

Drigard & Castr
Abogados

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

REF.: Expediente No. 00 028.948 solicitud de Patente a nombre de
KIMBERLY – CLARK WORLDWIDE, INC.

RAMIRO CASTRO DUQUE, vecino de Bogotá, portador de la tarjeta profesional No. 1003 del Consejo Superior de la Judicatura, obrando como apoderado de la Sociedad KIMBERLY – CLARK WORLDWIDE, INC., según lo acredita el documento de poder protocolizado en la Secretaría General bajo el No. 17397, de acuerdo con el Artículo 44 de la Decisión 486 de la Comisión de la Comunidad Andina, me permito solicitar que se examine si la invención contenida en la solicitud en referencia es patentable.

De acuerdo con lo anterior, me permito anéjar el recibo oficial de caja No. 02-65,928 por valor de \$318.000.

Señor Superintendente,


RAMIRO CASTRO DUQUE
C.C. No. 170.322 de Bogotá
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Octubre 07, 2002
CPB/hsr



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Industria y Comercio

SUPERINTENDENCIA

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Fecha (AMD): 2002-10-08 16:11:53

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CONSIGNACION

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CONCEPTO

CANT.	RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1	50005-01-01 SOLICITUDES	85 EXAMEN DE PATENTABILIDAD DE INVEN	318,000.00
		TOTAL :	\$ 318,000.00

SON: TRESCIENTOS DIEZ Y OCHO MIL PESOS

RESPONSABLE : 

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

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(21) International Application Number: PCT/IB98/01362 (22) International Filing Date: 31 August 1998 (31.08.98) (30) Priority Data: 60/058,608 12 September 1997 (12.09.97) US 60/072,440 26 January 1998 (26.01.98) US 60/085,495 14 May 1998 (14.05.98) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: McATEE, David, Michael ; 6715 Sunny Drive, Mason, OH 45040 (US). NISSING, Nicholas, James ; 4702 Williamsburg Road, Cincinnati, OH 45215 (US). HASE-NOEHRL, Erik, John ; 3809 Aylesboro Avenue, Cincinnati, OH 45208 (US). CABELL, David, William ; 6646 Pownern-farm Drive, Cincinnati, OH 45248 (US). (74) Agents: REED, T., David et al. ; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).			(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>
(54) Title: CLEANSING AND CONDITIONING ARTICLE FOR SKIN OR HAIR			
(57) Abstract The present invention relates to a substantially dry, disposable, personal cleansing article useful for both cleansing the skin or hair, and more particularly to a disposable cleansing article having a substrate which preferably comprises of multiple layers. These articles are used by the consumer by wetting the dry article with water. The article comprises a water insoluble substrate having at least a first portion that is wet extensible and at least a second portion that is less wet extensible than said first portion and a lathering surfactant. Preferably, the articles of the present invention further comprise a conditioning component.			

isethionates include those alkoyl isethionates selected from the group consisting of ammonium cocoyl isethionate, sodium cocoyl isethionate, sodium lauroyl isethionate, and mixtures thereof.

The alkyl and alkyl ether sulfates typically have the respective formulae $ROSO_3M$ and $RO(C_2H_4O)_xSO_3M$, wherein R is alkyl or alkenyl of from about 10 to about 30 carbon atoms, x is from about 1 to about 10, and M is a water-soluble cation such as ammonium, sodium, potassium and triethanolamine. Another suitable class of anionic surfactants are the water-soluble salts of the organic, sulfuric acid reaction products of the general formula:

10 R_1--SO_3--M

wherein R₁ is chosen from the group consisting of a straight or branched chain, saturated aliphatic hydrocarbon radical having from about 8 to about 24, preferably about 10 to about 16, carbon atoms; and M is a cation. Still other anionic synthetic surfactants include the class designated as succinamates, olefin sulfonates having about 12 to about 24 carbon atoms, and b-alkyloxy alkane sulfonates. Examples of these materials are sodium lauryl sulfate and ammonium lauryl sulfate.

20 { Other anionic materials useful herein are soaps (i.e. alkali metal salts, e.g., sodium or potassium salts) of fatty acids, typically having from about 8 to about 24 carbon atoms, preferably from about 10 to about 20 carbon atoms. The fatty acids used in making the soaps can be obtained from natural sources such as, for instance, plant or animal-derived glycerides (e.g., palm oil, coconut oil, soybean oil, castor oil, tallow, lard, etc.) The fatty acids can also be synthetically prepared. Soaps are described in more detail in U.S. Patent No. 4,557,853, cited above.

25 Other anionic materials include phosphates such as monoalkyl, dialkyl, and trialkylphosphate salts.

30 Other anionic materials include alkanoyl sarcosinates corresponding to the formula $RCON(CH_3)CH_2CH_2CO_2M$ wherein R is alkyl or alkenyl of about 10 to about 20 carbon atoms, and M is a water-soluble cation such as ammonium, sodium, potassium and alkanolamine (e.g., triethanolamine), a preferred examples of which are sodium lauroyl sarcosinate, sodium cocoyl sarcosinate, ammonium lauroyl sarcosinate, and sodium myristoyl sarcosinate. TEA salts of sarcosinates are also useful.

35 Also useful are taurates which are based on taurine, which is also known as 2-aminoethanesulfonic acid. Especially useful are taurates having carbon chains between C8 and C16. Examples of taurates include N-alkyltaurines such as the one prepared by reacting dodecylamine with sodium isethionate according to the teaching of U.S. Patent 2,658,072 which is incorporated herein by reference in its entirety. Further nonlimiting

examples include ammonium, sodium, potassium and alkanolamine (e.g., triethanolamine) salts of lauroyl methyl taurate, myristoyl methyl taurate, and cocoyl methyl taurate.

Also useful are lactylates, especially those having carbon chains between C8 and C16. Nonlimiting examples of lactylates include ammonium, sodium, potassium and alkanolamine (e.g., triethanolamine) salts of lauroyl lactylate, cocoyl lactylate, lauroyl lactylate, and caproyl lactylate.

Also useful herein as anionic surfactants are glutamates, especially those having carbon chains between C8 and C16. Nonlimiting examples of glutamates include ammonium, sodium, potassium and alkanolamine (e.g., triethanolamine) salts of lauroyl glutamate, myristoyl glutamate, and cocoyl glutamate.

Nonlimiting examples of preferred anionic lathering surfactants useful herein include those selected from the group consisting of sodium lauryl sulfate, ammonium lauryl sulfate, ammonium laureth sulfate, sodium laureth sulfate, sodium trideceth sulfate, ammonium cetyl sulfate, sodium cetyl sulfate, ammonium cocoyl isethionate, sodium lauroyl isethionate, sodium lauroyl lactylate, triethanolamine lauroyl lactylate, sodium caproyl lactylate, sodium lauroyl sarcosinate, sodium myristoyl sarcosinate, sodium cocoyl sarcosinate, sodium lauroyl methyl taurate, sodium cocoyl methyl taurate, sodium lauroyl glutamate, sodium myristoyl glutamate, and sodium cocoyl glutamate and mixtures thereof.

Especially preferred for use herein is ammonium lauryl sulfate, ammonium laureth sulfate, sodium lauroyl sarcosinate, sodium cocoyl sarcosinate, sodium myristoyl sarcosinate, sodium lauroyl lactylate, and triethanolamine lauroyl lactylate.

Nonionic Lathering Surfactants

Nonlimiting examples of nonionic lathering surfactants for use in the compositions of the present invention are disclosed in McCutcheon's, Detergents and Emulsifiers, North American edition (1986), published by Allured Publishing Corporation; and McCutcheon's, Functional Materials, North American Edition (1992); both of which are incorporated by reference herein in their entirety.

Nonionic lathering surfactants useful herein include those selected from the group consisting of alkyl glucosides, alkyl polyglucosides, polyhydroxy fatty acid amides, alkoxyated fatty acid esters, lathering sucrose esters, amine oxides, and mixtures thereof.

Alkyl glucosides and alkyl polyglucosides are useful herein, and can be broadly defined as condensation articles of long chain alcohols, e.g. C8-30 alcohols, with sugars or starches or sugar or starch polymers, i.e., glycosides or polyglycosides. These compounds can be represented by the formula (S)_n-O-R wherein S is a sugar moiety such as glucose, fructose, mannose, and galactose; n is an integer of from about 1 to about 1000, and R is a C8-30 alkyl group. Examples of long chain alcohols from which the alkyl group can be

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Standard tabulations of heat of vaporization and molar volume additive group contributions for a wide variety of atoms and groups of atoms are collected in Barton, A.F.M. Handbook of Solubility Parameters, CRC Press, Chapter 6, Table 3, pp. 64-66 (1985), which is incorporated by reference herein in its entirety. The above solubility parameter equation is described in Fedors, R.F., "A Method for Estimating Both the Solubility Parameters and Molar Volumes of Liquids", Polymer Engineering and Science, vol. 14, no. 2, pp. 147-154 (February 1974), which is incorporated by reference herein in its entirety.

Solubility parameters obey the law of mixtures such that the solubility parameter for a mixture of materials is given by the weighted arithmetic mean (i.e. the weighted average) of the solubility parameters for each component of that mixture. See, Handbook of Chemistry and Physics, 57th edition, CRC Press, p. C-726 (1976-1977), which is incorporated by reference herein in its entirety.

Formulation chemists typically report and use solubility parameters in units of $(\text{cal}/\text{cm}^3)^{1/2}$. The tabulated values of additive group contributions for heat of vaporization in the Handbook of Solubility Parameters are reported in units of kJ/mol. However, these tabulated heat of vaporization values are readily converted to cal/mol using the following well-known relationships:

$$1 \text{ J/mol} = 0.239006 \text{ cal/mol} \quad \text{and} \quad 1000 \text{ J} = 1 \text{ kJ.}$$

See Gordon, A.J. et al., The Chemist's Companion, John Wiley & Sons, pp. 456-463, (1972), which is incorporated by reference herein in its entirety.

Solubility parameters have also been tabulated for a wide variety of chemical materials. Tabulations of solubility parameters are found in the above-cited Handbook of Solubility Parameters. Also, see "Solubility Effects In Product, Package, Penetration, And Preservation", C.D. Vaughan, Cosmetics and Toiletries, vol. 103, October 1988, pp. 47-69, which is incorporated by reference herein in its entirety.

Nonlimiting examples of conditioning agents useful as oil soluble conditioning agents include those selected from the group consisting of mineral oil, petrolatum, C7-C40 branched chain hydrocarbons, C1-C30 alcohol esters of C1-C30 carboxylic acids, C1-C30 alcohol esters of C2-C30 dicarboxylic acids, mono-glycerides of C1-C30 carboxylic acids, diglycerides of C1-C30 carboxylic acids, triglycerides of C1-C30 carboxylic acids, ethylene glycol monoesters of C1-C30 carboxylic acids, ethylene glycol diesters of C1-C30 carboxylic acids, propylene glycol monoesters of C1-C30 carboxylic acids, propylene glycol diesters of C1-C30 carboxylic acids, C1-C30 carboxylic acid monoesters and polyesters of sugars, polydialkylsiloxanes, polydiarylsiloxanes, polyalkarylsiloxanes,

cylcomethicones having 3 to 9 silicon atoms, vegetable oils, hydrogenated vegetable oils, polypropylene glycol C4-C20 alkyl ethers, di C8-C30 alkyl ethers, and mixtures thereof.

Mineral oil, which is also known as petrolatum liquid, is a mixture of liquid hydrocarbons obtained from petroleum. See The Merck Index, Tenth Edition, Entry 7048, p. 1033 (1983) and International Cosmetic Ingredient Dictionary, Fifth Edition, vol. 1, p.415-417 (1993), which are incorporated by reference herein in their entirety.

Petrolatum, which is also known as petroleum jelly, is a colloidal system of nonstraight-chain solid hydrocarbons and high-boiling liquid hydrocarbons, in which most of the liquid hydrocarbons are held inside the micelles. See The Merck Index, Tenth Edition, Entry 7047, p. 1033 (1983); Schindler, Drug. Cosmet. Ind., 89, 36-37, 76, 78-80, 82 (1961); and International Cosmetic Ingredient Dictionary, Fifth Edition, vol. 1, p. 537 (1993), which are incorporated by reference herein in their entirety.

Straight and branched chain hydrocarbons having from about 7 to about 40 carbon atoms are useful herein. Nonlimiting examples of these hydrocarbon materials include dodecane, isododecane, squalane, cholesterol, hydrogenated polyisobutylene, docosane (i.e. a C22 hydrocarbon), hexadecane, isohexadecane (a commercially available hydrocarbon sold as Permethyl® 101A by Presperse, South Plainfield, NJ). Also useful are the C7-C40 isoparaffins, which are C7-C40 branched hydrocarbons.

Also useful are C1-C30 alcohol esters of C1-C30 carboxylic acids and of C2-C30 dicarboxylic acids, including straight and branched chain materials as well as aromatic derivatives. Also useful are esters such as monoglycerides of C1-C30 carboxylic acids, diglycerides of C1-C30 carboxylic acids, triglycerides of C1-C30 carboxylic acids, ethylene glycol monoesters of C1-C30 carboxylic acids, ethylene glycol diesters of C1-C30 carboxylic acids, propylene glycol monoesters of C1-C30 carboxylic acids, and propylene glycol diesters of C1-C30 carboxylic acids. Straight chain, branched chain and aryl carboxylic acids are included herein. Also useful are propoxylated and ethoxylated derivatives of these materials. Nonlimiting examples include diisopropyl sebacate, diisopropyl adipate, isopropyl myristate, isopropyl palmitate, myristyl propionate, ethylene glycol distearate, 2-ethylhexyl palmitate, isodecyl neopentanoate, di-2-ethylhexyl maleate, cetyl palmitate, myristyl myristate, stearyl stearate, cetyl stearate, behenyl behenrate, dioctyl maleate, dioctyl sebacate, diisopropyl adipate, cetyl octanoate, diisopropyl dilinoleate, caprylic/capric triglyceride, PEG-6 caprylic/capric triglyceride, PEG-8 caprylic/capric triglyceride, and mixtures thereof.

Also useful are various C1-C30 monoesters and polyesters of glycerin and related materials. These esters are derived from glycerin and one or more carboxylic acid moieties. Depending on the constituent acid and glycerin, these esters can be in either liquid or solid

R₃SiO[R₂SiO]_xSiR₃ wherein R is an alkyl group (preferably R is methyl or ethyl, more preferably methyl) and x is an integer up to about 500, chosen to achieve the desired molecular weight. Commercially available polyalkylsiloxanes include the polydimethylsiloxanes, which are also known as dimethicones, nonlimiting examples of which include the Vicasil® series sold by General Electric Company and the Dow Corning® 200 series sold by Dow Corning Corporation. Specific examples of polydimethylsiloxanes useful herein include Dow Corning® 225 fluid having a viscosity of 10 centistokes and a boiling point greater than 200°C, and Dow Corning® 200 fluids having viscosities of 50, 350, and 12,500 centistokes, respectively, and boiling points greater than 200°C. Also useful are materials such as trimethylsiloxysilicate, which is a polymeric material corresponding to the general chemical formula [(CH₃)₃SiO_{1/2}]_x[SiO₂]_y, wherein x is an integer from about 1 to about 500 and y is an integer from about 1 to about 500. A commercially available trimethylsiloxysilicate is sold as a mixture with dimethicone as Dow Corning® 593 fluid. Also useful herein are dimethiconols, which are hydroxy terminated dimethyl silicones. These materials can be represented by the general chemical formulas R₃SiO[R₂SiO]_xSiR₂OH and HOR₂SiO[R₂SiO]_xSiR₂OH wherein R is an alkyl group (preferably R is methyl or ethyl, more preferably methyl) and x is an integer up to about 500, chosen to achieve the desired molecular weight. Commercially available dimethiconols are typically sold as mixtures with dimethicone or cyclomethicone (e.g. Dow Corning® 1401, 1402, and 1403 fluids). Also useful herein are polyalkylaryl siloxanes, with polymethylphenyl siloxanes having viscosities from about 15 to about 65 centistokes at 25°C being preferred. These materials are available, for example, as SF 1075 methylphenyl fluid (sold by General Electric Company) and 556 Cosmetic Grade phenyl trimethicone fluid (sold by Dow Corning Corporation).

Vegetable oils and hydrogenated vegetable oils are also useful herein. Examples of vegetable oils and hydrogenated vegetable oils include safflower oil, castor oil, coconut oil, cottonseed oil, menhaden oil, palm kernel oil, palm oil, peanut oil, soybean oil, rapeseed oil, linseed oil, rice bran oil, pine oil, sesame oil, sunflower seed oil, hydrogenated safflower oil, hydrogenated castor oil, hydrogenated coconut oil, hydrogenated cottonseed oil, hydrogenated menhaden oil, hydrogenated palm kernel oil, hydrogenated palm oil, hydrogenated peanut oil, hydrogenated soybean oil, hydrogenated rapeseed oil, hydrogenated linseed oil, hydrogenated rice bran oil, hydrogenated sesame oil, hydrogenated sunflower seed oil, and mixtures thereof.

Also useful are C₄-C₂₀ alkyl ethers of polypropylene glycols, C₁-C₂₀ carboxylic acid esters of polypropylene glycols, and di-C₈-C₃₀ alkyl ethers. Nonlimiting examples of

soluble agents as described hereinbefore in the oil soluble conditioning agent section or hereinafter in the "Materials Used to Increase Lipid Hardness Value" section. In further embodiments, the conditioning emulsion further comprises an emulsifier capable of forming an emulsion of said internal and external phases. Although an emulsifier capable of forming an emulsion of the internal and external phases is preferred in the present invention, it is recognized in the art of skin care formulations that a water soluble conditioning agent can be enveloped by an oil soluble agent without an emulsifier. As long as the water soluble conditioning agent is enveloped by the oil soluble agent, thereby protected from being rinsed away during the cleansing process, the composition would be within the scope of the present invention.

The internal phase can optionally comprise other water-soluble or dispersible materials that do not adversely affect the stability of the conditioning emulsion. One such material is a water-soluble electrolyte. The dissolved electrolyte minimizes the tendency of materials present in the lipid phase to also dissolve in the water phase. Any electrolyte capable of imparting ionic strength to the internal phase can be used. Suitable electrolytes include the water soluble mono-, di- or trivalent inorganic salts such as water-soluble halides, e.g., chlorides, nitrates and sulfates of alkali metals and alkaline earth metals. Examples of such electrolytes include sodium chloride, calcium chloride, sodium sulfate, magnesium sulfate, and sodium bicarbonate. The electrolyte will typically be included in a concentration in the range of from about 1 to about 20% of the internal phase.

Other water-soluble or dispersible materials that can be present in the internal phase include thickeners and viscosity modifiers. Suitable thickeners and viscosity modifiers include water-soluble polyacrylic and hydrophobically modified polyacrylic resins such as Carbopol and Pemulen, starches such as corn starch, potato starch, tapioca, gums such as guar gum, gum arabic, cellulose ethers such as hydroxypropyl cellulose, hydroxyethyl cellulose, carboxymethyl cellulose, and the like. These thickeners and viscosity modifiers will typically be included in a concentration in the range of from about 0.05 to about 0.5% of the internal phase.

Other water soluble or dispersible materials that can be present in the internal water phase include polycationic polymers to provide steric stabilization at the water-lipid interface and nonionic polymers that also stabilize the water-in-lipid-emulsion. Suitable polycationic polymers include Reten 201, Kymene 557H® and Acco 7112. Suitable nonionic polymers include polyethylene glycols (PEG) such as Carbowax. These polycationic and nonionic polymers will typically be included in a concentration in the range of from about 0.1 to about 1.0% of the internal phase.

Preferred embodiments of the present invention which contain conditioning emulsions comprise an emulsifier capable of forming an emulsion of the internal and

Suitable highly branched hydrocarbons for use herein include hydrocarbon compounds having from about 17 to about 40 carbon atoms. Nonlimiting examples of these hydrocarbon compounds include squalane, cholesterol, lanolin, docosane (i.e. a C22 hydrocarbon), and isoparaffins.

5 Suitable fatty alcohols for use herein include monohydric alcohols, ethoxylated fatty alcohols, and fatty alcohol esters, excluding the ethoxylated fatty alcohols and fatty alcohol esters useful as emulsifiers herein. Specific examples of commercially available fatty alcohols include, but are not limited to, Unilin 550, Unilin 700, Unilin 425, Unilin 400, Unilin 350, and Unilin 325, all supplied by Petrolite. Suitable ethoxylated fatty
10 alcohols include, but are not limited, Unithox 325, Unithox 400, and Unithox 450, Unithox 480, Unithox 520, Unithox 550, Unithox 720, Unithox 750, all of which are available from Petrolite. Non-limiting examples of suitable esters of fatty alcohols include tri-isostearyl citrate, ethyleneglycol di-12-hydroxystearate, tristearylcitrate, stearyl octanoate, stearyl heptanoate, triaurylcitrate.

15 Suitable fatty acid esters for use herein include ester waxes, monoglycerides, diglycerides, triglycerides and mixtures thereof. Non-limiting examples of suitable ester waxes include stearyl stearate, stearyl behenate, palmityl stearate, stearyl octyldodecanol, cetyl esters, cetearyl behenate, behenyl behenate, ethylene glycol distearate, ethylene glycol dipalmitate, and beeswax. Examples of commercial ester waxes include Kester
20 waxes from Koster Keunen, Crodamol SS from Croda and Demalcare SPS from Rhone Poulenc.

 Vegetable oils and hydrogenated vegetable oils which are solid or semi-solid at ambient temperatures of from about 20°C to about 25°C are also useful herein as hardening materials. Examples of suitable vegetable oils and hydrogenated vegetable oils include
25 butterfat, chicken fat, goose fat, horse fat, lard (fatty tissue) oil, rabbit fat, sardine oil, tallow (beef), tallow (mutton), chinese vegetable tallow, babassu oil, cocoa butter, coconut oil, palm oil, palm kernal oil, hydrogenated safflower oil, hydrogenated castor oil, hydrogenated coconut oil, hydrogenated cottonseed oil, hydrogenated menhaden oil, hydrogenated palm kernel oil, hydrogenated palm oil, hydrogenated peanut oil,
30 hydrogenated soybean oil, hydrogenated rapeseed oil, hydrogenated linseed oil, hydrogenated rice bran oil, hydrogenated sesame oil, hydrogenated sunflower seed oil, derivatives thereof and mixtures thereof.

 Suitable polypropylene glycols for use herein include C4-C16 alkyl ethers of polypropylene glycols, and C1-C16 carboxylic acid esters of polypropylene glycols.
35 Nonlimiting examples of these materials include PPG-14 butyl ether, PPG-15 stearyl ether, PPG-9, PPG-12, PPG-15, PPG-17, PPG-20, PPG-26, PPG-30, PPG-34, and mixtures thereof.

Examples of suitable alpha-hydroxy fatty acids and fatty acids having from about 10 to about 40 carbon atoms include 12-hydroxystearic acid, 12-hydroxylauric acid, 16-hydroxyhexadecanoic acid, behenic acid, eurcic acid, stearic acid, caprylic acid, lauric acid, isostearic acid, and mixtures thereof. Examples of some suitable fatty acids are further
5 described in U.S. Patent 5,429,816, issued to Hofrichter et al. on July 4, 1995; and U.S. Patent 5,552,136, issued to Motley on September 3, 1996, which descriptions are incorporated herein by reference.

Suitable alkyl amides of di and/or tri-basic carboxylic acids for use herein include disubstituted or branched monoamides, monosubstituted or branched diamides, triamides,
10 and mixtures thereof. Some specific examples of alkyl amides of di- and tri-basic carboxylic acids include, but are not limited to, alkyl amides of citric acid, tricarballic acid, aconitic acid, nitrilotriacetic acid and itaconic acid such as 1,2,3-propane tributylamide, 2-hydroxy-1,2,3-propane tributylamide, 1-propene-1,2,3-trioctylamide, N,N,N'-tri(methyldecylamide)amine, 2 docecyl-N,N'-dibutylsuccinamide, and mixtures
15 thereof. Other suitable amides include the n-acyl amino acid derivatives described in U.S. Patent 5,429,816, issued to Hofrichter et al. on July 4, 1995.

Also suitable for use in the present invention are waxes having a HLB of from about 1 to about 10, preferably from about 6 and most preferably from about 5. The HLB (short for "Hydrophile-Lipophile Balance") value system is fully described, and values for
20 various materials are provided, in the publication The Time-Saving Guide to Emulsifier Selection (published by ICI Americas Inc., Wilmington, Del.; 1984), the disclosure of which are incorporated herein by reference in their entirety.

Useful ester waxes include C10-C40 fatty acid, diesters, of C10-C40 fatty acids where the alcohol is propylene glycol, ethylene glycol, polyethylene glycol, polypropylene
25 glycol, polyglycerin, or glycerin, triglycerides or diglycerides of C10-C40 fatty acids, pentaerythritol tri- or tetra- esters of C10-C40 fatty acids, C10-C40 fatty acids of sorbitan triesters, C10-C40 fatty acids of sucrose polyesters having 3-8 moles of substitution, myristyl myristate, paraffin, synthetic waxes such as Fischer-Tropsche waxes, microcrystalline waxes, castor wax, partially hydrogenated vegetable oils, behenyl
30 behenrate and myristyl propionate and mixtures thereof.

Useful diester waxes include Synchrowax ERL-C (C18-36 acid glycolester) (available from Croda) and propylene glycol diester waxes including ethylene glycol distearate and glycol distearate. Useful triglyceride waxes include Shea Butter, Cocoa Butter, Synchrowax HGL-C (C18-36 acid triglyceride), Synchrowax HRC (tribehenin),
35 Synchrowax HRS-C [tribehenin (and) calcium behenate] (all available from Croda Inc.), Tristearin, trimyristate and fully hydrogenated vegetable oils and mixtures thereof.

Preferred is a mixture of diester and triglyceride waxes in a ratio of from about 5:1 to about 1:1 and more preferably from about 4:1 to about 1:1.

Waxes useful in the compositions of this invention are disclosed in the following, all of which are incorporated by reference herein in their entirety: U.S. Pat No. 5,219,558 to Woodin, Jr. et al., issued June 15, 1993; U.S. Pat. No. 4,049,792, to Elsnau, issued Sept. 20, 1977; U.S. Pat. No. 4,151,272, to Geary et al., issued Apr. 24, 1975; U.S. Pat. No. 4,229,432, to Geria, issued Oct. 21, 1980; U.S. Pat No. 4,280,994, to Turney, issued Jul. 28, 1981; U.S. Pat. No. 4,126,679, to Davy et al., issued Nov. 21, 1978; and European Patent Application Publication Number 117,070 to May, published Aug. 29, 1984, "The Chemistry and Technology of Waxes", A. H. Warth, 2nd Edition, reprinted in 1960, Reinhold Publishing Corporation, pp. 391-393 and 421; "The Petroleum Chemicals Industry", R. F. Goldstein and A. L. Waddeam, 3rd Edition (1967), E & F.N. Span Ltd., pp. 33-40; "The Chemistry and Manufacture of Cosmetics", M. G. DeNavarre, 2nd Edition (1970), Van Nostrand & Company, pp. 354-376; and in "Encyclopedia of Chemical Technology", Vol. 24, Kirk-Othmer, 3rd Edition (1979) pp. 466-481.

Additional non-limiting examples of useful hardening materials are those selected from the group consisting of sorbitan esters, glyceryl esters, polyglyceryl esters, methyl glucose esters, sucrose esters, ethoxylated fatty alcohols, hydrogenated castor oil ethoxylates, sorbitan ester ethoxylates, polymeric emulsifiers, and silicone emulsifiers.

Sorbitan esters are useful in the present invention. Preferable are sorbitan esters of C16-C22 saturated, unsaturated and branched chain fatty acids. Because of the manner in which they are typically manufactured, these sorbitan esters usually comprise mixtures of mono-, di-, tri-, etc. esters. Representative examples of suitable sorbitan esters include sorbitan monooleate (e.g., SPAN® 80), sorbitan sesquileate (e.g., Arlacel® 83), sorbitan monoisostearate (e.g., CRILL® 6 made by Croda), sorbitan stearates (e.g., SPAN® 60), sorbitan triooleate (e.g., SPAN® 85), sorbitan tristearate (e.g., SPAN® 65), sorbitan dipalmitates (e.g., SPAN® 40), and sorbitan isostearate. Sorbitan monoisostearate and sorbitan sesquileate are particularly preferred emulsifiers for use in the present invention.

Other suitable hardeners for use in the present invention include, but is not limited to, glyceryl monoesters, preferably glyceryl monoesters of C16-C22 saturated, unsaturated and branched chain fatty acids such as glyceryl oleate, glyceryl monostearate, glyceryl monopalmitate, glyceryl monobenate, and mixtures thereof; polyglyceryl esters of C16-C22 saturated, unsaturated and branched chain fatty acids, such as polyglyceryl-4 isostearate, polyglyceryl-3 oleate, diglycerol monooleate, tetraglycerol monooleate and mixtures thereof; methyl glucose esters, preferably methyl glucose esters of C16-C22 saturated, unsaturated and branched chain fatty acids such as methyl glucose dioleate, methyl glucose sesquiisostearate, and mixtures thereof; sucrose fatty acid esters, preferably

Skin Barrier Repair Actives:

Skin barrier repair actives are those skin care actives which can help repair and replenish the natural moisture barrier function of the epidermis. Nonlimiting examples of skin barrier repair actives include brassicasterol; caffeine; campesterol; canola derived sterols; CERAMAX (available from Quest, located in Ashford, England); CERAMIDE 2 and CERAMIDE HO3™ (both available from SeJerna); CERAMIDE II and CERAMIDE III (both available from Quest); IIIB (available from Cosmoform, located in Delft, Netherlands); CERAMIDE LS 3773 (available from Laboratories Serobiologiques); CERAMINOL (available from Inocorn); cholesterol; cholesterol hydroxystearate; cholesterol isostearate; 7 dehydrocholesterol; DERMATEIN BRC and DERMATEIN GSL (both available from Hormel); ELDEW CL 301 AND ELDEW PS 203 (both available from Ajinomoto); glyceryl serine amide; lactic acid; lanolin alcohols; lanosterol; lauric acid N laurylglucamide; lipoic acid; N-acetyl cysteine; N-acetyl-L-serine; N methyl-L-Serine; vitamin B3 compounds (such as niacinamide and nicotinic acid); palmitic acid; panthenol; panthetine; phosphodiesterase inhibitors; PHYTO/CER (available from Intergen); phytyglycolipid millet extract (available from Barnet Products Distributer, located in Englewood, NJ); PHYTOSPHINGOSINE (available from Gist Brocades, located in King of Prussia, PA); PSENDOPILAGGRIN (available from Brooks Industries, located in South Plainfield, NJ); QUESTAMIDE H (available from Quest); serine; sigmasterol; sitosterol; soybean derived sterols; sphingosine; S-lactoyl glutathione; stearic acid; SUPER STEROL ESTERS (available from Croda); thioctic acid; THSC CERAMIDE OIL (available from Campo Research); trimethyl glycine; tocopheryl nicotinate; vitamin D3; Y2 (available from Ocean Pharmaceutical); and mixtures thereof.

25 Non-steroidal Cosmetic Soothing Actives:

Cosmetic soothing actives can be effective in preventing or treating inflammation of the skin. The soothing active enhances the skin appearance benefits of the present invention, e.g., such agents contribute to a more uniform and acceptable skin tone or color. The exact amount of anti-inflammatory agent to be used in the compositions will depend on the particular anti-inflammatory agent utilized since such agents vary widely in potency. Nonlimiting examples of cosmetic soothing agents include the following categories: propionic acid derivatives; acetic acid derivatives; fenamic acid derivatives; biphenylcarboxylic acid derivatives; and oxicams. All of these cosmetic soothing actives are fully described in U.S. Patent 4,985,459 to Sunshine et al., issued January 15, 1991, incorporated by reference herein in its entirety. Nonlimiting examples of useful cosmetic soothing actives include acetyl salicylic acid, ibuprofen, naproxen, benoxaprofen, flurbiprofen, fenoprofen, fenbufen, ketoprofen, indoprofen, piroprofen, carprofen, oxaprozin,

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chloride, dimyristyl dimethyl ammonium chloride, dipalmityl dimethyl ammonium chloride, distearyl dimethyl ammonium chloride, and mixtures thereof.

Other Optional Ingredients

5 The articles of the present invention can comprise a wide range of other optional components. These additional components should be pharmaceutically acceptable. The CITA Cosmetic Ingredient Handbook, Second Edition, 1992, which is incorporated by reference herein in its entirety, describes a wide variety of nonlimiting cosmetic and pharmaceutical ingredients commonly used in the skin care industry, which are suitable for
10 use in the compositions of the present invention. Nonlimiting examples of functional classes of ingredients are described at page 537 of this reference. Examples of these and other functional classes include: abrasives, absorbents, anticaking agents, antioxidants, vitamins, binders, biological additives, buffering agents, bulking agents, chelating agents, chemical additives, colorants, cosmetic astringents, cosmetic biocides, denaturants, drug
15 { astringents, external analgesics, film formers, fragrance components, humectants, opacifying agents, pH adjusters, preservatives, propellants, reducing agents, skin bleaching agents, and sunscreens agents.

Also useful herein are aesthetic components such as fragrances, pigments, colorings, essential oils, skin sensates, astringents, skin soothing agents, and skin healing
20 agents.

METHODS OF MANUFACTURE

The disposable, single use personal care cleansing and conditioning articles of the present invention are manufactured by separately or simultaneously adding onto or
25 impregnating into a water insoluble substrate having at least a wet extensible portion a lathering surfactant and a conditioning component, wherein said resulting article is substantially dry. By "separately" is meant that the surfactants and conditioning agents can be added sequentially, in any order without first being combined together. By "simultaneously" is meant that the surfactants and conditioning agents can be added at the
30 same time, with or without first being combined together. The lathering surfactant and/or the conditioning component can also be added onto or impregnated into either layers (100 or 200) in any sequence. Alternatively, the lathering surfactant and/or the conditioning component can be added onto or impregnated into the resulting combination of the first layer 100 and the second layer 200. Treatment with the lather surfactant and/or the
35 conditioning component can be achieved at anytime before or after joining the first layer 100 and the second layer 200. Despite the order of treatment, excess surfactant and/or conditioning component should be removed (e.g., by a nipping process). Thereafter, the

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(21) International Application Number: PCT/US97/03169 (22) International Filing Date: 28 February 1997 (28.02.97) (30) Priority Data: 08/609,588 1 March 1996 (01.03.96) US Not furnished 27 February 1997 (27.02.97) US		A. [US/US]: 29 Moale Road, Gladstone, NJ 07934 (US). HAMADA, Sachio [JP/FR]: 35, rue Croix-de-Fer, F-78100 Saint-Germain (FR). COLE, Curtis, A. [US/US]: 215 Hampton Drive, Langhorne, PA 19047 (US). WISNIEWSKI, Stephen, J. [US/US]: 6280 Point Pleasant Pike, Doylestown, PA 18901 (US). (74) Agents: CIAMPORCERO, Audley, A., Jr. et al.; Johnson & Johnson, One Johnson & Johnson Plaza, New Brunswick, NJ 08933-7003 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KO, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (80) Date of publication of the international search report: 8 January 1998 (08.01.98)	
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(54) Title: TOPICAL COMPOSITIONS COMPRISING AN OIL-IN-WATER EMULSION AND A RETINOID			
(57) Abstract			
Skin care compositions comprising an oil-in-water emulsion base containing retinoids and possessing good physical and chemical stability, comprising a stabilizing system selected from the group consisting of: a) at least one oil-soluble antioxidant; b) a chelating agent and at least one oil-soluble antioxidant; c) a chelating agent; and d) a chelating agent and an antioxidant present in each of the oil and water phases of said emulsion.			

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Two particularly preferred emulsification systems include (a) a mixture of glyceryl stearate and polyethylene glycol 100 stearate and (b) cetearyl alcohol and cetearyl glucoside. These emulsification systems permit the water and oil phases to be combined such that the oil phase forms droplets in the water phase. When
5 incorporating system (a) into a composition of this invention, the ratio of glyceryl stearate to polyethylene glycol 100 stearate should be from about 1:1. When incorporating system (b) into a composition of this invention, the ratio of cetearyl alcohol to cetearyl glucoside should be from about 6:1 to about 3:1. The amount of emulsifier present in the compositions of this invention should be from about 1 to
10 about 10 weight percent. More preferably, from about 1 to about 6 weight percent should be used. Most preferably, from about 1 to about 5 weight percent should be used.

In order to maintain the droplets as separate entities, and to prevent the phases from separating, accessory emulsifiers or "co-emulsifiers" are often utilized. These
15 co-emulsifiers prevent the oil phase from coalescing or creaming and keep the phases physically stable as an emulsion prior to application to the skin. They lend "body" to the emulsion and give the formulation its character as a lotion or a cream by imparting viscosity to the composition. It has been found that particularly useful co-emulsifiers are fatty alcohols such as cetyl and stearyl alcohols and the like.
20 Preferably, a mixture of cetyl and stearyl alcohols should be used as the co-emulsifier in most cases. Preferably, the ratio of cetyl alcohol to stearyl alcohol should be from about 2:1 to about 1:2. Preferably, the co-emulsifier should compose from about 1 to about 5 weight percent of the composition. The preferred ratio of emulsifier to co-emulsifier is from about 3:1 to about 1:10. More preferably, the ratio should be
25 from about 3:1 to about 1:3.

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- values. Accordingly, an oil phase having an unsaturation density or total C of 1200 or less and preferably 500 or less should be used in the formulations of this invention. It is theorized that saturated oils and/or fats are less reactive than unsaturated oils and fats, due to the presence of reactive double bonds in unsaturated oils and fats, which
- 5 can initiate reactions with the retinoids and other materials in the compositions of this invention. Synthetic oils that are useful are fatty acid esters, fatty alcohols, for example, octyl hydroxystearate, cetyl palmitate, cetyl alcohol, glyceryl stearate and PEG-100 stearate, stearyl alcohol, octyl pelargonate and the like. Examples of preferred oils are as follows: Finsolv TN (available from Finetex of New Jersey),
- 10 Miglyol 812 (available from Huls Corporation of New York), silicone oil (Dow Corning of Michigan), mineral oil, and the like, having very low iodine values are also quite useful in the compositions of this invention. Furthermore, the percentage of the oil present in the compositions of this invention is also relevant: the lower the percentage of high-iodine value oil, the more stable the retinoid in the composition.
- 15 When the emulsion compositions of this invention are applied to the skin, the aqueous portions of the compositions volatilize, while the non-volatile portion of the compositions of this invention remain upon the skin. The oil phase components along with the co-emulsifiers and emulsifiers make up this non-volatile portion of the compositions. Thus, the esthetics of the non-volatile portion are quite important in
- 20 making the compositions of this invention.
- It is desirable to compose an oil phase containing both at least one "dry" absorbable emollient oil and at least one substantive oil or wax. A dry absorbable emollient oil is needed for the purpose of quickly absorbing the composition into the skin. This dry absorbable emollient oil is generally not greasy, a desirable attribute.
- 25 However, this attribute can be unpleasant if the dry absorbable oil is the only oil in the oil phase. Because such an oil is easily absorbed, it leaves no positive "feel" on

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the skin. Therefore, it should be balanced with one or more substantive skin conditioning oils or waxes, which are soothing and coat the skin, leaving an "afterfeel" perceptible to the user. These substantive oils and waxes have these desirable traits, but, when used in excess, can leave a greasy feeling on the skin.

- 5 Thus, the benefit of the emulsion base of this invention is that it balances the esthetics of the compositions with respect to the oil phase and has the capability of rebalancing it with respect to other ingredients which may provide active skin conditioning and/or therapeutic benefits. Preferably, the ratio of dry absorbable emollient oil to substantive skin conditioning oils is from about 1:3 to about 10:1. More preferably,
- 10 the ratio is from about 1:3 to about 5:1. Most preferably, the ratio should be about 1:1. The dry absorbable emollient is most preferably C12-15 alkyl benzoate (commercially available as Finsolv TN from Finetex), capric-caprylic triglycerides (commercially available from Huls as Miglyol 812) or other suitable synthetic triglycerides known to those of skill in the art. Substantive oils or waxes may be
- 15 selected from white petrolatum, octyl hydroxystearate, cetyl palmitate and the like. The total amount of oil phase may vary from a very low level, e.g., about 2% of the overall composition, to as much as about 20% of the composition. More preferably, the oil phase should be composed of from about 5 to about 12% of the composition in order to provide the desired spreadability and consistency without leaving
- 20 excessive residue with the perception of greasiness and oily coating on the skin. Variations within this range may depend upon the characteristics of the additional components, including vitamins, sunscreens and the like, both to serve as a vehicle to apply the active ingredients properly to the skin and to modify the sometimes undesirable esthetics contributions from these components.

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In addition to such oils, other emollients and surface active agents have been incorporated in the emulsions, including glycerol trioleate, acetylated sucrose distearate, sorbitan trioleate, polyoxyethylene (1) monostearate, glycerol monooleate, sucrose distearate, polyethylene glycol (50) monostearate, octylphenoxypoly
5 (ethyleneoxy) ethanol, decaglycerin penta-isostearate, sorbitan sesquioleate, hydroxylated lanolin, lanolin, triglyceryl diisostearate, polyoxyethylene (2) oleyl ether, calcium stearoyl-2-lactylate, methyl glucoside sesquistearate, sorbitan monopalmitate, methoxy polyethylene glycol-22/dodecyl glycol copolymer (Elfacos E200), polyethylene glycol-45/dodecyl glycol copolymer (Elfacos ST9), polyethylene
10 glycol 400 distearate, and lanolin derived sterol extracts, glycol stearate and glycerol stearate; alcohols, such as cetyl alcohol and lanolin alcohol; myristates, such as isopropyl myristate; cetyl palmitate; cholesterol; stearic acid; propylene glycol; glycerine, sorbitol and the like.

It is also preferable to have at least one oil-soluble antioxidant in the
15 compositions of this invention. The oil-soluble antioxidants which are useful in the compositions of the present invention include butylated hydroxytoluene (BHT), ascorbyl palmitate, butylated hydroxyanisole (BHA), phenyl- a -naphthylamine, hydroquinone, propyl gallate, nordihydroguaiaretic acid, rosemary extract and mixtures thereof as well as any other known oil-soluble antioxidant compatible with
20 the other components of the compositions.

Preferably, a water-soluble antioxidant should be present in the water phase of the compositions of this invention. The water-soluble antioxidants which are useful in the compositions of this invention include ascorbic acid, sodium metabisulfite, sodium bisulfite, sodium thiosulfite, sodium formaldehyde sulfoxylate, isoascorbic
25 acid, thioglycerol, thiosorbitol, thiourea, thioglycolic acid, cysteine hydrochloride, 1,4-diazobicyclo-(2,2,2)-octane, malic acid, fumaric acid, lycopene and mixtures thereof

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as well as any other known water-soluble antioxidant compatible with the other components of the compositions.

The composition of this invention can contain additives, as required, such as a humectant, an antioxidant, a preservative, a flavor, fragrances, a surface active agent, a binder, and the like, as well as skin protectant agents, therapeutic agents and "cosmeceuticals".

Preferably, a detackifying material should be incorporated into the compositions of this invention. When emulsions are applied to the skin, they break apart. Often, they leave a sticky feeling as they dry before the emulsion has totally broken and been absorbed into the skin. This is particularly true of emulsions containing cetyl and stearyl alcohols, due to the liquid crystal nature of these materials, as they are quite slow to give up water upon application to the skin. Unexpectedly, it has been found that certain detackifying materials may be added to the compositions of this invention in order to combat this stickiness. Materials having a "talc-like" character, i.e., which crystallize into a plate-like form, are preferable for use as they add lubricity to the compositions of this invention. Other non-platey solids, although less preferably, are also acceptable for use as a detackifier. Preferably, the detackifying material used in the compositions of this invention should be lauroyl lysine, titanium dioxide, zinc oxide, pulverized nylon, oatmeal and surface treated oatmeal, silica, mica, barium sulfate, aluminum starch, octenyl succinate, micronized polyethylene, boron nitride, corn starch, talc or silicone waxes or oils and other insoluble particles which do not leave visual residue on the skin. More preferably, the detackifying material should be lauroyl lysine, boron nitride, mica and talc. Most preferably, the detackifier should be lauroyl lysine (such as Amihope LL commercially available from Ajinomoto). Preferably, the detackifier is present at very low concentrations, i.e., from about 0.01 to about 7% by weight. More preferably, it

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should be present at the amount of from about 0.5 to about 1% by weight. Other detackifying materials which are compatible with fatty emulsions would also be appropriate for use in the compositions of this invention.

Surprisingly, it has also been found that small concentrations of lower alkyl
5 alcohols also contribute an esthetically benefit to the compositions of this invention. It has been found that the addition of lower alkyl solvent alcohols mitigate the waxy feel of the emulsions on the skin due to the presence of cetyl and stearyl alcohols. It is believed that lower alkyl alcohols assist in solubilizing the liquid crystal structures formed by these fatty alcohols. Preferably, lower alkyl alcohols having from one to
10 four carbon atoms are useful in the compositions of this invention. Most preferably, ethyl alcohol should be present in the compositions of this invention. Preferably, they should be present in an amount of from about 2 to about 10 % by weight of the compositions.

15 { Examples of the humectant include glycerol, sorbitol, propylene glycol, ethylene glycol, 1,3-butylene glycol, polypropylene glycol, xylitol, maltitol, lactitol and the like. They may be used either singly or in combination. }

Examples of the preservatives include salicylic acid, chlorhexidine hydrochloride, phenoxyethanol, sodium benzoate, methyl para-hydroxybenzoate, ethyl para-hydroxybenzoate, propyl para-hydroxybenzoate, butyl para-
20 hydroxybenzoate and the like.

Examples of the flavor and fragrance include menthol, anethole, carvone, eugenol, limonene, ocimene, n-decylalcohol, citronellol, a-terpineol, methyl salicylate, methyl acetate, citronellyl acetate, cineole, linalool, ethyl linalool, vanillin, thymol, spearmint oil, peppermint oil, lemon oil, orange oil, sage oil, rosemary oil, cinnamon
25 oil, pimento oil, cinnamon leaf oil, perilla oil, wintergreen oil, clove oil, eucalyptus oil and the like.

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

2020
Bogotá, D.C.,

Doctor
RAMIRO CASTRO DUQUE
(Apoderado)

ASUNTO	Radicación	00028948
	Trámite	002
	Evento	001
	Actuación	430
	Oficio	9438
	Folios	024

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:

Documentos estudiados:

Los textos estudiados fueron la descripción (Folios: 5 a 10, 305, 306, 13 a 50, 307, 52 a 73) y las reivindicaciones 1 a 32 (Folios: 308 a 314).

La presente solicitud reivindica prioridad americana N° US60.130699 de 23 de abril de 1999 y US 09/379928 de 24 de agosto de 1999, y cumple con lo establecido en los artículos 9, 10 y 11 de la Decisión 486 de la Comisión de la Comunidad Andina.

Objeto de invención:

La presente solicitud se titula: "Composición protectora de la piel y su aplicación en artículos absorbentes".

El objeto de la presente solicitud se refiere a la inclusión de una loción hidrofóbica enriquecida con lípido sobre el material de cara al cuerpo de artículos absorbentes desechables, tales como los pañales, los calzoncillos de aprendizaje, los productos para la incontinencia del adulto, las prendas interiores, y los productos para el cuidado de la mujer y similares. Más particularmente, la presente solicitud se refiere a mejorar la salud de la piel a través del incremento de la función de barrera de la piel por medio de la entrega de materiales lípidos y no lípidos desde el material de cara al cuerpo de los artículos absorbentes desechables de la piel.

Según la descripción, el estrato córneo es la capa más exterior de la piel y es responsable por la regulación de los niveles de agua y funciona como una barrera en contra de los químicos y otros tensionantes encontrados en el ambiente. El arreglo complejo de lípidos en el espacio intracelular del estrato córneo es responsable por el establecimiento de una función de barrera normal. Las estructuras de capas múltiples del colesterol, de las ceramidas y de los ácidos grasos, así como de algunos otros lípidos menores, proporcionan la barrera principal al transporte de las sustancias hidrofílicas adentro o a través de la piel.

La dermatitis de pañal, por ejemplo, es un género de condiciones de la piel, que, en gran parte, se origina de una función de barrera dañada. El daño de la función de barrera puede resultar de una variedad de factores, incluyendo: la hidratación de piel incrementada debida a la oclusión de la piel, causada por los pañales, el daño a la piel enzimático causado por las enzimas fecales y de la orina, y el daño físico causado por la limpieza repetida de la piel con los paños limpiadores húmedos o trapos. La hidratación excesiva también tiene un impacto negativo sobre la barrera de la piel.

La piel que está envuelta con pañales es normalmente limpiada varias veces al día con paños limpiadores que utilizan soluciones que contienen surfactantes. El material limpiador puede causar un daño físico a la piel y por tanto llevar a una función de barrera disminuida. También son usadas las cremas de barrera, las lociones o los ungüentos para proporcionar una barrera hidrofóbica artificial sobre la piel y tratar las condiciones de la piel tal como el salpullido de pañal.

De acuerdo con la presente solicitud, se requiere en el arte: químicos tópicos entregados desde un material de lado al cuerpo de un artículo absorbente que protegen, mantienen y/o recuperan la barrera de la piel en contra de los irritantes en los fluidos biológicos; químicos tópicos entregados desde un material de lado al cuerpo de un artículo absorbente dentro de la piel, que no son grasosos y son cosméticamente aceptables al consumidor; químicos tópicos entregados desde un material de cuerpo absorbente del artículo absorbente que no perjudican las funciones de contención de desperdicio del pañal.

Lo que se reivindica como novedoso es lo siguiente: Una composición incrementadora de barrera de la piel que comprende de desde 0,1 por ciento por peso a 95 por ciento por peso de aceites o grasas naturales, de desde 0,1 por ciento por peso a 10 por ciento por peso de esteroides y derivados de esteroles, de desde 1 por ciento por peso a 20 por ciento por peso de un surfactante emulsificador de agua en aceite con un rango de balance hidrofílico-lipofílico de desde 3 a 6, de desde 0,5 por ciento por peso a 20 por ciento por peso de humectante, de desde 5 por ciento por peso a 95 por ciento por peso de emoliente, de desde 5 por ciento por peso a 95 por ciento por peso de cera, y de desde 1 por ciento por peso a 25 por ciento por peso de un incrementador de viscosidad.

El objeto de la solicitud definido anteriormente se clasificó en la IPC A61K 7/48, A61L 15/50.

Claridad de la solicitud:

El artículo 30 de la Decisión 486 de la Comisión de la Comunidad Andina establece que: "Las reivindicaciones definirán la materia que se desea proteger mediante la patente. Deben ser claras y concisas y estar enteramente sustentadas por la descripción."

Las reivindicaciones podrán ser independientes o dependientes. Una reivindicación será independiente cuando defina la materia que se desea proteger sin referencia a otra reivindicación anterior. Una reivindicación será dependiente cuando defina la materia que se desea proteger refiriéndose a una reivindicación anterior. Una reivindicación que se refiera a dos o más reivindicaciones anteriores se considerará una reivindicación dependiente múltiple."

De acuerdo con lo anterior, en la reivindicación 1 (folio: 308) se emplean términos bastante generales y que conllevan a ambigüedad; tales términos son por ejemplo: surfactante emulsificador, humectante, emoliente, incrementador de viscosidad. Además, los rangos de cantidad en los que se encuentran dichos excipientes son bastante amplios, por ejemplo, 0,1% al 95%.

De otro lado, en la reivindicación 7 (folio: 309) se dice lo siguiente: "... porque dicho esteroide es extractos naturales que contienen esteroides...", tiene errores gramaticales que le restan claridad a lo que se quiere decir.

Asimismo, la reivindicación 26 (folio: 313) y sus dependientes que mencionan un método para incrementar/restaurar/mantener la función de barrera de la piel de dicha piel de un usuario, no son claras puesto que dicho método está definido en función de una composición. Cabe recordar que los métodos y procedimientos deben estar definidos por sus pasos o etapas indicando las variables que intervienen en cada una de ellas, y no debe definirse por características de un producto, como están en el presente caso, que se define el método en función de la composición de la reivindicación 1.

Determinación del estado de la técnica:

El artículo 16 de la Decisión 486 de la Comisión de la Comunidad Andina establece que "El estado de la técnica comprenderá todo lo que haya sido accesible al público por una descripción escrita u oral, utilización, comercialización o cualquier otro medio antes de la fecha de presentación de la solicitud de Patente o, en su caso, de la prioridad reconocida.

Sólo para el efecto de la determinación de la novedad, también se considerará dentro del estado de la técnica, el contenido de una solicitud de patente en trámite ante la oficina nacional competente, cuya fecha de presentación o de prioridad fuese anterior a la fecha de presentación o de prioridad de la solicitud de patente que se estuviese examinando, siempre que dicho contenido esté incluido en la solicitud de fecha anterior cuando ella se publique o hubiese transcurrido el plazo previsto en el artículo 40".

Considerando que la fecha de presentación de la primera solicitud de patente de la cual se reivindica prioridad es: 23/04/1999, se buscaron documentos del estado de la técnica relacionados, con fecha de publicación anterior a esta.

Se hizo la búsqueda de documentos relevantes en el estado de la técnica, entendiendo como estado de la técnica la definición provista en el artículo 16 de la Decisión 486 de la Comisión de la Comunidad Andina y las excepciones fijadas en el artículo 17 de la misma.

Se encontró como anterioridades (documentos cuya fecha de publicación es anterior a la fecha de presentación de la primera solicitud de patente sobre la cual se reivindica prioridad o de la fecha de presentación de esta solicitud) que pueden afectar la patentabilidad del objeto de la presente solicitud:

Nº	Documento	Título	Fecha de Publicación
1	WO 99/13861	Cleansing and conditioning article for skin or hair	25 de marzo de 1999
2	WO 97/31620	Topical compositions comprising an oil-in-water emulsion and a retinoid	4 de septiembre de 1997

Evaluación de los requisitos de Patentabilidad:

El Artículo 14 de la Decisión 486 de la Comisión de la Comunidad Andina el cual establece: "Los Países Miembros otorgarán Patentes para las invenciones, sean de producto o de procedimiento en todos los campos de la tecnología siempre que sean nuevas, tengan nivel inventivo y sean susceptibles de aplicación industrial".

Se procedió a evaluar los requisitos de novedad, nivel inventivo y aplicación industrial

con el fin de establecer la patentabilidad de la invención reivindicada en la solicitud en estudio.

Como se observa, el objeto de esta solicitud puede ser idéntico a lo comprendido en el estado de la técnica, con lo cual se considera que podría no cumplir con el requisito de Novedad.

Evaluación de Nivel Inventivo:

El artículo 18 de la Decisión 486 de la Comisión de la Comunidad Andina establece que "Se considerará que una invención tiene nivel inventivo, si para una persona del oficio normalmente versada en la materia técnica correspondiente, esa invención no hubiese resultado obvia ni se hubiese derivado de manera evidente del estado de la técnica".

El Nivel Inventivo se evaluó por comparación entre lo solicitado y encontrado en el estado de la técnica y que se relaciona con el objeto reivindicado y de acuerdo con la definición de nivel inventivo del Artículo 18 de la Decisión 486 de la Comisión de la Comunidad Andina.

La Solicitud de Patente Colombiana No. 00028948, se refiere a:

Una composición incrementadora de barrera de la piel que comprende de desde 0,1 por ciento por peso a 95 por ciento por peso de aceites o grasas naturales, de desde 0,1 por ciento por peso a 10 por ciento por peso de esteroides y derivados de esteroles, de desde 1 por ciento por peso a 20 por ciento por peso de un surfactante emulsificador de agua en aceite con un rango de balance hidrofílico-lipofílico de desde 3 a 6, de desde 0,5 por ciento por peso a 20 por ciento por peso de humectante, de desde 5 por ciento por peso a 95 por ciento por peso de emoliente, de desde 5 por ciento por peso a 95 por ciento por peso de cera, y de desde 1 por ciento por peso a 25 por ciento por peso de un incrementador de viscosidad.

La anterioridad: WO99/13861 (folios: 319 a 330), se relaciona con: un artículo utilizado para la limpieza de la piel o el cabello que tiene un sustrato que comprende múltiples capas. Este artículo es empleado como absorbente y comprende un componente acondicionador. Este documento revela una composición que da a conocer todos los constituyentes de la composición de la presente solicitud.

La anterioridad: WO97/31620 (folios: 331 a 337), trata sobre: composiciones tópicas que comprenden una emulsión O/W y un retinóide; dicha composición contiene todos los componentes de la composición de la presente solicitud, tales como: grasas naturales o ácidos grasos de origen natural, esteroides, surfactantes, humectantes, emolientes, ceras e incrementadores de viscosidad.

Además, el método de la reivindicación 26 (folio: 313) y sus dependientes, resulta obvio para una persona medianamente versada en la materia, ya que es lógico que para que la composición cumpla sus funciones como barrera de la piel en un artículo absorbente debe estar en contacto con dicho material y que quede en contacto con la piel y debe transferirse dicha composición durante el uso.

La respuesta al problema técnico que se pretendía resolver, resulta obvia partiendo de las anterioridades en mención y de los conocimientos de una persona medianamente versada en la materia.

Como se observa, el objeto de esta solicitud podría resultar obvio para una persona del oficio normalmente versada en la materia y derivarse de manera evidente del estado de la técnica.

Evaluación de la Aplicación Industrial:

El artículo 19 de la Decisión 486 de la Comisión de la Comunidad Andina establece que "Se considerará que una invención es susceptible de aplicación industrial, cuando su objeto pueda ser producido o utilizado en cualquier tipo de industria, entendiéndose por industria la referida a cualquier actividad productiva, incluidos los servicios".

El objeto de la presente solicitud cumple con el requisito de Aplicación Industrial.

En conclusión los requisitos de patentabilidad de la presente solicitud se encuentran afectados así:

Nº	Documento	Reivindicaciones afectadas	Requisito que afecta
1	WO 99/13861	1 a 32	Nivel Inventivo
2	WO 97/31620	1 a 32	Nivel Inventivo

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 sesenta días contados a partir de la fecha de la 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 la División de Nuevas Creaciones

El anterior requerimiento fue notificado por fijación en lista, de fecha 73 OCT. 2025.

CONCEPTO TÉCNICO Nº: 1565	EXAMINADOR TÉCNICO Código N°: 202005	EXAMINADOR JURÍDICO Código N°:
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SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO

336

RADICACIÓN: 0-28948

EDICTO No. 2909

**LA SECRETARÍA GENERAL AD-HOC
HACE SABER:**

Que esta Superintendencia profirió Resolución No. 1978 de 31-ENE-2006. Que el contenido de la parte resolutive es como sigue: El Superintendente de Industria y Comercio.

RESUELVE

ARTICULO PRIMERO: Negar el privilegio de patente de invención para la solicitud correspondiente a "ARTICULOS ABSORBENTES QUE PROPORCIONAN BENEFICIOS DE SALUD A LA PIEL".

ARTICULO SEGUNDO: Notificar personalmente el contenido de la presente resolución al doctor Ramiro Castro Duque, o a quien haga sus veces, en su calidad de apoderado de Kimberly - Clark Worldwide, Inc., entregándole copia de la misma, advirtiéndole que contra ella procede el recurso de reposición interpuesto ante el Superintendente de Industria y Comercio, al momento de la notificación o dentro de los 5 días hábiles siguientes a ella.

NOTIFÍQUESE Y CUMPLASE

Dada en Bogotá, D.C., a los **31** **ENE** 2006

EL SUPERINTENDENTE DE INDUSTRIA Y COMERCIO,


JAIRO ROCIO ESCOBAR

Para notificar a los interesados, se fija el presente EDICTO en lugar visible al público en la SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO, por el término de (10) diez días hábiles contados a partir de las 8:30 a.m. de hoy.

Secretaría General Ad-Hoc 21-FEB-2006
Secretaría General Ad-Hoc
EDICTO No. 2909

Este edicto se desfija hoy 03-MAR-2006 a las cinco (5:00 p.m.)