Appeal decision

Appeal No. 2016-1771

Germany
Appellant MERCK PATENT GMBH

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The case of appeal against the examiner's decision of refusal regarding Japanese Patent Application No. 2013-240893, entitled "Pigment Mixture, and Use thereof in Cosmetics, Food and Pharmaceuticals" (the application published on March 1, 2014, Japanese Unexamined Patent Application Publication No. 2014-77137) has resulted in the following appeal decision:

Conclusion

The appeal of the case was groundless.

Reason

No. 1 History of the procedures

The application was filed on November 21, 2013 as a divisional application based on the Japanese Patent Application No. 2009-508248, which was originally filed on May 9, 2007 as an international application (priority claim under the Paris Convention: May 9, 2006, DE). A written statement and a written amendment were submitted on December 17, 2013. A written statement and a written amendment were submitted on March 24, 2015 in response to the notice of reasons for refusal dated September 25, 2014. The examiner's decision of refusal dated September 29, 2015 was issued (the date on which a certified copy of the decision was transmitted was October 6, 2015). The appeal against the examiner's decision of refusal was made on February 5,

2016 and a written amendment was submitted at the same time. A written amendment (formality) of the request for appeal was submitted on March 31, 2016. A reconsideration report was made by the examiner on June 17, 2016.

No. 2 Decision to dismiss the written amendment dated February 5, 2016

[Conclusion of Decision to dismiss the written Amendment]

The written amendment dated February 5, 2016 (hereinafter referred to as "Amendment of the case") shall be dismissed.

[Reason]

1. Detail of Amendment

(1) Description of Claim 1 after Amendment of the case

Claim 1 after the Amendment of the case is as follows. The underlines in the following description indicate amended portions.

"[Claim 1]

A pigment mixture consisting of at least two components A and B, characterized in that the component A comprises gold effect pigments based on multicoated flake-form substrates which have a layer sequence comprising

(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in the molar ratio 1:0.5 to 1:2.0 and optionally one or more metal oxide(s) in amounts of <20 wt.%, based on layer (A),

(B) a colorless coating having a refractive index n<1.8,

(C) a colorless coating having a refractive index n>1.8,

(D) an absorbent coating having a refractive index n>1.8 and optionally

(E) an outer protective layer,

wherein the gold effect pigment has the following layer structure:

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2,

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3,

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + SiO_2 + Fe_2O_3/TiO_2,

substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2, or

substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3, and

the component B comprises colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles."

(2) Claim 1 before Amendment of the case

Claim 1 before the Amendment of the case is as follows.

"[Claim 1]

A pigment mixture consisting of at least two components A and B, characterized in that the component A comprises effect pigments based on multicoated flake-form substrates which have a layer sequence comprising

(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in the molar ratio 1:0.5 to 1:2.0 and optionally one or more metal oxide(s) in amounts of <20 wt.%, based on layer (A),

(B) a colorless coating having a refractive index n<1.8,

(C) a colorless coating having a refractive index n>1.8,

(D) an absorbent coating having a refractive index n>1.8 and optionally

(E) an outer protective layer,

wherein the effect pigment has the following layer structure:

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2,

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3,

substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + SiO_2 + Fe_2O_3/TiO_2,

substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2, or

substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3, and

the component B comprises colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles."

2. Propriety of amendment

The amendment of the case is to amend "effect pigments" to "gold effect pigments" in Claim 1. This amendment is to limit "effect pigments" needed for specifying the invention according to Claim 1 before the Amendment to "gold effect pigments" on the basis of paragraphs [0004] and [0032] of the originally attached description.

Further, the field of industrial application and the problems to be solved of the invention according to Claim 1 after the Amendment is identical to that of the invention according to Claim 1 before the Amendment. Therefore, the purpose of the Amendment of the case pertains to the restriction of the scope of claims of Article 17bis(5)(ii).

It is examined whether the invention described in Claim 1 after the Amendment

of the case (hereinafter referred to as "the Amended Invention") should be independently patentable at the time of the patent application, or whether it falls under the provisions of Article 126(7) of the Patent Act which is applied mutatis mutandis pursuant to the provisions of Article 17bis(6) of the Patent Act.

(1) The Amended Invention

The Amended Invention is as described in 1(1) above.

(2) Matters described in the cited documents

The following matters are described in National Publication of International Patent Application No. 2003-513140 (published on April 8, 2003 and hereinafter referred to as "Cited Document"), which was distributed before the priority date for the application and cited in the reasons for refusal of the examiner's decision.

(a) "[Claim 1] Intensely colored interference pigments based on multicoated platelet-shaped substrates which comprise at least one layer sequence comprising
(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in a ratio of from 1:0.1 to 1:5, and optionally one or more mental oxides in amounts of not more than 20 wt.%, based on the layer (A),
(B) a colorless coating having a refractive index n of 1.8 or less,
(C) a colorless coating having a refractive index n of >1.8,
(D) an absorbent coating having a refractive index of n of >1.8, and optionally
(E) an outer protective layer."

(b) "[Claim 13] Pigment preparations comprising one or more binders, optionally one or more additives, and one or more interference pigments according to claim 1."

(c) "[0009]
(Disclosure of the present invention)

The object of the present invention is to provide gold- and orange-red interference pigments having high tinting strength and high hiding power which are distinguished by their advantageous applicational properties and at the same time can be prepared in a simple manner."

(d) "[0011]

The intensely colored interference pigments according to the invention are

distinguished by their extraordinarily high chroma C ("tinting strength"), their very high hiding power, and very strong luster with glitter effect. In contrast to gold-colored pearlescent pigments as disclosed, for example, in EU0 211 351 B1, the gold-colored interference pigments according to the invention exhibit significantly higher tinting strength and higher hiding power. The gold pigments according to the invention are an equivalent-and with respect to luster and tinting strength-superior alternative to the known metal bronzes, in particular in gravure printing on textiles."

(e) "[0025]

The high-refractive-index layer (A) preferably has a refractive index of 1.8 or more, particularly preferably 2.0 or more, and is a mixture of TiO_2 and Fe_2O_3, where the mixing ratio is from 1:0.1 to 1:5, particularly preferably from 1:1 to 1:2.5. The layer (A) is preferably intensely colored pseudobrookite. The thickness of layer (A) is from 10 to 300 nm, preferably from 15 to 250 nm and particularly preferably from 20 to 200 nm."

(f) "[0026]

In order to increase the tinting strength of layer (A), it is frequently advisable to admix one or more metal oxides, such as Al_2O_3, Ce_2O_3, B_2O_3, ZrO_2 or SnO_2, with the TiO_2/Fe_2O_3 mixture. The proportion of the further metal oxides in wt.% in addition to the TiO_2/Fe_2O_3 mixture in the layer (A) should be not more than 20 wt.%, preferably not more than 10 wt.%."

(g) "[0027]

In the case where layer (D) is likewise a layer comprising a TiO_2/Fe_2O_3 mixture, the addition of one or more metal oxides, such as Al_2O_3, Ce_2O_3, B_2O_3, ZrO_2 or SnO_2, in amounts of not more than 20 wt.%, based on the layer (D), is likewise advisable in order to increase the tinting strength."

(h) "[0028]

Colorless, low-refractive-index materials which are suitable for coating (B) are preferably metal oxides or the corresponding oxide hydrates, such as SiO_2, Al_2O_3, AlO(OH), B_2O_3, MgF_2, $MgSiO_3$ or a mixture of said metal oxides. The thickness of layer (B) is 10 to 600 nm, preferably 20 to 500 nm, and particularly preferably 20 to 400 nm."

(i) "[0029]

The coating of the substrates with a high-refractive-index pseudobrookite layer, a low-refractive-index layer (B), a high-refractive-index layer (C) and an absorbent layer (D) results in the formation of interference pigments whose color, luster and hiding power can be varied within broad limits."

(j) "[0030]

Particularly preferred colored pigments have the following layer sequences:

[0031]

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + Fe_2O_3/TiO_2 (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + Fe_2O_3 (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + $TiFe_2O_5$ (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + SiO_2 (B*) + $TiFe_2O_5$ (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + SiO_2 (B*) + Fe_2O_3/TiO_2 (D)

The pigments according to the invention can easily be prepared by the production of a plurality of high-and low-refractive-index interference layers with precisely defined thickness and a smooth surface on the finely divided, platelet-shaped substrates."

(k) "[0037]

The pigments according to the invention are compatible with a large number of color systems, preferably from the area of paints, coatings, and printing inks. For the production of printing inks, a large number of binders, in particular water-soluble grades, is suitable, as marketed, for example, by BASF, Marabu, Proll, Sericol, Hartmann, Gebr. Schmidt, Sicpa, Aarberg, Siegberg, GSB-Wahl, Follmann, Ruco or Coates Screen INKS GmbH. The printing inks may be water-based or solvent-based. The pigments are furthermore also suitable for the laser marking of paper and plastics, and for applications in the agricultural sector, for example for greenhouse sheeting, and, for example, for the coloring of tent awnings.

[0038]

The invention thus also relates to the use of the pigments in formulations such as paints, printing inks, security printing inks, surface coatings, plastics, ceramic materials, glasses, and in cosmetic formulations."

(l) "[0039]

It goes without saying that, for the various applications, the multicoated

pigments can also advantageously be used in the form of a mixture with organic dyes, organic pigments, or other pigments, such as transparent white, colored, and black pigments having high hiding power, and with platelet-shaped iron oxides, organic pigments, holographic pigments, LCPs (liquid crystal polymers), and conventional transparent, colored and black luster pigments based on metal oxide-coated mica and SiO_2 platelets, etc. The multilayered pigments can be mixed with commercially available pigments and fillers in any ratio."

(m) "[0040]

The pigments according to the invention are furthermore suitable for the production of flowable pigment preparations and dry preparations, in particular for printing inks, comprising one or more pigments according to the invention, binders, and optionally one or more additives."

(n) "[0042]

Example 1

100 g of mica having a particle size of 10 to 60 μm was heated to 75 degrees in 2 L of demineralised water. When this temperature was reached, a solution of 130.5 g of $FeCl_3 \times 6H_2O$, 46.5 g of $TiCl_4$, and 11.6 g of $AlCl_3 \times 6H_2O$ in 84.3 g of demineralised water was slowly metered in with vigorous stirring. The pH was kept constant at pH 2.6 by means of 32% sodium hydroxide solution. After addition of this solution, the mixture was stirred for a further approximately 15 minutes. The pH was subsequently raised to pH=7.5 by means of 32% sodium hydroxide solution, and 431 g of sodium water-glass solution (13.5% of SiO_2) was slowly metered in at this pH. The pH was then lowered to 2.0 by means of 10% hydrochloric acid, the mixture was stirred for a further 15 minutes, and 393 g of $TiCl_4$ solution (370 g of $TiCl_4$/L) was metered in. During this addition, the pH was kept constant by means of 32% sodium hydroxide solution. The pH was subsequently raised to 2.6 by means of 32% sodium hydroxide solution, and a solution consisting of 34 g of $FeCl_3 \times 6H_2O$ and 49 g of demineralised water was slowly metered in. The pH was kept constant at pH=2.6 by means of 32% sodium hydroxide solution. After addition of this solution, the mixture was stirred for a further approximately 15 minutes. The pH was subsequently raised to pH=5.0 by means of 32% sodium hydroxide solution, and the mixture was stirred for a further 15 minutes.

[0043]

The pigment was filtered off, washed with demineralized water, and dried at 110

degrees for 16 hours. Finally, the pigment was ignited at 850 degrees for 30 minutes, giving a gold pigment having an intense color, high hiding power, and strong luster."

(3) Invention described in Cited Document (the Cited Invention)

According to the description in (a) and (b) above, that is, the descriptions of "[Claim 1] Intensely colored interference pigments based on multicoated platelet-shaped substrates which comprise at least one layer sequence comprising
(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in a ratio of from 1:0.1 to 1:5, and optionally one or more mental oxides in amounts of not more than 20 wt.%, based on the layer (A),
(B) a colorless coating having a refractive index n of 1.8 or less,
(C) a colorless coating having a refractive index n of >1.8,
(D) an absorbent coating having a refractive index of n of >1.8, and optionally
(E) an outer protective layer.", and
"[Claim 13] Pigment preparations comprising one or more binders, optionally one or more additives, and one or more interference pigments according to claim 1.", it is acknowledged that the following invention (hereinafter referred to as "the Cited Invention") is described in the Cited Document.

"Pigment preparations comprising one or more binders, optionally one or more additives, and one or more intensely colored interference pigments,
wherein the intensely colored interference pigments are based on multicoated platelet-shaped substrates which comprise at least one layer sequence comprising
(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in a ratio of from 1:0.1 to 1:5, and optionally one or more mental oxides in amounts of not more than 20 wt.%, based on the layer (A),
(B) a colorless coating having a refractive index n of 1.8 or less,
(C) a colorless coating having a refractive index n of >1.8,
(D) an absorbent coating having a refractive index of n of >1.8, and optionally
(E) an outer protective layer."

(4) Comparison of the Cited Invention to the Amended Invention

The Cited Invention is compared to the Amended Invention.
(a) Since "ratio," "optionally," "one or more," and "coating" in the Cited Invention respectively correspond to "molar ratio," "optionally," "one or more," and "coating" in the Amended Invention. "(A) a high-refractive-index coating consisting of a mixture of

TiO_2 and Fe_2O_3 in a ratio of from 1:0.1 to 1:5, and optionally one or more mental oxides in amounts of not more than 20 wt.%, based on the layer (A)" in the Cited Invention corresponds to "(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in the molar ratio 1:0.5 to 1:2.0 and optionally one or more metal oxide(s) in amounts of <20 wt.%, based on layer (A)" in the Amended Invention from the point of view of partially overlapping ranges of the molar ratio and the ratio containing one or more metal oxides.

(b) "At least one layer sequence comprising
(B) a colorless coating having a refractive index n of 1.8 or less,
(C) a colorless coating having a refractive index n of >1.8,
(D) an absorbent coating having a refractive index of n of >1.8, and optionally
(E) an outer protective layer" in the Cited Invention corresponds to
"a layer sequence comprising
(B) a colorless coating having a refractive index n<1.8,
(C) a colorless coating having a refractive index n>1.8,
(D) an absorbent coating having a refractive index n>1.8 and optionally
(E) an outer protective layer" in the Amended Invention in the point of view of overlapping or partially overlapping ranges of refractive index and the number of layer sequences.

(c) It is obvious for a person skilled in the art that "multicoated," "platelet-shaped," and "interference pigments" in the Cited Invention respectively correspond to "multicoated," "flake-form," and "effect pigments" in the Amended Invention. Since "colored" in the Cited Invention and "gold" in the Amended Invention are common in the point of view of being colored, "intensely colored interference pigments based on multicoated platelet-shaped substrates" in the Cited Invention and "gold effect pigments based on multicoated flake-form substrates" are common in that they are "colored effect pigments based on multicoated flake-form substrates."

(d) Since pigment preparations in the Cited Invention comprise “optionally” one or more additives, they include one embodiment comprising one or more additives and another embodiment not comprising one or more additives. So, the former embodiment comprising one or more additives should include the above intensely colored interference pigments (colored effect pigments) and additives. Since they respectively partially overlap "the component A" and "the component B" in the Amended Invention,

the pigment preparations of the Cited Invention correspond to "a pigment mixture consisting of at least two components A and B" or "a pigment mixture" of the Amended Invention.

As described above, the common features and different features between the Amended Invention and the Cited Invention are as follows.

[Common features]

"A pigment mixture consisting of at least two components A and B, characterized in that
the component A comprises colored effect pigments based on multicoated flake-form substrates which have a layer sequence comprising
(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in the molar ratio 1:0.5 to 1:2.0 and optionally one or more metal oxide(s) in amounts of <20 wt.%, based on layer (A),
(B) a colorless coating having a refractive index n<1.8,
(C) a colorless coating having a refractive index n>1.8,
(D) an absorbent coating having a refractive index n>1.8 and optionally
(E) an outer protective layer, and
the component B is a pigment mixture comprising additives."

[The different features]

<Different Feature 1>

Regarding the color of colored effect pigments of the component A, the color is "gold" in the Amended Invention while the color is not specified in the Cited Invention (hereinafter referred to as "the different feature 1").

<Different Feature 2>

Regarding pigments of the component A, in the Amended Invention, "the pigment has the following layer structure:
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2,
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3,
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + SiO_2 + Fe_2O_3/TiO_2,
substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2, or
substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3" while the layer structure is not

specified in the Cited Invention (hereinafter referred to as "the different feature 2").

<Different Feature 3>

Regarding additives of the component B, in the Amended Invention " colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles" while it is not specified in the Cited Invention (hereinafter referred to as "the different feature 3").

(5) Judgment on the different features

(a) Regarding the different feature 1.

According to the description "The object of the present invention is to provide gold- and orange-red interference pigments having high tinting strength and high hiding power that are distinguished by their advantageous applicational properties and at the same time can be prepared in a simple manner." of (c) above in the Cited Document (Note: Underlines added by the body. The same applies hereinafter.), it can be said that gold is an example of colors of pigments in the Cited Invention.

Further, according to (n) above in the Cited Document, "gold pigments" are described in one embodiment of pigments of the Cited Invention, and it can be said that the color of the colored interference pigments of the Cited Invention should be "gold color."

Thus, it cannot be said that the different feature 1 is substantial, otherwise, selecting the gold color among colors of interference pigments in the Cited Invention can be easily achieved by a person skilled in the art according to described matters of the Cited Document.

(b) Regarding the different feature 2.

According to [0030] of (j) above of the Cited Document, it is described that "Particularly preferred colored pigments have the following layer sequences," regarding specific layer sequences, according to [0031] above of the Cited Document, it is described that

"substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + Fe_2O_3/TiO_2 (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + Fe_2O_3 (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + $TiFe_2O_5$ (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + SiO_2 (B*) + $TiFe_2O_5$ (D)

substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + SiO_2 (B*) + Fe_2O_3/TiO_2 (D)".

Since it is described in (e) above in the Cited Document that "The high-refractive-index layer (A) preferably has a refractive index of 1.8 or more, particularly preferably 2.0 or more, and is a mixture of TiO_2 and Fe_2O_3, ... (omitted)", it is described in (F) above in the Cited Document that "In order to increase the tinting strength of layer (A), it is frequently advisable to admix one or more metal oxides, such as Al_2O_3, Ce_2O_3, B_2O_3, ZrO_2 or SnO_2, with the TiO_2/Fe_2O_3 mixture, in addition to the TiO_2/Fe_2O_3 mixture in the layer (A) ... (omitted)", and it is described in (g) above in the Cited Document that "In the case where layer (D) is likewise a layer comprising a TiO_2/Fe_2O_3 mixture, ... (omitted)", it can be said that "$TiFe_2O_5$ (A)" and "$TiFe_2O_5$(D)" above in the Cited Document are replaced by "TiO_2/Fe_2O_3 (A)" and "TiO_2/Fe_2O_3 (D)." Since, in the specific layer sequences,
"substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + Fe_2O_3/TiO_2 (D)," "substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + $TiFe_2O_5$ (D)," and "substrate + $TiFe_2O_5$ (A) + SiO_2 (B) + TiO_2 (C) + SiO_2 (B*) + $TiFe_2O_5$ (D)" in the Cited Document respectively correspond to "substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2," "substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3," and "substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + SiO_2 + Fe_2O_3/TiO_2" in the Amended Invention, it cannot be said that the different feature 2 is substantial, otherwise, it can be easily achieved by a person skilled in the art according to described matters of the Cited Document.

(c) Regarding the different feature 3.

Regarding "colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles" as the component B of the Amended Invention, according to paragraph [0006] in the description, they may include "organic or inorganic additives". Thus, it is understood that the description implies that an embodiment of the Amended Invention comprises additives of organic pigments as the component B.

Regarding mixing pigments (corresponding to "the component A") with other materials, it is described in (l) above in the Cited Document that "It goes without saying that, for the various applications, the multicoated pigments can also advantageously be used in the form of a mixture with organic dyes, organic pigments, or other pigments, such as transparent white, colored, and black pigments having high hiding power, and with platelet-shaped iron oxides, organic pigments, holographic pigments, LCPs (liquid crystal polymers), and conventional transparent, colored, and black luster pigments based on metal oxide-coated mica and SiO_2 platelets, etc. The multilayered pigments

can be mixed with commercially available pigments and fillers in any ratio." That is, the Cited Document discloses that "platelet-shaped iron oxides", "transparent, colored and black luster pigments based on metal oxide-coated mica and SiO_2 platelets" are used as "other pigments". It is obvious for a person skilled in the art that "iron oxide", "metal oxide-coated mica" and " SiO_2" are inorganic materials, and these pigments are "inorganic pigments."

Thus, it cannot be said that the different feature 3 is substantial, otherwise, it can be easily achieved by a person skilled in the art according to described matters of the Cited Document.

(d) Thus, as examined in (a) to (c), there is no substantial difference between the Amended Invention and the Cited Invention, the Amended Invention is the invention described in a distributed publication in accordance with the provisions of Article 29(1)(iii), or the Amended Invention could be easily made by a person skilled in the art according to the described matter of the Cited Document and violates the provisions of Article 29(2), and the Amended Invention should not be independently patentable at the time of the patent application.

(e) Appellant's allegation

The Appellant's allegation stated in the columns of "d) Comparison of invention according to Claim 1 with invention described in the Cited Document 1" on page 3 of Request for appeal amended by the written amendment dated on March 31, 2016 is as follows.

"The Cited Document 1 is based on an earlier application filed by the Appellant and it discloses pigments having four-layer structure similar to the Invention. However, regarding typical additives to the pigments, the Cited Document 1 reads 'It goes without saying that, for the various applications, the multicoated pigments can also advantageously be used in the form of a mixture with organic dyes, organic pigments, or other pigments, such as transparent white, colored, and black pigments having high hiding power, and with platelet-shaped iron oxides, organic pigments, holographic pigments, LCPs (liquid crystal polymers), and conventional transparent, colored and black luster pigments based on metal oxide-coated mica and SiO_2 platelets, etc. The multilayered pigments can be mixed with commercially available pigments and fillers in any ratio.' (paragraph 0039),

That is, the Amended Invention differs from the Cited Invention in that the Amended Invention is not used in combination with specific other colorants and/or

additives. Particularly, the Cited Document does not disclose that the mixture is used as a colorant in cosmetics, food, or pharmaceuticals. Thus, a pigment mixture of the Invention is not disclosed in the Cited Document 1."

As described in (4)(d) above, it is acknowledged that the Amended Invention and the Cited Invention are alike because both are "pigment mixtures."

Since the above underlined part is not related to Claim 1 although it is based on the detailed description of the application, the Appellant's allegation cannot be accepted.

Even if only "pigments" are described and "a pigment mixture" is not substantially disclosed in the Cited Document 1, according to the description of (l) above in the Cited Document 1, generally speaking, it can be said that multicoated pigments can be used as a mixture by being mixed with, for example, colorants such as black pigments, pigments such as platelet-shaped iron oxides (flake-form iron oxides), or fillers for various applications. Besides, (l) above in the Cited Document 1 reads "The multicoated pigments can be mixed with commercially available pigments and fillers in any ratio.", and (k) above in the Cited Document 1 reads "The invention thus also relates to the use of the pigments in formulations such as paints, printing inks, security printing inks, surface coatings, plastics, ceramic materials, glasses, and in cosmetic formulations." Therefore, it can be said that the Cited Document 1 discloses that it can be used as pigments (colorants) in cosmetic preparation (cosmetic formulation). On the other hand, mixing multicoated pigments with commercially available pigments in any ratio for the various applications is a well-known art (This well-known art is known in, for example, Claim 1 of National Publication of International Patent Application No. 2003-508575, Claim 9 of National Publication of International Patent Application No. 2000-515928, Claim 11 of Japanese Unexamined Patent Application Publication No. 2000-1628, Claim 10 of Japanese Unexamined Patent Application Publication No. 2003-55575, and Claim 1 of Japanese Unexamined Patent Application Publication No. 2000-191939.)

Since the component B in the Amended Invention "comprises colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles," the component B may comprise additives (colorants) consisting of inorganic pigments or additives consisting of flake-form particles. ("Additives" are not limited to colorants, pigments, fillers, and their functions, and it is understood that "additives" are agents to be added.)

Further, regarding the effect of the Amended Invention, that is, the effect caused by mixing specific multicoated pigments (component A) with the component B so as to

produce a pigment mixture, it is only described in paragraph [0004] in the description that "Surprisingly, it has now been found that pigment mixtures comprising effect pigments, preferably gold pigments, based on multicoated flake-form substrates in combination with further colorants and/or additives impart a very soft skin feel, are light-stable, do not bleed/migrate, are non-toxic, and have high hiding power." However, there are no concrete examples disclosed in the description which show how far "skin feeling" and "hiding power" "are improved."

Thus, mixing multicoated pigments with additives (colorants) consisting of inorganic pigments or additives consisting of flake-form particles to produce a pigment mixture can be easily achieved by a person skilled in the art, and the Amended Invention does not provide more effect than a person skilled in the art can predict.

Therefore, even if the invention of "a pigment mixture" is not described in the Cited Document 1, the Amended Invention could be easily made by a person skilled in the art according to described matters of the Cited Document 1, and the Appellant's allegation cannot be accepted.

(F) Summary

As examined by comparing the Amended Invention to the Cited Invention in (a) to (d) above, the Amended Invention should not be independently patentable at the time of the patent application. Further, as examined in (e) above, even if a pigment mixture were not described in the Cited Document, the Amended Invention should not be independently patentable at the time of the patent application.

(6) Closing remarks regarding dismissal of the Amendment

Since the Amendment violates the provisions of Article 126(7) of the Patent Act which is applied mutatis mutandis pursuant to the provisions of Article 17-2(6) of the Patent Act, the Amendment shall be dismissed according to the provisions of Article 53(1) of the Patent Act applied mutatis mutandis by replacing certain terms pursuant to Article 159(1) of the Patent Act.

Therefore, the decision has resulted in the above Conclusion of Decision to Dismiss Amendment.

No. 3 Regarding the invention of the case

1. The Invention

Since the written amendment dated February 5, 2016 shall be dismissed due to

the above reason, the Inventions according to Claims 1 to 15 are specified by matters described in Claims 1 to 15 which have been amended by the amendment dated March 24, 2015, the invention according to Claim 1 (hereinafter referred to as "the Invention"), in view of the description, as is described in [Reason] of No. 2 above, is specified by matters described in Claim 1. Claim 1 is shown again as follows.

"[Claim 1]
A pigment mixture consisting of at least two components A and B, characterized in that the component A comprises effect pigments based on multicoated flake-form substrates which have a layer sequence comprising
(A) a high-refractive-index coating consisting of a mixture of TiO_2 and Fe_2O_3 in the molar ratio 1:0.5 to 1:2.0 and optionally one or more metal oxide(s) in amounts of <20 wt.%, based on layer (A),
(B) a colorless coating having a refractive index n<1.8,
(C) a colorless coating having a refractive index n>1.8,
(D) an absorbent coating having a refractive index n>1.8 and optionally
(E) an outer protective layer,
wherein the effect pigment has the following layer structure:
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2,
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3,
substrate + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + SiO_2 + Fe_2O_3/TiO_2,
substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3/TiO_2, or
substrate + TiO_2 + Fe_2O_3/TiO_2 + SiO_2 + TiO_2 + Fe_2O_3, and
the component B comprises colorants selected from the group of inorganic pigments, coloring natural fruit and/or plant extracts, and/or additives which consist of flake-form, needle-shaped, spherical, or irregularly shaped particles."

2. Cited Documents

Cited Document and described matters therein cited in the reasons for refusal of the examiner's decision are described in [Reason] 2(2) in No. 2 above.

3. Comparison / Judgment

As described in [Reason] 2(5) in No. 2 above, since the Amended Invention relating to "gold effect pigments" and containing all the matters specifying the Invention is disclosed in the Cited Document or could have easily been arrived at by a

person skilled in the art on the basis of the invention disclosed in the Cited Document, the appellant should not be granted a patent for the Amended Invention.

Since the Invention is obtained by only deleting the limitation of the color "gold" from "gold effect pigments" of the Amended Invention examined in [Reason] 2 in No. 2 above, the appellant should not be granted a patent for the Invention, likewise.

No. 4 Closing remarks

As described above, the appellant should not be granted a patent for the Invention in accordance with the provisions of Article 29(1)(iii) or Article 29(2) of the Patent Act.

Thus, the application should be rejected without examining Claims 2 to 15.

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

December, 21, 2016

Chief administrative judge:	KUNISHIMA, Akihiro
Administrative judge:	INOUE, Yoshihiro
Administrative judge:	HIBINO, Takaharu