

Appeal decision

Appeal No. 2018-5519

Osaka, Japan

Appellant

ROHTO Pharmaceutical Co., Ltd.

Patent Attorney

TADA, Eiko

The case of appeal against the examiner's decision of refusal for Japanese Patent Application No. 2013-220715, titled "SKIN CLEANING COMPOSITION FOR BODY ODOR SUPPRESSION" [published on June 5, 2014, Japanese Unexamined Patent Application Publication No. 2014-101356, Number of claims: 11] has resulted in the following appeal decision.

Conclusion

The examiner's decision is revoked.

The Invention of the present application shall be granted a patent.

Reason

No. 1 History of the procedures

The application is an application with a filing date of October 24, 2013 (claiming priority under the Paris Convention with a priority date of October 24, 2012), for which a notice of reasons for refusal was issued on May 2, 2017, and a written opinion and a written amendment were submitted on September 4, 2017, and an Examiner's decision of refusal (Examiner's decision) was issued on January 15, 2018. In response, a notice of appeal was filed on April 20, 2018 with a written amendment on the same date.

No. 2 Outline of the examiner's decision

The outline of the examiner's decision is set forth below.

(1) As for Article 36(6)(i) of the Patent Act

The inventions according to Claims 1 to 11 of the present application are not disclosed in the Detailed Description of the Invention, and thus the inventions fail to satisfy the requirement of Article 36(6)(i) of Patent Act, and the Applicant cannot be granted a patent.

(2) As for Article 29(1)(iii) and Article 29(2) of the Patent Act

The inventions according to Claims 1 to 11 were the inventions described in Cited Document 1, and correspond to the provision of Article 29(1)(iii) of the Patent Act, and were easily conceivable on the basis of the invention described in Cited Document 1 by a person who had ordinary knowledge in the technical field to which the inventions pertain (hereinafter referred to as "a person skilled in the art"), and thus the Applicant cannot be granted a patent under the provision of the same article, paragraph (2) of the Patent Act.

(3) As for Article 29(1)(iii) and Article 29(2) of the Patent Act

The inventions according to Claims 1, 2, 4 to 8, and 10 to 11 of the present application are the inventions described in the following Cited Document 2, 3, or 4, and thus these inventions correspond to the inventions specified in Article 29(1)(iii) of the Patent Act, and/or these inventions were easily conceivable on the basis of the invention of Cited Document 2, 3, or 4 by a person skilled in the art, and thus the Applicant cannot be granted patents for the inventions under the provision of Article 29(2) of the Patent Act.

(4) As for Article 29(2) of the Patent Act

Further, a person skilled in the art could have easily conceived of the inventions according to Claims 3 and 7 on the basis of the invention described in Cited Document 1 in combination with Cited Document 2, 3, or 4. Therefore, Applicant cannot be granted a patent for the inventions under the provision of Article 29(2) of the Patent Act.

List of Cited Documents, etc.

1. Japanese Unexamined Patent Application Publication No. 2009-67734
2. Japanese Unexamined Patent Application Publication No. 2005-15359
3. Japanese Unexamined Patent Application Publication No. 2006-183030
4. Japanese Unexamined Patent Application Publication No. 1998-183193
5. Japanese Unexamined Patent Application Publication No. 2011-88844 (Document showing common general knowledge)

No. 3 The Invention

The inventions according to Claims 1 to 11 of the present application (hereinafter referred to as "Invention 1" to "Invention 11" respectively, and collectively referred to as "the Invention" in some cases) are specified by matters described in Claims 1 to 11 of the scope of the claims that have been amended on April 20, 2018.

"[Claim 1]

A skin cleaning composition for the suppression of body odor of elderly people, comprising (A) polyquaternium-10 and (B) an antimicrobial component selected from the group consisting of benzalkonium chloride and isopropylmethylphenol.

[Claim 2]

The skin cleaning composition of Claim 1 to be used for the removal of nonenal.

[Claim 3]

The skin cleaning composition of Claim 1 or 2, further comprising a cationic polymer selected from the group consisting of (C) polyquaternium-7, polyquaternium-6, polyquaternium-22, and polyquaternium-39.

[Claim 4]

The skin cleaning composition of any one of Claims 1 to 3, further comprising at least one kind selected from the group consisting of higher fatty acid salts, alkyl ether sulfate, alkyl ether carboxylate, acetic acid betaine-type amphiphilic surfactant, N-acyl taurate, alkyl imino dicarboxylate-type amphiphilic surfactant, and alkyl hydroxy sulfobetaine-type amphiphilic surfactant.

[Claim 5]

The skin cleaning composition of Claim 3, wherein the content of the component (C) is 0.005 to 5 weight% on a total composition basis.

[Claim 6]

A method of removing body odor of elderly people, comprising the step of: cleaning a part of the skin in which body odor of the elderly people is present, in combination with (A) polyquaternium-10 and (B) an antimicrobial component selected from the group consisting of benzalkonium chloride and isopropylmethylphenol.

[Claim 7]

A skin cleaning composition for cleaning a part of a skin in which body odor of elderly people is present, the composition comprising (A) polyquaternium-10 and (B) an antimicrobial component selected from the group consisting of benzalkonium chloride and isopropylmethylphenol.

[Claim 8]

The skin cleaning composition of Claim 7 to be used for the removal of nonenal.

[Claim 9]

The skin cleaning composition of Claim 7 or 8, further comprising a cationic polymer selected from the group consisting of (C) polyquaternium-7, polyquaternium-6, polyquaternium-22, and polyquaternium-39.

[Claim 10]

The skin cleaning composition of any one of Claims 7 to 9, further comprising at least one kind selected from the group consisting of higher fatty acid salts, alkyl ether sulfate, alkyl ether carboxylate, acetic acid betaine-type amphiphilic surfactant, N-acyl taurate, alkyl imino dicarboxylate-type amphiphilic surfactant, and alkyl hydroxy sulfobetaine-type amphiphilic surfactant.

[Claim 11]

The skin cleaning composition of Claim 9, wherein the content of the component (C) is 0.005 to 5 weight% on a total composition basis."

No. 4 Cited Documents and Cited Inventions

1. Regarding Cited Document 1

(1) Matters described in Cited Document 1

Cited Document 1 cited in the reasons for refusal stated in the examiner's decision discloses the following matters:

- the described matter 1-1

"[0002]

Conventionally, for the purpose of cleaning skin and hairs, there are proposed various cleanser compositions with a cleanser base of surfactant."

- the described matter 1-2

"[0030]

Example 17 Hair shampoo

(mass%)

POE(3) sodium lauryl ether sulfate 10.0

Amidopropyl betaine laurate solution 3.0

Ammonium lauryl sulfate 2.0
 1,3-butyleneglycol 2.0
 Monoisopropanol amide laurate 1.0
 Ethyleneglycol distearate 2.0
 POE cetyl ether 1.0
 (Product name: N-BC-15TX [manufactured by Japan Surfactant])
 Cellulose derivatives 0.2
 (Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])
 Cellulose derivatives 0.2
 (Product name: LEOGARD GP [manufactured by Lion Corporation])
 Disodium edetate 0.2
 Phenoxyethanol ... (B) 0.2
 Sodium benzoate 0.4
 Dimethyldiallylammonium chloride / acrylamide copolymer 2.0
 (Product name: Merquat™ 550 [manufactured by Calgon])
 Dipotassium glycyrrhizinate 0.1
 Isopropylmethylphenol 0.1
 Citric acid proper amount
 Carrot extract 0.1
 (Product name: Carrot extract BG [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Phellodendron Bark extract 0.1
 (Product name: Phellodendron Bark Liquid B [manufactured by ICHIMARU PHARCOS Co., Ltd.])
 Olive oil ... (C) 0.1
 Avocado oil ... (C) 0.05
 Dimethiconol aqueous emulsion ... (A) 1.0
 (1,000,000 mm²/s; 25°C silicone purity 70%)
 Fragrance proper amount
 Purified water balance
 * Mixing ratio of components (mass ratio)
 (A):((B)+(C))=1:0.5
 (B):(C)=1:0.75
 [0031]

A hair shampoo with the above composition was prepared (pH6.0/25°C) by an ordinary method. Finishing quality such as smoothness, creamy feeling of bubbles, moisturized feeling, and lack of stickiness was evaluated. Each of the properties showed excellent or good result."

- the described matter 1-3

"[0032]

Example 18 Hair Shampoo

	(mass%)
POE(2) sodium lauryl ether sulfate	10.0
Amidopropyl betaine laurate solution	3.0
Sodium lauroylmethyl-beta-alanine solution	3.0

Dipropylene glycol 4.0
 Monoisopropanol amide laurate 1.0
 Ethyleneglycol distearate 1.5
 Cellulose derivatives 0.3
 (Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])
 Disodium edetate 0.2
 Phenoxyethanol ... (B) 0.1
 Sodium benzoate 0.4
 Dimethyldiallylammonium chloride / acrylamide copolymer 2.0
 (Product name: Merquat™ 550 [manufactured by Ondo Nalco Company])
 Dipotassium glycyrrhizinate 0.1
 Isopropylmethylphenol 0.1
 Citric acid proper amount
 Honey 0.1
 Hydrolyzed conchiolin 0.1
 (Product name: Perl protein extract BG-J [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Swertia pseudochinensis extract 0.1
 (Product name: Swertia pseudochinensis extract [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Olive oil ... (C) 0.1
 Dimethiconol aqueous emulsion ... (A) 1.0
 (1,000,000 mm²/s; 25°C:
 200 mm²/s; 25°C=7:3 silicone purity 70%)
 Dimethicone aqueous emulsion 0.5
 (Product name: BY22-083 [Dow Corning Toray Co., Ltd.])
 Fragrance proper amount
 Purified water balance
 * Mixing ratio of components (mass ratio)
 (A):((B)+(C)) = 1:0.3
 (B):(C)=1:1
 [0033]

A hair shampoo with the above composition was prepared (pH6.0/25°C) by an ordinary method. Finishing quality such as smoothness, creamy feeling of bubbles, moisturized feeling, and lack of stickiness was evaluated. Each of the properties showed excellent or good result."

(2) The invention described in Cited Document 1

- It is recognized from the described matter 1-2 that Cited Document 1 discloses the following invention (hereinafter referred to as "Cited Invention 1-1") :

"A hair shampoo having the following composition and the component composition:
 (mass%)

POE(3) sodium lauryl ether sulfate 10.0
 Amidopropyl betaine laurate solution 3.0
 Ammonium lauryl sulfate 2.0
 1,3-butyleneglycol 2.0

Monoisopropanol amide laurate 1.0
 Ethyleneglycol distearate 2.0
 POE cetyl ether 1.0
 (Product name: N-BC-15TX [manufactured by Japan Surfactant])
 Cellulose derivatives 0.2
 (Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])
 Cellulose derivatives 0.2
 (Product name: LEOGARD GP [manufactured by Lion Corporation])
 Disodium edetate 0.2
 Phenoxyethanol ... (B) 0.2
 Sodium benzoate 0.4
 Dimethyldiallylammonium chloride / acrylamide copolymer 2.0
 (Product name: Merquat™ 550 [manufactured by Calgon])
 Dipotassium glycyrrhizinate 0.1
 Isopropylmethylphenol 0.1
 Citric acid proper amount
 Carrot extract 0.1
 (Product name: Carrot extract BG [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Phellodendron Bark extract 0.1
 (Product name: Phellodendron Bark Liquid B [manufactured by ICHIMARU PHARCOS Co., Ltd.])
 Olive oil ... (C) 0.1
 Avocado oil ... (C) 0.05
 Dimethiconol aqueous emulsion ... (A) 1.0
 (1,000,000 mm²/s; 25C silicone purity 70%)
 Fragrance proper amount
 Purified water balance
 * Mixing ratio of components (mass ratio)
 (A):((B)+(C))=1:0.5
 (B):(C)=1:0.75"

- It is recognized from the described matter 1-3 that Cited Document 1 discloses the following invention (hereinafter referred to as "Cited Invention 1-2") :

"A hair shampoo having the following composition and the component composition:
 (mass%)

POE(2) sodium lauryl ether sulfate 10.0
 Amidopropyl betaine laurate solution 3.0
 Sodium lauroylmethyl-beta-alanine solution 3.0
 Dipropylene glycol 4.0
 Monoisopropanol amide laurate 1.0
 Ethyleneglycol distearate 1.5
 Cellulose derivatives 0.3
 (Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])
 Disodium edetate 0.2

Phenoxyethanol ... (B) 0.1
 Sodium benzoate 0.4
 Dimethyldiallylammonium chloride / acrylamide copolymer 2.0
 (Product name: Merquat™ 550 [manufactured by Onda Nalco Company])
 Dipotassium glycyrrhizinate 0.1
 Isopropylmethylphenol 0.1
 Citric acid proper amount
 Honey 0.1
 Hydrolyzed conchiolin 0.1
 (Product name: Perl protein extract BG-J [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Swertia pseudochinensis extract 0.1
 (Product name: Swertia pseudochinensis extract [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])
 Olive oil ... (C) 0.1
 Dimethiconol aqueous emulsion ... (A) 1.0
 (1,000,000 mm²/s; 25°C
 200 mm²/s; 25°C=7:3 silicone purity 70%)
 Dimethicone aqueous emulsion 0.5
 (Product name: BY22-083 [Dow Corning Toray Co., Ltd.])
 Fragrance proper amount
 Purified water balance
 * Mixing ratio of components (mass ratio)
 (A):((B)+(C)) = 1:0.3
 (B):(C)=1:1"

(Note that Cited Invention 1-1 and Cited Invention 1-2 are sometimes collectively referred to as "Cited Invention 1".)

2. Regarding Cited Document 2

(1) Matters described in Cited Document 2

Cited Document 2 cited in the reasons for refusal stated in the examiner's decision discloses the following matters:

- the described matter 2-1

"[0010]

[Problem to be solved by the Invention]

The invention has been made in view of the above circumstances. The object of the invention is to provide a skin cleanser composition capable of providing better foaming property (foaming property, creaminess) when in use as well as highly favorable feeling (no slimy sensation, smoothness to skin, smooth feeling) in cleansing, and further preventing the deterioration of quality (color and fragrance) over a long period of time."

- the described matter 2-2

"[0052]

According to the following composition, the cleansing agent compositions of Examples 10 to 14 were prepared in compliance with the commonly used method of each

formulation. These compositions were assessed in a similar manner to the above Examples, and the effects were found to be excellent.

...

[0055]

Triethanolamine myristate	6.0	
Potassium N-lauroyl-N-methyl-beta-alanine	2.0	
Coconut oil fatty acid diethanolamide	3.0	
(Home lead CD, manufactured by Lion Chemical Co., Ltd.)		
POE(3) sodium lauryl ether sulfate	4.0	
Lauryl dimethylamino acetate betaine	1.0	
(Obazolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)		
POE (10) behenyl ether	3.0	
(Emalex BHA-10, manufactured by Nippon Emulsion)		
Dimethylpolysiloxane	1.0	
(SH200-30cs, manufactured by Dow Corning Toray Silicone Co., Ltd.)		
Isononyl isononanoate	2.0	
Hydroxypropylmethylcellulose	0.5	
(METOLOSE HPMC 60SH4000, manufactured by Shin-Etsu Chemical Co., Ltd.)		
Alkyl acrylate copolymer emulsion	0.2	
(LEOARL MS-200, manufactured by Lion Chemical Co., Ltd.)		
Polyquaternium-10	1.0	
(JR-400, manufactured by Union Carbide Corporation)		
Propyleneglycol	5.0	
Isopropylmethylphenol	0.1	
LAPONITE XLG (manufactured by Japan Silica Industries Co., Ltd.)		0.3
Polyethylene powder (average particle diameter: 100 μm)	0.3	
Fragrance D	1.0	
Triethanolamine	Amount to adjust to pH8	
Purified water	Balance	
Total (%)	100.0"	

- the described matter 2-3

"[0049]

[Table 4]

カチオン化セルロース		2%水溶液粘度 (*1)	アルカリ金属及び アルカリ土類金属 塩含有量 (%)
(1)	ポリクオタニウム-4 (セルコートL-200、日本エヌエスシー (株) 製)	200	3.9
(2)	ポリクオタニウム-10 (JR-400、ユニオンカーバイド社製)	400	2.0
(3)	ポリクオタニウム-10 (レオガードLP、ライオン化学 (株) 製)	600	2.9
(4)	ポリクオタニウム-10 (レオガードMLP、ライオン化学 (株) 製)	1800	4.9
(5)	ポリクオタニウム-10 (レオガードKGP、ライオン化学 (株) 製)	23	7.2
(6)	ポリクオタニウム-39 (マーコート550、オンデコ製)	60	4.1
(7)	ポリクオタニウム-10 (レオガードGPS、ライオン化学 (株) 製)	400	2.0

(*1): 25℃、B型粘度計、No. 2ローター、30rpm

カチオン化セルロース Cationized cellulose
 ポリクオタニウム-4 Polyquaternium-4
 セルコートL-200、日本エヌエスシー (株) 製 Cellcoat L-200,
 manufactured by Nippon NNC
 ポリクオタニウム-10 Polyquaternium-10
 JR-400、ユニオンカーバイド社製 JR-400, manufactured by Union
 Carbide Corporation
 ポリクオタニウム-10 Polyquaternium-10
 レオガードLP、ライオン化学 (株) 製 LEOGARD LP, manufactured by
 Lion Chemical Co., Ltd.
 ポリクオタニウム-10 Polyquaternium-10
 レオガードMLP、ライオン化学 (株) 製 LEOGARD MLP, manufactured by
 Lion Chemical Co., Ltd.
 ポリクオタニウム-10 Polyquaternium-10
 レオガードKGP、ライオン化学 (株) 製 LEOGARD KGP, manufactured by
 Lion Chemical Co., Ltd.
 ポリクオタニウム-39 Polyquaternium-39
 マーコート550、オンデコ製 Merquat™ 550, manufactured by Onda Nalco
 Company
 ポリクオタニウム-10 Polyquaternium-10
 レオガードGPS、ライオン化学 (株) 製 LEOGARD GPS, manufactured by
 Lion Chemical Co., Ltd.
 2%水溶液粘度 2% aqueous solution viscosity
 アルカリ金属及びアルカリ土類金属塩含有量 (%) Alkali metal and alkali earth
 metal salt content (%)

(* 1) : 2 5 ° C 、 B 型 粘 度 計 、 N o . 2 ロ ー タ ー 、 3 0 r p m (* 1) :
25°C, B-type viscometer, No. 2 rotor, 30 rpm"

(2) The invention described in Cited Document 2

It is recognized from the described matter 2-2 that Cited Document 2 discloses the following invention (hereinafter referred to as "Cited Invention 2"):

"A cleansing gel composition having the following composition:

Triethanolamine myristate	6.0	
Potassium N-lauroyl-N-methyl-beta-alanine	2.0	
Coconut oil fatty acid diethanolamide	3.0	
(Home lead CD, manufactured by Lion Chemical Co., Ltd.)		
POE(3) sodium lauryl ether sulfate	4.0	
Lauryl dimethylamino acetate betaine	1.0	
(Ovasolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)		
POE (10) behenyl ether	3.0	
(Emalex BHA-10, manufactured by Nippon Emulsion)		
Dimethylpolysiloxane	1.0	
(SH200-30cs, manufactured by Dow Corning Toray Silicone Co., Ltd.)		
Isononyl isononanoate	2.0	
Hydroxypropylmethylcellulose	0.5	
(METOLOSE HPMC 60SH4000, manufactured by Shin-Etsu Chemical Co., Ltd.)		
Alkyl acrylate copolymer emulsion	0.2	
(LEOARL MS-200, manufactured by Lion Chemical Co., Ltd.)		
Polyquaternium-10	1.0	
(JR-400, manufactured by Union Carbide Corporation)		
Propyleneglycol	5.0	
Isopropylmethylphenol	0.1	
LAPONITE XLG (manufactured by Japan Silica Industries Co., Ltd.)		0.3
Polyethylene powder (average particle diameter: 100 μm)	0.3	
Fragrance D	1.0	
Triethanolamine	Amount to adjust to pH8	
Purified water	Balance	
Total (%)	100.0"	

3. Regarding Cited Document 3

(1) Matters described in Cited Document 3

Cited Document 3 cited in the reasons for refusal stated in the examiner's decision discloses the following matters:

- the described matter 3-1

"[Problem to be solved by the Invention]

[0006]

The invention solves the aforesaid problem and achieves the following goal.

Specifically, the object of the invention is to provide a paste cleanser composition which is excellent in terms of high temperature stability, utility in low temperature, and mildness to the skin while maintaining good foaming property of higher fatty acids."

- the described matter 3-2

"[0031]

(Examples 1 to 9 and Comparative Examples 1 to 9)

The following were added as the mixing compositions shown in the following Tables 1 to 4 and as the other components common to all Examples 1 to 9 and Comparative Examples 1 to 9.

...

Further, the paste cleanser compositions of Examples 1 to 9 and Comparative Examples 1 to 9 were prepared by the following preparation method in compliance with the common method. The prepared paste cleanser composition was assessed in terms of foaming property, high temperature stability, utility in low temperature, and mildness to the skin. The results are shown in Tables 1, 2. Further, raw materials of fragrances to be used in Examples and Comparative Examples were those described in (0027) to (0045) of Japanese Unexamined Patent Application Publication No. 2002-128658.

...

[0035]

<Assessment of Mildness to Skin>

Mildness to the skin in the invention was assessed comprehensively with a barometer of stimulation to the skin in cleaning (tingling, burning) and skin condition after cleaning (lack of tingling, burning, or tightness). After ten panelists used each paste cleanser composition for the skin (mainly the face), an assessment of mildness to the skin was made on the basis of the following criteria to calculate an average value."

- the described matter 3-3

"[0040]

(Example 10)

- Paste deodorant and antibacterial cleanser composition -

The following components were mixed with the following mixing composition to prepare a paste deodorant and antibacterial cleanser composition by the above preparation method in compliance with a common method:

[Components and mixing composition]

- Potassium laurate 5.0%
- Lauric acid 0.5%
- Potassium myristate 9.0%
- Myristic acid 1.0%
- Potassium palmitate 5.0%
- Palmitic acid 0.5%
- Potassium stearate 10.0%
- Stearic acid 1.0%
- Sodium N-lauroyl-N-methyl-beta-alanine 3.0%
- N-lauroyl-N-methyl-beta-alanine 0.3%
- POE(11) stearyl ether 3.0%
- 1,3-butylene glycol 12.0%
- Hexylene glycol 4.0%
- POE(3) sodium lauryl ether sulfate 2.5%

- Lauryl dimethylamino acetate betaine 2.0%
(Obazolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)
- Ethanol 1.5%
- POE(2) Monoisopropanol amide laurate 1.0%
(Amizet 2L-Y, manufactured by Kawaken Fine Chemicals Co., Ltd.)
- Styrene polymer emulsion (35%) 1.0%
(SAIVINOL RPX-196PE-3, manufactured by SAIDEN CHEMICAL INDUSTRY CO., LTD.)
- Sodium chloride 0.3%
- Bengel FW (manufactured by HOJUN., Co. Ltd.) 0.2%
- Methylparaben 0.2%
- Triclosan 0.2%
- Triclocarban 0.1%
- Isopropylmethylphenol 0.1%
- Piroctone olamine 0.1%
(Octopirox, manufactured by Clariant Japan)
- Cationized cellulose 0.1%
(LEOGARD GP, manufactured by Lion Chemical Co., Ltd.)
- Polyacrylic acid 0.1%
(Carbopol 9402, manufactured by BF Goodrich)
- Propylparaben 0.1%
- Oil-soluble licorice extract 0.1%
(Oil-soluble licorice extract P-T40N, manufactured by MARUZEN PHARMACEUTICALS CO., LTD.)
- Hydroxyethanediphosphonate 0.1%
- Fragrance 0.5%
- Potassium hydroxide proper amount (0.05 to 2.0%)
- Yellow No. 4 proper amount (0.0001 to 0.001%)
- Blue No. 1 proper amount (0.0001 to 0.001%)
- Purified water balance
- Total 100.0%

...

[0043]

An assessment of foaming property, high temperature stability, utility in low temperature, and mildness to the skin was made for the paste cleanser compositions of Examples 10 to 12 in a similar manner to Example 1. Every example was found to show excellent foaming property and low temperature utility and furthermore mildness to the skin."

(2) The invention described in Cited Document 3

It is recognized from the described matter 3-3 that Cited Document 3 discloses the following invention (hereinafter referred to as "Cited Invention 3"):

"A paste deodorant and an antibacterial cleanser composition comprising the following components in the following mixing composition:

- Potassium laurate 5.0%
- Lauric acid 0.5%
- Potassium myristate 9.0%

- Myristic acid 1.0%
- Potassium palmitate 5.0%
- Palmitic acid 0.5%
- Potassium stearate 10.0%
- Stearic acid 1.0%
- Sodium N-lauroyl-N-methyl-beta-alanine 3.0%
- N-lauroyl-N-methyl-beta-alanine 0.3%
- POE(11) stearyl ether 3.0%
- 1,3-butylene glycol 12.0%
- Hexylene glycol 4.0%
- POE(3) sodium lauryl ether sulfate 2.5%
- Lauryl dimethylamino acetate betaine 2.0%
- (Ovasolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)
- Ethanol 1.5%
- POE(2) Monoisopropanol amide laurate 1.0%
- (Amizet 2L-Y, manufactured by Kawaken Fine Chemicals Co., Ltd.)
- Styrene polymer emulsion (35%) 1.0%
- (SAIVINOL RPX-196PE-3, manufactured by SAIDEN CHEMICAL INDUSTRY CO., LTD.)
- Sodium chloride 0.3%
- Bengel FW (manufactured by HOJUN., Co. Ltd.) 0.2%
- Methylparaben 0.2%
- Triclosan 0.2%
- Triclocarban 0.1%
- Isopropylmethylphenol 0.1%
- Piroctone olamine 0.1%
- (Octopirox, manufactured by Clariant Japan)
- Cationized cellulose 0.1%
- (LEOGARD GP, manufactured by Lion Chemical Co., Ltd.)
- Polyacrylic acid 0.1%
- (Carbopol 9402, manufactured by BF Goodrich)
- Propylparaben 0.1%
- Oil-soluble licorice extract 0.1%
- (Oil-soluble licorice extract P-T40N, manufactured by MARUZEN PHARMACEUTICALS CO., LTD.)
- Hydroxyethanediphosphonate 0.1%
- Fragrance 0.5%
- Potassium hydroxide proper amount (0.05 to 2.0%)
- Yellow No. 4 proper amount (0.0001 to 0.001%)
- Blue No. 1 proper amount (0.0001 to 0.001%)
- Purified water balance
- Total 100.0%"

4. Regarding Cited Document 4

(1) Matters described in Cited Document 4

Cited Document 4 cited in the reasons for refusal stated in the examiner's decision discloses the following matters:

- the described matter 4-1

"[0005]

[Problem to be solved by the invention] Therefore, the object of the invention is to provide a cleanser composition suitable for the skin with excellent cleaning performance, excellent foaming property, and excellent feeling after cleaning without stretched feeling of the skin after cleaning, having low stimulation, and capable of stably mixing cationic antibacterial agent to achieve high antibacterial effects, thereby imparting itching prevention and deodorization effects."

- the described matter 4-2

"[0090]

[Advantage of the Invention] The cleanser composition of the invention has excellent cleaning performance, foaming property, and excellent feeling after cleaning, and further low stimulative property, and can stably mix a cationic antibacterial agent, and exert high antibacterial effects and broad antibacterial spectrum, and thus can impart itching preventing effects and deodorizing effects to the body."

- the described matter 4-3

"[0107] Example 7

A cleanser for hand washing with the following composition was prepared by a common method.

[Table 2]

Potassium coconut oil fatty acid	16%
Cationized cellulose (Polymer JR400)	0.3%
Diethanol amide laurate	3%
Benzalkonium chloride*1	1%
Disodium ethylene diamine tetra-acetic acid	0.6%
Glyceride	1%
Methylparaben	0.2%
Fragrance	0.1%
Water	Balance
Total	100.0%

[0108] The resultant cleanser had excellent cleaning performance and foaming property, as well as low stimulation, with no dryness of the skin after cleaning, and further antibacterial effects."

(2) Inventions described in Cited Document 4

It is recognized from the described matters 4-1 to 4-3 that Cited Document 4 discloses the following invention (hereinafter referred to as "Cited Invention 4".):

"A cleanser for hand washing having the following composition and capable of imparting deodorizing effects to the body for exerting high antibacterial effects:

Potassium coconut oil fatty acid	16%
Cationized cellulose (Polymer JR400)	0.3%
Diethanol amide laurate	3%
Benzalkonium chloride	1%

Disodium ethylene diamine tetra-acetic acid	0.6%
Glyceride	1%
Methylparaben	0.2%
Fragrance	0.1%
Water	Balance
Total	100.0%"

5. The other cited documents

(1) Cited Document 5 cited as a document showing common general knowledge in the examiner's decision has the following description:

- the described matter 5-1

[Background Art]

[0002]

In recent years, people have become sensitive to odor, body odor, particularly body odor of elderly people peculiar to the middle-aged. In Japan, average age is increased according to a greater life expectancy and a declining birthrate. Therefore, it can be said that those who generate body odor of elderly people are growing in number. On the other hand, research for a trend of generation of body odor of elderly people and a substance that generates body odor of elderly people has been conducted intensively, and the following non-patent literature 1 has reported as set forth below.

[0003]

Body odor of elderly people tends to become significant in older age over 60 years old. People of middle age have a greater amount of lipid peroxide in sebum compared to those of earlier age. 9-hexadecenoic acid, one kind of fatty acid in sebum excreted on the skin, is subjected to oxidative decomposition relatively quickly on a skin surface compared to earlier age, due to the action of normal inhabitant (microorganism) to generate nonenal (C₉H₁₆O), which is one kind of unsaturated aldehyde. This nonenal is supposed to be a causative substance of body odor of elderly people.

[0004]

Incidentally, ammonia and lower fatty acids generally said as bad odor are easily cleanable with water, by virtue of their water solubility. On the other hand, hydrogen sulfide and methylmercaptan are gaseous and volatile at room temperature, and thus have convenient properties to reduce even if deodorization is impossible.

[0005]

Differing from anything above, nonenal is not soluble to water, and thus is difficult to clean with water, and further has a high boiling point and a low vapor pressure, and thus has properties to take a long time for natural diffusion. In view of this, nonenal cannot be removed even by bathing daily or washing clothes, and thus cannot be deodorized. It is also very bothersome since it gradually accumulates.

[0006]

As it is gradually clarified that the cause of body odor of elderly people is nonenal, several measures are proposed. In general, there are two principles. One measure is to suppress the generation of nonenal by suppressing microorganisms with a focus on the fact that nonenal generates by the action of microorganisms from fatty acids excreted on human skin.

[0007]

Another measure is to change generated nonenal into another, odorless substance by a chemical reaction by using condensed type tannin (hereinafter noted as tannin) obtained from grape seeds or persimmon juice. Additionally, although it is not directed to nonenal, what is disclosed is the use of edible seeds and seed extracts, which is a subject matter of the present application."

- the described matter 5-2

"[0015]

In order to solve the above problem, the inventors have found that the use of a major raw material of edible plant oils is effective for the deodorization of nonenal as a result of study with a focus on the fact that nonenal is not water-soluble, but soluble in oils such as oils and organic solvents.

[0016]

The invention has the following effects. Specifically, studying with a focus on the fact that nonenal is lipid soluble, as aforementioned, the inventors have found that the reaction of a lipid of an edible plants oil with nonenal results in the binding of a lipid and the nonenal to produce another, odorless substance, and they positively bind to each other with increasing amount of lipid."

No. 5 Comparison / Judgment

<1> Comparison / judgment between the Invention and Cited Invention 1

1. Invention 1

(1) Comparison with Cited Invention 1

"Cellulose derivatives (Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])" of Cited Inventions 1-1 and 1-2 corresponds to "polyquaternium-10" of Invention 1 in view of the description of [0017] of the specification of the present application:

"Polyquaternium-10 may be available by synthesis, or from commercial products. Such commercial products may include, for example, ... Catinal HC-200 (TOHO CHEMICAL INDUSTRY Co., Ltd.), ..."

"Cellulose derivatives (Product name: LEOGARD GP [manufactured by Lion Corporation])" of Cited Invention 1-1 is recognized as a mixed raw material comprising "polyquaternium-10" of Invention 1 in view of the description of [0017] of the specification of the present application "... a commercially available mixed raw material comprising polyquaternium-10 may be used. Such mixed raw material may include, for example, ... LEOGARD GP (Lion)..."

"Isopropylmethylphenol" of Cited Inventions 1-1 and 1-2 corresponds to "antibacterial component" of Invention 1 in view of the description of [0022] in the specification of the present application that "Antibacterial component is a publicly known component in the art capable of suppressing the growth of bacteria (Gram-positive anaerobic, Gram-negative anaerobic, etc.) by performing antibacterial or bacteriostatic action. Specifically, an antibacterial component may include ... isopropylmethylphenol ...".

Further, it was a matter of common general knowledge before the priority date of the present application that hair shampoo was one for cleaning hairs and scalp. Thus

"hair shampoo" of Cited Inventions 1-1 and 1-2 corresponds to "skin cleaning composition" of Invention 1.

Consequently, Invention 1 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 1 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antimicrobial component of isopropylmethylphenol"

but they are different from each other in at least the following features:

(Different feature 1)

The invention 1 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 1 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 2)

Invention 1 is "for the removal of body odor of elderly people", whereas Cited Invention 1 fails to specify the use.

Further, Invention 1 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 1 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 1 and 2:

(Different feature 3)

Regarding antibacterial components, Invention 1 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 1 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 1

A Regarding Different feature 1

In view of the description of [0052] of the specification of the present application: "a skin cleaning composition of the invention mixes the above components (A) and (B) and mixes additional components as necessary, and may be prepared in the form of various cleaning compositions in compliance with the common method.", it is recognized that Invention 1 does not exclude the inclusion of other components, and thus this point is not a substantial difference.

B Regarding Different feature 2

(A) Regarding the skin cleaning composition of Invention 1, the specification of the present application has the following descriptions:

- the described matter 1

[Background Art]

[0002]

In recent years, there is increasing interest in odor. In particular, more and more people care about their own body odor peculiar to elderly people that is supposed to be generated with advancing age. It is reported that body odor called body odor of elderly people is closely associated with the generation of unsaturated aldehyde of 2-nonenal that generates by the oxidative decomposition of omega-7 unsaturated fatty acids on the skin surface (...).

[0003]

A method of masking with fragrance or utilizing odor absorbing effects of charcoal as a conventional technique to prevent such body odor (...). Further, what is proposed is a method of using an extract from root or rhizome of *Sanguisorba officinalis* (...) and a method of using condensed Kaki-tannin (...).

[0004]

Further, those who are bothered by body odor get so attached to the removal of their own body odor that they often wash their own bodies strongly in a bath with the conventional body cleanser or head skin cleanser such as soap, body soap, face cleanser, and shampoo. However, excessive skin washing with such conventional cleanser that do not have sufficient effects of suppressing body odor sometimes causes peeling of the cornified layer, and thus it is not preferable."

- the described matter 2

[Means for solving the problem]

[0009]

As a result of intensive study for solving the aforesaid problem, the present inventors have found that a combined use of a specific cationic polymer of polyquaternium-10 and an antibacterial component for skin cleaning may perform significantly highly synergistic body odor suppressing effects. Further, the present inventors have investigated and found that the combination of other cationic polymers such as polyquaternium-7 with polyquaternium-10 and an antibacterial component for skin cleaning may yield further high body odor suppressing effects, and finally completed the invention."

- the described matter 3

"[0060]

<Test example 1: Body odor cleansing power assessment 1>

By use of each test formulation (Examples 1 to 3 and Comparative Examples 1 to 3) shown in the following Table 1, an assessment was made for trans-2-nonenal removing effects.

[Table 1]

(重量%)	実施例 1	実施例 2	実施例 3	比較例 1	比較例 2	比較例 3
ポリクオタニウムー10 ¹⁾	0.5	0.5	0.5	—	—	0.5
塩化ベンザルコニウム	0.1	0.1	—	—	0.1	—
イソプロピルメチルフェノール	—	—	0.1	—	—	—
ポリクオタニウムー7 ²⁾	—	0.5	0.5	—	—	—
ラウリン酸 ³⁾	1.5	1.5	1.5	1.5	1.5	1.5
ミリスチン酸 ⁴⁾	2	2	2	2	2	2
パルミチン酸 ⁵⁾	1.5	1.5	1.5	1.5	1.5	1.5
水酸化カリウム	1.3	1.3	1.3	1.3	1.3	1.3
精製水	残余	残余	残余	残余	残余	残余
trans-2-ノネナル洗浄率 (%)	79	88	84	61	60	66

1) ポリクオタニウムー10：ポイズ C-150L（花王株式会社製）

2) ポリクオタニウムー7：マーコート 550（NALCO 製）

3) ラウリン酸：ルナック L-98（花王株式会社製）

4) ミリスチン酸：ルナック MY-98（花王株式会社製）

5) パルミチン酸：ルナック P-95（花王株式会社製）

(重量%) (Percent by weight)

ポリクオタニウムー10 Polyquaternium-10

塩化ベンザルコニウム Benzalkonium chloride

イソプロピルメチルフェノール Isopropylmethylphenol

ポリクオタニウムー7 Polyquaternium-7

ラウリン酸 Lauric acid

ミリスチン酸 Myristic acid

パルミチン酸 Palmitic acid

水酸化カリウム Potassium hydroxide

精製水 Purified water

trans-2-ノネナル洗浄率 trans-2-nonenal cleaning rate

実施例 Example

比較例 Comparative Example

残余 Balance

1) ポリクオタニウムー10：ポイズ C-150L（花王株式会社製）1)

Polyquaternium-10: Poise C-150L (manufactured by Kao Corporation)

2) ポリクオタニウムー7：マーコート 550（NALCO 製）2)

Polyquaternium-7: Merquat 550 (manufactured by NALCO)

3) ラウリン酸：ルナック L-98（花王株式会社製） 3) Lauric acid:
Lunac L-98 (manufactured by Kao Corporation)

4) ミリスチン酸：ルナック MY-98（花王株式会社製） 4) Myristic acid:
Lunac MY-98 (manufactured by Kao Corporation)

5) パルミチン酸：ルナック P-95（花王株式会社製） 5) Palmitic acid:
Lunac P-95 (manufactured by Kao Corporation)

[0061]

First, pig skin was immersed into saline for two hours, and cut out into a 2 cm*2

cm square. On this 2 cm*2 cm pig skin surface, 5%(w/w) trans-2-nonenal dissolved into ethanol solvent was coated in an amount of 30 uL and dried. In addition, each test formulation (Examples 1 to 3 and Comparative Examples 1 to 3) was diluted with purified water so as to have a concentration of 10%(w/w). To a sponge cut into a 2 cm*2 cm square (width: 0.5 cm) there was attached 1 mL of 10% aqueous solution of each test formulation, which was foamed by pushing the sponge 20 times by hand. A 2 cm*2 cm square pig skin after coating trans-2-nonenal was rubbed with a sponge, which was foamed by attaching each test formulation, to clean for 30 seconds (4 strokes/second). Further, as a control there was prepared a 2 cm*2 cm square pig skin cleaned in a similar manner with a sponge with only purified water. After cleaning with the sponge, each pig skin was rinsed by 3L purified water for 30 seconds, and then water was wiped off. The respective pig skins were fed to a 500 mL conical flask. Mono Trap DCC18 (Silica monolith trap, manufactured by GL sciences Inc.) was hung with a silicone rubber of the conical flask, and after sealing, left to stand for 2 hours at room temperature. After two hours, Mono Trap DCC18 was recycled, and fed to MT Extract Cup (manufactured by GL sciences Inc.) for solvent extraction, and after the addition of 1 mL chloroform, was irradiated with ultrasound for five minutes. Each extraction liquid thus obtained was subjected to gas chromatography (GC) measurement in the below-mentioned measurement condition to quantify trans-2-nonenal.

[0062]

(GC measurement condition)

- Equipment: Gas chromatograph GC-17A (manufactured by Shimadzu Corporation)

- Column: VF-5ms 30m×0.25mmφ×0.25μm (manufactured by VARIAN)

- Carrier gas: He, Pressure: 100 kPa

Total flow rate: 16 ml/min

- Split ratio 10:1

- Temperature condition: 60°C -> temperature elevation (10°C/min) -> 150°C -> temperature elevation (20°C/min) -> 200°C, 11.5 min

- Injection port: 250°C, Detector: 250°C (FID)

- Injection amount: 8 ul

[0063]

In the above GC measurement condition, 2-nonenal cleaning rate was calculated in accordance with the following calculation formula I on the basis of measured values for each example, comparative example, and control.

trans-2-nonenal cleaning rate (%) = $\frac{\text{a value at control} - \text{a value at each example or comparative example}}{\text{a value at control}} \times 100$ (Formula I)

[0064]

The result is shown in the bottom column of the above Table 1. As evident from this result, even in a case of cleaning with the conventional soap component of only higher fatty acid salts, nonenal could be removed to some extent, but not sufficiently (Comparative Example 1). Further, in a case of solely mixing the polyquaternium-10 or an antibacterial component with these higher fatty acid salts, the promoting effect of the removal of nonenal was observed to be slight or not at all (Comparative Example 2, Comparative Example 3). On the other hand, quite unexpectedly, in a case of cleaning by a combination of polyquaternium-10 and an antibacterial component, the effect of removing nonenal was significantly promoted synergistically. Further, further combining the other cationic polymer

(polyquaternium-7) in addition to polyquaternium-10 and an antibacterial component (benzalkonium chloride, isopropylmethylphenol), it has been clarified that significantly high nonenal cleaning effects may be achieved. From the foregoing results, it can be seen that the skin cleaning composition of the invention is effective for the suppression of body odor (in particular body odor of elderly people).

[0065]

<Test example 2: Body odor cleansing power assessment 2>

By use of various test formulations including synthetic surfactants (Example 4 and Comparative Examples 4 to 5) shown in the following Table 2, an assessment was made for trans-2-nonenal removing effects.

[Table 2]

〔重量%（純分）〕	実施例 4	比較例 4	比較例 5
ポリクオタニウムー10 ⁶⁾	0.5	—	—
イソプロピルメチルフェノール	0.1	0.1	—
ラウレス硫酸ナトリウム ⁷⁾	4.5	4.5	4.5
ヤシ油脂肪酸アミドプロピルベタイン ⁸⁾	3.0	3.0	3.0
ヤシ油脂肪酸ジエタノールアミド ⁹⁾	2.0	2.0	2.0
クエン酸	0.2	0.2	0.2
塩化ナトリウム	1.0	1.0	1.0
精製水	残余	残余	残余
trans-2-ノネナル洗浄率 (%)	86	64	61

6) ポリクオタニウムー10：ポイズC-150L（花王（株）製）

7) ラウレス硫酸ナトリウム：ビューライトNA-25S（三洋化成工業（株）製）

8) ヤシ油脂肪酸アミドプロピルベタイン：レボン2000HG（三洋化成工業（株）製）

9) ヤシ油脂肪酸ジエタノールアミド：アミゾールCDE（川研ファインケミカル（株）製）

重量%（純分） Percent by weight (purity)

ポリクオタニウムー10 Polyquaternium-10

イソプロピルメチルフェノール Isopropylmethylphenol

ラウレス硫酸ナトリウム Sodium laureth sulfate

ヤシ油脂肪酸アミドプロピルベタイン Coconut oil fatty acid amidopropyl betaine

ヤシ油脂肪酸ジエタノールアミド Coconut oil fatty acid diethanolamide

クエン酸 Citric acid

塩化ナトリウム Sodium chloride

精製水 Purified water

trans-2-ノネナル洗浄率 trans-2-nonenal cleaning rate

実施例 Example

比較例 Comparative Example

残余 Balance

6) ポリクオタニウムー10：ポイズC-150L（花王（株）製） 6)

Polyquaternium-10: Poise C-150L (manufactured by Kao Corporation)

7) ラウレス硫酸ナトリウム：ビューライトNA-25S（三洋化成工業（株）製） 7) Sodium laureth sulfate: Viewlight NA-25S (manufactured by Sanyo Chemical

Industries, Ltd.)

8) ヤシ油脂肪酸アミドプロピルペタイン : レボン 2 0 0 0 H G (三洋化成工業 (株) 製) 8) Coconut oil fatty acid amidopropyl betaine: LEBON2000HG (manufactured by Sanyo Chemical Industries, Ltd.)

9) ヤシ油脂肪酸ジエタノールアミド : アミゾール C D E (川研ファインケミカル (株) 製) 9) Coconut oil fatty acid diethanolamide; Amizol CDE (manufactured by Kawaken Fine Chemicals Co., Ltd.)

[0066]

First, pig skin was immersed into saline for two hours, and cut out into a 2 cm*2 cm square. On this 2 cm*2 cm pig skin surface, 5%(w/w) trans-2-nonenal dissolved into ethanol solvent was coated in an amount of 30 uL and dried. In addition, each test formulation (Example 4 and Comparative Examples 4 to 5) was diluted with purified water so as to have a concentration of 10%(w/w). To a sponge cut into a 2 cm*2 cm square (width: 0.5 cm) there was attached 1 mL of 10% aqueous solution of each test formulation, which was foamed by pushing the sponge 20 times by hand. A 2 cm*2 cm square pig skin after coating with trans-2-nonenal was rubbed with a sponge, which was foamed by attaching each test formulation, to clean for 30 seconds (4 strokes/second). Further, as a control there was prepared a 2 cm*2 cm square pig skin cleaned in a similar manner with a sponge with only purified water. After cleaning with the sponge, each pig skin was rinsed by 3L purified water for 30 seconds, and then water was wiped off. After cleaning, the respective pig skins were fed to a 500 mL conical flask. Mono Trap DCC18 (Silica monolith trap, manufactured by GL sciences Inc.) was hung with a silicone rubber of the conical flask, and after sealing, left to stand for 2 hours at room temperature. After two hours, Mono Trap DCC18 was recycled, and fed to an MT Extract Cup (manufactured by GL sciences Inc.) for solvent extraction, and after the addition of 1 mL chloroform, was irradiated with ultrasound for five minutes. Each extraction liquid thus obtained was subjected to gas chromatography (GC) measurement in the below-mentioned measurement condition to quantify trans-2-nonenal.

[0067]

(GC measurement condition)

- Equipment: 7890A (manufactured by Agilent Technologies)
- Column: HP-INNOWax 30 m×0.25 mmφ×0.25 μm (manufactured by Agilent Technologies)
- Carrier gas: He, Pressure: 100 kPa, Total flow rate: 16 ml/min
- Split ratio 3:1
- Temperature condition: 60°C -> temperature elevation (10°C/min) -> 150°C -> temperature elevation (20°C/min) -> 200°C, 11.5 min
- Injection port: 250°C, Detector: 250°C (FID)
- Injection amount: 2 ul

[0068]

In the above GC measurement condition, 2-nonenal cleaning rate was calculated in accordance with the same calculation formula I as in the above test example 1 on the basis of measured values for each example, comparative example, and control.

[0069]

The result is shown in the bottom column of the above Table 2. As is evident from this result, even in a case of using a control including a synthetic surfactant as a base, nonenal could be removed to some extent, but not yet sufficiently (Comparative Example 5). Further, the addition of only isopropylmethylphenol as an antibacterial component has little promoting effect on nonenal removal (Comparative Example 4). On the other hand, similar to the result of the above test example 1, in a case of cleaning by a combination of polyquaternium-10 and an antibacterial component (isopropylmethylphenol), the effect of removing nonenal was significantly promoted. Therefore, it can be seen that the skin cleaning composition of the invention is particularly effective for the suppression of body odor."

Comprehensively taking the above described matters 1 to 3 into consideration, the invention 1 uses (A) polyquaternium-10 and (B) an antimicrobial component selected from the group consisting of benzalkonium chloride and isopropylmethylphenol in combination, and found a previously unknown property of effectively removing a causative substance of body odor of elderly people of 2-nonenal, and the invention is recognized as an invention with a limited use of "for the removal of body odor of elderly people".

Therefore, a consideration is given as to whether the use of "for the removal of body odor of elderly people" of invention 1 might be said to provide a new use, by taking into account the common general technical knowledge before the priority date of the present application in the technical field.

(B) As is discussed in the above item (1), the shampoo of Cited Invention 1 is intended for skin cleaning. Taking into account the common general knowledge before the priority date of the present application, the following is recognized with respect to "for skin cleaning" and "for skin cleaning for the removal of body odor of elderly people".

a "For skin cleaning" is to remove pollutants of skin including a causative substance of body odor by cleaning the skin, whereas "for skin cleaning for the removal of body odor of elderly people" is to remove particularly body odor of elderly people among causative substances of body odor.

Here, there are various pollutants of the skin. There are various odors and causative substances for armpit odor, smelly feet, and breath odor. These substances have different structures, features, and physical properties. Thus it was a matter of common general knowledge before the priority date of the present application that not all the causative substances and odors could be removed by one composition or one method.

Further, it was a matter of common general knowledge before the priority date of the present application from the description of Cited Document 5 that a causative substance of body odor of elderly people of nonenal could not be easily removed by bathing or laundry of clothing (see the described matter 5-1.).

Consequently, it cannot be said that the skin pollution to be removed by simple "skin cleaning" is a same phenomenon as the pollution due to a causative substance of body odor of elderly people difficult to be removed by bathing or laundry, nor can it be said that the removal proceeds in the same mechanism.

b A "skin cleaning" composition and a composition "for skin cleaning for the removal of body odor of elderly people" have in common that they are both for cleaning the skin. As described in Cited Document 1, various cleanser compositions with a cleanser base of a surfactant were proposed before the priority date of the present application for the purpose of cleaning the skin (see the described matter 1-1) and there were various different means as a means for removing pollutants of the skin.

c It can be seen from the description of Cited Document 5 that there is a growing consciousness to odor in recent years, and people are becoming sensitive to body odor, in particular body odor of elderly people, and as it is clarified that the causative substance is nonenal, and measures are taken for deodorization and the removal of odor with a focus on nonenal (see Described matters 5-1 and 5-2). It was recognized before the priority date of the present application that a product consisting of a composition "for skin cleaning for the removal of body odor of elderly people" and a product consisting of a composition "for skin cleaning" in which pollutants to be removed are not specified were different kinds from each other.

(C) It was recognized that the pollution by the body odor of elderly people, which is a target for "skin cleaning for the removal of body odor of elderly people", was different in phenomenon and mechanism from the skin pollution to be removed by simple "skin cleaning", as discussed in the above (B)a, and a "skin cleaning" composition was also different from a composition "for skin cleaning for the removal of body odor of elderly people" as a product, as discussed in the above (B)c. As discussed in the above (B)b, a person skilled in the art would not recognize before the priority date of the present application that a "skin cleaning" composition of Cited Invention 1 had an effect of effectively removing body odor of elderly people in a variety of means for removing pollutants of the skin.

Therefore, it can be said that Invention 1 provides a new use of "for the removal of body odor of elderly people".

(D) Further, Cited Document 1 neither describes nor suggests applying Cited Invention 1 "for the removal of body odor of elderly people", whereas Invention 1 provides a new use of "for the removal of body odor of elderly people". A person skilled in the art would not recognize before the priority date of the present application that Cited Invention 1 had an effect of effectively removing body odor of elderly people. Thus it cannot be said that a person skilled in the art could have easily conceived of applying the shampoo of Cited Invention 1 "for the removal of body odor of elderly people".

Further, Invention 1 causes unexpected excellent results of significantly promoting the effect of removing a causative substance of body odor of elderly people of trans-2-nonenal synergistically by a combined use of (A) polyquaternium-10 and (B) an antimicrobial component selected from the group consisting of benzalkonium chloride and isopropylmethylphenol, as exemplified in test examples 1 and 2 of the specification of the present application (see the described matter 3, particularly [Table 1] and [Table 2]).

(3) Summary

Therefore, without consideration of Different feature 3 in detail, Invention 1 was

not described in Cited Document 1, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 1 and the common general knowledge before the priority date of the present application.

2. Invention 6

(1) Comparison with Cited Document 1

A Invention described in Cited Document 1

It was a matter of common general knowledge before the priority date of the present application that hair shampoo was one for cleaning hair and the scalp. Thus it can be seen from the description of "hair shampoo" of Cited Inventions 1-1 and 1-2 that a method for cleaning hair and the scalp by use of hair shampoo is a matter essentially described in Cited Document 1 although not literally.

Consequently, it is recognized that Cited Document 1 discloses the following invention (hereinafter referred to as "Cited Invention 1'-1" and "Cited Invention 1'-2".)

- Cited Invention 1'-1

"A method of cleaning hair and the scalp by use of hair shampoo having the following composition and component composition:

	(mass%)
POE(3) sodium lauryl ether sulfate	10.0
Amidopropyl betaine laurate solution	3.0
Ammonium lauryl sulfate	2.0
1,3-butyleneglycol	2.0
Monoisopropanol amide laurate	1.0
Ethyleneglycol distearate	2.0
POE cetyl ether	1.0
(Product name: N-BC-15TX [manufactured by Japan Surfactant])	
Cellulose derivatives	0.2
(Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.])	
Cellulose derivatives	0.2
(Product name: LEOGARD GP [manufactured by Lion Corporation])	
Disodium edetate	0.2
Phenoxyethanol... (B)	0.2
Sodium benzoate	0.4
Dimethyldiallylammonium chloride / acrylamide copolymer	2.0
(Product name: Merquat™ 550 [manufactured by Calgon])	
Dipotassium glycyrrhizinate	0.1
Isopropylmethylphenol	0.1
Citric acid	proper amount
Carrot extract	0.1
(Product name: Carrot extract BG [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.])	
Phellodendron Bark extract	0.1
(Product name: Phellodendron Bark Liquid B [manufactured by ICHIMARU PHARCOS Co., Ltd.])	
Olive oil ... (C)	0.1

Avocado oil ... (C) 0.05
 Dimethiconol aqueous emulsion ... (A) 1.0
 (1,000,000 mm²/s; 25°C silicone purity 70%)
 Fragrance proper amount
 Purified water balance
 * Mixing ratio of components (mass ratio)
 (A):((B)+(C))=1:0.5
 (B):(C)=1:0.75"

- Cited Invention 1'-2

"A method of cleaning hair and the scalp by use of hair shampoo having the following composition and component composition:

	(mass%)
POE(2) sodium lauryl ether sulfate	10.0
Amidopropyl betaine laurate solution	3.0
Sodium lauroylmethyl-beta-alanine solution	3.0
Dipropylene glycol	4.0
Monoisopropanol amide laurate	1.0
Ethyleneglycol distearate	1.5
Cellulose derivatives	0.3
(Product name: Catinal HC-200 [manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.]	
Disodium edetate	0.2
Phenoxyethanol... (B)	0.1
Sodium benzoate	0.4
Dimethyldiallylammonium chloride / acrylamide copolymer	2.0
(Product name: Merquat™ 550 [manufactured by Ondeo Nalco Company])	
Dipotassium glycyrrhizinate	0.1
Isopropylmethylphenol	0.1
Citric acid	proper amount
Honey	0.1
Hydrolyzed conchiolin	0.1
(Product name: Perl protein extract BG-J [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.]	
Swertia pseudochinensis extract	0.1
(Product name: Swertia pseudochinensis extract [manufactured by MARUZEN PHARMACEUTICALS CO., LTD.]	
Olive oil ... (C)	0.1
Dimethiconol aqueous emulsion ... (A)	1.0
(1,000,000 mm ² /s; 25°C:	
200 mm ² /s; 25°C=7:3 silicone purity 70%)	
Dimethicone aqueous emulsion	0.5
(Product name: BY22-083 [Dow Corning Toray Co., Ltd.]	
Fragrance	proper amount
Purified water	balance
* Mixing ratio of components (mass ratio)	
(A):((B)+(C)) = 1:0.3	

(B):(C)=1:1"

(Note that Cited Invention 1'-1 and Cited Invention 1'-2 are sometimes collectively referred to as "Cited Invention 1' ".)

B Invention 6 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 1' are identical to each other in that they are both
"A method of cleaning a skin by use of (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol in combination"
but they are different from each other in at least the following features:

(Different feature 1')

Invention 6 fails to specify the use of components other than polyquaternium-10 and antibacterial component, whereas Cited Invention 1' specifies the use of components other than polyquaternium-10 and antibacterial component.

(Different feature 2')

Invention 6 is a method of "the removal of body odor of elderly people, characterized in that a site of a skin where the generation of body odor of elderly people is present is cleaned", whereas Cited Invention 1' fails to specify this.

Further, Invention 6 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 1' are identical to each other in that they are both
"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"
but they are different from each other in the following point in addition to the above Different features 1' and 2':

(Different feature 3')

Regarding antibacterial components, Invention 6 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 1' includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 1'

A Different feature 1'

As is discussed in 1.(2)A, it is recognized that Invention 6 does not exclude the use of the other components, and thus this point is not a substantial difference.

B Different feature 2'

As is discussed in the above item 1. (2)B(C), it is recognized that a person skilled in the art would not recognize before the priority date of the present application that a method of cleaning the scalp by use of hair shampoo of Cited Invention 1' caused an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that Cited Document 1 discloses "cleaning a site of the skin where the generation of body odor of elderly people is present".

Further, it cannot be said that a person skilled in the art could have easily

conceived of applying a method of cleaning by use of a hair shampoo of Cited Invention 1' for "a method of removing body odor of elderly people". On the other hand, Invention 6 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 3' in detail, Invention 6 was not described in Cited Document 1, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 1 and the common general knowledge before the priority date of the present application.

3. Invention 7

(1) Comparison with Cited Invention 1

Invention 7 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 1 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol" but they are different from each other at least in the following features:

(Different feature 1")

Invention 7 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 1 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 2")

Invention 7 is "for cleaning a part of the skin in which body odor of elderly people is present", whereas Cited Invention 1 fails to specify the use.

Further, Invention 7 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 1 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component" but they are different from each other in the following point in addition to the above Different features 1" and 2":

(Different feature 3")

Regarding antibacterial components, Invention 7 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 1 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 1

A Regarding Different feature 1"

As is discussed in the above item 1. (2)A, it is recognized that Invention 7 does not exclude the use of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 2"

Invention 7 is a skin cleaning composition for removing body odor of elderly people by "cleaning a part of the skin in which body odor of elderly people is present. The use of removing body odor of elderly people provides a new use as discussed in the above item 1, and thus it is not described in Cited Document 1.

Further, it is recognized that a person skilled in the art would not recognize before the priority date of the present application that Cited Invention 1 caused an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that a person skilled in the art could have easily conceived of applying the hair shampoo of Cited Invention 1 "for cleaning a site of the skin where the generation of body odor of elderly people is present", whereas Invention 7 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 3" in detail, Invention 7 was not described in Cited Document 1, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 1 and the common general knowledge before the priority date of the present application.

4. Regarding Inventions 2 to 5 and 8 to 11

Inventions 2 and 8 both further specify Inventions 1 and 7 as "to be used for the removal of nonenal". Inventions 3 and 9 further specify Invention 1 or 2 and Invention 7 or 8 as "comprising a cationic polymer selected from the group consisting of (C) polyquaternium-7 ...". Inventions 4 and 10 further specify any of Inventions 1 to 3 and any of Inventions 7 to 9 as "comprising at least one kind selected from the group consisting of higher fatty acid salt ...". Inventions 5 and 11 further specify "the content of the component (C)" in Inventions 3 and 9.

Therefore, Inventions 2 to 5 and 8 to 11 have essential components of "for the removal of body odor of elderly people" or "for cleaning a part of a skin in which body odor of elderly people is present". Therefore, for a reason similar to those discussed in the above items 1. or 3., the inventions were not described in Cited Document 1, nor were they easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 1 and the common general knowledge before the priority date of the present application.

<2> Comparison / judgment between the Invention and Cited Invention 2

1. Invention 1

(1) Comparison with Cited Invention 2

"Isopropylmethylphenol" of Cited Invention 2 corresponds to "antibacterial component" of Invention 1.

"Cleansing gel composition" of Cited Invention 2 corresponds to "skin cleaning composition" of Invention 1 in view of the fact that the problem of Cited Document 2 is "to provide a skin cleaning composition ..." (see the described matter 2-1.).

Consequently, Invention 1 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 2 are identical to each other in that they

are both

"A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol"

but they are different from each other at least in the following features:

(Different feature 4)

Invention 1 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 2 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 5)

Invention 1 is "for the removal of body odor of elderly people", whereas Cited Invention 2 fails to specify the use.

Further, Invention 1 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 2 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 4 and 5:

(Different feature 6)

Regarding antibacterial components, Invention 1 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 2 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 2

A Regarding Different feature 4

As is discussed in the above item <1>1.(2)A, it is recognized that Invention 1 does not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 5

(A) As is discussed in the above item <1>1. (2)B, taking the common general knowledge before the priority date of the present application into consideration, a person skilled in the art would not recognize before the priority date of the present application that Cited Invention 2 had an effect of effectively removing body odor of elderly people. Therefore, it can be said that Invention 1 provides a new use of "for the removal of body odor of elderly people".

(B) Further, Cited Document 2 neither describes nor suggests applying Cited Invention 2 "for the removal of body odor of elderly people", whereas Invention 1 provides a new use of "for the removal of body odor of elderly people". A person skilled in the art would not recognize before the priority date of the present application that Cited Invention 2 had an effect of effectively removing body odor of elderly people. Thus it

cannot be said that a person skilled in the art could have easily conceived of applying the cleansing gel composition of Cited Invention 2 "for the removal of body odor of elderly people".

Further, Invention 1 causes unexpected excellent results of significantly promoting the effect of removing a causative substance of body odor of elderly people of trans-2-nonenal synergistically by a combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 6 in detail, Invention 1 was not described in Cited Document 2, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 2 and the common general knowledge before the priority date of the present application.

2. Invention 6

(1) Comparison with the invention described in Cited Document 2

A Invention described in Cited Document 2

"Cleansing gel composition" of Cited Invention 2 corresponds to "skin cleaning composition" in view of the fact that the problem of Cited Document 2 is "to provide a skin cleaning composition ..." (see the described matter 2-1.). A method for cleaning the skin by use of the composition is a matter essentially described Cited Document 2, although not literally.

Consequently, it is recognized that Cited Document 2 discloses the following invention (hereinafter referred to as "Cited Invention 2".)

"A method of cleaning the skin by use of a cleansing gel composition having the following composition:

Triethanolamine myristate	6.0	
Potassium N-lauroyl-N-methyl-beta-alanine	2.0	
Coconut oil fatty acid diethanolamide	3.0	
(Home lead CD, manufactured by Lion Chemical Co., Ltd.)		
POE(3) sodium lauryl ether sulfate	4.0	
Lauryl dimethylamino acetate betaine	1.0	
(Ovasolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)		
POE (10) behenyl ether	3.0	
(Emalex BHA-10, manufactured by Nippon Emulsion)		
Dimethylpolysiloxane	1.0	
(SH200-30cs, manufactured by Dow Corning Toray Silicone Co., Ltd.)		
Isononyl isononanoate	2.0	
Hydroxypropylmethylcellulose	0.5	
(METOLOSE HPMC 60SH4000, manufactured by Shin-Etsu Chemical Co., Ltd.)		
Alkyl acrylate copolymer emulsion	0.2	
(LEOARL MS-200, manufactured by Lion Chemical Co., Ltd.)		
Polyquaternium-10	1.0	
(JR-400, manufactured by Union Carbide Corporation)		
Propyleneglycol	5.0	
Isopropylmethylphenol	0.1	
LAPONITE XLG (manufactured by Japan Silica Industries Co., Ltd.)		0.3

Polyethylene powder (average particle diameter: 100 μm)	0.3
Fragrance D	1.0
Triethanolamine	Amount to adjust to pH8
Purified water	Balance
Total (%)	100.0

B Invention 6 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 2' are identical to each other in that they are both "A method of cleaning the skin by use of (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol in combination" but they are different from each other at least in the following features:

(Different feature 4')

Invention 6 fails to specify the use of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 2' specifies the use of components other than polyquaternium-10 and an antibacterial component.

(Different feature 5')

Invention 6 is a method of "the removal of body odor of elderly people, characterized in that a site of the skin where the generation of body odor of elderly people is present is cleaned", whereas Cited Invention 2' fails to specify this.

Further, Invention 6 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 2' are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component" but they are different from each other in the following point in addition to the above Different features 4' and 5':

(Different feature 6')

Regarding antibacterial components, Invention 6 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 2' includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 2'

A Regarding Different feature 4'

As is discussed in the above item 1. (2)A, it is recognized that Invention 6 does not exclude the use of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 5'

As is discussed in the above item 1. (2)B(A), it is recognized that a person skilled in the art would not recognize before the priority date of the present application that a method of cleaning the skin by use of a cleansing gel composition of Cited Invention 2' caused an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that Cited Document 2 discloses "cleaning a site of the skin

where the generation of body odor of elderly people is present".

Further, it cannot be said that a person skilled in the art could have easily conceived of applying a method of cleaning by use of a cleansing gel composition of Cited Invention 2' for "a method of removing body odor of elderly people". On the other hand, Invention 6 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 6' in detail, Invention 6 was not described in Cited Document 2, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 2 and the common general knowledge before the priority date of the present application.

3. Invention 7

(1) Comparison with Cited Invention 2

Invention 7 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 2 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol" but they are different from each other at least in the following features:

(Different feature 4")

Invention 7 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 2 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 5")

Invention 7 is "for cleaning a part of the skin in which body odor of elderly people is present", whereas Cited Invention 2 fails to specify the use.

Further, Invention 7 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 2 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component" but they are different from each other in the following point in addition to the above Different features 4" and 5":

(Different feature 6")

Regarding antibacterial components, Invention 7 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 2 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 2

A Regarding Different feature 4"

As is discussed in the above item 1. (2)A, it is recognized that Invention 7 does

not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 5"

Invention 7 is a skin cleaning composition for removing body odor of elderly people by "cleaning a part of a skin in which body odor of elderly people is present. The use of removing body odor of elderly people provides a new use as discussed in the above item 1., and thus it is not described in Cited Document 2.

Further, it is recognized that a person skilled in the art would not recognize before the priority date of the present application that Cited Invention 2 caused an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that a person skilled in the art could have easily conceived of applying the cleansing gel composition of Cited Invention 2 "for cleaning a site of a skin where the generation of body odor of elderly people is present", whereas Invention 7 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 6" in detail, Invention 7 was not described in Cited Document 2, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 2 and the common general knowledge before the priority date of the present application.

4. Inventions 2 to 5 and 8 to 11

As is discussed in the above item <1>4., Inventions 2 to 5 and 8 to 11 have essential components of "for the removal of body odor of elderly people" or "for cleaning a part of a skin in which body odor of elderly people is present". Therefore, for a reason similar to those discussed in the above items 1. or 3., the inventions were not described in Cited Document 2, nor were they easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 2 and the common general knowledge before the priority date of the present application.

<3> Comparison / judgment between the Invention and Cited Invention 3

1. Invention 1

(1) Comparison with Cited Invention 3

"Cationized cellulose ... (Product name: LEOGARD GP, manufactured by Lion Corporation)" of Cited Invention 3 is recognized as a mixed raw material comprising "polyquaternium-10" of Invention 1 in view of the description of [0017] of the specification of the present application "... a commercially available mixed raw material comprising polyquaternium-10 may be used. Such mixed raw material may include, for example, ... LEOGARD GP (Lion)...".

"Isopropylmethylphenol" of Cited Invention 3 corresponds to "antibacterial component" of Invention 1.

"Antibacterial cleanser composition" of Cited Invention 3 is one for cleaning the "skin" and corresponds to a "skin cleaning composition" of Invention 1 in view of the fact that the problem of Cited Document 3 is "to provide a paste cleanser composition

excellent in mildness to the skin" (see the described matter 3-1) and that the composition is used for "skin (mainly the face)" in the examples that assessed mildness to skin (see the described matter 3-2).

"Deodorant" of Cited Invention 3 is deodorization.

Consequently, Invention 1 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 3 are identical to each other in that they are both

"A skin cleaning composition for odor prevention comprising (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol"

but they are different from each other at least in the following features:

(Different feature 7)

Invention 1 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 3 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 8)

Regarding odor to be prevented, Invention 1 specifies it as "body odor of elderly people", whereas Cited Invention 3 fails to specify it.

Further, Invention 1 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 3 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 7 and 8:

(Different feature 9)

Regarding antibacterial components, Invention 1 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 3 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different feature with Cited Invention 3

A Regarding Different feature 7

As is discussed in the above item <1>1.(2)A, it is recognized that Invention 1 does not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 8

(A) The matters described in the specification of the present application are as per discussed in the above <1>1.(2)B(A).

Therefore, a consideration is given as to whether the use of "for the removal of body odor of elderly people" of Invention 1 might be said as providing a new use, by taking into account the common general technical knowledge before the priority date of the present application in the technical field.

(B) As is discussed in the above item (1), Cited Invention 3 is a deodorant for skin cleaning and an antibacterial cleanser composition. Taking the common general knowledge before the priority date of the present application into account, the following is recognized with respect to "deodorant and antibacterial cleaning" and "the removal of body odor of elderly people".

a "Deodorant" is to prevent body odor, whereas "for the removal of body odor of elderly people" is to remove particularly body odor of elderly people among various body odors. Here, there are various odors and causative substances for skin such as armpit odor, smelly feet, and breath odor. These substances have different structures, features, and physical properties. Thus it was a matter of common general knowledge before the priority date of the present application that not all the causative substances and odors could be prevented by one composition or one method. Consequently, it cannot be said that the body odor to be prevented by "deodorant" is the same phenomenon as the "body odor of elderly people", nor can it be said that the prevention of these odors proceeds in the same mechanism.

"Antibacterial cleaning" is recognized as implementing bacterial killing and cleaning, as it literally means. In particular, when it comes to "cleaning", it cannot be said that the pollution of a skin to be removed by simple skin cleaning and the removal and the pollution of a skin to be removed by simple skin cleaning and the removal have the same phenomenon and mechanism, as discussed in the above <1>1.(2)B. Further, it is not recognized that there was a matter of common general knowledge before the priority date of the present application that "deodorization" could remove body odor of elderly people. Thus it cannot be said that a state where a target of "bacterial killing" of microorganism is present is the same phenomenon as a state where the "body odor of elderly people" is present, nor can it be said that the prevention mechanism is the same.

b It can be seen from the description of Cited Document 5 that there were various different means before the priority date of the present application as means for deodorizing or reducing body odor (see the described matter 5-1.).

Further, as described in Cited Document 1, various cleanser compositions with a cleanser base of a surfactant were proposed before the priority date of the present application for the purpose of cleaning the skin (see the described matter 1-1) and there were various different means as means for removing pollutants of the skin.

c It can be seen from the description of Cited Document 5 that there is a growing consciousness to odor in recent years, and people are becoming sensitive to body odor, in particular body odor of elderly people, and as it is clarified that the causative substance is nonenal, measures are taken for deodorization and the removal of odor with a focus on nonenal (see Described matters 5-1 and 5-2). It was recognized before the priority date of the present application that a product consisting of a composition "for the removal of body odor of elderly people" and a product consisting of a composition "deodorant and antibacterial cleanser" in which odor to be prevented or pollutant to be cleaned was not clarified were different kinds from each other.

(C) It was recognized that the body odor of elderly people, which is a target for "skin

cleaning for the removal of body odor of elderly people", was different in phenomenon and mechanism from the odor or pollution that became a target for "deodorant and antibacterial cleaning", as discussed in the above (B)a, and a "deodorant and an antibacterial cleanser" composition was also different from a composition "for skin cleaning for the removal of body odor of elderly people" as a product, as discussed in the above (B)c. As discussed in the above (B)b, a person skilled in the art would not recognize before the priority date of the present application that a "deodorant and an antibacterial cleanser" composition of Cited Invention 3 had an effect of effectively removing body odor of elderly people in a variety of means for removing pollutants of the skin.

Therefore, it can be said that Invention 1 provides a new use of "for the removal of body odor of elderly people".

(D) Further, Cited Document 3 neither describes nor suggests applying Invention 3 "for the removal of body odor of elderly people", whereas Invention 1 provides a new use of "for the removal of body odor of elderly people". A person skilled in the art would not recognize before the priority date of the present application that Cited Invention 3 had an effect of effectively removing body odor of elderly people. Thus it cannot be said that a person skilled in the art could have easily conceived of applying the "deodorant and antibacterial cleanser" composition of Cited Invention 3 "for the removal of body odor of elderly people".

Further, Invention 1 causes unexpected excellent results of significantly promoting the effect of removing a causative substance of body odor of elderly people of trans-2-nonenal synergistically by a combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 9 in detail, Invention 1 was not described in Cited Document 3, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 3 and the common general knowledge before the priority date of the present application.

2. Invention 6

(1) Comparison with the invention described in Cited Document 3

A Invention described in Cited Document 3

"Deodorant and antibacterial cleanser composition" of Cited Invention 3 are ones for cleaning the "skin" in view of the fact that the problem of Cited Document 3 is "to provide a paste cleanser composition excellent in mildness to the skin" (see the described matter 3-1) and that the composition is used for "skin (mainly the face)" in the examples that assessed mildness to the skin (see the described matter 3-2). Thus a method for cleaning the skin by use of the composition is a matter essentially described in Cited Document 3, although not literally.

Consequently, it is recognized that Cited Document 3 discloses the following invention (hereinafter referred to as "Cited Invention 3".)

"A method of cleaning the skin by use of a paste deodorant and an antibacterial cleanser composition comprising the following components in the following mixing composition:

- Potassium laurate 5.0%
- Lauric acid 0.5%
- Potassium myristate 9.0%
- Myristic acid 1.0%
- Potassium palmitate 5.0%
- Palmitic acid 0.5%
- Potassium stearate 10.0%
- Stearic acid 1.0%
- Sodium N-lauroyl-N-methyl-beta-alanine 3.0%
- N-lauroyl-N-methyl-beta-alanine 0.3%
- POE(11) stearyl ether 3.0%
- 1,3-butylene glycol 12.0%
- Hexylene glycol 4.0%
- POE(3) sodium lauryl ether sulfate 2.5%
- Lauryl dimethylamino acetate betaine 2.0%
- (Obazolin LB-SF, manufactured by TOHO CHEMICAL INDUSTRY Co., Ltd.)
- Ethanol 1.5%
- POE(2) Monoisopropanol amide laurate 1.0%
- (Amizet 2L-Y, manufactured by Kawaken Fine Chemicals Co., Ltd.)
- Styrene polymer emulsion (35%) 1.0%
- (SAIVINOL RPX-196PE-3, manufactured by SAIDEN CHEMICAL INDUSTRY CO., LTD.)
- Sodium chloride 0.3%
- Bengel FW (manufactured by HOJUN., Co. Ltd.) 0.2%
- Methylparaben 0.2%
- Triclosan 0.2%
- Triclocarban 0.1%
- Isopropylmethylphenol 0.1%
- Piroctone olamine 0.1%
- (Octopirox, manufactured by Clariant Japan)
- Cationized cellulose 0.1%
- (LEOGARD GP, manufactured by Lion Chemical Co., Ltd.)
- Polyacrylic acid 0.1%
- (Carbopol 9402, manufactured by BF Goodrich)
- Propylparaben 0.1%
- Oil-soluble licorice extract 0.1%
- (Oil-soluble licorice extract P-T40N, manufactured by MARUZEN PHARMACEUTICALS CO., LTD.)
- Hydroxyethanediphosphonate 0.1%
- Fragrance 0.5%
- Potassium hydroxide proper amount (0.05 to 2.0%)
- Yellow No. 4 proper amount (0.0001 to 0.001%)
- Blue No. 1 proper amount (0.0001 to 0.001%)
- Purified water balance
- Total 100.0%"

B Invention 6 with an antibacterial component of "isopropylmethylphenol" and Cited

Invention 3' are identical to each other in that they are both "A method of cleaning the skin by use of (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol in combination" but they are different from each other at least in the following features:

(Different feature 7')

Invention 6 fails to specify the use of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 3' specifies the use of components other than polyquaternium-10 and an antibacterial component.

(Different feature 8')

Invention 6 is a method of "the removal of body odor of elderly people, characterized in that a site of a skin where the generation of body odor of elderly people is present is cleaned", whereas Cited Invention 3' fails to specify this.

Further, Invention 6 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 3' are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 7' and 8':

(Different feature 9')

Regarding antibacterial components, Invention 6 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 3' includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 3'

A Regarding Different feature 7'

As is discussed in the above item 1. (2)A, it is recognized that Invention 6 does not exclude the use of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 8'

As is discussed in the above item 1. (2)B(C), it is recognized that a person skilled in the art would not recognize before the priority date of the present application that a method of cleaning the skin by use of a deodorant and an antibacterial cleanser composition of Cited Invention 3' had an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that Cited Document 3 discloses "cleaning a site of the skin where the generation of body odor of elderly people is present".

Further, it cannot be said that a person skilled in the art could have easily conceived of applying a method of cleaning by use of a deodorant and an antibacterial cleanser composition of Cited Invention 3' for "a method of removing body odor of elderly people". On the other hand, Invention 6 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 9' in detail, Invention 6 was not described in Cited Document 3, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 3 and the common general knowledge before the priority date of the present application.

3. Invention 7

(1) Comparison with Cited Invention 3

Invention 7 with an antibacterial component of "isopropylmethylphenol" and Cited Invention 3 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antibacterial component of isopropylmethylphenol" but they are different from each other at least in the following features:

(Different feature 7")

Invention 7 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 3 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 8")

Invention 7 is "for cleaning a part of the skin in which body odor of elderly people is present", whereas Cited Invention 3 fails to specify the use.

Further, Invention 7 with an antibacterial component of "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 3 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component" but they are different from each other in the following point in addition to the above Different features 7" and 8":

(Different feature 9")

Regarding antibacterial components, Invention 7 includes "benzalkonium chloride" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 3 includes "isopropylmethylphenol", but does not include "benzalkonium chloride".

(2) Judgment about the different features with Cited Invention 3

A Regarding Different feature 7"

As is discussed in the above item 1. (2)A, it is recognized that Invention 7 does not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 8"

Invention 7 is a skin cleaning composition for removing body odor of elderly people by "cleaning a part of the skin in which body odor of elderly people is present.

The use of removing body odor of elderly people provides a new use as discussed in the above item 1., and thus it is not described in Cited Document 3.

Further, it cannot be said that a person skilled in the art could have easily conceived of applying a deodorant and an antibacterial cleanser composition of Cited Invention 3 "for cleaning a site of a skin where the generation of body odor of elderly people is present". On the other hand, Invention 7 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 9" in detail, Invention 7 was not described in Cited Document 3, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 3 and the common general knowledge before the priority date of the present application.

4. Inventions 2 to 5 and 8 to 11

As is discussed in the above item <1>4., Inventions 2 to 5 and 8 to 11 have essential components of "for the removal of body odor of elderly people" or "for cleaning a part of the skin in which body odor of elderly people is present". Therefore, for a reason similar to those discussed in the above items 1. and 3., the inventions were not described in Cited Document 3, nor were they easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 3 and the common general knowledge before the priority date of the present application.

<4> Comparison / judgment between the Invention and Cited Invention 4

1. Invention 1

(1) Comparison with Cited Invention 4

"Cationized cellulose (Polymer JR400)" of Cited Invention 4 is recognized as "polyquaternium-10" of Invention 1 in view of the description of the column of Cationized cellulose (2) of Table 4 of Cited Document 2 that "polyquaternium-10 (JR-400...)" (see the described matter 2-3.).

"Benzalkonium chloride" of Cited Invention 4 corresponds to "antibacterial component" of Invention 1 in view of the description of [0022] in the specification of the present application that "Antibacterial component is a publicly known component in the art capable of suppressing the growth of bacteria (Gram-positive anaerobic, Gram-negative anaerobic, etc.) by performing antibacterial or bacteriostatic action. Specifically, an antibacterial component may include benzalkonium chloride ...".

"Cleanser for hand washing" of Cited Invention 4 corresponds to "skin cleaning composition" of Invention 1.

Consequently, Invention 1 with an antibacterial component of "benzalkonium chloride" and Cited Invention 4 are identical to each other in that they are both "A skin cleaning composition for odor prevention comprising (A) polyquaternium-10 and (B) an antibacterial component of benzalkonium chloride" but they are different from each other at least in the following features:

(Different feature 10)

Invention 1 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 4 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 11)

Regarding odor to be prevented, Invention 1 specifies it as "body odor of elderly people", whereas Cited Invention 4 fails to specify it.

Further, Invention 1 with an antibacterial component of "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 4 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 10 and 11:

(Different feature 12)

Regarding antibacterial components, Invention 1 includes "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 4 includes "benzalkonium chloride", but does not include "isopropylmethylphenol".

(2) Judgment about the different features with Cited Invention 4

A Regarding Different feature 10

As is discussed in the above item <1>1. (2)A, it is recognized that Invention 1 does not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 11

(A) As is discussed in the above item <3>1.(2)B, taking the common general knowledge before the priority date of the present application into account, a person skilled in the art would not recognize before the priority date of the present application that "a cleanser for hand washing capable of imparting deodorizing effects to body for exerting high antibacterial effects to impart deodorizing effects" of Cited Invention 4 had an effect of effectively removing body odor of elderly people. Thus it can be said that Invention 1 provides a new use of "for the removal of body odor of elderly people".

(B) Further, Cited Document 4 neither describes nor suggests applying Cited Invention 4 "for the removal of body odor of elderly people", whereas Invention 1 provides a new use of "for the removal of body odor of elderly people". A person skilled in the art would not recognize before the priority date of the present application that Cited Invention 4 had an effect of effectively removing body odor of elderly people. Thus it cannot be said that a person skilled in the art could have easily conceived of applying "a cleanser for hand washing capable of imparting deodorizing effects to the body for exerting high antibacterial effects to impart deodorizing effects" of Cited Invention 4 "for the removal of body odor of elderly people".

Further, Invention 1 causes unexpected excellent results of significantly

promoting the effect of removing a causative substance of body odor of elderly people of trans-2-nonenal synergistically by a combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 12 in detail, Invention 1 was not described in Cited Document 4, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 4 and the common general knowledge before the priority date of the present application.

2. Invention 6

(1) Comparison with the invention described in Cited Document 4

A Invention described in Cited Document 4

Cited Document 4 describes "a cleanser for hand washing capable of imparting deodorizing effects to the body". A method of providing deodorizing effects by cleaning hands with the cleanser is a matter essentially described in Cited Document 4 although not literally.

Consequently, it is recognized that Cited Document 4 discloses the following invention (hereinafter referred to as "Cited Invention 4".)

"A method of the cleaning hands with a cleanser for hand washing having the following composition and capable of imparting deodorizing effects to the body for exerting high antibacterial effects to impart deodorizing effects:

Potassium coconut oil fatty acid	16%
Cationized cellulose (Polymer JR400)	0.3%
Diethanol amide laurate	3%
Benzalkonium chloride	1%
Disodium ethylene diamine tetra-acetic acid	0.6%
Glyceride	1%
Methylparaben	0.2%
Fragrance	0.1%
Water	Balance
Total	100.0%

B Invention 6 with an antibacterial component of "benzalkonium chloride" and Cited Invention 4' are identical to each other in that they are both

"A method of preventing odor, comprising the step of preventing odor by a combined use of (A) polyquaternium-10 and (B) an antimicrobial component of benzalkonium chloride"

but they are different from each other at least in the following features:

(Different feature 10')

Invention 6 fails to specify the use of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 4' specifies the use of components other than polyquaternium-10 and an antibacterial component.

(Different feature 11')

Regarding odor to be prevented, Invention 6 specifies it as "body odor of elderly people", whereas Cited Invention 4' fails to specify it.

Further, Invention 6 with an antibacterial component of "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 4' are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component" but they are different from each other in the following point in addition to the above Different features 10' and 11':

(Different feature 12')

Regarding antibacterial components, Invention 6 includes "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 4' includes "benzalkonium chloride", but does not include "isopropylmethylphenol".

(2) Judgment about the different features with Cited Invention 4'

A Regarding Different feature 10'

As is discussed in the above item 1. (2)A, it is recognized that Invention 6 does not exclude the use of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 11', as is discussed in the above 1.(2)B(C), it is recognized that a person skilled in the art would not recognize before the priority date of the present application that a method of cleaning the hands by use of "a cleanser for hand washing capable of imparting deodorizing effects to the body for exerting high antibacterial effects" of Cited Invention 4' to impart deodorizing effects had an effect of effectively removing body odor of elderly people. Therefore, it cannot be said that Cited Document 4 discloses "cleaning a site of the skin where the generation of body odor of elderly people is present".

Further, it cannot be said that a person skilled in the art could have easily conceived of applying a method of cleaning by use of a cleanser for hand washing of Cited Invention 4' for "a method of removing body odor of elderly people". On the other hand, Invention 6 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of old people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 12' in detail, Invention 6 was not described in Cited Document 4, nor was it easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 4 and the common general knowledge before the priority date of the present application.

3. Invention 7

(1) Comparison with Cited Invention 4

Invention 7 with an antibacterial component of "benzalkonium chloride" and Cited Invention 4 are identical to each other in that they are both "A skin cleaning composition comprising (A) polyquaternium-10 and (B) an antibacterial component of benzalkonium chloride"

but they are at least different from each other in the following features:

(Different feature 10")

Invention 7 fails to specify the inclusion of components other than polyquaternium-10 and an antibacterial component, whereas Cited Invention 4 specifies the inclusion of components other than polyquaternium-10 and an antibacterial component.

(Different feature 11")

Invention 7 is "for cleaning a part of the skin in which body odor of elderly people is present", whereas Cited Invention 4 fails to specify the use.

Further, Invention 7 with an antibacterial component of "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol" and Cited Invention 4 are identical to each other in that they are both

"A skin cleaning composition comprising (A) polyquaternium-10 and an antibacterial component"

but they are different from each other in the following point in addition to the above Different features 10" and 11":

(Different feature 12")

Regarding antibacterial components, Invention 7 includes "isopropylmethylphenol" or "benzalkonium chloride and isopropylmethylphenol", whereas Cited Invention 4 includes "benzalkonium chloride", but does not include "isopropylmethylphenol".

(2) Judgment about the different features with Cited Invention 4

A Regarding Different feature 10"

As is discussed in the above item 1. (2)A, it is recognized that Invention 7 does not exclude the inclusion of the other components, and thus this point is not a substantial difference.

B Regarding Different feature 11"

The present invention 7 is a skin cleaning composition for removing body odor of elderly people by "cleaning a site of the skin where body odor of elderly people is present. The use of removing body odor of elderly people provides a new use as discussed in the above item 1., and thus it is not described in Cited Document 4.

Further, it cannot be said that a person skilled in the art could have easily conceived of applying "a cleanser for hand washing capable of imparting deodorizing effects to the body for exerting high antibacterial effects to impart deodorizing effects" of Cited Invention 4 "for cleaning a site of the skin where the generation of body odor of elderly people is present". On the other hand, Invention 7 causes unexpected excellent effects in terms of the removal of a causative substance of body odor of elderly people by the combined use of (A) and (B).

(3) Summary

Therefore, without considering Different feature 12" in detail, Invention 7 was not described in Cited Document 4, nor was it easily conceivable by a person skilled in

the art on the basis of the inventions described in Cited Document 4 and the common general knowledge before the priority date of the present application.

4. Inventions 2 to 5 and 8 to 11

As is discussed in the above item <1>4., Inventions 2 to 5 and 8 to 11 have essential components of "for the removal of body odor of elderly people" or "for cleaning a site of the skin where body odor of elderly people is present". Therefore, for a reason similar to those discussed in the above items 1. or 3., the inventions were not described in Cited Document 4, nor were they easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Document 4 and the common general knowledge before the priority date of the present application.

No. 6 Reasons for refusal stated in the examiner's decision

1. As for Article 36(6)(i) of the Patent Act (Reason 2)

Reason 2 in the examiner's decision is summarized as set forth below: Specifically, Claims 1 to 11 recite various antibacterial components, while only the case where benzalkonium chloride and isopropylmethylphenol are used as an antibacterial component suggests in the Detailed Description of the Invention, on the basis of objective data, solving the problem to "provide a novel skin cleaning composition that highly performs the removing effects of body odor of elderly people". It is not obvious from the description of the specification of the present application that the other antibacterial components also cause a similar effect. Thus the contents disclosed in the Detailed Description of the Invention cannot be extended or generalized to the scope of the Inventions according to Claims 1 to 11 that encompass the embodiments using an antibacterial component other than benzalkonium chloride and isopropylmethylphenol.

In contrast, a written amendment on April 20, 2018 made the antibacterial components of (B) of Claims 1 to 11 ones "selected from the group consisting of benzalkonium chloride and isopropylmethylphenol", which resulted in conformance to the provision of Article 36(6)(i) of the Patent Act.

2. As for Article 29(1)(iii) (Reason 3) and Article 29(2) (Reason 4) of the Patent Act

As is discussed in the above No. 5, the inventions were not described in any of Cited Document 1 to 4, nor were they easily conceivable by a person skilled in the art on the basis of the inventions described in Cited Documents 1 to 4 and the common general knowledge before the priority date of the present application.

No. 7 Additional Notes in the Examiner's Decision

The examiner's decision additionally notes that the inventions according to Claims 1, 2, 5 to 8, and 11 are the inventions described in any one of Cited Documents 6 to 8, and thus these inventions correspond to the inventions specified in Article 29(1)(iii) of the Patent Act for which the Applicant cannot be granted a patent, and/or these inventions were easily conceivable on the basis of the invention of any of Cited Documents 6 to 8 by a person skilled in the art, and thus the Applicant cannot be granted patents for the inventions under the provision of Article 29(2) of the Patent Act, while they are not the reasons for refusal.

However, a written amendment on April 20, 2018 made the antibacterial components (B) ones "selected from the group consisting of benzalkonium chloride and isopropylmethylphenol", whereas Cited Documents 6 to 8 fail to describe such antibacterial components. Thus the inventions according to Claims 1, 2, 5 to 8, and 11 after the Amendment (i.e. the inventions 1, 2, 5 to 8, and 11) are not described in Cited Documents 6 to 8, resulting in conformance to the provision of Article 29(1)(iii) of the Patent Act.

Further, a person skilled in the art could not have easily conceived of making an antibacterial component the ones "(B) selected from the group consisting of benzalkonium chloride and isopropylmethylphenol" in the invention described in Cited Documents 6, 7, or 8 to provide a composition for the removal of body odor of elderly people, a method of removing body odor of elderly people, or a skin cleaning composition for cleaning a site of a skin where the generation of body odor of elderly people is present. The effect of Inventions 1, 2, 5 to 8, and 11 capable of effectively removing body odor of elderly people is significant and unexpected from Cited Documents 6, 7, and 8, and thus these inventions were not easily conceivable by a person skilled in the art on the basis of the invention described in Cited Documents 6, 7, and 8, nor do these inventions violate the provision of Article 29(2) of the Patent Act.

List of Cited Documents, etc.

- 6. MINTEL GNPD ID:1614277, August 2011
- 7. MINTEL GNPD ID:1946145, December 2012
- 8. MINTEL GNPD ID:1900847, October 2012

No. 8 Closing

As described above, the application cannot be rejected due to the reasons of the examiner's decision.

In addition, beyond that, no reasons for refusal were found.

Therefore, the appeal decision shall be made as described in the conclusion.

December 25, 2018

Chief administrative judge: BANNO, Seiji
Administrative judge: HASEGAWA, Akane
Administrative judge: TOMINAGA, Midori