Decision on Opposition

Opposition No. 2019-700347

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The case of opposition against the patented invention in Japanese Patent No. 6414362, entitled "Polarized Laminate and Eyeglasses" has resulted in the following decision.

Conclusion

The correction of the Scope of Claims of Japanese Patent No. 6414362 shall be approved as described in the corrected Scope of Claims attached to the written correction demand, as for Claims [1-7], [8-10], and 11.

The patent for Claims 1, 2, 4 to 7, and 11 of Patent No. 6414362 is revoked.

The patent for Claims 8 to 10 of Japanese Patent No. 6414362 is maintained.

An opposition to a granted patent related to the patent for Claim 3 of Japanese Patent No. 6414362 shall be dismissed.

Reasons

No. 1 History of the procedures, etc.

The application of the patent for Claims 1 to 10 of Japanese Patent No. 6414362 (hereinafter, referred to as "the Patent") was filed on September 26, 2017 as an international filing date (priority based on prior application: September 29, 2016 (three cases), June 19, 2017), and the establishment of patent right was registered on October 12, 2018.

A Gazette containing the Patent was published on October 31, 2018. Thereafter, a written opposition to a granted patent (hereinafter, referred to "the written opposition") was filed by the patent opponent, the patent professional corporation SATO & ASSOCIATES (hereinafter referred to as "the Patent Opponent")

The history of the further procedures, etc. is as follows:

July 17, 2019	Notice of reasons for rescission
September 19, 2019	Written correction demand
September 19, 2019	Written opinion (Patentee)
October 29, 2019	Written opinion (Patent Opponent)
December 5, 2019	Notice of reasons for rescission
February 7, 2020	Written demand for correction
February 7, 2020	Written opinion (Patentee)
March 18, 2020	Written opinion (Patent Opponent)

The request for correction by the written demand for correction dated September 19, 2019 shall be deemed to have been withdrawn pursuant to the provisions of Article

120-5(7) of the Patent Act.

No. 2 Regarding the demand for correction
1 Object of the demand

The object of the written demand for correction dated February 7, 2020 (hereinafter, referred to as "the demand for correction") is to request to correct the Scope of Claims of Japanese Patent No. 6414362 to the corrected Scope of Claims attached to the written demand for correction, as for corrected Claims 1 to 10.

2 Contents of correction

The details of correction demanded by the Patentee in the demand for correction are as follows:
Here, underlines indicate amended portions.
(1) Correction A

The recitation in Claim 1 "a first layer provided on the first surface and formed of a first resin material including an alicyclic polyamide" is corrected to "a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide."

(2) Correction B

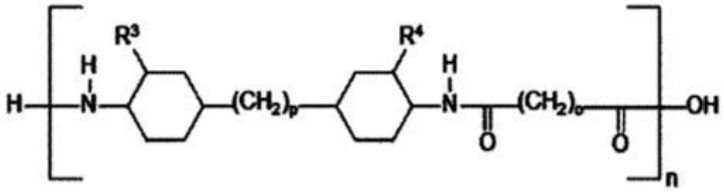
The recitation in Claim 1 of the Scope of Claims "a second layer provided on the second surface and formed of a second resin material including an alicyclic polyamide" is corrected to "a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide."

(3) Correction C

The recitation in Claim 1 of the Scope of Claims "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured, the Barcol hardness after the immersion is 70% or more with respect to the Barcol hardness before the immersion" is corrected to "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured, the Barcol hardness after the immersion is 70% ... with respect to the Barcol hardness before the immersion."

(4) Correction D

The recitation in Claim 1 of the Scope of Claims "to 100% with respect to the Barcol hardness before the immersion." is corrected to "to 100% with respect to the Barcol hardness before the immersion, wherein the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:"



(Here, in the formulas, R^3 and R^4 each independently represents a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater.)."

(5) Correction E

The recitation in Claim 1 of the Scope of Claims "A polarized laminate, comprising: " is corrected to

"A polarized laminate, comprising: ..., wherein the first layer and the second layer are joined to the first surface and the second surface respectively by a two-liquid type polyurethane adhesive."

(6) Correction F

Claim 3 of the Scope of Claims is deleted.

(7) Correction G

The recitation in Claim 4 of the Scope of Claims "... any one of Claims 1 to 3" is corrected to "... Claim 1 or 2."

(8) Correction H

The recitation in Claim 5 of the Scope of Claims "Claims 1 to 4" is corrected to "... Claims 1, 2, and 4."

(9) Correction I

The recitation in Claim 6 of the Scope of Claims "Claims 1 to 5" is corrected to "... Claims 1, 2, 4, and 5."

(10) Correction J

The recitation in Claim 7 of the Scope of Claims "Claims 1 to 6" is corrected to "... Claims 1, 2, and 4 to 6."

(11) Correction K

The recitation in Claim 8 of the Scope of Claims "The polarized laminate according to any one of Claims 1 to 7, wherein the first resin material and the second resin material have different glass transition temperatures from each other" is corrected to

"A polarized laminate, comprising:

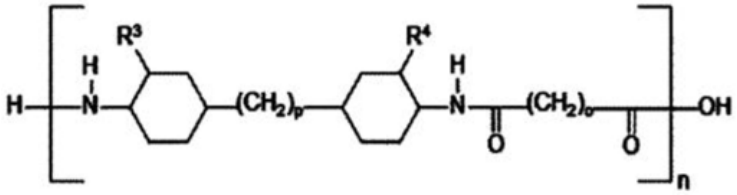
a polarizing film having a first surface and a second surface that is a reverse side of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide; and

a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein

the first layer has a retardation of from 2,600 to 8,000, the second layer has a retardation of from 0 to 500, and when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion,

the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:



(Here, in the formulas, R^3 and R^4 each independently represent a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater), and

the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material."

(12) Correction L

The recitation in Claim 10 of the Scope of Claims "any one of Claims 1 to 9" is corrected to "Claim 8 or 9."

(13) Correction M

New Claim 11 is added to the Scope of Claims and recites as follows:

" A polarized laminate, comprising:

a polarizing film having a first surface and a second surface that is a reverse side of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide; and

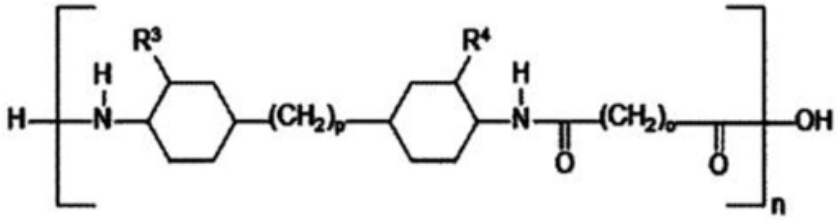
a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein

the first layer has a retardation of from 2,600 to 8,000,

the second layer has a retardation of 0 to 500,

when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion,

the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:



(Here, in the formulas, R^3 and R^4 each independently represent a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater), and

the polyamide included in at least one of the first resin material and the second resin material has a glass transition temperature of 140°C to 190°C, and

the glass transition temperature of the first resin material is higher than the glass transition temperature of the second resin material."

3 Suitability of correction

The demand for correction is made on Claims 1 to 10, which are the group of claims before the correction.

However, the demand for correction includes correction aimed at the matter prescribed in Article 120-5(2) (iv) of the Patent Act (i.e., such correction shall be limited to "correction of a statement of claims which cites another statement of claims to the statement which does not cite said other statement of claims"). In addition, the patentee is requesting another correction unit.

Then, the suitability of correction is judged for each of Claims [1-7], [8-10], and 11, which are a group of claims after correction by the demand for correction.

(1) Regarding corrected Claims 1 to 7

A Regarding Correction A

The correction with Correction A is to limit "a first resin material" recited in Claim 1 from one "including an alicyclic polyamide" to one "including 60% by mass or more of an alicyclic polyamide." Furthermore, the same is also applied to Claim 2 and Claims 4 to 7.

Therefore, the correction by Correction A corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims).

Furthermore, [00081] of the specification attached to the application of the Patent describes that "The percentage content of the polyamide in the first layer 32 is preferably 60% by mass or more, more preferably 70% by mass or more, and even more preferably 80% by mass or more."

Then, the correction by Correction A is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art. Therefore, the correction by Correction A is within the matters described in the specification, Scope of Claims, or drawings attached to the application.

Furthermore, it is clear that the Scope of Claims as corrected by Correction A does not include any of the inventions being regarded as those not included in the Scope of the Claims before the correction. Thus, the correction by Correction A does not substantially enlarge or alter the Scope of Claims.

B Regarding Correction B

The correction by Correction B is judged in the same manner as the correction by Correction A.

Therefore, the correction by Correction B corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims). Also, the correction by Correction B remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application. Furthermore, the correction by Correction B does not substantially

enlarge or alter the Scope of Claims.

C Regarding Correction C

For the correction of error, the correction by Correction C corrects the term "Barcol" recited in Claim 1 to "Barcol." The same is also applied to Claim 2 and Claims 4 to 7.

Therefore, the correction by Correction C corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (ii) of the Patent Act (correction of errors in the description or of incorrect translations). Furthermore, it is clear that Correction C by the correction falls within the scope of the matter stated in the specification, Scope of Claims, or drawings originally attached to the application (the specification, Scope of Claims, or drawings originally attached to the application as of the international filing date, of a Japanese-language patent application), and does not substantially enlarge or alter the Scope of Claims.

D Regarding Correction D

The correction by Correction D limits each of the "alicyclic polyamide" included in the "first resin material" and the "alicyclic polyamide" included in the "second resin material" to one represented by the specific chemical formula (see, the above 2(4)). Furthermore, the same is also applied to Claim 2 and Claims 4 to 7.

Therefore, the correction by Correction D corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims).

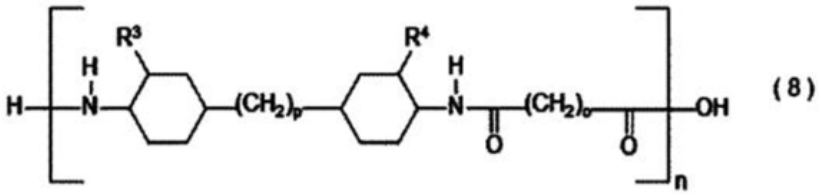
Furthermore, [0045] and [0046] of the specification attached to the application of the Patent describe that "The first layer 32 is formed of a first resin material including a polyamide" and "since the polarized laminate 3 includes a first layer 32 formed of the first resin material including an alicyclic polyamide, an effect that the impact resistance required for a lens for eyeglasses can be secured is obtained," respectively.

In addition, [0068] and [0069] of the specification attached to the application of the Patent respectively describe as follows:

"[0068] Regarding the alicyclic polyamide, for example, a compound in which at least one of a dicarboxylic acid and a diamine as the monomers that constitute the polyamide has an alicyclic chemical structure.

The alicyclic polyamide is represented by, for example, the following Formula (8).

[0069] [Chemical 8]



(Here, in Formula (8), R^3 and R^4 each independently represents a hydrogen atom or a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater.)

Furthermore, [0089] of the specification attached to the application of the Patent

describes that "The polyamide to be used for the second layer 33 may be the same polyamide as the polyamide mentioned for the first layer 32."

Considering the above, the correction by Correction D is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art. Therefore, the correction by Correction D remains within the scope of the matters stated in the application, Scope of Claims, or drawings attached to the application.

Furthermore, it is clear that the Scope of Claims as corrected by Correction D does not include any of the inventions being regarded as those not included in the Scope of the Claims before the correction. Thus, the correction by Correction D does not substantially enlarge or alter the Scope of Claims.

E Regarding Correction E

The correction with Correction E is to limit the "first layer" and the "first surface" of the "polarized laminate" and the "second layer" and the "second surface" thereof to those "joined respectively by a two-liquid type polyurethane adhesive." Furthermore, the same is also applied to Claim 2 and Claims 4 to 7.

Therefore, the correction by Correction E corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims).

Furthermore, [0097], [0100], [0115], and [0116] of the specification attached to the application of the Patent describe that "Between the polarizing film 31 and the first layer 32, an adhesive layer (first adhesive layer) 34 joining (adhering) these is provided," Particularly, it is preferable that the adhesive layer 34 is formed by the method described below. " First, a two-liquid type urethane-based adhesive is applied on the first layer 32, and a coating layer is obtained. Next, the coating layer is subjected to a first treatment by which a curing reaction is carried out in an environment with low humidity, and to a second treatment that is carried out at a higher temperature than the first treatment, and thereby the adhesive layer 34 is formed," and "an adhesive layer (second adhesive layer) 35 that is disposed between the polarizing film 31 and the second layer 33 and joins (adheres) these," and "It is preferable that the adhesive layer (second adhesive layer) 35 satisfies conditions that are similar to the conditions for the adhesive layer (first adhesive layer) 34 described above."

Then, the correction by Correction E is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.
Therefore, the correction by Correction E is within the matters described in the description, Scope of Claims, or drawings attached to the application.

Furthermore, it is clear that the Scope of Claims as corrected by Correction E does not include any of the inventions being regarded as those not included in the Scope of the Claims before the correction. Thus, the correction by Correction E does not substantially enlarge or alter the Scope of Claims.

F Regarding Correction F

Since the correction by Correction F deletes Claim 3, it corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims). In addition, it is clear that the correction by Correction F remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application and does not substantially enlarge or alter the Scope of Claims.

G Regarding Correction G

The correction by Correction G avoids dependence of Claim 4 as corrected from the deleted Claim 3 as a result of the deletion of Claim 3 due to the correction by Correction F. Regarding this matter, the same is also applied to Claims 5 to 7, which depend from Claim 4.

Therefore, the correction by Correction G corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (iii) of the Patent Act (clarification of an ambiguous description).

Furthermore, it is clear that the correction by Correction G remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application and does not substantially enlarge or alter the Scope of Claims.

H Regarding Corrections H to J

The judgment on the corrections by Corrections H to J is the same as the judgment about correction by Correction G.

Therefore, each of the corrections by Corrections H to J corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (iii) of the Patent Act (clarification of an ambiguous description). In addition, each of the corrections by Corrections H to J remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application. Furthermore, none of the corrections by Corrections H to J substantially enlarges or alters the Scope of Claims.

I Summary

The corrections made to Claims 1 to 7 as corrected (the corrections by Corrections 1 to 10) comply with the provisions of Article 126(5) and (6)of the Patent Act as applied mutatis mutandis under Article 120-5(2) and Article 120-5(9) of the Patent Act.

(2) Regarding Claims 8 to 10 as corrected

A Regarding Correction K

The correction by Correction K can be divided into the following corrections:

[A] In Claim 8 that depends from any one of Clams 1 to 7, the recitation in Claim 8, which depends from the recitation in Claim 1, is replaced with one that does not depend from the recitation in Claim 1.

[B]A "first resin material" recited in Claim 8 as corrected by the above [A] is limited from

one "including an alicyclic polyamide" to one "including 60% by mass or more of an alicyclic polyamide."

[C] A "second resin material" recited in Claim 8 as corrected by the above [A] is limited from

one "including an alicyclic polyamide" to one "including 60% by mass or more of an alicyclic polyamide."
[D] For the correction of error, the term "Barcol" recited in Claim 8 is corrected by the above [A] to "Barcol."
[E] The "alicyclic polyamide" included in the "first resin material" or the "alicyclic polyamide" included in the "second resin material recited in Claim 8 as corrected by the above [A]" is limited to one represented by the specific chemical formula (see, the above 2(11)).
[F] The relationship for "glass transition temperature" between the "first resin material" and the "second resin material" recited in Claim 8 is limited from one such that "they have different glass transition temperatures from each other" to one such that "the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material."

Regarding these matters, furthermore, the same is also applied to Claims 9 and 10, which cite the statement of Claim 8.

Therefore, the correction by Correction K corresponds to a correction that aims at matters prescribed in Article 120-5(2) (i), (ii), and (iv) of the Patent Act (such correction shall be limited to "the restriction of the Scope of Claims," "correction of errors or incorrect translations," and "correction of a statement of claims which cites other statement of claims to a statement which does not cite said other statement of claims").

Furthermore, it is clear that the correction by the above [A] in the correction by Correction K is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.

In addition, as stated in the above (1)A to C, among the corrections in the correction by Correction K, each of the corrections by the above [B] to [D] is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.

Furthermore, each of the descriptions in the specification, which are cited in the above (1) D, is recognized as one in which only one of the "alicyclic polyamide" included in the "first resin material" and the "alicyclic polyamide" included in the "second resin material" is represented by [Chemical 8] in [0069]. Therefore, among the corrections in the correction by Correction K, the correction by the above [E] is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.

Then, [0122] of the specification attached to the application of the Patent describes that "Regarding the first resin material and the second resin material, there may be a difference between the glass transition temperatures. In this case, a layer having a lower glass transition temperature between the first layer 32 and the second layer 33 can be suitably subjected to stretching for exhibiting retardation." In addition, this description can be recognized to intend to describe both an aspect in which the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material and an aspect in which the glass transition

temperature of the first resin material is higher than the glass transition temperature of the second resin material. Then, among the corrections made by Correction K, the correction made by the above [F] is also recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.

Considering the above, the correction by Correction K remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application.

Furthermore, it is clear that the Scope of Claims as corrected by Correction K does not include any of the inventions being regarded as those not included in the Scope of the Claims before the correction. Thus, the correction by Correction K does not substantially enlarge or alter the Scope of Claims.

B Regarding Correction L

The correction by Correction L reduces the number of claims depending from Claim 10 by replacing "any one of Claims 1 to 9" with "Claim 8 or 9".

Therefore, the correction by Correction L corresponds to a correction that aims at the matter prescribed in Article 120-5(2) (i) of the Patent Act (the restriction of the Scope of Claims). Furthermore, it is clear that the correction by Correction L remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application and does not substantially enlarge or alter the Scope of Claims.

C Summary

The corrections made to Claims 8 to 10 as corrected (the corrections by Corrections K and L) comply with the provisions of Article 126(5) and (6)of the Patent Act as applied mutatis mutandis under Article 120-5(2) and Article 120-5(9) of the Patent Act.

(3) Regarding corrected Claim 11

A Regarding Correction M

The correction by Correction M can be divided into the following corrections:

[A] In Claim 8, which cites the recitation of any one of Clams 1 to 7, the recitation of Claim 8, which cites the recitation of Claim 2, is replaced with one that does not cite the recitation of Claim 2 and is then placed in new Claim 11 (Claim 8 is replaced with one that cites the recitation of Claim 1).

[B] The "first resin material" recited in Claim 11 as corrected by the above [A] is limited from one "including an alicyclic polyamide" to one "including 60% by mass or more of an alicyclic polyamide."

[C] The "second resin material" recited in Claim 11 as corrected by the above [A] is limited from one "including an alicyclic polyamide" to one "including 60% by mass or more of an alicyclic polyamide."

[D] For the correction of error, the term "Barcol" recited in Claim 1 is corrected to "Barcol."

[E] The "alicyclic polyamide" included in the "first resin material" or the "alicyclic polyamide" included in the "second resin material" which is recited in Claim 11 as corrected by the above [A], is limited to one represented by the specific chemical

formula (see, the above 2(13)).
[F] The relationship for "glass transition temperature" between the "first resin material" and the "second resin material" recited in Claim 11 is limited from one such that "they have different glass transition temperatures from each other" to one that "the glass transition temperature of the first resin material is higher than the glass transition temperature of the second resin material."

Therefore, the correction by Correction M corresponds to a correction that aims at matters prescribed in Article 120-5(2) (i), (ii), and (iv) of the Patent Act (such correction shall be limited to "the restriction of the Scope of Claims," "correction of errors or incorrect translations," and "correction of a recitation of claims which cites other recitation of claims to a recitation which does not cite said other recitation of claims").

Furthermore, as stated in the above (2) A, the correction by Correction M (the corrections by the above [A] to [F]) is recognized as one that does not introduce any new technical matter in relation to the technical matters derived by summing up all the descriptions in the specification or drawings by a person skilled in the art.

Therefore, the correction by Correction M remains within the scope of the matters stated in the specification, Scope of Claims, or drawings attached to the application.

Furthermore, it is clear that the Scope of Claims as corrected by Correction M does not include any of the inventions being regarded as those not included in the Scope of the Claims before the correction. Thus, the correction by Correction M does not substantially enlarge or alter the Scope of Claims.

B Summary

The corrections made to Claim 11 as corrected (the correction by Correction M) comply with the provisions of Article 120-5(2) and 126(5) and (6)of the Patent Act as applied mutatis mutandis under Article 120-5(9) of the Patent Act.

4. Summary

As stated above, all of the corrections by the demand for correction comply with the provisions of Article 126(5) and (6) of the Patent Act as applied mutatis mutandis under Article 120-5(9) of the Patent Act.

As stated in Conclusion, therefore, the correction of the Scope of Claims of Japanese Patent No. 6414362 shall be approved as recited in the corrected Scope of Claims attached to the demand for written correction, as for the corrected Claims [1 to 7], [8 to 10], and 11.

No. 3 The Patent Invention

As stated in the above "No. 2," since the correction by the demand for correction has been approved, the inventions recited in Claims 2 and 4 to 11 of the Patent (hereinafter, respectively referred to as "Invention 1," and so on), which are specified by the matters recited in Claim 1, Claim 2, and Claims 4 to 11 of the Scope of Claims as corrected by the demand for correction, are as follows:

Note

[Claim 1]

A polarized laminate, comprising:

a polarizing film having a first surface and a second surface that is a reverse side of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide;

and

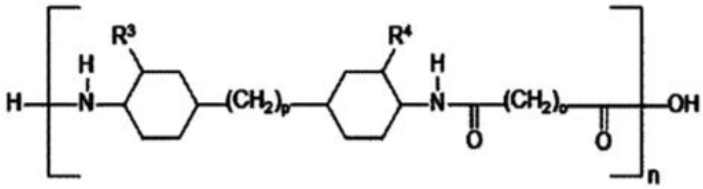
a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein

the first layer has a retardation of from 2,600 to 8,000,

the second layer has a retardation of 0 to 500,

when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion,

the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:



(Here, in the formulas, R^3 and R^4 each independently represents a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater), and

the first layer and the second layer are joined to the first surface and the second surface respectively by a two-liquid type polyurethane adhesive.

[Claim 2]

The polarized laminate according to Claim 1, wherein the polyamide included in at least one of the first resin material and the second resin material has a glass transition temperature of 140°C to 190°C.

[Claim 4]

The polarized laminate according to Claim 1 or 2, wherein the polarized laminate is a lens for eyeglasses.

[Claim 5]

The polarized laminate according to, any one of Claims 1, 2, and 4, wherein when the polarized laminate is used, the second surface having the second layer provided thereon faces an eye side of a user.

[Claim 6]

The polarized laminate according to any one of Claims 1, 2, 4, and 5, wherein the polarized laminate has a curved plate shape such that the first layer forms a convex

surface.

[Claim 7]

The polarized laminate according to any one of Claims 1, 2, and 4 to 6, wherein a water absorption ratio of each of the first layer and the second layer as measured according to JIS K 7209:2000 is 0.5% to 6.0%.

[Claim 8]

A polarized laminate, comprising:

a polarizing film having a first surface and a second surface that is a reverse side of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide; and

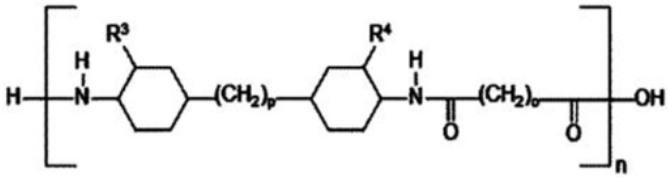
a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein

the first layer has a retardation of from 2,600 to 8,000,

the second layer has a retardation of 0 to 500,

when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion,

the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:



(Here, in the formulas, R^3 and R^4 each independently represents a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater), and

the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material.

[Claim 9]

The polarized laminate according to Claim 8, wherein a difference between the glass transition temperature of the first resin material and the glass transition temperature of the second resin material is 3°C to 35°C.

[Claim 10]

Eyeglasses comprising the polarized laminate of Claim 8 or 9.

[Claim 11]

A polarized laminate, comprising:

a polarizing film having a first surface and a second surface that is a reverse side

of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide; and

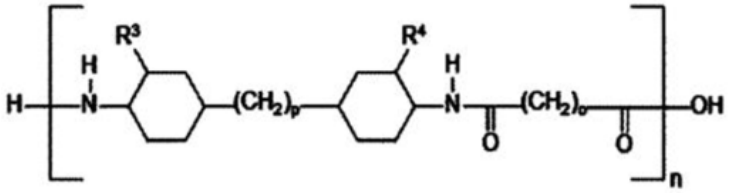
a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein

the first layer has a retardation of from 2,600 to 8,000, wherein

the second layer has a retardation of 0 to 500,

when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion,

the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula:



(Here, in the formulas, R^3 and R^4 each independently represents a hydrocarbon group having 4 or fewer carbon atoms; o represents an integer from 2 to 14; p represents an integer from 0 to 6; and n represents an integer of 2 or greater),

the polyamide included in at least one of the first resin material and the second resin material has a glass transition temperature of 140°C to 190°C, and

the glass transition temperature of the first resin material is higher than the glass transition temperature of the second resin material.

No. 4 Reasons for revocation and evidences

1. Reasons for revocation

The reasons for revocation notified by the notice of reasons for rescission dated December 5, 2019 are as follows:

(1) Reason 1 (inventive step)

It is recognized that the inventions recited in Claims 1 to 10 of the Patent could have been easily made by a person having ordinary skill in the art to which the invention pertains (hereinafter referred to as "a person skilled in the art"), on the basis of an invention disclosed in the publication (A-1) distributed in Japan or a foreign country prior to the filing of the prior application.

Therefore, Claims 1 to 10 of the Patent have been granted a patent in violation of the provisions of Article 29 of the Patent Act and thus should be revoked.

A-1: Japanese Unexamined Patent Application Publication No. 2007-93649

A-2: Japanese Unexamined Patent Re-publication No. 2006/040954

(The body's note: Publication A-2 is Domestic re-publication of PCT international publication for patent application No. W2006/040954)

A-3: Certificate of Experimental Result

(The body's note: The creator is "DJK Co., Ltd.")

A-4: Catalog entitled "Grilamid TR High Performance Transparent Polyamide," EMS-

CHMIE (Japan) Ltd.
(The body's note: At the end of page 34, there is a description "Domat/EMS, May 2011." Here, "Domat/EMS" is a geographical name.)
Reference 1: Catalog entitled "TROGAMID(R)," Daicel-Evonik Ltd., front cover, pages 1 to 10, and back cover
(The body's note: There is a description "2000. 2. 1000 P. A." Here, "Domat/EMS" is a place name. Here, the circled R representing a registered trademark is replaced by (R).)

(2) Reason 2 (enablement requirement)

The Detailed Description of the Invention of the Patent cannot be recognized as being described clearly and sufficiently as to enable a person skilled in the art to work the inventions recited in Claims 1 to 10 of the Patent.

Therefore, the patent for Claims 1 to 10 of the Patent has been granted for a patent application not complying with the requirements under the provision of Article 36(4)(i) of the Patent Act and thus should be revoked.

(3) Reason 3 (clarity)

It cannot be said that the inventions recited in Claims 1 to 10 of the Patent are clear.

Therefore, the patent for Claims 1 to 10 of the Patent has been granted on a patent application not complying with the requirements under the provisions of Article 36(6)(ii) of the Patent Act and falls under Article 113(4) of the Patent Act. Hence, the patent should be revoked.

2. Regarding evidences
(1) Evidences submitted by Patent Opponent

The Patent Opponent has submitted the following evidences:
A5: Noburu Ogawa, "English-Japanese Plastic Industry Dictionary," 5th ed. 2nd print, Kogyo Chosakai Publishing Co., Ltd., May 25, 1992, front cover, preliminaries, pages 68 to 69 (section of "Barcol hardness"), page 1300, colophon
Reference 1: Japanese Unexamined Patent Application Publication No. 2006-227591
Reference 2: Japanese Unexamined Patent Application Publication No. 2005-138365
Reference 3: Nobuko Kato and one other, "Analysis of Polyurethane," Journal of the Adhesion Society of Japan, The Adhesion Society of Japan, June 1, 2004, vol. 40, No. 6, pages 234 to 240
Reference 4: "Notice Concerning Formation of Mitsui Chemicals Polyurethanes, Inc.," Mitsui Takeda Chemicals, Inc. and Mitsui Chemicals, Inc.,
(The body's note: The same content can be viewed on the Internet <URL: https://jp.mitsuichemicals.com/jp/release/2006/2006_0302.htm>.)

(2) Evidences submitted by the Patentee

The Patentee has submitted the following evidences:
B1: "Written opinion (Japanese Patent Application No. 2006-540876)"
(The body's note: This is the result of inquiring from J-PlatPat <URL: https://www.j-platpat.inpit.go.jp/> the written opinion submitted on April 20, 2011 in the examination of A2.)

B2: Material that the Patentee considers to be "raw data of some examples"
(The body's note: No evidence is given to support the creator, date of creation, etc., and no evidence to infer these is submitted.)

No. 5 Judgment by the body
1. Regarding Reason 1 (inventive step)
(1) Described matters in A-1
A-1 (Japanese Unexamined Patent Application Publication No. 2007-93649) is a publication distributed before the prior application and includes the following
A "[Technical Field]
[0001]
The present invention relates to a polarized lens in which a polarizing plate having a protective layer made of transparent nylon resin is spherically processed, and transparent nylon resin is laminated and integrated on the concave side thereof.
[Background Art]
[0002]
A polarizing plate in which a protective layer is laminated and integrated on a polarizing thin film is used not only for liquid crystal display but also as sunglasses, goggles, etc. due to its excellent antiglare property.
... (Omitted) ...
[0004]
The third method is to process a polarizing plate in which a polycarbonate-based sheet is attached and integrated as a protective layer on each of the sides of a polarizing thin film into a spherical or lens shape by thermoforming; or to further subject it to injection molding to laminate and integrate a polycarbonate resin (see Patent Document 2). The polarized lens obtained by this method attains improvements in heat resistance and impact resistance by means of polycarbonate resin but remains a drawback of weak solvent resistance. The use of spectacle frames containing a large amount of a plasticizer, such as vinyl chloride or celluloid, gradually promotes the transfer of the plasticizer from the frame to the polycarbonate resin layer, eventually causing solvent cracks in the polycarbonate resin layer. Thus, there are restrictions on the frame materials that can be used. Furthermore, the resistance to stress cracks due to the molecular weight and internal strain of the injected polycarbonate resin is reduced, making the polarized lens difficult to use in two-point frameless lens applications.
... (Omitted) ...
[Disclosure of Invention]
[Problem to be solved by the invention]
[0005]
The present invention solves the above problem and intends to provide a polarized lens having excellent impact resistance and heat resistance and improved solvent resistance with no peeling at an interface, and can be used as a two-point frameless lens."

B "[Means for solving the problem]
[0006]
For attaining the above object, the present inventors have completed the present invention by focusing on a transparent nylon resin having transparency, heat resistance,

and impact resistance close to those of polycarbonate and being excellent in two-point frameless workability (stress crack resistance) and frame-containing plasticizer resistance (solvent crack resistance), which are the disadvantages of polycarbonate.
... (Omitted) ...
[Advantage of the Invention]
[0008]

The polarized lens of the present invention is one obtained by spherically processing into a lens shape a polarizing plate provided with a protective layer on a polarizing thin film in which a dichroic dye is adsorbed and oriented on a polymer film; and laminating and integrating a transparent nylon resin on the concave side thereof by an insert molding process. Here, making the protective layer on the concave side from transparent nylon resin provides the polarized lens with excellent impact resistance and heat resistance as well as an improved solvent resistance without peeling at the interface between the polarizing plate and the resin laminated by the insert molding process. Therefore, a plastic frame containing a relatively large amount of a plasticizer can be selected and used. Also, the polarized lens can be sufficiently used as a two-point frameless lens application."

C "[Best Mode for Carrying Out the Invention]
[0009]

FIG. 1 shows the configuration of the polarized lens of the present invention.
... (Omitted) ...
[0011]

Of the protective layers (3, 5) provided on both sides of the polarizing thin film, the protective layer (5) on the surface that is spherically processed to be the concave side is made of transparent nylon resin. The transparent nylon resin used is a commercially available transparent nylon resin having heat resistance and formed into a sheet form by solution casting molding, extrusion molding, calendar molding, melt casting molding, or the like. The obtained sheet-like material is laminated and integrated on a polarizing thin film with an adhesive interposed therebetween to form a protective layer. Examples of the adhesive include acrylic adhesives, epoxy adhesives, polyurethane adhesives, and olefin adhesives. However, anything can be used as long as it allows the polarizing thin film and the protective layer to be sufficiently adhered and is excellent in terms of optical fluoroscopy without yellowing over time and causing problems, such as peeling, cracking, and whitening during thermoforming.
... (Omitted) ...
[0012]

Of the protective layers provided on both sides of the polarizing thin film, the protective layer (3) on the surface that is spherically processed to be the convex side is made of triacetyl cellulose, polycarbonate resin, cyclic polyolefin resin, or transparent nylon resin. A sheet of any of these resins formed by a well-known molding process as described above is laminated and integrated on a polarizing thin film via an adhesive in the same manner as described above.
... (Omitted) ...
[0015]

The polarizing plate adjusted as described above is spherically processed into a lens shape by vacuum molding, press molding, or the like. However, the shaping into

lens shape by slowly cooling to room temperature after molding may cause warpage in the cooling process due to the differences in material and thickness of the protective layer, and the shrinkage force inherent in the polarizing thin film and the protective layer, resulting in difficulty in obtaining the spherical state. For solving such a problem, a polarizing plate having a desired lens shape can be obtained by preparing male and female molds having the same desired lens shape and maintained at 50°C or lower, preferably 40°C or lower; and immediately sandwiching the spherically processed polarizing plate between the male and female molds, followed by rapidly cooling. Warpage occurs when the sandwiched molds have temperatures of 50°C or higher. The polarized lens of the present invention can be obtained by injecting a transparent nylon resin onto the concave side of the polarizing plate processed into a lens shape by an insert molding process. Here, the transparent nylon resin injected is the same as one used as the protective layer.
... (Omitted) ...
[0017]

The protective layer of the present invention, any of various additives typified by antioxidants, plasticizers, modifiers, light stabilizers, antistatic agents, and the like may be appropriately blended in the composition thereof or may be used for treatment on the surface thereof."

D "[Examples]
[0018]

Next, specific examples of the present invention will be described.
[0019]
<Polarizing thin film>

A polyvinyl alcohol film (trade name: 'Kuraray Vinylon #7500', manufactured by Kuraray Co., Ltd.) was stained in a solution with dissolved dichromatic dyes (Brilliant Blue 6B in a concentration of 0.4g/L, Benzopurpurine in a concentration of 0.2 g/L, and Chlorazole Black BH in a concentration of 0.1 g/L) under 40°C conditions for 10 minutes. After immersing this stained film in an aqueous solution of nickel acetate tetrahydrate (0.4 g/L) and boric acid (40 g /L) at 40°C for 20 minutes, it was stretched in this solution about twice in the uniaxial direction and then washed with water and dried to obtain a polarized thin film.
[0020]
<Sheet for protective layer>

Transparent nylon resin (trade name: 'CX7323', manufactured by Degussa AG) and polycarbonate resin (trade name: 'Iupilon E-2000', manufactured by Mitsubishi Engineering Plastics Corporation) were extruded, and at this time the resin temperature of the polishing roll and the speed difference between the polishing roll and the take-up roll were adjusted to obtain a sheet having the thickness and the retardation value shown in Table 1. The retardation value of this sheet was measured at 10 points using an automatic birefringence index meter (manufactured by KS-SYSTEMS, Co., Ltd.). Then, the range (from the smallest value to the largest value) is shown. In addition, a triacetyl cellulose sheet with a thickness of 80 μm (trade name: 'Fujitac TA80', manufactured by Fuji Photo Film Co., Ltd.) was prepared.
[Table 1]

保護層用シート	材質	厚み(mm)	リタデーション値(nm)
A	透明ナイロン	0. 7	2800～3600
B	透明ナイロン	0. 45	20～200
C	透明ナイロン	0. 25	20～200
D	ポリカーボネート	0. 4	2400～2800
E	トリアセチルセルロース	0. 08	10～30

保護層用シート	Protective layer
材質	Material
透明ナイロン	Transparent nylon
ポリカーボネート	Polycarbonate
トリアセチルセルロース	Triacetyl cellulose
厚み	Thickness
リタデーション値	Retardation value

[0021]

<Examples 1 to 3>

A polarizing plate was obtained by selecting protective layers of Table 1 as protective layers (3, 5) as shown in Table 2 and attaching them on both sides of the above polarizing thin film with a one-component moisture-curable polyurethane adhesive. The obtained polarizing plate was punched into a circle of 7 cm in diameter, pre-dried at 70°C for 12 hours, suctioned onto a spherical mold of six curves under an atmosphere of 150°C with a REMA molding machine (vacuum molding machine) type CR-32, and held for 6 minutes, to thereby be shaped into a spherical shape. Immediately after taking out the obtained spherical processed product from the REMA molding machine, it was sandwiched between male and female molds each having a 6-curve spherical surface at 40°C and then cooled to room temperature to complete spherical processing. Next, the obtained spherically processed product was inserted into an injection molding machine equipped with a 6-curve lens mold, and the transparent nylon resin was injected on the concave side thereof to carry out injection-integrating to obtain a polarized lens with a thickness of about 2.0 mm.

... (Omitted) ...

[0025]

... (Omitted) ...

<Two-point frameless lens suitability>

Each sample (polarized lens) was drilled using a commercially available eyeglass processing machine to form a screw hole for two points and screw-fixed with a metal temple, followed by being subjected to a cycle test (70°C x 1 hr. to -20°C x 1 hr.: 100 cycles) in a state where the angle with the lens is expanded to 120°C. Subsequently, those without cracks around the screw holes are indicated by '○', and those with cracks are indicated by '×.' In Table 2, this evaluation is referred to as '2-point aptitude.'

... (Omitted) ...

[Table 2]

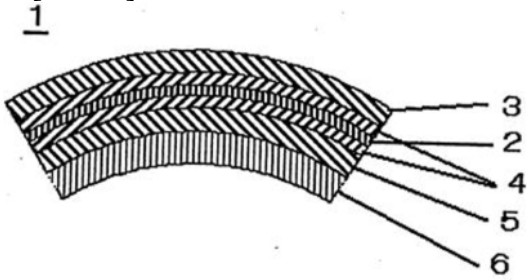
	実施例1	実施例2	実施例3	比較例1	参考例1	参考例2
保護層(3)	A	B	E	D	-	-
保護層(5)	C	C	B	D	-	-
耐熱性	○	○	○	○	×	×
耐衝撃性	○	○	○	○	×	○
2ポイント適性	○	○	○	×	×	○
フレーム適性	○	○	○	×	○	○
密着性	○	○	○	○	○	×

保護層	Protective layer
耐熱性	Heat-resistance
耐衝撃性	Impact resistance
2 ポイント適正	Two-point aptitude
フレーム適正	Frame aptitude
密着性	Adhesion
実施例	Example
比較例	Comparative example
参考例	Reference example

[0026]

As is clear from the above results, it was confirmed that polarized lenses of Examples 1 to 3, which are within the technical scope of the present invention, can be used as two-point frameless lenses with excellent heat resistance and impact resistance without peeling at the interface and no solvent resistant problem."

E [FIG. 1]



(2) A-1 Invention

A-1 describes the following invention (hereinafter referred to as "A-1 Invention"), which belongs to the technical field described in [0001], exhibits the effects described in [0008], and has the configuration of "Example 1" described in [0018] to [0026]. Considering that the protective layer (3) is on the convex side of the polarized lens and the protective layer (5) is on the concave side of the polarized lens ([0011] and [0012]), the "protective layer (3)" and "protective layer (5)" are described as "convex side protective layer" and "concave-side protective layer", respectively. In addition, regarding the transparent nylon resin injected on the concave surface side, the description of "the transparent nylon resin to be injected is the same as one used as the

protective layer" in [0015] was taken into consideration, and the common technical knowledge was taken into consideration for the manufacturing process (crosslinking process) of the polarizing thin film.

"A polarized lens in which a polarizing plate having a protective layer made of transparent nylon resin is spherically processed, and transparent nylon resin is laminated and integrated on the concave side thereof, wherein

a protective layer sheet A having a thickness of 0.7 mm and a retardation value of from 2800 to 3600 nm is obtained by extrusion molding a transparent nylon resin (trade name: 'CX7323', manufactured by Degussa_AG);

a polyvinyl alcohol film is dyed with dichromatic dyes, crosslinked, uniaxially stretched, washed with water, and dried to obtain a polarized thin film;

a protective layer sheet C having a thickness of 0.25 mm and a retardation value of 20 to 200 nm is obtained by extrusion molding a transparent nylon resin (trade name: 'CX7323', manufactured by Degussa_AG); and

a polarizing plate is obtained by selecting a protective sheet A as a convex side protective layer, and a protective sheet C as a concave-side protective layer and attaching them on the both sides of the above polarizing thin film with a one-component moisture-curable polyurethane adhesive, and then the obtained polarizing plate is punched into a circle, shaped into a spherical shape and then subjected to injection-integrating on the convex side with a transparent nylon resin (trade name: 'CX7323', manufactured by Degussa_AG) to obtain a polarized lens, wherein

the polarized lens is one obtained by spherically processing into a lens shape a polarizing plate provided with a protective layer on a polarizing thin film in which a dichroic dye is adsorbed and oriented on a polymer film; laminating and integrating a transparent nylon resin on the concave side thereof by an insert molding process; and making the protective layer on the concave side from transparent nylon resin to provide the polarized lens with excellent impact resistance and heat resistance as well as improved solvent resistance without peeling at the interface between the polarizing plate and the resin laminated by the insert molding process, thereby allowing a plastic frame containing a relatively large amount of a plasticizer to be selected and used and allowing the polarized lens to be sufficiently used as a two-point frameless lens application."

(3) Comparison

Invention 1 and A-1 Invention are compared.

A polarizing film

The "polarized thin film" of A-1 Invention is obtained by a procedure in which "a polyvinyl alcohol film is dyed with dichromatic dyes, crosslinked, uniaxially stretched, washed with water, and dried."

This configuration reveals that the "polarizing thin film" of A-1 Invention is a polarizing film having a front surface and a back surface.

Therefore, the "polarizing thin film" of the invention of A-1 corresponds to the "polarizing film" of Invention 1 which is said to "have a first surface and a second surface opposite to the first surface."

B First layer

The "polarizing plate" of A-1 Invention is obtained by "selecting a protective

sheet A as a convex-side protective layer, and a protective sheet C as a concave-side protective layer and attaching them on the both sides of the above polarizing thin film with a one-component moisture-curable polyurethane adhesive." In addition, the "protective sheet A" is one having "a thickness of 0.7 mm and a retardation value of from 2800 to 3600 nm" and obtained "by extrusion molding a transparent nylon resin (trade name: 'CX7323', manufactured by Degussa AG)."

This configuration reveals that the "convex-side protective layer" of A-1 Invention is formed on the front surface; i.e., the first surface, of the "polarizing thin film" and is just a "layer" as the wording itself means. In addition, the "transparent nylon resin (trade name: 'CX7323,' manufactured by Degussa AG)" of A-1 Invention is classified as "alicyclic polyamide" in consideration of its trade name (see A-2, [0086] and Reference 1, page 2). Therefore, the "convex-side protective layer" of Exhibit A-1 invention is composed of a resin material (100% by mass) corresponding to alicyclic polyamide. In addition, distinguishing this resin material from others by adding the numeral "first" is only a problem in the claim recitation(it does not affect the composition as a product). Furthermore, the range of retardation values (from 2800 to 3600) of the "convex-side protective layer" of A-1 Invention is included in the range of from 2600 to 8000.

Therefore, the "convex-side protective layer" of A-1 Invention corresponds to the "first layer" of Invention 1, which is configured of "a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide." In addition, the "convex-side protective layer" in Invention 1 satisfies the requirement of "a retardation of from 2600 to 8000."

C Second layer

As stated in the above B, the "concave-side protective layer" of A-1 invention corresponds to the "second layer" of the Invention, which is said to be composed of "a second resin material formed on the second surface and including 60% by mass or more of an alicyclic polyamide." In addition, the "concave-side protective layer" of A-1 Invention satisfies the requirement of "a retardation of from 0 to 500" in the "second layer" in Invention 1.

D Polarized laminate

Considering the comparison results of the above A to C and the overall configurations of A-1 Invention and Invention 1, the "polarized lens" of A-1 Invention corresponds to the "polarized laminate" of Invention 1, which is said to comprise the "polarizing film," the "first layer," and the "second layer."

(4) Corresponding features and different features

A Corresponding Feature

Invention 1 and A-1 Invention are identical to each other in the following configuration.

"A polarizing film comprising:

a polarized laminate having a first surface and a second surface that is a reverse side of the first surface;

a first layer provided on the first surface and formed of a first resin material including 60% by mass or more of an alicyclic polyamide; and

a second layer provided on the second surface and formed of a second resin material including 60% by mass or more of an alicyclic polyamide, wherein
the first layer has a retardation of from 2,600 to 8,000, and
the second layer has a retardation of 0 to 500."

B Different Features

Invention 1 and A-1 Invention are different from each other in the following features.

(Different Feature 1)

The "polarized laminate" of Invention 1 satisfies the requirement of "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion," whereas it is not clear whether A-1 Invention satisfies such a requirement.

(Different Feature 2)

The "polarized laminate" of Invention 1 includes a configuration that "the alicyclic polyamide included in the first resin material and the alicyclic polyamide included in the second resin material are each represented by the following chemical formula," whereas the "polarized laminate" of A-1 Invention is not "represented by the following chemical formula,"
(The body's note: "the following chemical formula" is as recited in [Claim 1] in the above "No. 3.")

(Different Feature 3)

The "polarized laminate" of Invention 1 includes a configuration that "the first layer and the second layer are joined to the first surface and the second surface respectively by a two-liquid type polyurethane adhesive," whereas A-1 Invention is configured of being "obtained by selecting a protective sheet A as a convex-side protective layer, and a protective sheet C as a concave-side protective layer and attaching them on both sides of the above polarizing thin film with a one-component moisture-curable polyurethane adhesive" (the type of the adhesive is not a "two-liquid type urethane-based adhesive" but a "one-component moisture-curable polyurethane adhesive)."

(5) Judgment

Taking the case into consideration, judgments are made in the order of Different Feature 2, Different Feature 3, and Different Feature 1.

A Regarding Different Feature 2

Regarding the "transparent nylon resin" of A-1 Invention, [0006] of A-1 describes that "the present inventors have completed the present invention by focusing on a transparent nylon resin having transparency, heat resistance, and impact resistance close to those of polycarbonate and being excellent in two-point frameless workability (stress crack resistance) and frame-containing plasticizer resistance (solvent crack resistance), which are the disadvantages of polycarbonate." Then [0011] of A-1

describes that "the transparent nylon resin used is a commercially available transparent nylon resin having heat resistance." Thus, it is recognized that the "transparent nylon resin (trade name: 'CX7323', manufactured by Degussa_AG)" is used as an example of such a "transparent nylon resin."

Here, a person skilled in the art before the prior application marketed "Glylamid TR90" as a "transparent nylon resin," which is recognized to satisfy the requirements described in the above [0006] and [0011] (well-known in the art). In addition, "Glylamid TR90" is a copolymer of 3,3'-dimethyl-4,4'-diaminodicyclohexylmethane and dodecanedioic acid and thus satisfies the requirements of "the following chemical formula" of Invention 1 (The body's note: In this regard, see [0084] of Japanese Unexamined Patent Application Publication No. 2016-147925 (hereinafter referred to as "Reference 2")).

It is a matter within the scope suggested by the description in A-1 that a person skilled in the art would replace "a transparent nylon resin (trade name: 'CX7323', manufactured by Degussa AG)" with the well-known "GrilamidTR90" to satisfy the requirement of Invention 1, which is "the following chemical formula" of Invention 1 for Different Feature 2.

B Regarding Different Feature 3

Regarding the "one-component moisture-curable polyurethane adhesive" of A-1 Invention, [0011] of A-1 describes that "Examples of the adhesive include acrylic adhesives, epoxy adhesives, polyurethane adhesives, and olefin adhesives. However, anything can be used as long as it allows the polarizing thin film and the protective layer to be sufficiently adhered and is excellent in terms of optical fluoroscopy without yellowing over time and causing problems, such as peeling, cracking, and whitening during thermoforming." Therefore, it is recognized that the "one-component moisture-curable polyurethane adhesive" of A-1 Invention is used as an example of such an "adhesive".

Here, for a person skilled in the art before the prior application, needless to exemplify, it was well-known in the art that a "two-liquid type urethane-based adhesive" is an "adhesive" similar to the "one-component moisture-curable polyurethane adhesive" used in A-1 Invention. Furthermore, in view of the descriptions in [0001], [0027], [0029], [0039], [0064], [0072], [0077], and [0133] of Reference 1 (Japanese Unexamined Patent Application Publication No. 2006-227591), it is recognized that there is no problem even if the well-known "two-liquid type urethane adhesive" is adopted instead of the "one-component moisture-curable polyurethane adhesive" of A-1 Invention. Furthermore, [0036] of Japanese Unexamined Patent Application Publication No. 2005-62262, [0055] of Japanese Patent Laid-Open No. 2007-217667, and [0054] and [0055] of Japanese Unexamined Patent Application Publication No. 2004-144943 describe that the two-liquid type urethane adhesive is more preferable than the one-component type adhesive as an adhesive for the polarizing film.

Therefore, it is a matter within the scope suggested by the description in A-1 Invention that a person skilled in the art would replace the "one-component moisture-curable polyurethane adhesive" with the well-known "two-liquid type urethane-based adhesive" to make A-1 include the configuration of Invention 1 for Different Feature 3.

Incidentally, [0100] and [0101] of the specification for the Patent respectively describe as follows: "Particularly, it is preferable that the adhesive layer 34 is formed by the method described below. First, a two-liquid type urethane-based adhesive is applied on the first layer 32, and a coating layer is obtained. Next, the coating layer is subjected to a first treatment by which a curing reaction is carried out in an environment with low humidity, and to a second treatment that is carried out at a higher temperature than the first treatment, and thereby the adhesive layer 34 is formed." and "Therefore, it can be prevented that the amount of NCO groups becomes excessive with respect to the hydroxyl groups of the main agent. That is, the amount of NCO groups can be suitably adjusted so as to become a suitable amount corresponding to the hydroxyl groups of the main agent. In addition, the formation of urethane bonds is suitably carried out in the early stage of the curing reaction (polymerization reaction), and air bubbles caused by the generation of carbon dioxide can be effectively prevented from exerting adverse influence on the external appearance and functions of the polarized laminate 3. Furthermore, productivity of the polarized laminate 3 can be increased.

However, the "polarized lens" of Invention 1 is not limited to the one obtained by the process described in [0100] or the adjustment described in [0101] (In Claim 1, it is only stated that "the first layer and the second layer are joined to the first surface and the second surface respectively by a two-liquid type urethane-based adhesive").

Incidentally, [0072] of Reference 1 discloses adjusting the amounts of the main material (polyol) and the curing agent (isocyanate compound) (a well-known technique).

C Regarding Different Feature 1

A-1 Invention after being modified as stated in the above A and B is considered to satisfy the requirements of Invention 1 for Different Feature 1 in view of its configuration (this matter is also inferred from A-3).

Alternatively, it is natural that resistance to hot water is required, as the A-1 Invention is a "polarized lens." Therefore, a person skilled in the art would be forced to adopt a configuration of making the "polarized lens" of A-1 Invention satisfy the requirements of Invention 1 for Different Feature 1.

(6) Regarding the effects of the Invention

The effect of Invention 1 is that "a polarized laminate that can retain stable product quality (particularly, polarization characteristics) for a long time and has excellent processability and durability (particularly, water resistance and weather resistance) can be provided." ([0018]).

However, A-1 Invention is "the polarized lens with excellent impact resistance and heat resistance as well as an improved solvent resistance without peeling at the interface between the polarizing plate and the resin laminated by the insert molding process, thereby allowing a plastic frame containing a relatively large amount of a plasticizer to be selected and used and allowing the polarized lens to be sufficiently used as a two-point frameless lens application." In addition, this effect is also exerted in A-1 Invention after changing the "transparent nylon resin" and "adhesive" as stated in the above (5)A and B.

Therefore, the effect of Invention 1 is within the range predicted from A-1 Invention, and also within the range predicted from A-1 Invention (A-1 Invention and

well-known art) after the change stated in the above (5)A and B.

(7) Summary

Invention 1 could have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

(8) Regarding Invention 2 and Inventions 4 to 10

A Regarding Invention 2

"Grilamid TR90" has a glass transition temperature of 155°C (A-4, page 5).

The remainder is as already stated.

Invention 2 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

B Regarding Invention 4

The "polarized lens" of A-1 Invention "can be sufficiently used as a two-point frameless lens application."

Therefore, changing the "polarized lens" of the A-1 Invention to a "lens for eyeglasses" is recognized as the planned application for the "polarized lens" of the A-1 Invention.

The remainder is as already stated.

Invention 4 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

C Regarding Invention 5

It is recognized as a configuration naturally adopted when the "polarized lens" of A-1 Invention is used as a "lens for eyeglasses."

The remainder is as already stated.

Invention 5 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

D Regarding Invention 6

The configuration "the polarized laminate has a curved plate shape such that the first layer forms a convex surface" also includes the A-1 Invention.

The remainder is as already stated.

Invention 6 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

E Regarding Invention 7

The water absorption rate of "Grilamid TR 90" is generally recognized to be about 3% (see A-4, pages 10 and 11, ISO 62 corresponds to JIS K 7209:2000).

It is highly probable that the configuration "a water absorption ratio of each of the first layer and the second layer as measured according to JIS K 7209:2000 is 0.5% to 6.0%" also includes A-1 Invention as changed as stated in the above A and B.

The remainder is as already stated.

Invention 7 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

F Regarding Inventions 8 to 10

Patented Invention 8 includes a configuration that "the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material."

Furthermore, [0122] of the specification for the Patent describes that "in a case in which the glass transition temperature of the first resin material that constitutes the first layer 32 is lower than the glass transition temperature of the second resin material that constitutes the second layer 33, the first layer 32 can be suitably subjected to stretching for exhibiting retardation at a relatively low temperature."

On the other hand, the "convex-side protective layer" and the "concave-side protective layer" of A-1 Invention are both made of the same resin (a transparent nylon resin (trade name: "CX7323", manufactured by Degussa AG). ..

Therefore, the effect described in [0122] of the specification for the Patent is heterogeneous and cannot be exerted by the "polarized lens" of A-1 Invention.

In addition, A-1 has no description or suggestion of such an effect. The same can be also said for other evidences. It cannot be said that such an effect was common general knowledge for a person skilled in the art before the prior application.

The same can be said for Invention 9 and Invention 10, because they also include the configuration "the glass transition temperature of the first resin material is lower than the glass transition temperature of the second resin material."

Inventions 8 to 10 could not have been easily invented even by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

G Regarding Invention 11

Comparing Invention 11 and A-1 Invention, they differ in the following features and correspond to each other in other features.

(Different Feature 1)

The "polarized laminate" of Invention 11 satisfies the requirement of "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion," whereas it is not clear whether A-1 Invention satisfies such a requirement.

(Different Feature 4)

The "polarized laminate" of Invention 1 includes a configuration that "the alicyclic polyamide included in the first resin material or the alicyclic polyamide included in the second resin material is represented by the following chemical formula" and satisfies the requirement of "the polyamide included in at least one of the first resin material and the second resin material has a glass transition temperature of 140°C to 190°C" and "the glass transition temperature of the first resin material is higher than the glass transition temperature of the second resin material," whereas A-1 Invention is not "represented by the following chemical formula" and does not comply with the above requirement for glass transition temperature.

(The body's note: "the following chemical formula" is as recited in [Claim 11] in the above "No. 3.")

Taking the case into consideration, judgments are made in the order of Different Feature 4 and Different Feature 1.

(Regarding Different Feature 4)]

As stated below, a person skilled in the art could easily conceive of the configuration of Invention 11 for Difference 4 by replacing the material of the "convex-side protective layer" with the well-known "Grilamid TR90" in A-1 Invention.

In other words, as stated in the above (5)A, it is recognized that "transparent nylon resin (trade name: 'CX7323', manufactured by Degussa_AG)" is used as an example of such a "transparent nylon resin" as mentioned in [0006] and [0011] of A-1. Therefore, the "transparent nylon resin" of A-1 Invention may be replaced with something other than "CX7323."

Furthermore, A-1 only mentions "a transparent nylon resin" as the resin of "concave-side protective layer" in [0011] and "triacetyl cellulose, polycarbonate resin, cyclic polyolefin resin, or transparent nylon resin" as the resin of "convex-side protective layer" in [0012]. Therefore, it can be said that preparing the "convex-side protective layer" and the "concave-side protective layer" with different resins is a planned matter in A-1 Invention.

In addition, as stated in the above (5)A, a person skilled in the art before the prior application marketed "Glylamid TR90" as a "transparent nylon resin," which is recognized to satisfy the requirements described in the above [0006] and [0011] (well-known in the art). As stated in the above (5)A, "Grilamid TR90" is "represented by the following chemical formula." In addition, "Grilamid TR90" has a glass transition temperature of 155°C (A-4, page 5), whereas "CX7323" has a glass transition temperature of 140°C (A-2, [0086]).

Then, A-4 describes that "the alicyclic Grilamid TR 90 also has excellent weather resistance and UV resistance" on page 4, left column, lines 2 to 1 from the bottom. It is recognized that it has a performance suitable for "convex-side protective layer" of "polarized lens."

Furthermore, "Grilamid TR90" has a higher Tg than "CX7323." In addition, it is obvious that the outer (convex-side) layer of the "polarized lens" is required to be more durable against radiant heat than the inner (concave side) layer. Therefore, it can be said that there is motivation to change the material of the "convex-side protective layer" from "CX7323" to the well-known "Grilamid TR90" in A-1 Invention.

(The body's note: Considering only Tg, the well-known "Grilamid TR55" is about 5°C higher. However, it is as stated above when considering the weather resistance and the UV resistance.)

(Regarding Different Feature 1)

It is the same as the above (5)C, in that A-1 Invention in which the material of the "convex-side protective layer" is replaced with the well-known "Grilamid TR90" meets the requirements of Invention 11 related to Different Feature 1.

Considering the above, Invention 11 could also have been easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art.

2. Regarding Reason 2 (enablement requirement)

Referring [Table 1] in [0154] of the specification for the Patent, in Examples 1 to 5 and Examples 7 to 9, the ratios of the Barcol hardness values after immersion with

respect to the Barcol hardness values before immersion, which were measured by the method described in [0136] with respect to each of the first and second layer, are completely equal to each other to two significant figures (hereinafter, referred to as "Barcol hardness ratio"). Furthermore, in each of these examples, the film thickness of the first layer and the film thickness of the second layer are different from each other. Even in such a case, there is not no doubt that the values of the Barcol hardness ratios of the first layer and the second layer are exactly the same to two significant figures.

However, referring to [Table 1] in [0154] of the specification for the Patent, the Barcol hardness ratios of the first layer and the second layer are 70% or more and 100% or less in all of Examples 1 to 9, satisfying the requirement of each of Inventions 8 to 10, "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion."

Then, with reference to these examples, a person skilled in the art could manufacture the "polarized laminate" of each of Inventions 8 and 9 and the "glasses" of Invention 10.

(The body's note: Inventions 8 to 10 are not inventions of aligning the values of the Barcol hardness ratios of the first and second layer.)

Therefore, the description of the detailed description of the invention of the Patent is clear and sufficient to enable a person of ordinary skill in the art to carry out the inventions recited in Claims 8 to 10 of the Patent.

3. Regarding Reason 3 (clarity requirement)

Reason 3 has been resolved by the correction by the demand for correction.

No. 6 Judgment on the reasons for patent opposition was not adopted for the reason of cancellation

1. Regarding Article 29(1)(iii)

A-1 does not disclose any invention in which "a transparent nylon resin" "represented by the following chemical formula" is adopted.

Therefore, it cannot be said that Inventions 8 to 10 are the inventions disclosed in A-1.

2. Regarding Article 36(6)(i)

In each of Inventions 8 to 10, each of the "first layer" and the "second layer" is one "formed of a first resin material including 60% by mass or more of aliphatic polyamide" and having a stable performance of "when a Barcol hardness of the polarized laminate before and after immersion of the polarized laminate in distilled water at 80°C for 15 minutes is measured according to JIS K 7060:1995, the Barcol hardness after the immersion is 70% to 100% with respect to the Barcol hardness before the immersion.

From these configurations, the "polarized lens" or "glasses" of each of Inventions 8 to 10 is recognized to attain the object "to provide a polarized lens having excellent impact resistance and heat resistance and improved solvent resistance with no peeling at an interface, and can be used as a two-point frameless lens." described in [0005] of the specification for the Patent.

Therefore, Inventions 8 to 10 are disclosed in the detailed description of the invention.

3. Regarding Article 36(6)(ii)

Inventions 8 to 10 are clear even if the Barcol hardness value (not a ratio but a value) is not provided as a matter specifying the invention.

No. 7 Summary

As stated above, Inventions 1, 2, 4 to 7, and 11 could be easily invented by a person skilled in the art based on the invention disclosed in A-1 and the well-known art, so that the Patent has been granted in violation of the provisions of Article 29(2) of the Patent Act.

Hence, the patents for Claims 1, 2, 4 to 7, and 11 have been granted in violation of the provisions of Article 29 of the Patent Act. Therefore, the Patent falls under Article 113(2) of the Patent Act and should be revoked.

The patents for Claims 8 to 10 cannot be revoked by the reasons for the patent objection described in the written opinion to the grant of patent, and the reasons for revocation notified by the body. In addition, no other reason can be found for revoking the patents for Claims 8 to 10.

The patent for Claim 3 has been deleted. Therefore, of the patent oppositions by the Patent Opponent, the object of the petition does not exist with respect to the patent for Claim 3.

Therefore, the opposition to a granted patent related to the patent for Claim 3 shall be dismissed under the provisions of Article 135 of the Patent Act which is applied mutatis mutandis pursuant to Article 120-8(1) of the Patent Act.

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

April 24, 2020

Chief administrative judge: SATOMURA, Toshimitsu
Administrative judge: HIGUCHI, Nobuhiro
Administrative judge: TAKAMATSU, Dai