#### Trial decision

Correction No. 2016-390126

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The case of trial for correction of Japanese Patent No. 5995128 has resulted in the following trial decision:

#### Conclusion

The correction of the Description and Claims of Japanese Patent No. 5995128 shall be approved as the Corrected Description and Claims attached to the written demand for trial of the case.

#### Reason

No. 1 History of the procedures

Japanese Patent No. 5995128 was filed on January 20, 2016, and regarding the inventions according to Claims 1 to 6, the establishment of the patent right was registered on September 2, 2016. Subsequently, a trial for correction was requested on October 5, 2016, notice of reasons for refusal of correction was issued on November 11, 2016, and the Corrected Description attached to the written demand for trial of the case and the grounds of the written demand of the trial for correction were amended and a written opinion submitted on December 9, 2016.

No. 2 Outline of reasons for refusal of correction issued on November 11, 2016

Corrections E and F are not within the matters described in the Description,

Claims or Drawings attached to the application of the patent (Article 126(5) of the

Patent Act), or are not intended for restriction of the scope of claims, correction of
errors, clarification of an ambiguous description, or correction of the description of a
claim depending on another claim to read a claim not depending on the another claim
(the proviso to Article 126(1) of the Patent Act).

No. 3 Propriety of amendment as of December 9, 2016

1. Detail of Amendment

The amendment with written amendment submitted on December 9, 2016

(hereinafter referred to as "the Amendment") is to amend "(2) The matters of correction" in the written demand of the trial for correction from

#### "E. Correction E

In paragraph 0025 in the Description, the description 'phosphate buffered saline (PBS)' is corrected to read 'phosphate buffer.'

#### F. Correction F

In paragraph 0033 in the Description, the description 'PBS' is corrected to read 'phosphate buffer.'" to

#### "E. Correction E

In paragraph 0025 in the Description, the description 'buffer solution' is corrected to read 'buffer.'"

### 2. Judgment by the body on the Amendment

It can be said that the Amendment is to correct the description "buffer solution" in paragraph 0025 in the Description to read "buffer"; that is, to add matters of correction which were not declared at the time of requesting the trial for correction (before the Amendment). Thus, since the Amendment is to substantially change the gist of the request for trial for correction of the case and to change the gist of the written demand of the trial for correction, it should be said that the Amendment violates the provisions of Article 131-2(1) of the Patent Act.

However, taking the case into consideration, the body does not consider the above change of the gist.

### No. 4 Object of the demand, content of Correction

The objective of the request for trial for correction of the case is to correct as the Corrected Description and Claims attached to the written demand for trial of the case after the Amendment; that is, to correct as the following matters of correction.

#### 1. Correction A

In Claim 1, the description "~NH-CR<sup>1</sup>R<sup>2</sup>" is corrected to read "~NH-CHR<sup>1</sup>R<sup>2</sup>."

#### 2. Correction B

In paragraph [0012] in the Description attached to the application of the patent, the description "~NH-CR¹R²" is corrected to read "~NH-CHR¹R²."

#### 3. Correction C

In paragraph [0014] in the Description attached to the application of the patent, the description "1 to 20 mol%" is corrected to read "1 to 30 mol%."

#### 4. Correction D

In paragraph [0014] in the Description attached to the application of the patent, the description "1/99 to 20/80" is corrected to read "1/99 to 30/70."

#### 5. Correction E

In paragraph [0025] in the Description attached to the application of the patent, the description "buffer solution" is corrected to read "buffer."

# No. 5 Judgment by the body

1. Purpose of correction (the proviso to Article 126(1) of the Patent Act)

## (1) Regarding the Correction A

Since it is described in Claim 1 before the Correction of the case and Claim 1 in the Description before the Correction of the case (the Description of the patent) that "R¹ is a hydrophobic group, and R² is an hydrogen atom or a hydrophobic group" and it is described in paragraph [0013] in the Description before the Correction of the case that, regarding the hydrophobic group, "The hydrophobic group is an alkyl group with carbon number of 6 to 18 which may be a branched group," it is clear that each of R¹ and R² is a monovalent group. Further, taking binding to N into consideration, in the formula "~NH-CR¹R²" of Claim 1 before the Correction of the case, the bonding of the carbon atom is only three and this violates common general technical knowledge; in addition, a monovalent group should be bonded to the carbon atom and it can be understood that the description of monovalent group is missed, and thus it can be said that "~NH-CR¹R²" of Claim 1 before the Correction of the case in which the description of monovalent group is missed is an ambiguous description.

Examining what the monovalent group is, regarding the formula "~NH-CR<sup>1</sup>R<sup>2</sup>" of Claim 1 before the Correction of the case, the following matters are described in the Description before the Correction of the case.

#### "[0029]

#### (2) Derivatization

To the gelatin solution obtained in the step (1), a derivatizing agent having a hydrophobic group to be introduced is added, and the mixture is stirred and reacted for a prescribed time. As the derivatizing agent, aldehyde or ketone having the hydrophobic group, such as dodecanal, tetradecanal, or decyl ethyl ketone, is used. The reaction temperature is 30 to 80°C and the reaction time is 0.5 to 12 hours, and usually, the mixture is only stirred to obtain gelatin in which an alkyl group is bonded to an amino group of gelatin via a Schiff base (~N=CR<sup>1</sup>R<sup>2</sup>). The usage amount of aldehyde is 1 to 4

times with respect to a stoichiometric amount corresponding to the desired derivatizing ratio. It is more preferable that the usage amount is 1 to 2 times.

[0030]

Next, the Schiff base is reduced to form a structure represented by formula (1). As the reducing agent, a well-known reducing agent, such as sodium cyanoborohydride (NaBH<sub>3</sub>CN), sodium triacetoxyborohydride (NaBH(OAc)<sub>3</sub>), 2-picoline borane, or pyridine borane, can be used. Among them, 2-picoline borane is preferable. Picoline borane has stability and can perform reductive amitation of aldehyde or ketone in an aqueous solvent by one step. Further, using picoline borane can achieve a yield of 80 to 90%, which is significantly higher than a yield of 70 to 75% by using sodium cyanoborohydride. It is preferable that the usage amount of 2-picoline borane is 1 to 3 equivalent with respect to equivalent of the derivatizing agent."

According to the above description, reducing the Schiff base "~N=CR<sup>1</sup>R<sup>2</sup>" to obtain a structure of "~NH-CR<sup>1</sup>R<sup>2</sup>," the formula (1), of Claim 1 before the Correction of the case in which the description of monovalent group is missed, and thus it can be understood by a person skilled in the art that the monovalent group bonded to the carbon atom of formula (1) whose description is missed is a hydrogen atom.

As described above, since the Correction A is to correct the description "~NH-CR¹R²" of Claim 1 before the Correction of the case whose description is an ambiguous statement due to the absence of the monovalent group to be bonded to the carbon atom, to read "~NH-CHR¹R²" so as to be an unambiguous description by clarifying the presence of the missed hydrogen atom, the Correction A is intended for clarification of an ambiguous description in accordance with item(iii) of the proviso to Article126(1) of the Patent Act.

### (2) Regarding the correction B

As examined in above (1), the Correction B is to correct the description "~NH-CR¹R²" in paragraph [0012] in the Description before the Correction of the case to read "~NH-CHR¹R²," and is intended for clarification of an ambiguous description.

## (3) Regarding the Correction C

To provide consistency in paragraph [0014] in the Description before the Correction of the case, regarding the description of range of mol% of an imino group bonded to the hydrophobic group with respect to the amount of an amino group in raw material gelatin, between "(c) an imino group / an amino group (molar ratio) in the

gelatin derivative is 1/99 to 30/70" of Claim 1 before the Correction of the case and "the amount of an imino group with respect to the amount of an amino group in gelatin is 1 to 30%," the Correction C is to correct "20 mol%" of the upper limit to read "30 mol%" and is intended for clarification of an ambiguous description in accordance with item(iii) of the proviso to Article126(1) of the Patent Act.

#### (4) Regarding the Correction D

The Correction D is to correct the description "1/99 to 20/80" in paragraph [0014] in the Description before the Correction of the case to read "1/99 to 30/70" so as to provide consistency with "(c) an imino group / an amino group (molar ratio) in the gelatin derivative is 1/99 to 30/70" of Claim 1 before the Correction of the case, and is intended for clarification of an ambiguous description in accordance with item(iii) of the proviso to Article126(1) of the Patent Act.

## (5) Regarding the Correction E

The Correction E is to correct the description "buffer solution" in paragraph [0025] in the Description before the Correction of the case to read "buffer" so as to provide consistency with "buffer" in paragraphs [0039] and [0040] in the Description before the Correction of the case, and is intended for clarification of an ambiguous description in accordance with item(iii) of the proviso to Article126(1) of the Patent Act.

## 2. Addition of new matters (Article 126(5) of the Patent Act)

#### (1) Regarding the correction A

The Correction A is within the matters described in the Description of the patent on the basis of the descriptions of paragraphs [0013], [0029], and [0030] in the Description originally attached to the application of the patent. Further, paragraphs [0013], [0029], and [0030] in the Description of the patent after the Correction are not changed.

Thus, the Correction A is within the matters described in the Description and Claims originally attached to the application of the patent, and complies with the provisions of Article 126(5) of the Patent Act.

## (2) Regarding the Correction B

As examined in above 2. (1), the Correction B is within the matters described in the Description of the patent.

Thus, the Correction B is within the matters described in the Description and

Claims originally attached to the application of the patent, and complies with the provisions of Article 126(5) of the Patent Act.

### (3) Regarding the Correction C

The Correction C is within the matters described in the Description of the patent on the basis of the description of paragraph [0014] in the Description originally attached to the application of the patent. Further, paragraph [0014] in the Description of the patent after the Correction is not changed.

Thus, the Correction C is within the matters described in the Description and Claims originally attached to the application of the patent, and complies with the provisions of Article 126(5) of the Patent Act.

### (4) Regarding the Correction D

As examined in above 2. (3), the Correction D is within the matters described in the Description of the patent.

Thus, the Correction D is within the matters described in the Description and Claims originally attached to the application of the patent, and complies with the provisions of Article 126(5) of the Patent Act.

# (5) Regarding the Correction E

The Correction E is within the matters described in the Description of the patent on the basis of the description of paragraphs [0039] and [0040] in the Description originally attached to the application of the patent. Further, paragraphs [0039] and [0040] in the Description of the patent after the Correction are not changed.

Thus, the Correction E is within the matters described in the Description and Claims originally attached to the application of the patent, and complies with the provisions of Article 126(5) of the Patent Act.

# 3. Enlargement or alternation of Claims (Article 126(6) of the Patent Act)

#### (1) Regarding the Correction A

The Correction A is to correct an ambiguous statement due to the absence of the monovalent group to be bonded to the carbon atom, in order to clarify the monovalent group, and thus the Correction A does not substantially alter the description of Claims, and does not substantially enlarge or alter Claims.

# (2) Regarding the Corrections B to E

As examined in above "1. Purpose of correction (the proviso to Article 126(1) of the Patent Act)," the Corrections B to E are to correct ambiguous statement of the Description before the Correction of the case, not to correct Claims. Further, it is clear that the Corrections B to E do not alter Claims.

Thus, the Corrections B to E do not substantially enlarge or alter Claims, and comply with the provisions of Article 126(6) of the Patent Act.

# No. 6 Closing

As described above, the corrections related to the demand for trial are intended for the matters listed in item(iii) of the proviso to Article126(1) of the Patent Act, and comply with the provisions of Article 126(5) and Article 126(6) of the Patent Act.

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

January 19, 2017

Chief administrative judge: SUTO, Yasuhiro Administrative judge: SAITO, Mitsuko Administrative judge: SEKI, Mihogi