

Decision on opposition

Opposition No. 2016-701023

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The case of opposition against the patented invention in Japanese Patent No. 5911785, entitled "optical layered product" has resulted in the following decision.

Conclusion

The patent regarding the invention according to claims 1 to 4 of Japanese Patent No. 5911785 shall be revoked.

Reason

1 History of the procedure

The application (priority date: March 31, 2007) according to Patent No. 5911785 (the number of claims: 4, hereinafter referred to as "the Patent") is a part of Japanese Patent Application No. 2008-84716 (hereinafter referred to as "original application") filed on March 27, 2008, as a divisional application on October 24, 2012, and the establishment of the patent right was registered on April 8, 2016 (publication of the patent issued on April 27, 2016).

Meanwhile, on October 27, 2016, a patent opposition was lodged by the opponent for the patent claimed in claims 1 to 4 of the Patent, the reason for revocation was notified to the patentee on January 25, 2017, a written argument was submitted by the patentee on March 24, 2017, a reason for revocation was notified to the patentee (advance notice of decision) on March 30, 2017, and a written argument was submitted by the patentee on March 23, 2017.

2 The inventions claimed in claims 1 to 4 of the Patent

The inventions claimed in claims 1 to 4 of the Patent (hereinafter referred to as "the Invention 1" to "the Invention 4," respectively, and hereinafter collectively referred to as "the Invention") are recognized to be as specified by the matters described in claims 1 to 4, and the descriptions of claims 1 to 4 are as follows.

"[Claim 1]

An optical layered product having one layer of an optical functional layer which contains at least translucent fine particles, provided on one surface or both surfaces of a translucent substrate, directly or via another layer, wherein a standard deviation of a variation of dispersion of an area of the said translucent fine particles in the optical functional layer is in a range of 0.04 to 0.20, and the optical layered product has an internal haze value (X) and a total haze value (Y) which satisfy the following expressions (1) to (4):

$$Y > X \quad (1),$$

$$Y \leq X + 11 \quad (2),$$

$$Y \leq 28.5 \quad (3), \text{ and}$$

$$X \geq 15 \quad (4).$$

[Claim 2]

The optical layered product according to claim 1, wherein 95% or more of the number of the said translucent fine particles are fine particles of a translucent spherical resin, each having an actual particle size in a range of 1 to 20 μm when measured by an electron microscope.

[Claim 3]

The optical layered product according to claim 1 or 2, wherein the said optical functional layer contains at least a radiation-curable resin, one or a plurality of types of low refractive index translucent fine particles, and one or a plurality of types of high refractive index translucent fine particles.

[Claim 4]

The optical layered product according to claim 3, wherein a difference in a refractive index between the said radiation-curable resin and the said low refractive index translucent fine particle is within a range of ± 0.05 or less, and a difference in a refractive index between the radiation-curable resin and the high refractive index translucent fine particle is within a range of 0.05 or more."

3 Outline of notice of reasons for revocation (advance notice of decision)

The outline of reasons for revocation (hereinafter referred to as "the reason for revocation") is as follows, having been notified by the notice of the reasons for the revocation (advance notice of decision) on March 30, 2017, to a patent according to the Inventions 1 to 4.

The patent relating to the Inventions 1 to 4 was made against a patent application which does not satisfy the requirement stipulated in Article 36(6)(i) of the Patent Act.

4 Judgment for success or failure of reasons for revocation

(1) Because Article 36(6) of the Patent Act provides that "the scope of claims must comply with the following items," and its item (i) provides that "the invention to be patented is described in the detailed description of the invention" (hereinafter referred to as "requirements for support"), whether or not the description in the scope of claims complies with the requirements for support should be judged after having compared the description in the scope of claims with the description in the detailed description of the invention, and after having investigated whether or not the invention described in the scope of claims is the invention described in the detailed description of the invention and is within a range such that a person skilled in the art can recognize that the problem of the invention can be solved by the description of the detailed description of the invention, and whether or not the invention is within the range such that the person skilled in the art can recognize that the problem of the invention can be solved in view of the common general technical knowledge at the time of filing the subject patent application even if there is not a description or suggestion in the detailed description of the invention; and it is understood to be necessary that in a so-called parameter invention, in particular, in order that the description of the scope of claims complies with the requirements for support of the specification, the detailed description of the invention is described in such an extent that the technical meaning of a relationship between the range represented by the expression and the obtained effect (performance) can be understood by the person skilled in the art at the time when the patent has been filed, even without a disclosure of the specific example, or in such a way that the specific examples are disclosed in such an extent that the person skilled in the art can recognize that a desired effect (performance) will be obtained within a range shown by the expression, in consideration of the common general technical knowledge at the time of the patent application (Intellectual Property High Court decision November 11, 2005,

Judgment in 2005 (Gyo-Ke) No. 10042).

(2) When this case is examined from the above point of view, the Inventions 1 to 4 are as recognized in the above-described 2, and any of the inventions has such a constituent component (hereinafter referred to as "first constituent component") that "standard deviation of variation of dispersion of area of translucent fine particles in optical functional layer" (hereinafter referred to as "parameter of degree of dispersion") is in a range of 0.04 to 0.20, and such a constituent component (hereinafter referred to as "second constituent component") that an internal haze value (X) and a total haze value (Y) satisfy the expressions (1) to (4).

(3) On the other hand, in the detailed description of the invention of the specification of the Patent (hereinafter simply referred to as "the Specification"), there is the following description (The underlines attached in the description are omitted. Underlines in the following notes indicate points particularly relating to recognition of matters described in the detailed description of the invention, which will be described later.) .

A "[Technical field]

[0001]

The present invention relates to an optical layered product that is provided on the surface of a display such as a liquid crystal display (LCD) or a plasma display (PDP), and particularly relates to an optical layered product for improving visibility of the screen."

B "[Background Art]

[0002]

...Omitted...

[0003]

In these displays, the visibility of the image is hindered by indoor illumination such as a fluorescent lamp, incidence of sunlight from a window, the background reflections of a shadow of an operator, and the like which appear on the surface of the display device. Because of this, on the surface of the display, a functional film such as an antiglare film is provided on the outermost surface (conventional AG), which has a fine uneven structure formed thereon that can diffuse the surface reflected light, suppress regular reflection of outdoor daylight, and prevent the background reflections of the external environment (having antiglare property), in order to improve the visibility of the image.

...Omitted...

[0006]

In the case where the antiglare film has been used on the outermost surface, when the display has been used in a bright room, there has been a problem that the image of the black display becomes whitish due to the diffusion of light, and that the contrast is lowered. Because of this, there is demanded an antiglare film which can achieve high contrast even by reducing the antiglare property (high contrast AG).

...Omitted...

[0008]

On the other hand, in the case where the antiglare film has been used on the outermost surface, there is a problem that a glare (portion showing differences in luminance) which is thought to be caused by the fine uneven structure occurs on the surface, and lowers the visibility. The glare tends to easily occur along with the refinement of pixels associated with the increase in the number of pixels of the display and the improvement of a display technology such as a pixel division system, and an antiglare film having a glare preventing effect is required (high definition AG).

[0009]

...Omitted... In addition, as for a method of adjusting the background reflection of outdoor daylight on the screen, the glare phenomenon, and the balance of whiteness, a method of finely specifying a range of the surface haze and the internal haze as in Patent Document 2 and Patent Document 3 has also been developed.

C "[Problem to be solved by the invention]

[0010]

As has been described above, there are problems to be solved such as antiglare function, high contrast, and glare prevention, but there is such a trade-off relationship that if one property is pursued, another property is sacrificed. Accordingly, there is no such product as to satisfy these functions by a structure in which one layer is stacked on a translucent substrate. Then, as a method of imparting these functions at the same time, a multilayered film or a geometry of a film surface is being developed. However, the multilayer structure requires such a step as to coat the layers on the translucent substrate a plurality of times, and the cost increases. In addition, it is difficult to adjust the balance between each of the layers for the multilayered structure, and actually, only some of these functions are selected and achieved according to a purpose of use.

[0011]

For this reason, the present invention is aimed at providing an optical layered product that has an antiglare function, high contrast, and a glare preventing function (in particular, high antiglare properties and glare preventing function) in a well-balanced

manner, and can be applied also to a high definition LCD; and providing an optical layered product which achieves these functions particularly by such a structure that one layer is stacked on the translucent substrate."

D "[Means for solving the problem]

[0012]

As a result of having made an extensive investigation of a device that has high antiglare properties and suppresses the glare, the present inventors found that a degree of dispersion of the translucent fine particles in the optical functional layer of the optical layered product is important, and thereby completed the present inventions (1) to (4).

[0013]

The present invention (1) is an optical layered product having one layer of an optical functional layer that contains at least translucent fine particles, provided on one surface or both surfaces of a translucent substrate, directly or via another layer, wherein a standard deviation of a variation of dispersion of the area of the translucent fine particles in the optical functional layer is in a range of 0.04 to 0.20, and the optical layered product has an internal haze value (X) and a total haze value (Y) which satisfy the following expressions (1) to (4).

$$Y > X \quad (1)$$

$$Y \leq X + 11 \quad (2)$$

$$Y \leq 28.5 \quad (3)$$

$$X \geq 15 \quad (4)"$$

E "[Advantage of the Invention]

[0017]

According to the present invention, such an effect is given that an optical layered product can be provided which secures high antiglare properties and suppresses the glare to a great extent, even when the optical functional layer is formed of a one-layer structure."

F "[0031]

In the optical functional layer according to the best mode, the dispersion state of the translucent fine particles is neither a state in which the fine particles are uniformly dispersed in the optical functional layer nor a state in which the fine particles are agglomerated, but is an intermediate state between the above-described uniform dispersion and the above-described agglomeration. FIG. 1 is an electrophotograph showing the state. Here, the "standard deviation of variation of the dispersion of the area" means a value obtained by randomly extracting 100 sections of 50 μm square, calculating the number of particles contained in the section, and dividing the value of

standard deviation of the number of particles in each of the lattices, by an average number of the particles in 100 sections. The standard deviation of the variation of the dispersion of the area in the present invention is preferably 0.04 to 0.20, more preferably 0.06 to 0.15, and further preferably 0.08 to 0.13."

G "[0047]

It is preferable that the optical layered product has an internal haze value (X) and a total haze value (Y) which satisfy the following expressions (1) to (4). Here, the "total haze value" means a haze value of the optical layered product, and "internal haze value" means a value obtained by subtracting a haze value of a transparent sheet provided with an adhesive, from the haze value of a sheet in a state in which the transparent sheet provided with the adhesive is laminated on the surface of the fine uneven shape of the optical layered product. Incidentally, any haze value refers to a value which has been measured according to JIS K 7105.

[0048]

$$Y > X \quad (1)$$

$$Y \leq X + 11 \quad (2)$$

$$Y \leq 50 \quad (3)$$

$$X \geq 15 \quad (4)$$

[0049]

Here, in a range of $Y > X + 11$, the light diffusion effect on a surface increases, whereby the surface becomes whitish, and the contrast is lowered. A preferable range is $X + 1 < Y < X + 8$, and a more preferable range is $X + 2 \leq Y \leq X + 6$. In a range of $Y \leq X + 11$ and $Y > 50$, the transmittance decreases; on the other hand, coloring is viewed in a white image display, and visibility decreases. In a range of $X < 15$, the internal diffusion effect is insufficient and the glare develops. A preferable range is $18 < X < 40$, and a more preferable range is $25 \leq X \leq 35$."

H "[0069]

The total light transmittance, the sharpness of a transmitted image (sharpness of transmitted visual image), the antiglare property, the contrast, and the glare were measured and evaluated according to the following method, while there were used the optical layered products (optical functional layer films) which have been obtained in Examples 1 to 4 and Comparative Examples 1 to 4.

[0070]

Total light transmittance

The total light transmittance was measured by means of a haze meter (trade name: NDH 2000, made by Nippon Denshoku Co., Ltd) according to JIS K 7105.

Sharpness of transmission image

The sharpness of the transmission image was measured according to JIS K 7105 by means of an image clarity measurement instrument (trade name: ICM-1 DP, made by Suga Test Instruments Co., Ltd.), in such a state that the measurement instrument was set at a transmission mode and an optical comb width was set at 0.5 mm.

Haze value

The haze value was measured by means of the haze meter (trade name: NDH 2000, made by Nippon Denshoku Co. , Ltd) according to JIS K 7105.

The "internal haze value" is a value obtained by subtracting a haze value of the transparent sheet provided with an adhesive from a haze value of a state in which the transparent sheet provided with the adhesive is laminated on the surface of the fine uneven shape of the optical layered film.

The transparent sheet provided with the adhesive, which was used when the internal haze was measured, was as follows.

Transparent sheet: component polyethylene terephthalate (PET)
thickness 38 μm

Adhesive layer:	component	acrylic adhesive
	thickness	10 μm

Haze of transparent sheet provided with adhesive	3.42
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Antiglare property

The antiglare property was evaluated as excellent when the value of the sharpness of the transmitted visual image was 0 to 30, as good when the value was 31 to 70, and as poor when the value was 71 to 100.

Contrast

The contrast was measured by an operation of: laminating a face opposite a face on which the optical layered product in each example and each comparative example is formed, with a screen surface of a liquid crystal display (trade name: LC-37GX 1 W, made by Sharp Corporation), through a colorless and transparent adhesive layer; setting an illuminance of the liquid crystal display surface at 200 lux by a fluorescent lamp (product name: HH 4125 GL, made by National Corporation) which was illuminated from the direction of 60° above the front of the liquid crystal display screen; then measuring the luminance at the time when the liquid crystal display was white and when the display was black, with a color luminance meter (trade name: BM-5A, made by TOPCON Co., Ltd.); and calculating a value from the obtained luminance (cd/m^2) when the display was black and the luminance (cd/m^2) when the

display was white according to the following expression. The contrast was determined to be poor when the value was 600 to 800, to be good when the value was 801 to 1000, and to be excellent when the value was 1001 to 1200.

Contrast = luminance of display in white / luminance of display in black

Glare

As for the glare, a resolution was measured by an operation of: laminating a face opposite the face on which the optical layered product in each of the examples and each of the comparative examples is formed, through a colorless and transparent adhesive layer, with each of a surface of a screen of a liquid crystal display (trade name: LC-32GD4, made by Sharp Corporation) with a resolution of 50 ppi, a liquid crystal display (trade name: LL-T 1620-B, made by Sharp Corporation) with a resolution of 100 ppi, a liquid crystal display (trade name: LC-37 GX 1 W, made by Sharp Corporation) with a resolution of 120 ppi, a liquid crystal display (trade name: VGN-TX 72B, made by Sony Corporation) with a resolution of 140 ppi, a liquid crystal display (trade name: nw 8240 - PM 780, made by Hewlett Packard, Japan) with a resolution of 150 ppi, and a liquid crystal display (trade name: PC-CV 50 FW, made by Sharp Corporation) with a resolution of 200 ppi; setting the liquid crystal display at a green display in a darkroom; and then photographing each liquid crystal TV from the normal direction of the TV by the CCD camera (CV-200C, made by Keyence Corporation) with a resolution of 200 ppi. The glare was evaluated to be poor when a value of the resolution was 0 to 50 ppi at the time when a variation of the luminance was not confirmed in the photographed image; to be good when the value of resolution was 51 to 140 ppi; and to be excellent when the value of resolution was 141 to 200 ppi.

[0071]

The evaluation results according to the above described evaluation method are shown in Table 7.

[0072]

[Table 7]

表 7

	塗料粘度 (Pa・s)	乾燥条件	面積分散 バラツキ	全ヘイズ	内部ヘイズ 値	全光線透 過率	透過画像 鮮明度	Ra	Sm	防眩性	コントラス ト	ギラツキ
実施例1	83	100°C1分	0.09	27.5	23.5	93.6	57.8	0.098	158	○	○	○
実施例2	79	100°C1分	0.10	27.8	23.3	93.4	56.2	0.102	162	○	○	○
実施例3	200	120°C1分	0.06	26.5	24.0	93.5	60.5	0.150	120	○	○	○
実施例4	20	120°C1分	0.19	28.5	23.5	93.5	28.5	0.205	115	◎	○	○
比較例1	4	60°C30秒	0.31	30.5	22.1	93.2	6.5	0.282	102	◎	×	×
比較例2	75	100°C1分	0.03	48.5	36.5	93.9	22.5	0.165	75	○	×	◎
比較例3	1	100°C1分	0.35	30.5	4.2	91.8	1.8	0.352	85	◎	×	×
比較例4	1	100°C1分	1.12	1.5	0.2	93.8	91.5	0.010	380	×	◎	◎

表 7 Table 7

塗料粘度(Pa/s) Viscosity of paint (Pa/s)

乾燥条件	Drying condition
面積分散バラツキ	Variation of dispersion of area
全ヘイズ	Total haze
内部ヘイズ値	Internal haze value
全光線透過率	Total light transmittance
透過画像鮮明度	Sharpness of transmitted visual image
防眩性	Antiglare property
コントラスト	Contrast
ギラツキ	Glare
実施例 1	Example 1
実施例 2	Example 2
実施例 3	Example 3
実施例 4	Example 4
比較例 1	Comparative Example 1
比較例 2	Comparative Example 2
比較例 3	Comparative Example 3
比較例 4	Comparative Example 4
1 0 0 °C 1 分	100°C 1 minute
1 2 0 °C 1 分	120°C 1 minute
6 0 °C 3 0 秒	60°C 30 seconds "

(4) A In the above-described (3)B, it is described that conventionally, there has been such a method as to define ranges of the surface haze and the internal haze, in order to adjust the background reflection of outdoor daylight on the screen, the glare phenomenon, and the balance of whiteness, in the antiglare film; and in the above-described (3)C, it is described that there is a tradeoff relationship among the antiglare function, the high contrast, and the glare preventing function, and that there has not existed such an optical layered product as to have a structure in which one layer of the optical functional layer is stacked on the translucent substrate and satisfies these functions. Therefore, from these descriptions, the problem to be solved by the Invention is recognized to exist in providing an optical layered product which has such a structure that one layer is stacked on the translucent substrate, and has the antiglare function, the high contrast, and the glare preventing function; in particular, the high antiglare property and the glare preventing function, in a well-balanced manner.

B In addition, it is recognized that in the above-described (3)D and E, it is described that the inventors have found that "degree of dispersion of translucent fine

particles in optical functional layer" is important, in order to have a high antiglare property and suppress the glare, and by adopting the constituent component described in claim 1 of the Patent, it becomes possible to provide an optical layered product which suppresses the glare to a high level while securing the high antiglare property, even when the optical functional layer is formed of a one-layer structure. Therefore, from the description in the above-described (3)F, it can be grasped that the parameter which defines "degree of dispersion of translucent fine particles in optical functional layer" is the "parameter of degree of dispersion" of the first constituent component, and it can be understood from the above description in the above-described (3)G that the second constituent component also contributes to the solving of the problem. Accordingly, from the detailed description of the invention of the Specification, it is understood that the Invention has adopted the first constituent component and the second constituent component (see the above-described (2)) as main means for solving the problem of the invention.

C In addition, in the above-described (3)H, Examples 1 to 4 and Comparative Examples 1 to 4 are described as specific examples of the Invention, and it is shown that any item in evaluations of the antiglare property, the contrast, and the glare in Examples 1 to 4 shows an excellent or good result and no poor result, but that on the other hand, in Comparative examples 1 to 4, at least one item shows a poor result. From the evaluation result and the description of each evaluation item described in the above-described (3)H, it is understood that "having the antiglare function, the high contrast, and the glare preventing function" "in a well-balanced manner" in the problem of the invention recognized in the above-described A means that as for the antiglare function, the value of the sharpness of the transmitted visual image is 70 or less, which has been measured in an optical comb width of 0.5 mm; as for the contrast, the value of "luminance of display in white / luminance of display in black" is 801 or more, which has been measured under the predetermined measurement conditions; and as for the glare, the value of the resolution at the time when the variation of the luminance is not confirmed in the image photographed in the predetermined condition is 51 ppi or more.

(5) A In view of the above-described (2) and the above-described (4)B, the Invention corresponds to a so-called parameter invention.

For this reason, in view of the above-described (1), it will be examined firstly whether or not the detailed description of the invention in the Specification discloses and describes specific examples to such an extent that a person skilled in the art can recognize that a desired effect recognized in the above-described (4)A will be obtained,

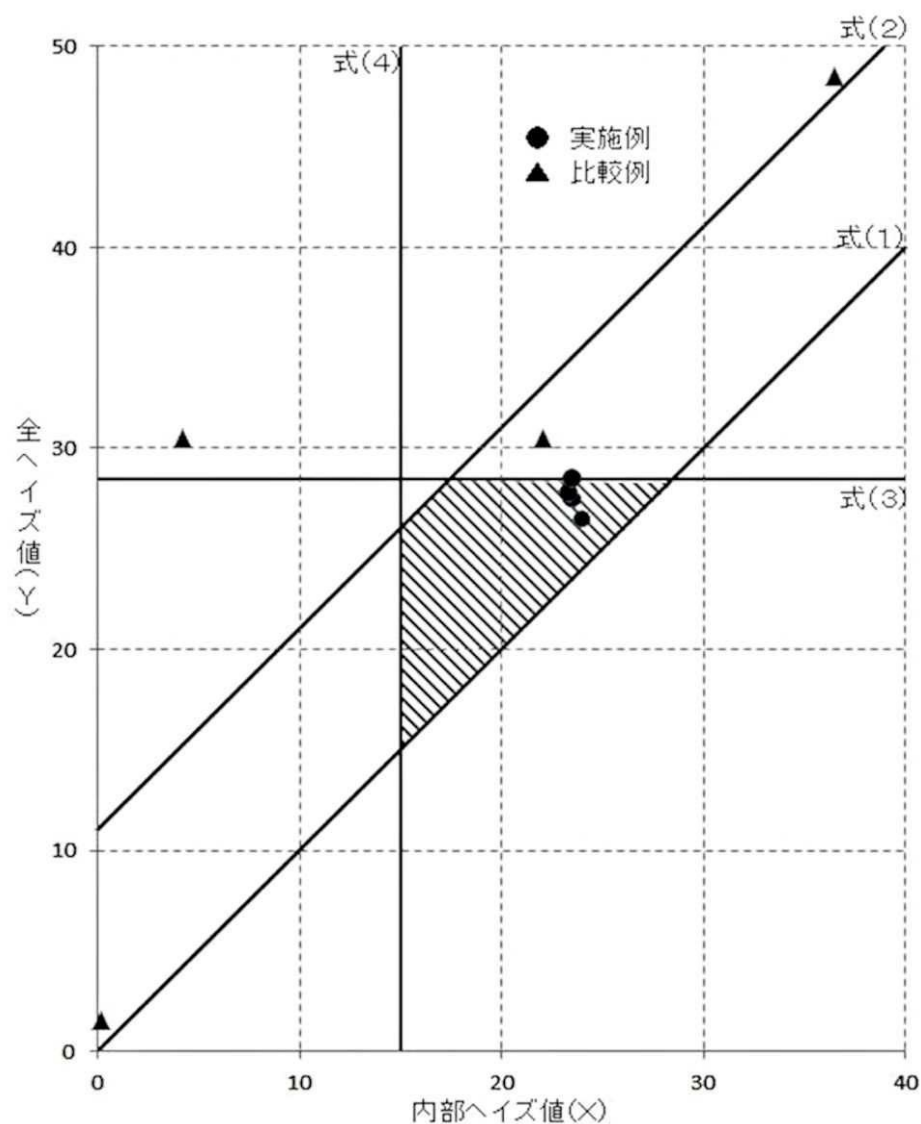
if "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)" are within the ranges defined in the first constituent component and the second constituent component, in consideration of common general technical knowledge at the time when the original application was filed which is regarded as the time when the application according to the Patent has been filed (hereinafter simply referred to as "at the time of filing the subject patent application"), under the provision of Article 44 (2) of the Patent Act.

B [0072] According to [Table 7] in (the above-described (3)H), the total haze values (Y) of Examples 1 to 4 are 27.5, 27.8, 26.5, and 28.5, respectively; the internal haze values (X) are 23.5, 23.3, 24.0, and 23.5, respectively; and "parameter of degree of dispersion" are 0.09, 0.10, 0.06, and 0.19, respectively.

On the other hand, the total haze values (Y) of Comparative Examples 1 to 4 are 30.5, 48.5, 30.5, and 1.5, respectively; the internal haze values (X) are 22.1, 36.5, 4.2, and 0.2, respectively; and "parameter of degree of dispersion" are 0.31, 0.03, 0.35, and 1.12, respectively.

C Here, the total haze values (Y) and the internal haze values (X) of Examples 1 to 4 and Comparative Examples 1 to 4 are plotted on such a graph that the vertical axis is regarded as the total haze value (Y) and the horizontal axis is regarded as the internal haze value (X), and also the expressions (1) to (4) are written. Then, the following reference drawing is obtained.

[Reference drawing]



全ヘイズ値 (Y) Total haze value (Y)

内部ヘイズ値 (X) Internal haze value (X)

実施例 Example

比較例 Comparative Example

式 (1) Expression (1)

式 (2) Expression (2)

式 (3) Expression (3)

式 (4) Expression (4)

D The "parameter of degree of dispersion" of Examples 1 to 4 covers the majority (0.06 to 0.19) of the range of "0.04 to 0.20" of the first constituent component.

On the other hand, as is clear from the above-described reference drawing, the

internal haze values (X) and the total haze values (Y) in Examples 1 to 4 are concentrated in an extremely narrow region (in a range of 23.3 to 24.0 for the internal haze value (X) and in a range of 26.5 to 28.5 for the total haze value (Y)), within the range in which the internal haze value (X) and the total haze value (Y) satisfy expressions (1) to (4) (shaded portion in reference drawing).

For such Examples 1 to 4, it can hardly be recognized that the problem is solved by the internal haze value (X) and the total haze value (Y) satisfying the expressions (1) to (4) (second constituent component, and shaded portion in reference drawing), and further by the "parameter of degree of dispersion" being in the range of 0.04 to 0.20 (first constituent component), and to support that such similar effects to those in Examples 1 to 4 are obtained as to "have the antiglare function, the high contrast, and the glare preventing function" "in the well-balanced manner."

In addition, in the first place, in the XY plane where the internal haze value (X) is represented by X and the total haze value (Y) is represented by Y, various boundary lines other than the four straight lines corresponding to the expressions (1) to (4) can be assumed to exist between Examples 1 to 4 and Comparative Examples 1 to 4; and even if the common general technical knowledge at the time of filing the subject patent application is considered, a person skilled in the art cannot understand from the description in the detailed description of the invention in the Specification that boundary lines between optical layered products which "have the antiglare function, the high contrast, and the glare preventing function" "in the well-balanced manner" as in each of the Examples and optical layered products which are poor in at least one in each of the functions as in each of Comparative Examples are four straight lines corresponding to the expressions (1) to (4).

Accordingly, it cannot be said that the detailed description of the invention in the Specification discloses and describes specific examples to such an extent that a person skilled in the art can recognize that a desired effect found in the above-described (4) can be obtained if "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)" are within the range defined in the first constituent component and the second constituent component, in consideration of the common general technical knowledge at the time of filing the subject patent application.

(6) A Next, it will be examined whether or not the detailed description of the invention in the Specification is described to such an extent that a person skilled in the art can understand the technical meaning of the relationship of the conditions that "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)" are within a

range defined in the first constituent component and the second constituent component, with the obtained effect, even though the specific examples are not disclosed at the time of filing the subject patent application.

B From the description of the above-described (3)F in the detailed description of the invention in the Specification, it is grasped that in order to solve the problem and obtain the desired effect, the dispersion state of the translucent fine particles is neither in a state of being uniformly dispersed in the optical functional layer nor in a state of being agglomerated therein, but needs to be in an intermediate state between uniform dispersion and agglomeration, and it can be understood that the "parameter of degree of dispersion" is a parameter representing the dispersion state of the translucent fine particles.

In addition, according to the description in the above-described (3)G, as the light-diffusion effect on the surface increases, the contrast decreases, and accordingly it can be understood that the expression (2) is the constituent component for excluding such a phenomenon; and when the internal diffusion effect is insufficient, glare occurs, and accordingly it can be understood that expression (4) is the constituent component for excluding such a phenomenon.

However, what can be understood from these descriptions is merely a qualitative trend of the change in "the anti-glare function, the high contrast, and the function of the prevention of the glare" due to the change in the values of "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)"; and it cannot be understood that such values of "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)" as to be capable of solving the problem and obtaining the desired effect of having "anti-glare function, the high contrast, and the function of the prevention of the glare" "in a well-balanced manner" (the above-described (4)C) are a range of "0.04 to 0.20" and a range satisfying the expressions (1) to (4), which are defined in the first constituent component and the second constituent component, by a person skilled in the art even with the above description, if the specific examples are not disclosed.

Accordingly, it cannot be said that the detailed description of the invention in the Specification is described in such an extent that a person skilled in the art can understand the technical meaning of the relationship of the conditions that "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)" are within a range defined in the first constituent component and the second constituent component, with the obtained effect, even if the specific examples are not disclosed at the time of filing the subject patent application.

(7) Incidentally, in the written opinion submitted on May 23, 2017, the patentee alleges that "the intellectual property high court decision on November 11, 2005 Judgment No. 10042" (hereinafter referred to as "Grand panel decision") defines a "parameter invention" as an "invention which determines a component specified by a range represented by a certain expression using two technical variables (parameters) representing characteristic values as a constituent component"; the conventional examination standard of the Japanese Patent Office refers to such parameters as "special parameters," and defines that the "special parameters" do not correspond to those which are commonly used by those skilled in the art in the technical field; and therefore, because the Invention is not the "parameter invention" which uses the "special parameters" but an invention with simple numerical limitation, the strict requirements for support which the Grand panel decision requires are not applied to the Invention.

Therefore, the assertion has been examined, but the description in the portion held by the Grand panel decision, which the patentee points out is such that "the present invention is an invention which determines a component identified by two technical variables (parameters) representing characteristic values as a constituent component, and is regarded as a so-called parameter invention; and therefore"; and it is reasonable to understand that the description does not indicate the definition of a parameter invention, but simply states that "an invention which determines a component specified by a range represented by a certain expression using two technical variables (parameters) representing characteristic values as a constituent component" which the patentee refers to corresponds to the "parameter invention."

In addition, apart from this point, the definition of the "special parameter" in the examination standard (old standard), which the patentee points out, is a definition of the "special parameter" in the description which describes that there are many cases where the scope of the invention becomes unclear (violates requirements for clarity), when the claim includes identification of an object by "special parameter," and does not describe the definition of the "parameter invention"; and accordingly the above-described allegation of the patentee is originally based on the false recognition of the examination standard.

Furthermore, even if the Invention does not correspond to a so-called "parameter invention" and is merely "an invention with numerical limitation," it is interpreted that as is determined in the Grand panel decision, whether or not the description in the scope of claims complies with the requirements for support should be judged after having compared the description in the scope of claims with the description

in the detailed description of the invention, and after having investigated whether or not the invention described in the scope of claims is the invention described in the detailed description of the invention and is within a range that a person skilled in the art can recognize that the problem of the invention can be solved by the description of the detailed description of the invention, and whether or not the invention is within the range that the person skilled in the art can recognize that the problem of the invention can be solved in view of the common general technical knowledge at the time of filing the subject patent application even if there is not such a description or suggestion in the detailed description of the invention. However, in the first place, it is similar to the description in the above-described (5) and (6) that as for the values of the "parameter of degree of dispersion," "internal haze value (X)," and "total haze value (Y)," the Invention is not within the range that the person skilled in the art can recognize that the person can solve the problem of the invention according to the description of the detailed description of the invention in the Specification, and also is not within the range that the person skilled in the art can solve the problem of the invention in view of the common general technical knowledge at the time of filing the subject patent application even if there is not such a description or suggestion in the detailed description of the invention, and accordingly there is no change in the finding that the description of claims 1 to 4 of the Patent does not comply with the requirements for support.

Accordingly, the above-described allegation of the patentee cannot be adopted.

5 Closing

As described above, the patent according to claims 1 to 4 of the Patent was granted on a patent application which does not satisfy the requirement stipulated in Article 36 (6) (i) of the Patent Act, falls under Article 113 (4) of the Act, and should be invalidated.

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

June 9, 2017

Chief administrative judge: NAKADA, Makoto
Administrative judge: SHIMIZU, Yasushi
Administrative judge: KAWAHARA, Masashi