-soluble skin care ingredients, such as Vitamins A, D, E and K, and the like, are also within the scope of the present invention. The skin care ingredients may be incorporated into the composition, either directly or as a predispersion, with agitation.

A skin care composition of the present invention has the following characteristics: first, the composition should be a stable suspension in its melt form in order to be consistently applied to a substrate surface, such as the topsheet of an absorbent article; such a stable liquid composition is substantially free from excessively large agglomerates (e.g., greater than about 1000 microns), resulting in minimal bridging and separation/settling effects, and an enhanced smooth skin feel; second, the composition should be solid or semi-solid at room temperature (i.e., 20°C) so that there is little "migration" on the substrate surface and the adverse effect to the absorbency of the article is minimized; third, the composition is readily transferable to the skin by contact, normal wear motions and/or body heat; and fourth, the composition is preferably plastic or fluidy at skin temperature (i.e., 34°C-36°C) to facilitate the transfer to the skin.

The skin care compositions of the present invention are substantially anhydrous. The anhydrous nature of the composition avoids overhydration of the already susceptible skin that has been chronically exposed to a high relative humidity micro-environment. Furthermore, the anhydrous nature of the composition avoids the wicking effect of the highly absorbent diaper core, which may preferentially draw the composition towards the core, interfering with the absorbency of the core and keeping the composition away from the topsheet surface and the wearer's skin.

The compositions suitable for incorporating skin care ingredients and rheological agents therein to practice the present invention are described in U.S. Patent Application Serial Nos. 08/926,532 and 08/926,533, each filed on September 10, 1997; U.S. Patent No. 5,607,760

about 100 microns and a solubility in the composition of less than 10%, preferably less than 5% by weight. However, the particle size may vary, depending on type of agent, the mechanism to provide rheological effects, the activation or preparation of the rheological agent, and other like factors. It is also recognized that the rheological agents need not be solid particles in the carrier.

5 That is, the rheological agents may be miscible or partially miscible with the carrier. It is recognized that the rheological agents may function as immobilizing agents or hardeners as well. It is also recognized that the rheological agents may be incorporated into the composition singly or as mixtures of various rheological agents.

The preparation and/or activation of the rheological agents may involve, but is not
10 limited to, the following steps: reduction in agglomerates by milling, grinding, agitation or other methods known in the art; and activation by methods known in the art, such steps being dependent upon the type of rheological agent used.

Some rheological agents may also function as hardeners or immobilizing agents to provide a solid or semi-solid composition at room temperature (i.e., about 20°C). That is,
15 rheological agents may be added to the composition such that the composition is hardened and/or immobilized sufficiently on the substrate surface, while not substantially interfering its transferability to the skin that comes into contact with the composition.

The rheological agents comprises from about 0.1% to about 25% by weight of the total composition, preferably from about 0.25% to about 10% by weight, and more preferably from
20 about 0.5% to about 5% by weight of the total composition.

Type A Rheological Agents

A skin care composition modified by this type of rheological agents typically exhibits a substantially "flat" rheological profile with respect to temperature. Specifically, the apparent
25 viscosity of the composition does not change substantially over the temperature range from about the processing temperature to room temperature. An immobilizing agent may be added to produce a solid or semi-solid composition at room temperature.

A preferred rheological agent for use herein is fumed silica, either surface-treated or
30 untreated. The untreated fumed silica is available commercially under the trade name CAB-O-SIL M-5 and HS-5, by Cabot Corporation, Tuscola, IL. More preferred for use herein is surface-treated fumed silica. Even more preferred is a fumed silica selected from the group consisting of polyalkylsiloxane treated fumed silica, trialkylsilylated fumed silica, dialkylsilylated fumed silica, and mixtures thereof. Most preferred is a fumed silica selected from the group consisting

THIXCIN GR, THIXATROL GST, THIXSEAL 1084, and the like. All these castor oil derivatives or mixtures thereof are available from Rheox, Inc., Hightstown, NJ.

Also useful herein are polymeric rheological agents. Nonlimiting examples are polymethacrylate polymers, polymethacrylate and styrene copolymers, which can optionally be crosslinked a common crosslinking agent, polyethylene, polyethylene and acrylic acid or vinyl acetate copolymers, polyisobutylene, poly- α -olefins, bi or tri-component copolymers of styrene and hydrogenated ethylene, propylene, butylene, and/or, Nylon 66 and hydrophobic cellulose derivatives.

Also useful herein are nonionic surfactants. Nonlimiting examples include polyethylene oxide ethers derived from C_8 - C_{22} alcohols, preferably ceteth-10 (polyoxyethylene 10 cetyl ether), steareth-21 (polyoxyethylene stearyl ether) and mixtures thereof; ethoxylated or propoxylated alcohols or alkyl phenols, having preferably C_8 - C_{22} alkyl chains and preferably from about 6 to about 25 ethylene oxide or propylene oxide groups; mono- and di- fatty acid esters of ethylene glycol; fatty acid monoglyceride; sorbitan; mono- and di- C_8 - C_{22} fatty acids; polyoxyethylene sorbitan; and mixtures thereof.

Also useful herein are waxes such as carnauba, ozokerite, beeswax, candelilla, paraffin, ceresin, esparto, ouricuri, rezowax, isoparaffin, silicone waxes, polyethylene waxes, and other known mined and mineral waxes. Additionally microcrystalline waxes are also effective rheological agents. A preferred wax is a paraffin wax such as Paraffin S.P. 434 from Strahl and Pitsch Inc., West Babylon, NY.

Other nonlimiting examples also useful herein, without specific regard to the rheology-temperature profiles, are diethanolamides; methylethylamides; and amphoteric surfactants such as dialkylamino propionic acid; alkyl galactomannan, zinc stearate, sorbitan sesquileate, cetyl hydroxy ethyl cellulose and other modified celluloses.

Emollients

For skin care compositions designed to provide skin appearance and/or skin protective benefits, a useful ingredient in these compositions is one or more skin protectants or emollients. As used herein, the term "emollient" means a material that protects against wetness or irritation, softens, soothes, supplies, coats, lubricates, moisturizes, protects and/or cleanses the skin; the term "protectant" means a material which protects injured or exposed skin or mucous membrane surface from harmful or annoying stimuli. In a preferred embodiment, these emollients will have either a plastic or liquid consistency at room temperatures, i.e., 20°C.

Representative emollients useful in the present invention include, but are not limited to, emollients that are petroleum-based; sucrose ester fatty acids; polyethylene glycol and derivatives thereof; humectants; fatty acid ester type; alkyl ethoxylate type; fatty acid ester ethoxylates; fatty alcohol type; polysiloxane type; propylene glycol and derivatives thereof; glycerine and derivatives thereof, including glyceride, acetoglycerides, and ethoxylated glycerides of C₁₂-C₂₈ fatty acids; triethylene glycol and derivatives thereof; spermaceti or other waxes; fatty acids; fatty alcohol ethers, particularly those having from 12 to 28 carbon atoms in their fatty chain, such as stearic acid; propoxylated fatty alcohols; other fatty esters of polyhydroxy alcohols; lanolin and its derivatives; kaolin and its derivatives; any of the monographed skin care agents listed above; or mixtures of these emollients. Suitable petroleum-based emollients include those hydrocarbons, or mixtures of hydrocarbons, having chain lengths of from 16 to 50 carbon atoms. Petroleum based hydrocarbons having these chain lengths include mineral oil (also known as "liquid petrolatum") and petrolatum (also known as "mineral wax," "petroleum jelly" and "mineral jelly"). Mineral oil usually refers to less viscous mixtures of hydrocarbons having from 16 to 20 carbon atoms. Petrolatum usually refers to more viscous mixtures of hydrocarbons having from 16 to 32 carbon atoms. Petrolatum and mineral oil are particularly preferred emollients for compositions of the present invention.

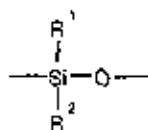
Suitable fatty acid ester type emollients include those derived from C₁₂-C₂₈ fatty acids, preferably C₁₆-C₂₂ saturated fatty acids, and short chain (C₁-C₈, preferably C₁-C₃) monohydric alcohols. Representative examples of such esters include methyl palmitate, methyl stearate, isopropyl laurate, isopropyl myristate, isopropyl palmitate, ethylhexyl palmitate and mixtures thereof. Suitable fatty acid ester emollients can also be derived from esters of longer chain fatty alcohols (C₁₂-C₂₈, preferably C₁₂-C₁₆) and shorter chain fatty acids e.g., lactic acid, such as lauryl lactate and cetyl lactate.

Suitable alkyl ethoxylate type emollients include C₁₂-C₂₂ fatty alcohol ethoxylates having an average degree of ethoxylation of from about 2 to about 30. Preferably, the fatty alcohol ethoxylate emollient is selected from the group consisting of lauryl, cetyl, and stearyl ethoxylates, and mixtures thereof, having an average degree of ethoxylation ranging from about 2 to about 23. Representative examples of such alkyl ethoxylates include laureth-3 (a lauryl ethoxylate having an average degree of ethoxylation of 3), laureth-23 (a lauryl ethoxylate having an average degree of ethoxylation of 23), ceteth-10 (a cetyl alcohol ethoxylate having an average degree of ethoxylation of 10) and steareth-10 (a stearyl alcohol ethoxylate having an average degree of ethoxylation of 10). When employed, these alkyl ethoxylate emollients are typically used in combination with the

petroleum-based emollients, such as petrolatum, at a weight ratio of alkyl ethoxylate emollient to petroleum-based emollient of from about 1:1 to about 1:5, preferably from about 1:2 to about 1:4.

Suitable fatty alcohol type emollients include C₁₂-C₂₂ fatty alcohols, preferably C₁₆-C₁₈ fatty alcohols. Representative examples include cetyl alcohol and stearyl alcohol, and mixtures thereof. When employed, these fatty alcohol emollients are typically used in combination with the petroleum-based emollients, such as petrolatum, at a weight ratio of fatty alcohol emollient to petroleum-based emollient of from about 1:1 to about 1:5, preferably from about 1:1 to about 1:2.

Other suitable types of emollients for use herein include polysiloxane compounds. In general, suitable polysiloxane materials for use in the present invention include those having monomeric siloxane units of the following structure:



wherein, R¹ and R², for each independent siloxane monomeric unit can each independently be hydrogen or any alkyl, aryl, alkenyl, alkaryl, arakyl, cycloalkyl, halogenated hydrocarbon, or other radical. Any of such radicals can be substituted or unsubstituted. R¹ and R² radicals of any particular monomeric unit may differ from the corresponding functionalities of the next adjoining monomeric unit. Additionally, the polysiloxane can be either a straight chain, a branched chain or have a cyclic structure. The radicals R¹ and R² can additionally independently be other silaceous functionalities such as, but not limited to siloxanes, polysiloxanes, silanes, and polysilanes. The radicals R¹ and R² may contain any of a variety of organic functionalities including, for example, alcohol, carboxylic acid, phenyl, and amine functionalities.

Exemplary alkyl radicals are methyl, ethyl, propyl, butyl, pentyl, hexyl, octyl, decyl, octadecyl, and the like. Exemplary alkenyl radicals are vinyl, allyl, and the like. Exemplary aryl radicals are phenyl, diphenyl, naphthyl, and the like. Exemplary alkaryl radicals are tolyl, xylyl, ethylphenyl, and the like. Exemplary aryl radicals are benzyl, α-phenylethyl, β-phenylethyl, α-phenylbutyl, and the like. Exemplary cycloalkyl radicals are cyclobutyl, cyclopentyl, cyclohexyl, and the like. Exemplary halogenated hydrocarbon radicals are chloromethyl, bromoethyl, tetrafluoroethyl, fluoroethyl, trifluoroethyl, trifluorotolyl, hexafluoroxylyl, and the like.

Viscosity of polysiloxanes useful for the present invention may vary as widely as the viscosity of polysiloxanes in general vary, so long as the polysiloxane is flowable or can be made to be flowable for application to the absorbent article. This includes, but is not limited to, viscosity as

When present, the amount of emollient that can be included in the composition will depend on a variety of factors, including the particular emollient involved, the skin benefits desired, the other components in the composition and like factors. The composition will comprise from 0 to 99.9%, by total weight, of the emollient. Preferably, the composition will comprise from about 10 to about 95%, more preferably from about 20 to about 80%, and most preferably from about 40 to about 75%, by weight, of the emollient.

Immobilizing Agent

An optional component of the skin care is an agent capable of immobilizing the composition in the desired location in or on the treated article. Because some embodiments of the composition have a plastic or liquid consistency at 20°C, they tend to flow or migrate, even when subjected to modest shear. When applied to a wearer-contacting surface or other location of an absorbent article, especially in a melted or molten state, the composition will not remain primarily in or on the treated region. Instead, the composition will tend to migrate and flow to undesired regions of the article and adversely affect the absorbency of the article.

Specifically, if the composition migrates into the interior of the article, it can cause undesired effects on the absorbency of the article. It also means that much more composition has to be applied to the article to get the desired skin smoothness benefits. Increasing the add-on level of composition not only increases the cost, but also exacerbates the undesirable effect on the absorbency of the article's core and undesired transfer of composition during processing/converting of the treated articles.

The immobilizing agent counteracts this tendency of the composition to migrate or flow by keeping the composition primarily localized on the surface or in the region of the article to which the composition is applied. This is believed to be due, in part, to the fact that the immobilizing agent raises the melting point and/or viscosity of the composition. Since the immobilizing agent is preferably miscible with the carrier/emollient (or solubilized in the carrier/emollient with the aid of an appropriate emulsifier or dispersed therein), it entraps the composition on the surface of the article's wearer contacting surface or in the region to which it is applied.

In addition to being miscible with (or solubilized in) the carrier/emollient, the immobilizing agent preferably has a melting profile that will provide a composition that is solid or semisolid at room temperature. In this regard, preferred immobilizing agents will have a melting point of at least about 35°C. This is so the immobilizing agent itself will not have a tendency to migrate or flow. Preferred immobilizing agents will have melting points of at least

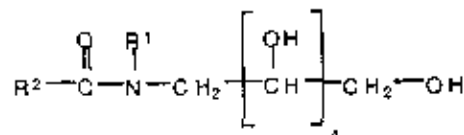
about 40°C. Typically, the immobilizing agent will have a melting point in the range of from about 50° to about 150°C.

It is also advantageous to "microscopically" lock or entrap the components of the composition on the wearer contacting surface or the region of the article to which the composition is applied. This can be accomplished by using immobilizing agents which tend to form fine crystals or have high crystallinity. Upon cooling, the immobilizing agent forms multiple seeds or nuclei, from which the crystalline structures grow, and entrap other components. In addition, outside cooling of the treated article via blowers, fans, cold rolls, etc. can speed up crystallization of the immobilizing agent.

When utilized, immobilizing agents useful herein can be selected from any of a number of agents, so long as the protease-inhibiting properties of the skin care composition provide the skin benefits described herein. Preferred immobilizing agents will comprise a member selected from the group consisting of C₁₄-C₆₀ fatty alcohols, C₁₄-C₆₀ fatty acids, and C₁₄-C₆₀ fatty alcohol ethoxylates having an average degree of ethoxylation ranging from about 2 to about 110, and mixtures thereof. The alkyl chain of the fatty alcohols, fatty acids, or fatty acid esters is typically C₁₄ to C₆₀, preferably C₁₆ to C₅₀, and more preferably C₂₀ to C₄₀. The alkyl chains may be linear, branched, saturated or unsaturated, with linear chains being the preferred structure. The high melting crystalline materials are more effective as the immobilizing agents. It is believed that the long, linear structure of these materials can speed up solidification on the treated absorbent article and "lock" up the composition more rapidly. The average degree of ethoxylation is preferably from about 2 to about 40, more preferably from about 5 to about 20. In one embodiment, the immobilizing agents include C₁₆-C₁₈ fatty alcohols, such as cetyl alcohol, stearyl alcohol, behenyl alcohol, and mixtures thereof. Mixtures of cetyl alcohol and stearyl alcohol are particularly preferred. In another embodiment, the immobilizing agents include C₁₆-C₁₈ fatty acids, most preferably selected from the group consisting of palmitic acid, stearic acid, and mixtures thereof. Mixtures of palmitic acid and stearic acid are particularly preferred. Still other embodiments use immobilizing agents such as C₁₆-C₁₈ fatty alcohol ethoxylates having an average degree of ethoxylation ranging from about 2 to about 32, preferably from about 5 to about 20.

Other types of immobilizing agents that may be used herein include polyhydroxy fatty acid esters, polyhydroxy fatty acid amides, and mixtures thereof. Preferred esters and amides will have three or more free hydroxy groups on the polyhydroxy moiety and are typically nonionic in character. Because of the possible skin sensitivity of those using articles to which the composition is applied, these esters and amides should also be relatively mild and non-irritating to the skin.

The most preferred polyhydroxy fatty acid amides have the general formula:



wherein R^1 is methyl or methoxypropyl; R^2 is a C_{11} - C_{17} straight-chain alkyl or alkenyl group.

These include N-lauryl-N-methyl glucamide, N-lauryl-N-methoxypropyl glucamide, N-cocoyl-N-methyl glucamide, N-cocoyl-N-methoxypropyl glucamide, N-palmityl-N-methoxypropyl glucamide,
 5 N-tallowyl-N-methyl glucamide, or N-tallowyl-N-methoxypropyl glucamide.

As previously noted, some of the immobilizing agents may require an emulsifier for solubilization in the emollient. This is particularly the case for certain of the glucamides such as the N-alkyl-N-methoxypropyl glucamides having hydrophilic lipophilic balance (HLB) values of at
 10 least about 7. Suitable emulsifiers will typically include those having HLB values below about 7. In this regard, the sorbitan esters previously described, such as the sorbitan stearates, having HLB values of about 4.9 or less have been found useful in solubilizing these glucamide immobilizing agents in petrolatum. Other suitable emulsifiers include steareth-2 (polyethylene glycol ethers of
 15 stearyl alcohol that conform to the formula $\text{CH}_3(\text{CH}_2)_{17}(\text{OCH}_2\text{CH}_2)_n\text{OH}$, where n has an average value of 2), sorbitan tristearate, isosorbide laurate, and glyceryl monostearate. The emulsifier can be included in an amount sufficient to solubilize the immobilizing agent in the emollient such that a substantially uniform mixture is obtained. For example, an approximately 1:1 mixture of N-cocoyl-N-methyl glucamide and petrolatum that will normally not melt into a single phase mixture, will melt into a single phase mixture upon the addition of 20% of a 1:1 mixture of Steareth-2 and
 20 sorbitan tristearate as the emulsifier.

Other types of ingredients that can be used as immobilizing agents, either alone, or in combination with the above-mentioned immobilizing agents, include waxes such as carnauba, ozokerite, beeswax, candelilla, paraffin, ceresin, esparto, ouricuri, rezowax, isoparaffin, and other known mined and mineral waxes. The high melt point of these materials can help immobilize the
 25 composition on the desired surface or location on the article. Additionally microcrystalline waxes are effective immobilizing agents. Microcrystalline waxes can aid in "locking" up low molecular weight hydrocarbons within the skin care composition. Preferably the wax is a paraffin wax. An example of a particularly preferred alternate immobilizing agent is a paraffin wax such as Paraffin S.P. 434 from Strahl and Pitsch Inc., West Babylon, NY. Synthetic waxes such as those derived
 30 from polyethylene may also be used herein.

Depending on the rheological properties and thermal properties (especially the melting temperature) of the composition, the amount of the immobilizing agent may vary. When present, the composition typically comprises from about 5 to about 95 wt%, preferably from about 5 to about 50 wt%, most preferably from about 10 to about 40 wt%, of the immobilizing agent.

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Optional Hydrophilic Surfactants

It is highly desirable that at least a portion of the article's topsheet be made of a hydrophilic material to promote rapid transfer of liquids (e.g., urine) through the topsheet. Similarly, it may be desirable that the composition be sufficiently wettable to ensure that liquids will transfer through the topsheet rapidly. Alternatively, hydrophobic skin care compositions may be utilized, so long as they are applied such that the fluid handling properties of the topsheet are adequately maintained. (For example, as discussed below, nonuniform application of the composition to the topsheet is one means to accomplish this goal.) This diminishes the likelihood that body exudates will flow off the composition-treated topsheet rather than being drawn through the topsheet and being absorbed by the absorbent core. Where a hydrophilic composition is desired, depending upon the particular components used in the composition, a hydrophilic surfactant (or a mixture of hydrophilic surfactants) may, or may not, be required to improve wettability. For example, some immobilizing agents, such as N-cocoyl-N-methoxypropyl glucamide have HLB values of at least about 7 and are sufficiently wettable without the addition of hydrophilic surfactant. Other immobilizing agents such as the C₁₆ - C₁₈ fatty alcohols having HLB values below about 7 may require addition of hydrophilic surfactant to improve wettability when the composition is applied to article topsheets. Similarly, a hydrophobic emollient such as petrolatum may require the addition of a hydrophilic surfactant if a hydrophilic composition is desired. Of course, the concern around wettability is not a factor when the wearer-contacting surface under consideration is other than the article's topsheet or when fluid handling properties of the topsheet are adequately maintained via other means (e.g., nonuniform application).

Suitable hydrophilic surfactants will preferably be miscible with the other components of the skin care composition so as to form blended mixtures. Because of possible skin sensitivity of those using disposable absorbent products to which the composition is applied, these surfactants should also be relatively mild and non-irritating to the skin. Typically, these hydrophilic surfactants are nonionic to be not only non-irritating to the skin, but also to avoid other undesirable effects on any other structures within the treated article. For example, reductions in tissue laminate tensile strength, adhesive bond sufficiencies, and the like.

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If water-based skin care compositions are used, a preservative will be needed. Suitable preservatives include propyl paraben, methyl paraben, benzyl alcohol, benzalkonium, tribasic calcium phosphate, BHT, or acids such as citric, tartaric, maleic, lactic, malic, benzoic, salicylic, and the like. Suitable viscosity increasing agents include some of the agents described as effective immobilizing agents. Suitable solvents include propylene glycol, glycerine, cyclomethicone, polyethylene glycols, hexalene glycol, diol and multi-hydroxy based solvents. Nonlimiting examples of suitable vitamins include A, D₃, E, B₅ and E acetate.

III. ABSORBENT ARTICLE

As used herein, the term "absorbent article" refers to a device which absorbs and retains body exudates. The term "disposable" is used herein to describe absorbent articles which are not intended to be laundered or otherwise restored or reused as an absorbent article after a single use. Examples of disposable absorbent articles include feminine hygiene garments such as sanitary napkins, panty-liners and tampons, diapers, incontinence briefs, diaper holders, training pants, and the like.

Disposable absorbent articles typically comprise a topsheet (preferably liquid pervious), a backsheet (preferably liquid impervious) and an absorbent core positioned between the topsheet and the backsheet. Disposable absorbent articles and components thereof, including the topsheet, backsheet, absorbent core, and any individual layers of these components, have a body facing surface and a garment facing surface. As used herein, "body facing surface" means that surface of the article or component which is intended to be worn toward or adjacent to the body of the wearer, while the "garment facing surface" is on the opposite side and is intended to be worn toward or placed adjacent to the wearer's clothing or undergarments when the disposable absorbent article is worn.

The following description generally discusses the absorbent core, topsheet, and backsheet materials that are useful in disposable absorbent articles that are used in the methods of the present invention. It is to be understood that this general description applies to these components of the specific absorbent articles shown in Figure 1 and further described below, in addition to those of other disposable absorbent articles which are generally described herein.

In general, the absorbent core is capable of absorbing or retaining liquids (e.g., menses, urine, and/or other body exudates). The absorbent core is preferably compressible, conformable, and non-irritating to the wearer's skin. The absorbent core may be manufactured in a wide variety of sizes and shapes (e.g., rectangular, oval, hourglass, "T" shaped, dog bone, asymmetric, etc.). In addition to the absorbent composites of the present invention, the absorbent core may include any of a wide variety of liquid-absorbent materials commonly used in absorbent articles, such as

Van Tilberg on April 27, 1993, U.S. Patent No. 4,687,478, issued to Van Tilburg on Aug. 18, 1997, U.S. Patent No. 4,950,264, issued to Osborn, III on Aug. 21, 1990, U.S. Patent No. 5,009,653, issued to Osborn, III on April 23, 1991, U.S. Patent 5,267,992, issued to Van Tilburg on Dec. 7, 1993, U.S. Patent No. 5,389,094, issued to Lavash et al. on Feb. 14, 1995, U.S. Patent No. 5,413,568, issued to Roach et al. on May 9, 1995, U.S. Patent No. 5,460,623, issued to Emcnaker et al. on Oct. 24, 1995, U.S. Patent No. 5,489,283, issued Van Tilburg on Feb. 6, 1996, U.S. Patent No. 5,569,231, issued to Emcnaker et al. on Oct. 29, 1996, and U.S. Patent No. 5,620,430, issued to Bamber on April 15, 1997, the disclosure of each of which is incorporated by reference herein.

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IV. TREATING ARTICLES WITH SKIN CARE COMPOSITIONS

In preparing the present composition, the order and manner of mixing the various components of the present invention is not particularly critical. It is not necessary to mix the components together at elevated temperatures. It is found that the components may be thoroughly mixed to form a substantially uniform composition at temperatures which range from about 40°C to about 100°C. Agitation is generally required. And it is found that viscous heat generated from agitation may be sufficient to raise the temperature of the mixture or composition so that a substantially uniform dispersion of components therein can be achieved. Sometimes, external heat may be added. It is preferred that the rheological agent be added to the carrier with agitation such that the rheological agent is mixed uniformly and/or activated (i.e., form a rheological structure). Where predispersions are used, the particulate materials and the predispersant are pre-mixed in a separate step before being added to the composition. However, predispersion of zinc oxide or other skin care ingredients are not required. These ingredients can be mixed with the carrier directly under sufficient agitation.

In preparing absorbent articles of the present invention, the skin care composition is applied such that during wear, at least some portion of the composition will transfer from the treated article to the wearer's skin. That is, skin care composition is either applied directly to one or more wearer contacting surfaces, or is applied in alternate locations or means such that the skin care composition is readily available for transfer from one or more wearer contacting surfaces during use without intervention by the user/caregiver. (For example, materials positioned beneath the wearer contacting surface, encapsulated compositions, etc.) Of course, to effectuate delivery of composition to those body regions most susceptible to contact with feces, it will be preferred to include the composition on the portion of the topsheet and cuffs that will contact the wearer's buttocks, genitals, intertriginous and anal regions during wear. Additionally, the composition may be applied to other

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**SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISIÓN DE NUEVAS CREACIONES**

2020

Abogado
EMILIO FERRERO

ASUNTO Radicación 05-592
 Trámite 011
 Evento 379
 Actuación 430
 Oficio 15784
 Folios 017

Patente de Invención ☒ Patente de Modelo de Utilidad ☐

Vía Nacional ☐

Vía PCT (fase nacional) ☒ Cap. I ☐ Cap. II ☒

No. Sol. Internacional: PCT/EP03/05494

Fecha de Presentación Internacional: mayo 26 de 2003

Como resultado del examen de fondo, realizado con fundamento en el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

Descripción: Folios: 37 a 68
Reivindicaciones: Folios: 69 a 74 (originalmente radicadas)
 Folios: 137 a 140 (modificadas)
Dibujos: Folio: 36
Prioridad: 12 de junio de 2002, EP. No. 020120983.9

2. Objeto de la invención

- La Invención se titula **"ARTÍCULO ABSORBENTE QUE CONTIENE UNA COMPOSICIÓN PARA EL CUIDADO DE LA PIEL"** (folio 1)
- El problema planteado en esta solicitud consiste en desarrollar un producto absorbente con una composición para el cuidado de la piel que sea estable a temperaturas elevadas y presente una rápida solidificación cuando es aplicada sobre la superficie de dicho producto y no penetre en las capas constituyentes del artículo absorbente.

La solicitud en estudio presenta un artículo absorbente que comprende una composición sólida para el cuidado de la piel, la cual incluye diversos emolientes y un acelerador de cristalización.

- El objeto de la invención se catalogó como A61L 15/34 según la Clasificación Internacional de Patentes (IPC).

3. Determinación del Estado de la Técnica

Considerando que la fecha de presentación de la primera solicitud de patente de la cual se reivindica prioridad es: 12 de junio de 2002, se buscaron documentos del estado de la técnica relacionados, con fecha de publicación anterior a esta.

Nº	Documento	Título	Fecha de publicación
D2	WO 00/71177	"ABSORBENT ARTICLE HAVING A SKIN CARE COMPOSITION"	30 de noviembre de 2000

4. Análisis de patentabilidad (según requisito) (artículo 14 D486)

Novedad (artículo 16 D486)

Respecto a la solicitud en estudio:

La reivindicación independiente 1 define un artículo absorbente constituido por una capa superior permeable al líquido, una capa base impermeable al líquido y un cuerpo absorbente localizado en medio de dichas capas. *Dicho artículo tiene una composición para el cuidado de la piel que comprende al menos:*

- De 5 a 70% en peso de un componente con un punto de fusión comprendido entre 25 °C a 37 °C, elegido a partir del grupo de ceras sintéticas, parafinas, ésteres del ácido graso, ésteres del ácido graso polihidroxi, alcoholes grasos, ésteres de ácidos grasos alcoxilados, alcoholes ácidos alcoxilados y mezclas de estos compuestos.
- De 5 a 70% en peso de un componente cuyo punto de fusión es al menos 5 °C más elevado que el punto de fusión del componente a), el cual se elige a partir del grupo de parafinas, ésteres del ácido polihidroxi, alcoholes grasos de C₁₄-C₂₂, ácidos grasos de C₁₂-C₂₂, los derivados alcoxilados de los alcoholes grasos y ésteres grasos, y mezclas de estos componentes.
- De 5 a 25% en peso de un acelerador de cristalización que es una cera polimérica, con la condición de que el acelerador de cristalización tiene un punto de fusión en el rango de 45 a 70 °C.
- Menos del 5% en peso de agua.

Respecto al estado de la técnica

El documento WO 00/71177 (llamado D1 de aquí en adelante), divulga un artículo absorbente que comprende una cubierta exterior impermeable al líquido; una capa superior permeable al líquido; un cuerpo absorbente localizado entre dicha cubierta exterior y capa superior (página 32, líneas 16-24). El artículo absorbente contiene una composición para el cuidado de la piel aplicada en al menos una porción del mismo de manera que es transferible al usuario (página 6, líneas 2-7; página 40, línea 11; página 40, líneas 25-30), la cual incluye:

- De 40 a 75% en peso de un componente seleccionado de ceras, ésteres de ácido graso, ésteres de ácido graso polihidroxi, alcoholes grasos, entre otros (página 21, línea 1 a página 22, líneas 7; página 24, líneas 3-6)
- De 5 a 50% en peso de un componente seleccionado de parafinas, ésteres de ácido graso polihidroxi, alcoholes grasos, ácidos grasos, entre otros (página 25, líneas 10-16, 29-30; página 28, líneas 21-30; página 29, líneas 1-4)
- De 0.1 a 25% en peso de una cera polimérica (página 17, líneas 18-20; página 20, líneas 16-17)
- Menos del 5% en peso de agua (página 9, línea 25; página 8, líneas 4-6)

De acuerdo con lo expuesto, el producto absorbente con la composición para el cuidado de la piel, propuesto en la solicitud estudiada ya era conocido en D2, por lo cual no puede considerarse novedoso.

En conclusión, la materia de invención señalada en la solicitud en estudio se encuentra afectada en su novedad de acuerdo con el artículo 16 de la Decisión 486.

5. Conclusión:

Los requisitos de patentabilidad de la presente solicitud se encuentran afectados así:

N°	Documento	Reivindicaciones afectadas	Requisito que afecta
D1	WO 00/71177	1-17	Novedad

En cumplimiento del artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le indica que debe dar respuesta dentro del término de 60 días contados a partir de la fecha de notificación de la presente comunicación. En caso de no dar respuesta al presente requerimiento, o si a pesar de la respuesta subsistieran los impedimentos para la concesión, se denegará la patente.

Notifíquese el presente oficio conforme a lo dispuesto en el numeral 5.2, literal e), del capítulo quinto del título primero de la Circular Única N° 10 de 2001.

ALIX CARMENZA CÉSPEDES DE VERGEL

Jefe de División de Nuevas Creaciones

El anterior requerimiento fue notificado por fijación en lista, de fecha 12 DIC. 2008

CONCEPTO TÉCNICO No.3422	EXAMINADOR TÉCNICO Código No.202076
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