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COLOMBIA

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
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DISE-2015/10922

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIRECCIÓN DE NUEVAS CREACIONES
E. S. D.

Ref.: Expediente No. **15-293.695**
Solicitud de patente a nombre de
JOHNSON & JOHNSON CONSUMER INC.

1. Yo, CAROLINA MERCEDES DAZA MONTALVO, identificada como aparece al pie de mi firma, domiciliada en la Carrera 11 No. 86-53, piso 6, obrando como apoderada de la sociedad solicitante JOHNSON & JOHNSON CONSUMER INC., presento con este escrito el siguiente documento:

1.1. Copia certificada de la solicitud de patente Estadounidense No. 14/577,136 del 19 de diciembre de 2014, de la cual se reivindica prioridad en el trámite de la presente solicitud.

Este documento está siendo presentado dentro del término legal correspondiente, esto es, 19 de abril de 2016, de conformidad con lo dispuesto en el artículo 10 de la Decisión 486 de la Comisión de la Comunidad Andina.

Señor Director,

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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

8 de diciembre de 2015

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: **14/577,136**
Fecha de Presentación: **19 de diciembre de 2014**

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 **US 14/577,136**

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) **M. TARVER**
Oficial Certificador
(Sello oficial de la Oficina de Patentes y Marcas de los Estados Unidos de América)

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Reivindicaciones:

1. Una composición antitranspirante tópica que comprende a portador tópico cosméticamente aceptable y un agente anticolinérgico seleccionado del grupo que consiste en acetiloctapéptido-3 y dipéptido diaminobutiroil bencilamida diacetato en una cantidad eficaz para inhibir o evitar la transpiración, en donde la composición está prácticamente libre de sales de aluminio.

2. La composición de conformidad con la reivindicación 1 que comprende, aproximadamente, 0,01 a, aproximadamente, 30,0 % en peso del agente anticolinérgico.

3. La composición de conformidad con la reivindicación 1, que comprende, aproximadamente, 0,1 a, aproximadamente, 20,0 % en peso de acetiloctapéptido-3.

4. La composición de conformidad con la reivindicación 1 que comprende, aproximadamente, 0,05 a, aproximadamente, 6,0 % en peso de dipéptido diaminobutiroil bencilamida diacetato.

5. La composición de conformidad con la reivindicación 1, que comprende, además, un agente absorbente de agua.

PA 1984577

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

December 08, 2015

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: *14/577,136*
FILING DATE: *December 19, 2014*

THE COUNTRY CODE AND NUMBER OF YOUR PRIORITY APPLICATION, TO BE USED FOR FILING ABROAD UNDER THE PARIS CONVENTION, IS *US14/577,136*

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

M. TARVER
Certifying Officer

Electronic Acknowledgement Receipt

EFS ID:	21020225
Application Number:	14577136
International Application Number:	
Confirmation Number:	8875
Title of Invention:	Antiperspirant Composition
First Named Inventor/Applicant Name:	Glasiela Lemos Anconi
Customer Number:	27777
Filer:	Sharon E. Hayner/Judith Ubry
Filer Authorized By:	Sharon E. Hayner
Attorney Docket Number:	JCO5163USNP
Receipt Date:	19-DEC-2014
Filing Date:	
Time Stamp:	15:18:03
Application Type:	Utility under 35 USC 111(a)

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Payment Type	Deposit Account
Payment was successfully received in RAM	$1740
RAM confirmation Number	1977
Deposit Account	100750
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees) 5

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Final_Spec_JCO5163USNP.pdf	220165 b941af34a3459aaaf9b3842f6a50373e58a218a4	yes	23

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	21
Claims	22	22
Abstract	23	23

Warnings:

Information:

2	Application Data Sheet	121914_ADS_JCO5163USNP.pdf	1561802 fd1f41a562558c55d9f36a7f40f3f38e73ebc223	no	8

Warnings:

Information:

3	Power of Attorney	121914_POA_JCO5163USNP.pdf	205598 8578b5e84d7a9fc40614294b1894fe3106221316	no	3

Warnings:

Information:

4	PTO/SB/69-Authorize EPO Access to Search Results	121914_sb0069_JCO5163USNP.pdf	151670 80ae3fa957c66896d46b9d08ff06a279db61f528	no	2

Warnings:

Information:

5	Fee Worksheet (SB06)	fee-info.pdf	36516 017461792838 4daa59dc038d2b68291ba3141f00	no	2

Warnings:

Information:

Total Files Size (in bytes):	2175751

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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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JCO5163USNP

ANTIPERSPIRANT COMPOSITION

Field of the invention

This invention relates to a topical antiperspirant composition containing an anticholinergic agent as the active antiperspirant compound that is substantially free of aluminum salts.

Background of the Invention

Antiperspirant and deodorant compositions are widely employed throughout many parts of the world in order to control localized perspiration and odor. Wet patches such as those under the arms are considered to be unsightly. Additionally, body odor can interfere with normal relationships and cause social exclusion. These issues take on a greater significance particularly in regions that tend to have high humidity and warmer climates. Besides the underarm area, other body areas including the feet may benefit from the use of antiperspirants and deodorants.

Antiperspirants act by stopping or reducing the activity of the sweat glands. Today, antiperspirants are typically sold in a rollerball applicator or solid stick form and include an aluminum-based compound, wax, liquid emollients and natural scent enhancers. Antiperspirants currently marketed commonly employ an astringent metal salt, such as aluminum or aluminum/zirconium salt. The key to the sweat-blocking activity rests purely in the active aluminum-based compound that, in a typical commercial antiperspirant, makes up from about 10 to 25 percent of the ingredients. Aluminum ions, from aluminum salts such as aluminum chlorohydrate and aluminum chloride, are drawn into the cells that line the human body's eccrine gland ducts. The eccrine glands are responsible for producing the majority of the body's sweat and are located in the armpits. The aluminum ions are taken into the cells that line the eccrine-gland ducts at the opening of the epidermis, the top layer of the skin. When the aluminum ions are drawn into the cells, water passes in with them. As more water flows in, the cells begin to swell, squeezing the ducts closed. Consequently, sweat is directly blocked from being excreted through the skin. Once the eccrine ducts have been closed, the

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other odor-reducing/masking ingredients provide a thin coating to the skin's top layer. The gland ducts remain closed until the water content outside and inside the gland cells reaches equilibrium at which time the cell content begins to pass back out through osmosis.

Deodorants on the other hand block the odor of sweat. Deodorant agents do this by limiting bacterial proliferation, blocking sweat diffusion, absorbing malodors and enzymatic inhibition. Commercial products may be marketed as a deodorant, an antiperspirant or both.

U.S. Patent Publication No. 2011/0020415 relates to a composition for the treatment of hyperhidrosis. It contains an antiperspirant, at least one muscle relaxing agent, at least one peptide, and at least one botanical agent. The antiperspirant is preferably aluminum tertacholrohydrex glycine, and the peptide may be for example dipeptide diaminobutyroyl benzylamide diacetate, argireline, SYN-AKE, SNAP 8, or the like.

Recently, the use of aluminum in deodorants and antiperspirants has become controversial due to concern that aluminum can be absorbed by the body and enter into the bloodstream. Additionally, antiperspirant aerosols containing aluminum allow for inhalation during manufacture and application.

The present invention provides a novel topical antiperspirant product that does not require aluminum salts. These antiperspirant compositions are substantially free, preferably 100% free, of aluminum salts.

Summary of the Invention

The present invention provides a topical antiperspirant composition comprising a cosmetically acceptable topical carrier and an anticholinergic agent selected from the group consisting of acetyl octapeptide-3 and dipeptide diaminobutyroyl benzylamide diacetate in an amount effective to inhibit or prevent perspiration, wherein said composition is substantially free of aluminum salts.

Detailed Description of the Invention

The cosmetic antiperspirant composition of the invention is adapted to be applied topically to a user's skin, typically in the underarm area.

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The composition is substantially free of aluminum salts. In particular, the composition is substantially free of aluminum chlorohydrate and/or its derivatives. The formulations may occasionally contain aluminum residue. This is related to traces or extremely low amounts of aluminum element as a residue in raw materials used as ingredients of the composition. This is not an aluminum salt.

As used herein, "substantially free of" an ingredient means containing less than about 50 ppm in final formulation.

In one embodiment, the composition of the invention is totally free of aluminum salts.

Anti-cholinergic Agents

The anti-cholinergic agent in the composition is acetyl octapeptide-3 (for example SNAP 8 commercially available from Lipotec SA) or dipeptide diaminobutyroyl benzylamide diacetate (for example SYN-AKE commercially available from Pentapharm Ltd.).

While not wishing to be being bound by theory, it is believed that dipeptide diaminobutyroyl benzylamide diacetate acts by blocking the acetylcholine receptor of sweat glands, while acetyl octapeptide-3 acts by preventing the release of acetylcholine from sympathetic neurons.

The anticholinergic agent is present in the composition in an amount effective to inhibit or substantially reduce perspiration, for example in the underarm area of a human user following topical application to the same. The composition will generally contain about 0.01 to about 30.0 w/w% of the anticholinergic agent.

In one embodiment the composition contains about 0.1 to about 20.0 w/w%, or about 0.5 to about 15.0 w/w%, of acetyl octapeptide-3.

In another embodiment the composition contains about 0.05 to about 6.0 w/w%, or about 0.1 to about 4.0 w/w%, of dipeptide diaminobutyroyl benzylamide diacetate.

The composition may optionally also comprise one or more other anticholinergic agents, including for example biopeptides such as pentapeptide,

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hexapeptide, or octapeptide, botulinum toxin (botox), acetyl hexapeptide-8, trihexyphenidyl (artane), benztropine mesylate (cogentin), biperiden, procyclidine, 2,5 antihistamines (orphenadrine), atropine, flavoxate (urispas), oxybutynin (ditropan, oxytrol), scopolamine, hyoscyamine (levsinex), tolterodine (detrol), belladonna alkaloids , fesoterodine (toviaz), solifenacin (vesicare), darifenacin (enablex), propantheline (pro-banthine).

Water Absorbing Agent

The composition may optionally comprise a water absorbing agent. Such water absorbing agents are known for cosmetic applications and are usually porous ingredients, composed of micro channels resulting in a high absorption capacity and the ability to absorb a different variety of materials. Such compounds may have affinity to hydrophilic or lipophilic molecules. In some cases, it is preferred to combine multiple water absorbing agents in order to maximize the absorption capabilities.

Suitable water absorbers include silicas, cotton powder, bamboo silk and zeolites.

In one embodiment, the composition comprises Bambusa Arundinacea Stem Powder (for example BAMBOO SILK PW available from Polytechno Indústrias Químicas Ltda/Ion Química), silicas (for example MSS 500/3H available from Kobo and/or SPHERON L-1500 available from Presperse).

The cosmetic antiperspirant compositions of the present invention will generally contain from about 0.01 to about 20.0 w/w% of a water absorbing agent in the final composition. In a preferred embodiment, the composition will contain about 0.1 to about 10.0 w/w% and in a more preferred embodiment, the cosmetic antiperspirant composition will contain about 0.5 to about 6.0 w/w% of a water absorbing agent.

The composition may comprise other ingredients known in the antiperspirant, deodorant, or cosmetic art. In most embodiments, the antiperspirant will include other functional ingredients, which provide benefits to the user's body. Such materials are in general well-known to those persons of ordinary skill in the relevant personal care composition art, and may include moisturizing agents, anti-bacterial agents, deodorants and perfumes.

Other ingredients may include film formers. For example, water-insoluble films of polymers create occlusion on the axillary skin, thereby reducing the underarm wetness. Such films are a barrier to the passage of sweat. Polymers used should be occlusive, insoluble in water, and high in degree of adhesion, such as Acrylates/Octylacrylamide Copolymer.

The composition may also include ingredients known to have antibacterial and deodorant properties. These substances may include, for example, 1,6-di-(4-chlorophenylbiguanido) hexane (Chlorhexidin), 3,4,4'-trichlorocarbanilide, quaternary ammonium compounds, oil of cloves, mint oil, thyme oil, triethyl citrate, farnesol (3,7,11-trimethyl-2,6,10-dodecatrien-1-ol), ethylhexyl glycerol ether, or polyglyceryl-3 caprylate. In particular, polyglyceryl 3 caprylate (TEGO® Cosmo P 813, available from Degussa/Evonik), a vegetable sourced ester, with lipophilic character, may be used to reduce odor-causing bacteria on the skin at very low concentrations.

The composition may also comprise linear chain alcohols, amines, ether-alcohols, cetyl alcohol, stearyl alcohol and cetearyl alcohol, classified by CTFA as "emulsion stabilizers" agents.

Perfumes and fragrances may be included in the antiperspirant composition. Perfumes give rise to an olfactory response in the form of a fragrance, and in addition may contribute to mask body malodor.

Preservatives are required to prevent product damage caused by bacteria, yeast or mold, and to protect the product from inadvertent contamination by the consumer during use. Useful preservatives include sodium benzoate, ethylhexylglycerin and caprylyl glycol, benzyl alcohol, methyl paraben, propyl paraben, DMDM hydantoin, methylchloroisothiaoline, methylisothiazolinone, imidazolidinyl urea phenoxyethanol, sodium benzoate and benzoic acid. EDTA and salts thereof are often used to further enhance preservation.

Antioxidants should be added to prevent formula from oxidation process. Useful antioxidants include ascorbic acid, tocopheryl acetate and polypnehols. In the present invention, anti-oxidants such as tocopheryl acetate (stabilized vitamin E) may be used as anti-oxidant agent.

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Humectants and moisturizing agents may be included in the composition. Suitable ingredients include hydrophobic agents, hydrophilic agents and combinations thereof. Examples of moisturizing agents are allantoin, glycerol, polyglycerylmethacrylate, panthenol, polyols, ceramide, borage oil (linoleic acid), hyaluronic acid, sodium peroxylinecarbolic acid (sodium PCA), wheat protein (e.g., laurdimonium hydroxypropyl hydrolyzed wheat protein), hair keratin amino acids, panthenol; primrose oil; GLA 3 and other fish oils that may include, for example, the omega-3 and omega-6 oils and/or linoleic acid; and flax seed oil, and mixtures thereof. Other moisturizing agents can also be used.

Additionally, skin conditioners may be added to prevent or calm skin irritation. For example, vegetable extracts may be added. Cotton milk (commercially available from Symrise) may provide nourishing, calming and softening properties to skin. In one embodiment, the composition of the invention contains about 34 to about 40 weight percent milk proteins.

Pigments and colorants may be included in the antiperspirant composition of the present invention.

Emollients, such as isopropylmyristate, mineral oils and vegetable oils in general, which give rise to a tactile response in the form of an increase in skin lubricity may be included for a more esthetically pleasing product. The composition may contain emollients in any desired amount to achieve a desired emollient effect.

Non-volatile emollients are preferable in the present invention. Classes of non-volatile emollients include non-silicone and silicone emollients. Non-volatile, non-silicone emollients include C_{12-15} alkyl benzoate. The non-volatile silicone material can be a polyethersiloxane, polyalkyarylsiloxane or polyethersiloxane copolymer. An illustrative non-volatile silicone material in the present invention is phenyl trimethicone. Non-limiting examples of emollients can be found in U.S. Pat. No. 6,007,799. Examples include, but are not limited to, PPG-14 butyl ether, PPG-15 stearyl ether, PPG-3 myristyl ether, stearyl alcohol, stearic acid, glyceryl monoricinoleate, isobutyl palmitate, glyceryl

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monostearate, isocetyl stearate, sulphated tallow, oleyl alcohol, propylene glycol, isopropyl laurate, mink oil, sorbitan stearate, cetyl alcohol, hydrogenated castor oil, stearyl stearate, hydrogenated soy glycerides, isopropyl isostearate, hexyl laurate, dimethyl brassylate, decyl oleate, diisopropyl adipate, n-dibutyl sebacate, diisopropyl sebacate, 2-ethyl hexyl palmitate, isononyl isononanoate, isodecyl isononanoate, isotridecyl isononanoate, 2-ethyl hexyl palmitate, 2-ethyl hexyl stearate, Di-(2-ethyl hexyl) adipate), Di-(2-ethyl hexyl) succinate, isopropyl myristate, isopropyl palmitate, isopropyl stearate, octacosanol, butyl stearate, glyceryl monostearate, polyethylene glycols, oleic acid, triethylene glycol, lanolin, castor oil, acetylated lanolin alcohols, acetylated lanolin, petrolatum, isopropyl ester of lanolin, fatty acids, mineral oils, butyl myristate, isostearic acid, palmitic acid, PEG-23 oleyl ether, olelyl oleate, isopropyl linoleate, cetyl lactate, lauryl lactate, myristyl lactate, quaternised hydroxy alkyl, aminogluconate, vegetable oils, isodecyl oleate, isostearyl neopentanoate, myristyl myristate, oleyl ethoxy myristate, diglycol stearate, ethylene glycol monostearate, myristyl stearate, isopropyl lanolate, paraffin waxes, glycyrrhizic acid, hydrocyethyl stearate amide.

In one embodiment, the emollient is selected from linear silicones, cyclic silicones, hydrocarbons, polyhydroxy alcohols having more than 3 carbon atoms, liquid or solid polyalkyleneglycol ethers containing a polypropylene glycol (PPG) moiety and terminating in an alkyl ether, and combinations thereof. In another embodiment, the emollient is a volatile silicone having a flash point of 100° C. or less, such as cyclomethicone or trisiloxane. In another embodiment, the emollient is a nonvolatile silicone, such as dimethiconol or a longer chain dimethicone.

Surfactants and emulsifiers may be used in the antiperspirant compositions of the invention. Typical surfactants are disclosed in U.S. 2003/0007939A1. Emulsifiers useful in the composition include nonionic, anionic, cationic, amphoteric or zwitterionic and blends thereof. Suitable emulsifiers are disclosed in U.S. Patent No. 3,755,560 and U.S. Patent No. 4,421,769. Examples are polyethylene glycol 20, sorbitan monolaurate (Polysorbate 20), polyethylene glycol 20 stearyl ether (Brij 78, Steareth 20),

polyethylene glycol ether of lauryl alcohol (Laureth 23), polysorbate 80 (Tween 80), and lecithin.

Cellulosic gums also can be used as additives in the compositions of this invention. Preferred cellulosic gums include water-soluble hydroxyalkylcellulose polymers such as hydroxymethylcellulose, hydroxyethylcellulose and hydroxypropylcellulose. Other thickening agents that may be used include acacia, agar, alginate, carrageenan, gum tragacanth, xanthan gum, collagen, carboxypolymethylene, glyceryl monostearate, polyvinylpyrrolidone and polyacrylamide.

The composition may be in the form of a solid or gel stick, cream, lotion, spray, squeeze product, or the like, as known in the art.

Accordingly, the anticholinergic agent and other active agents may be contained in a vehicle, as known in the art. The major types of antiperspirant vehicles most frequently fall into the following categories: (a) solutions; (b) emulsions, both oil-in-water and water-in-oil; and including lotions and creams; (c) suspensions; (d) gels; and (e) solids and semi-solids including stick products. Antiperspirant products in some vehicles, including liquids, gels, suspensions and emulsions, can be provided for application via roll-on applicator, as known in the art.

Examples of solvents, in addition to water, that are frequently used in personal care compositions are polypropylene glycol, polyethylene glycol, ethanol, glycerol, ethylene glycol, 1,2,4-butanetriol, 1,2,6-hexanetriol, ethanol, isopropanol, butanetriol, sorbitol esters, butanediol, butylene glycol, hexylene glycol, methylpropanediol, pyrrolidone, N-methylpyrrolidone, dimethyl sulfoxide, dimethyl sulfone and similar solvents and mixtures thereof.

The composition of the invention may be a squeeze product, including hydro-alcoholic squeeze products.

The antiperspirant composition can be in gel form. A "gel" in accordance with the present invention is a colloid in which the disperse phase has combined with the continuous phase to produce a viscous, jelly-like product. Gels in accordance with the present invention can be aqueous or nonaqueous. The gels will typically comprise a vehicle comprising a gelling agent such as

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described above. The vehicle of the gels will also typically comprise a solvent. A silicone surfactant may also be included required to achieve stability.

Emulsions, such as lotions and creams, of the oil-in-water type and water-in-oil type are well-known in the cosmetic art and are useful in the subject invention. Triphase emulstions such as water-in-oil-in-water type may also be used. Oils useful in both types of emulsions, and also for solvents in solvent-based vehicles in general, include hydrocarbon oils and waxes (e.g., petrolatum, mineral oil, micro-crystalline waxes, polyalkenes, paraffins, cerasin, ozokerite, polyethylene, perhydrosqualene, polyalphaolefins, hydrogenated polyisobutenes and combinations thereof). Preferred are fatty acid derivatives, cholesterol, cholesterol derivatives, diglycerides and triglycerides (e.g., castor oil, soy bean oil, derivatized soybean oils such as maleated soy bean oil, safflower oil, cotton seed oil, corn oil, walnut oil, peanut oil, olive oil, cod liver oil, almond oil, avocado oil, palm oil, sesame oil, vegetable oils and vegetable oil derivatives, sunflower seed oil, coconut oil and derivatized coconut oil, cottonseed oil and derivatized cottonseed oil, jojoba oil, cocoa butter and combinations thereof, as well as any of the aforementioned oils that have been partially or fully hydrogenated), acetoglyceride esters (e.g., acetylated monoglycerides), alkyl esters, alkenyl esters (e.g., oleyl myristate, oleyl stearate, oleyl oleate, and combinations thereof), lanolin and its derivatives (e.g., lanolin, lanolin oil, lanolin wax, lanolin alcohols, lanolin fatty acids, isopropyl lanolate, acetylated lanolin, acetylated lanolin alcohols, lanolin alcohol linoleate, lanolin alcohol ricinoleate, hydroxylated lanolin, hydrogenated lanolin and combinations thereof), wax esters (e.g., beeswax and beeswax derivatives, spermaceti, myristyl myristate, stearyl stearate and combinations thereof), sterols and phospholipids, and combinations thereof. Examples of alkyl esters include isopropyl esters of fatty acids and long chain esters of long chain fatty acids, e.g., SEFA (sucrose esters of fatty acids), pentaerythritol esters, aromatic mono, di or triesters, cetyl ricinoleate, isopropyl palmitate, isopropyl myristate, cetyl ricinoleate and stearyl ricinoleate. Other examples include hexyl laurate, isohexyl laurate, isohexyl palmitate, decyl oleate, isodecyl oleate, hexadecyl stearate, decyl stearate, isopropyl isostearate, diisopropyl adipate, diisohexyl adipate, dihexyldecyl adipate, diisopropyl sebacate, acyl

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isononanoate lauryl lactate, myristyl lactate, cetyl lactate, and combinations thereof. Still other suitable oils include milk triglycerides (e.g., hydroxylated milk glyceride) and polyol fatty acid polyesters. Also useful are vegetable waxes such as carnauba and candelilla waxes; sterols such as cholesterol, cholesterol fatty acid esters; and phospholipids such as lecithin and derivatives, sphingo lipids, ceramides, glycosphingo lipids, and combinations thereof.

The water-based roll-on is usually an oil-in-water emulsion rather than a water-in-oil system due to the poorer efficiency of the latter. The oil-in-water emulsion presents the active ingredient in a readily accessible solution form in the external phase. Since the active ingredient ends up in the dissolved state, the formulator can use either a liquid or solid antiperspirant active.

The composition of the invention may also be a clear water-in-oil roll-on. These compositions are relatively new on the market. They demonstrate superior aesthetics and leave no residue or deposit on the skin after application. Clarity is achieved simply by following the room temperature order of addition specified.

The composition may alternatively be an aerosol. Sprays or aerosols have the advantage of eliminating direct contact with hands for application. The propellant gas may be, for example, a hydrocarbon (propane, isobutene), a chlorofluorocarbon, carbon dioxide or nitrous oxide.

The composition of the invention may be a suspension.

In one embodiment, the composition is a lotion or a cream.

In another embodiment, the composition is a solid or semi-solid or stick, and comprises an effective amount of anticholinergic agent and a solidifying agent, wherein the composition is in the form of a solid or semi-solid at ambient temperature (e.g., 25° C. and below). Accordingly, the composition may comprise for example mixtures of waxes and oils and solutions based on aqueous, propylene glycol and/or alcohol mixtures solidified for example by sodium stearate. Preferably, the solidifying agent is selected from the group consisting of a wax and sodium stearate.

Solid compositions of the invention may also be finely divided and used in the form of powders.

Almost all antiperspirant solids employ stearyl alcohol as the gelling agent. Emollients are often added to impart a softer feel and to add glideability. Most solids also contain talc and/or silica. Silica is an effective suspending agent that helps to keep the active ingredient homogeneously suspended throughout the stick. Miscellaneous ingredients often include colours, titanium dioxide (opacifying agent) and allantoin (soothing agent).

Sticks and solids are complex chemical systems requiring a balance of ingredients designed to make the most of several performance factors including payout, slip or lubricity, chemical stability, softening temperature, and efficacy.

The composition of the invention may also be a foam. Accordingly, the liquid vehicles described above may contain dispersions of gas in the liquid phase. The gas globules may be of any size, from colloidal to macroscopic, as in soap bubbles. Typical liquid foams are those used in shaving creams, etc.

EXAMPLES

Example 1

The following is composition is a hydro-alcoholic squeeze spray formulation of the present invention.

TABLE 1

INGREDIENT	FUNCTION	% w/w
A: SD Alcohol 40	Solvent	38.00
B: Propylene glycol	Humectant	3.50
C: Deionized water	Solvent	48.00
D: Absorbents	Absorbents	6.00
E: Fragrance	Perfume	0.50
F: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant	4.00

Procedure

1. Mix A and C using overhead stirrer
2. Add B. Mix for 10 min
3. Add D, E and F. When homogeneous, pour into suitable containers

Example 2

The following product is a water-in-oil emulsion according to the invention in which the refractive indices of the continuous and dispersed phases are identically matched. A silicone surfactant is used to achieve a stabile emulsion.

TABLE 2

INGREDIENT	FUNCTION	% w/w
A: Cyclomethicone (and) Dimethicone Copolyol	Solvent	9.70
B: Cyclomethicone	Solvent	3.40
C: Dimethicone, 50 cst	Skin Conditioning	3.88
D: Isostearyl Palmitate	Skin Conditioning	2.42
E: Dipropylene Glycol	Solvent	19.51
F: Deionized Water	Solvent	50.69
G: Absorbents	Absorbents	6.00
H: Fragrance	Perfume	0.40
I: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant Agent	4.00

Procedure

1. Combine A, B, C, D and H and mix until uniform
2. In a separate vessel combine E, F and G and mix until uniform
3. Match the refractive indexes of phases 1 and 2

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4. Slowly add the aqueous phase from Step 2 to the oil phase from Step 1 and homogenize at slow speed. The viscosity will slowly increase.
5. Add I and mix until uniform.
6. Homogenize vigorously (5000 rpm) until a firm gel is obtained (typically from 1 to 5 min)
7. Fill into airtight containers

Example 3

The following composition is an emulsion roll-on formulation according to the invention, which exhibits excellent physical stability and application properties.

TABLE 3

INGREDIENT	FUNCTION	% w/w
A: Steareth-21	Surfactant	2.00
B: Steareth-2	Surfactant	2.00
C: Steareth-5 Stearate	Skin Conditioning	1.00
D: Clyclomethicone (and) PPG-15 Stearyl Ether	Skin Conditioning	5.00
E: Deionized Water	Solvent	79.20
F:Absorbents	Absorbents	6.00
G: Fragrance	Perfume	0.80
H: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant Agent	4.00

Procedure

1. Combine A, B, C and D and heat to 700° C
2. Heat E separately at 700° C
3. Add A, B, C and D to E with agitation
4. Homogenize the mixture for 1-3 min

5. Cool to 35° C with continuous agitation
6. Add F to emulsion slowly with agitation
7. Add H and G with agitation
8. Homogenize the mixture again for 1-3 min
9. Fill into suitable containers

Example 4

This composition according to the invention provides superior aesthetics and leaves no residue or deposit on the user's skin after application. It is a clear antiperspirant product made with the following ingredients using the order of addition below at room temperature (20 -22° C).

TABLE 4

INGREDIENT	FUNCTION	% w/w
A: Deionized Water	Solvent	8.75
B: Dipropylene Glycol	Solvent	3.00
C: PEG-7 Glyceryl Cocoate	Skin Conditioning	18.20
D: Cyclomethicone (and) Dimethicone Copolyol	Skin Conditioning	41.50
E: Cetearyl Octanoate	Surfactant	3.20
F: Polysorbate 20	Surfactant	1.00
G: Deionized Water	Solvent	12.60
H: Isopropyl Myristate	Skin Conditioning	1.00
I: Absorbents	Absorbents	6.00
J: Fragrance	Perfume	0.75
K: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant Agent	4.00

Procedure

1. Combine A and B with overhead mixing (medium agitation)

2. Slowly add C. Mix well
3. Slowly add D. Mix well
4. Slowly add E and F. Mix well
5. Premix H and I. Slowly add to the main batch
6. Slowly add G. Mix well
7. Slowly add K and J. Mix well until clear
8. Pour into appropriate containers

Example 5

A composition of the invention in aerosol form is made by the following procedure:

TABLE 5

INGREDIENT	FUNCTION	% w/w
A: Bentone Gel VS-5 PC	Suspending Agent	18.50
B: Cyclomethicone	Solvent	21.20
C: Dimethicone, 50 cst	Skin Conditioning	8.50
D: Isopropyl Myristate	Skin Conditioning	1.50
E: Absorbents	Absorbents	6.00
F: Fragrance	Perfume	0.30
G: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant Agent	4.00
H: Isobutane	Propellant	40.00

Procedure

1. Combine A, B, C and D. Mix well for about 10 min or until homogeneous.
2. Add E mix until uniform
3. Add G mix until uniform
4. Add F and mix 5 min
5. Place mixture into a suitable container and charge with H as specified.

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Example 6

The following composition according to the invention is a solid formulation.

TABLE 6

INGREDIENT	FUNCTION	% w/w
A: Volatile Silicone	Solvent	56.70
B: Stearyl Alcohol	Surfactant	20.00
C: PPG-3 Myristyl Ether	Skin Conditioning	5.00
D: PEG-8 Distearate	Surfactant	2.00
E: Talc	Absorbent	1.00
F: Silica	Absorbent	1.50
G: Polyethylene	Film Former	3.00
H: Absorbents	Absorbents	6.00
I: Fragrance	Perfume	0.80
J: Acetyl octapeptide-3 or dipeptide diaminobutyroyl benzylamide diacetate	Antiperspirant Agent	4.00

Procedure

1. Heat A to 65° C
2. Add C and D with stirring
3. Add B slowly. Maintain 65° C
4. Add E, F, G and H.
5. Cool to 60°C. Add I and J.
6. Pour into stick casings at 54°C.

Example 7

Using the ingredients in Table 7 and the procedure below, a comparative roll-on composition containing acetyl hexapeptide-8 was prepared.

TABLE 7

INGREDIENT	FUNCTION	% w/w
A: Aqua	Solvent	79.51
B: Steareth-2	Surfactant	3.00
C: Steareth-21	Surfactant	1.00
D: PPG-15 Stearyl Ether	Emollient	4.00
E: Ethylhexyglycerin; Caprylyl Glycol	Skin Conditioning Agent	1.00
F: Polyglyceryl-3 Caprylate	Emulsifying Agent	0.30
G: Citric acid	pH adjuster	0.68
H: Sodium Hydroxide	pH adjuster	0.01
I: Sodium Benzoate	Preservative	0.50
J: Acetyl Hexapeptide-8	Antiperspirant agent	10.00

Procedure:

1. Oily Phase: Combined B, C, D, E and F in an auxiliary tank. Started heating to 75-80°C.
2. Water Phase: Combined A and I in a main tank. Started heating to 75°-80°C.
3. Emulsification Step: Added oily phase over water phase (both 75-80°C). Mixed for 5 min. Homogenized for 4 min.
4. Cooling Step: Cooled the emulsion to 25° C. Added G, H and J. Mixed for 10 min.

Example 8

Using the ingredients in Table 8 and the procedure below, a roll-on composition containing acetyl cctapeptide-3 according to the invention was prepared.

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TABLE 8

INGREDIENT	FUNCTION	% w/w
A: Aqua	Solvent	79.51
B: Steareth-2	Surfactant	3.00
C: Steareth-21	Surfactant	1.00
D: PPG-15 Stearyl Ether	Emollient	4.00
E: Ethylhexyglycerin; Caprylyl Glycol	Skin Conditioning Agent	1.00
F: Polyglyceryl-3 Caprylate	Emulsifying Agent	0.30
G: Citric acid	pH adjuster	0.68
H: Sodium Hydroxide	pH adjuster	0.01
I: Sodium Benzoate	Preservative	0.50
J: Acetyl Octapeptide-3	Antiperspirant agent	10.00

Procedure:

1. Oily Phase: Combined B, C, D, E and F in an auxiliary tank. Started heating to 75-80° C.
2. Water Phase: Combined A and I in a main tank. Started heating to 75°-80° C.
3. Emulsification Step: Added oily phase over water phase (both 75-80 °C). Mixed for 5 min. Homogenized for 4 min.
4. Cooling Step: Cooled the emulsion to 25° C. Add G, H and J. Mixed it for 10 min.

Example 9

Using the ingredients in Table 9 and the procedure below, a roll-on composition containing dipeptide diaminobutyroyl benzylamide diacetate according to the invention was prepared.

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TABLE 9

INGREDIENT	FUNCTION	% w/w
A: Aqua	Solvent	84.46
B: Steareth-2	Surfactant	3.00
C: Steareth-21	Surfactant	1.00
D: PPG-15 Stearyl Ether	Emollient	4.00
E: Ethylhexyglycerin; Caprylyl Glycol	Skin Conditioning Agent	1.00
F: Polyglyceryl-3 Caprylate	Emulsifying Agent	0.30
G: Citric acid	pH adjuster	0.73
H: Sodium Hydroxide	pH adjuster	0.01
I: Sodium Benzoate	Preservative	0.50
J: Dipeptide Diaminobutyroyl Benzylamide Diacetate	Antiperspirant agent	5.00

Procedure:

1. Oily Phase: Combined B, C, D, E and F in an auxiliary tank. Started heating to 75-80° C.
2. Water Phase: Combined A and I in a main tank. Started heating to 75-80° C.
3. Emulsification Step: Added oily phase over water phase (both 75-80° C). Mixed for 5 min. Homogenized for 4 min.
4. Cooling Step: Cooled the emulsion to 25° C. Added G, H and J. Mixed it for 10 min.

Example 10

An *in vivo* study of the eight-hour antiperspirant efficacy of the compositions of Examples 7, 8 and 9 was performed as follows using the US FOOD AND DRUG ADMINISTRATION Guidelines for Effectiveness Testing of OTC Antiperspirant Drug Products, 2003. Example 7 was comparative, as indicated above.

Fifteen subjects were used to test each composition. Subjects were first subjected to a 21-day conditioning period, which began with a 14 day wash out period. During 14 day wash out period, the subjects used a standard bar soap and bacteriostatic deodorant supplied by the institute running the study. The subjects did not remove underarm hair. Following this, from day 15 to day 21 the subjects were instructed to use only standard soap and discontinue the bacteriostatic deodorant.

During the conditioning period, subjects were instructed and supervised by a trained technician to wash their underarms according to the following procedure: a) wash one of the underarms for 10 seconds with an aqueous solution of standard soap 2.0%; b) rinse thoroughly with running water until the soap is completely removed; c) dry the underarm with a paper towel; and d) repeat the procedure with the other underarm.

After the wash out period was completed, each subject was checked for unauthorized use of antiperspirant products during the conditioning period using a cotton swab in the underarms.

Next, a 30 day application period began. 150 cm^2, randomly distributed areas were marked on each subjects' underarm. Test samples were then applied to one underarm of each subject, while the other underarm was untreated as a control every day during the 30 day application period. Subjects waxed or shaved their underarms every Friday evening.

On day 30 of the 30 day application period, each subject was provided with a 100% cotton t-shirt previously washed with water and neutral soap without fragrance and again washed only with water. The subjects were instructed to wear the T-shirts for eight hours.

After eight hours, the subjects were placed in a room at 37.8° C ± 1° C and relative humidity between 30% and 40% for 80 minutes. After 40 minutes in the hot room, pads previously weighed and stored in closed polyethylene bags were removed from the bags and placed immediately onto the subjects' underarms, and then replaced every 20 minutes. Subjects ingested 200 mL of water when entering the hot room and also 40 minutes later in order to maintain the internal level of hydration, allowing the sweat to flow freely and evidencing

only the effects of the formulation of the product tested. The initial 40 minute period was considered as an acclimatization period.

Used pads were collected every 20 minutes and weighed. The weights of the pads pre- and post-use were compared according to the FDA Guidelines using statistical analysis with the Wilcoxon Signed Rank test (FDA protocol) and the Student-t test paired with the unilateral hypothesis of improvement for sweating assessment. The confidence level considered in the comparative analysis was 95%. Software: XLSTAT 2013 and MINITAB 14.

The results are shown in Table 10.

TABLE 10

Anticholinergic Agent	% of subjects with reduction in relation to control	Average % of sweat reduction (mg)
Acetyl Hexapeptide-8	66.7	8.0%
Acetyl Octapeptide-3	81.8	20.7
Diaminobutyroyl Benzylamide Diacetate	92.3	25.6

The compositions containing acetyl octapeptide-3 and dipeptide diaminobutyroyl benzylamide diacetate according to the invention reduced the sweat by an average of 20.7% and 25.6%, respectively, relative to the control for at least 50% of subjects (81.8% and 92.3%). This confirms antiperspirant activity. The FDA Guidelines call for a minimum of 20% sweat reduction in at least 50% volunteers. In contrast, the comparative composition containing acetyl hexapeptide-8 showed sweat reduction by an average of only 8.0% relative to the control, which did not meet success criteria.

We Claim:

1. A topical antiperspirant composition comprising a cosmetically acceptable topical carrier and an anticholinergic agent selected from the group consisting of acetyl octapeptide-3 and dipeptide diaminobutyroyl benzylamide diacetate in an amount effective to inhibit or prevent perspiration, wherein said composition is substantially free of aluminum salts.

2. The composition according to claim 1 comprising about 0.01 to about 30.0 w/w% of the anticholinergic agent.

3. The composition according to claim 1comprising about 0.1 to about 20.0 w/w% of acetyl octapeptide-3.

4. The composition according to claim 1 comprising about 0.05 to about 6.0 w/w% of dipeptide diaminobutyroyl benzylaminde diacetate.

5. The composition according to claim 1 further comprising a water absorbing agent.

ABSTRACT

The present invention relates to a topical antiperspirant composition comprising a cosmetically acceptable topical carrier and an anticholinergic agent selected from the group consisting of acetyl octapeptide-3 and dipeptide diaminobutyroyl benzylamide diacetate in an amount effective to inhibit or prevent perspiration, wherein said composition is substantially free of aluminum salts.

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Application Number	
Filing Date	
First Named Inventor	Glasiela Lemos Anconi
Title	ANTIPERSPIRANT COMPOSITION
Art Unit	
Examiner Name	
Attorney Docket Number	JCO5163USNP

SIGNATURE of Applicant or Patent Practitioner

Signature	/Sharon E. Hayner/	Date	December 19, 2014
Name	Sharon E. Hayner	Telephone	732-524-2242
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Signature	/Sharon E. Hayner/	Date	December 19, 2014
Name	Sharon E. Hayner	Telephone	732-524-2242
Title and Company	Assistant Secretary, Johnson & Johnson Consumer Companies, Inc.		

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JCO5163USNP
	Application Number	
Title of Invention	ANTIPERSPIRANT COMPOSITION	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JCO5163USNP
	Application Number	
Title of Invention	ANTIPERSPIRANT COMPOSITION	

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JCO5163USNP
	Application Number	
Title of Invention	ANTIPERSPIRANT COMPOSITION	

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Title of the Invention	ANTIPERSPIRANT COMPOSITION		
Attorney Docket Number	JCO5163USNP	**Small Entity Status Claimed** ☐	
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)		**Suggested Figure for Publication (if any)**	

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Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country i

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

PTO/AIA/14 (12-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	JCO5163USNP
	Application Number	
Title of Invention	ANTIPERSPIRANT COMPOSITION	

Please Select One:	(•) Customer Number	( ) US Patent Practitioner	( ) Limited Recognition (37 CFR 11.9)
Customer Number	27777		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the application number blank.

Prior Application Status			Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button. Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) [i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

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Application Number	Country [i]	Filing Date (YYYY-MM-DD)	Access Code [i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button. Add

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Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices

f checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), he Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), nd any other intellectual property offices in which a foreign application claiming priority to the instant patent application s filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant oes not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority o the instant patent application is filed to have access to the instant patent application.

n accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect o: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application laims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 7 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is ought in the instant patent application.

n accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

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Applicant 1 Remove

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

(•) Assignee ( ) Legal Representative under 35 U.S.C. 117 ( ) Joint Inventor

( ) Person to whom the inventor is obligated to assign. ( ) Person who shows sufficient proprietary interest

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor :

If the Applicant is an Organization check here. [X]

Organization Name	Johnson & Johnson Consumer Companies, Inc.		
Mailing Address Information:			
Address 1	Grandview Road		
Address 2			
City	Skillman	**State/Province**	NJ
Country [i]	US	Postal Code	08558
Phone Number	732-524-2242	Fax Number	732-524-2808
Email Address	jnjuspatent@corus.jnj.com		

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not subsitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication . An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

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If the Assignee or Non-Applicant Assignee is an Organization check here. [ ]

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Prefix	Given Name	Middle Name	Family Name	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications

Signature	/Sharon E. Hayner/			Date (YYYY-MM-DD)	2014-12-19
First Name	Sharon E.	Last Name	Hayner	Registration Number	33058

Additional Signature may be generated within this form by selecting the Add button. Add

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.