

## Trial decision

Invalidation No. 2011-800233

Gunma, Japan

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The decision on the case of the patent invalidation trial between the above parties on Japanese Patent No. 4767719, entitled "Method for producing liquid seasoning", dated July 13, 2012 came with a court decision of revocation of the trial decision for the portion in the invention relating to claims 1 to 5 and claim 9 in the portion (2012 (gyoke) No. 10299, rendition of decision on April 11, 2013) at the Intellectual Property High Court, accordingly the invention relating to claims 1 to 5 and claim 9 in the portion of which the decision was revoked was proceeded further, and another trial decision was handed down as follows:

### Conclusion

The correction shall be approved.

The patent regarding the invention according to Claims 1 to 5 and 9 of Japanese Patent No. 4767719 was invalidated.

Among the trial decisions dated July 13, 2012, a portion of "The costs of litigation shall be borne by demandant." shall be revoked.

As for the costs in connection with the trial, 1/3 shall be borne by the demandant, and 2/3 shall be borne by the demandee.

## Reason

### No. 1 History of the procedures

February 27, 2006	Patent Application (Internal Priority Date: April 15, 2005)
June 24, 2011	Registration of establishment of the patent right
November 14, 2011	Submission of written demand for trial and Evidences A No. 1 to A No. 10
February 3, 2012	Submission of written reply and Evidences B No. 1 to B No. 3
February 3, 2012	Written correction request (First time)
March 16, 2012	Written refutation
As of May 8, 2012	Written notification of trial examination
June 7, 2012	Submission of oral proceedings statement brief and Evidence A No. 11 by demandant
June 7, 2012	Submission of oral proceedings statement brief and Evidences B No. 4 and B No. 5 by demandee
June 21, 2012	Submission of written statement by demandee
June 21, 2012	Oral proceeding
	Notification of reasons for invalidation
June 21, 2012	Written correction request (Second time)
July 13, 2012	The first trial decision (disagreement on trial)
August 21, 2012	Suit against trial decision (submission by demandant) (2012 (Gyo-ke) 10299)
April 11, 2013	Rendition of judgment (partial revoke of trial decision)
April 25, 2013	Final and binding decision of a part of trial (claims 6 to 8)

### No. 2 Scope of proceedings of this trial decision

In the written demand for trial dated November 14, 2011, the demandant demanded that the patent (claims 1 to 9) in Japanese patent No. 4767719 should be invalidated, and the first trial decision dated July 13, 2012 held a conclusion that

"The correction shall be approved.

The demand for trial of the case was groundless.

The costs in connection with the trial shall be borne by the demandant.";

but the judgment rendered on April 11, 2013 held that

"1 Among the trial decisions rendered by Patent Office on July 13, 2012 concerning the case of the invalidation No. 2011-800233, any portion relating to claims 1 to 5, and 9 shall be revoked.

2 The other demands of the plaintiff shall be dismissed.

3 The costs of the litigation shall be divided into 3, and 2/3 shall be borne by the defendant and the remainder shall be borne by the plaintiff"; and  
the judgment became final and binding on April 25, 2013.

However, a portion became final and binding on April 25, 2013, in which such an allegation of the demandant that the claims 6 to 8 in Japanese patent No. 4767719 shall be invalidated was decided to be "groundless", in the first trial decision, and a portion in which "The correction shall be approved." for the corrected matter 3 in the written correction request (second time) dated June 21, 2012 relating to claim 6 also has become integrally final and binding.

Therefore, an object to be proceeded in this trial decision is only a portion relating to claims 1 to 5, and claim 9 for which the conclusion of "The demand for trial of the case was groundless." in the first trial decision was revoked in the judgment rendered on April 11, 2013.

#### No. 3 Suitability of correction

##### 1 Corrected matter

Concerning the correction of the Patent, a written correction request (first time) dated February 3, 2012 and a written correction request (second time) dated June 21, 2012 have been submitted, but it is stipulated that "In the case where the correction has been requested, when there is a request for the correction, which has been previously requested in the trial case, the request shall be regarded as having been withdrawn." (Article 134-2(4) of the Patent Act before revision <hereinafter referred to as "Patent Act before revision"> by the Patent Act No. 63 of 2011, of which the provisions then in force shall remain applicable according to revision supplement Article 2 (18) of the Patent Act No. 63 in 2011), and accordingly only the request of the collection in the written correction request (second time) shall be regarded as an object of the examination.

##### (1) Corrected matter 1

As for Claim 1 in the scope of claims of the Patent,

"a substance having a blood pressure-lowering effect" shall be corrected into "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity", and

"[Claim 1]

A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce and a substance having a blood pressure-lowering effect; and

and a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, while controlling a temperature in the center of the mixture so as to become 60 to 90°C, after the step (A)." shall be corrected into

"[Claim 1]

A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce, and a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity, while controlling a temperature in the center of the mixture so as to become 60 to 90°C, after the step (A). (Underline shows corrected part.)

(2) Corrected matter 2

Regarding Claim 2 in the scope of claims of the Patent,

"a substance having a blood pressure-lowering effect" shall be corrected into "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity", and

"[Claim 2]

A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce and a substance having a blood pressure-lowering effect; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect, wherein

the step (B) comprises a step of heat-treating the mixture so that the temperature in the center of the mixture becomes 60 to 90°C, while mixing the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect" shall be corrected into

"[Claim 2]

A method for producing a liquid seasoning comprising: a step (A) of mixing a seasoning liquid containing a raw soy sauce, and a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity, wherein

the step (B) comprises a step of heat-treating the mixture so that the temperature in the center of the mixture becomes 60 to 90°C, while mixing the seasoning liquid containing the raw soy sauce, and the substance having a blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity. (Underline shows corrected part.)

2 Suitability of purpose of correction, existence or absence of addition of new matter, and existence or absence of substantial expansion or change of the scope of claims

(1) Regarding corrected matter 1 and corrected matter 2

The correction from "a substance having a blood pressure-lowering effect" according to Claims 1 and 2 in the scope of claims of the Patent, to "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity", is a correction that specifies "a substance having a blood pressure-lowering effect", and limits the substance to "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity", and is aimed at restricting the scope of

claims.

In addition, as for "a substance having a blood pressure-lowering effect", "the peptide" and "the coffee bean extract" are well known substances before the priority date of the Patent, as is described in the paragraph [0003] in the description of the Patent, as "Various materials are proposed as a material having a physiologically activating function, but there is a substance having the blood pressure-lowering effect as one of the materials. Among the substances, there are peptides,  $\gamma$ -aminobutyric acid, chlorogenic acid, coffee bean extracts and the like, as a substance which is contained in foods and has high safety, and the foods are proposed which contain the substances and are effective for hypertension (Patent documents 1 to 3)", while referring to patent documents. Incidentally, patent documents 1 to 3 are "[Patent Document 1] Japanese Unexamined Patent Application Publication No. 2004-194515, [Patent Document 2] Japanese Unexamined Patent Application Publication No. 2004-290088, and [Patent Document 3], Japanese Unexamined Patent Application Publication No. 2002-87977", as is described in [0005]; and in Patent Document 1 (Japanese Unexamined Patent Application Publication No. 2004-194515), a raw coffee bean extract is described as the substance having the blood pressure-lowering effect, in Patent Document 2 (Japanese Unexamined Patent Application Publication No. 2004-290088), a peptide having the angiotensin converting enzyme inhibitory activity is described as the substance having the blood pressure-lowering effect, and in Patent Document 3 (Japanese Unexamined Patent Application Publication No. 2002-87977), a coffee bean extract is described as the substance having the blood pressure-lowering effect.

Furthermore, concerning "a substance having a blood pressure-lowering effect" according to Claims 1 and 2 in the scope of claims of the Patent, it is described in the paragraph [0013] in the description of the Patent that "the substance having the blood pressure-lowering effect in the Invention means polyphenols, a peptide having the angiotensin conversion inhibitory activity, a sympathetic nerve inhibitory substance, vinegar, nicotianamine, a nucleic acid derivative, soy sauce cake, sphingolipid and the like, and is preferably one or two or more substances selected from these substances."

Concerning polyphenols preferred among these substances, it is described in the paragraph [0014] in the description of the Patent that the polyphenols preferably include chlorogenic acids; furthermore, it is described in the paragraph [0017] in the description of the Patent that a coffee bean is preferable as a natural product extract containing chlorogenic acids, particularly, as a plant extract; and a matter concerning

a method of extracting the chlorogenic acids from the coffee bean is described in the paragraphs [0018] to [0024] in the description of the Patent. In addition, in the paragraphs [0064] to [0070], the paragraph [0073], and the paragraphs [0075] to [0076] in the description of the Patent, an example is described in which such a liquid seasoning 1 is produced that the coffee bean extract is added to the raw soy sauce.

In addition, concerning "the peptide having the angiotensin conversion inhibitory activity", it is described in the paragraph [0027] in the description of the Patent that peptides derived from foods can be used, and a peptide derived from milk, a peptide derived from a grain and a peptide derived from fish meat are preferable. Furthermore, in the paragraph [0028] in the description of the Patent, a numerical value of a specific concentration of the peptide that is used in the Patent invention and has the angiotensin converting enzyme inhibitory activity is described with respect to the intensity at which the blood pressure-lowering effect of the angiotensin converting enzyme inhibitory activity can be expected. In addition, a commercialized product of a peptide which can be blended in the Invention is described in the paragraph [0029] in the description of the Patent; and furthermore, specific numerical values are described with respect to a preferable amount to be blended, from the viewpoint of the blood pressure-lowering effect and a flavor, in the paragraph [0030] in the description of the Patent.

Therefore, when the above described matters are summed up, the correction that "a substance having a blood pressure-lowering effect" shall be corrected to "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" is within the scope of the matters described in the description or the drawings attached to the application, and does not substantially expand or change the scope of claims.

### 3 Regarding the demandant's allegation

The demandant alleges in a written refutation and an oral proceedings statement brief that ""a correction in which "ACE inhibitory peptide" is added is not "a technical matter derived by a person skilled in the art, even though the person sums up all descriptions of originally attached description etc.", and is not "a matter described in the originally attached description etc." in other words, corresponds to a new matter."" (22nd line to 25th line in 3rd page in oral proceedings statement brief), and that the correction should not be approved because of being a correction in which a new matter is added.

Furthermore, the demandant submits Evidence A No. 11, and alleges that there is a case example in the judgment of suitability of an amendment in an examination process for another application (Japanese patent Application No. 2006-34074) relating to "method for producing liquid seasoning", in which an examiner notified the reason for refusal based on the reason of violation of Article 17-2(3) of the Patent Act (addition of new matter), on the grounds that experimental data in the example in which the effect of the liquid seasoning containing the ACE inhibitory peptide was confirmed was not described in the description at the time of the initial application, then the demandee of the case, who was the applicant, did not respond for this notice of the reason for refusal, and the decision of refusal became final and binding.

However, the matter described in the description or in the drawings is usually a matter concerning a technical idea which has been disclosed in the description or in the drawings; accordingly in a case where the matter is explicitly described in the description or in the drawings, or in a case where the matter is clear from the description, it is recognized that such a correction does not introduce a new technical matter; and it can be judged that the correction is carried out "within the scope described in the description or in the drawing". Then, the correction of the case is explicitly described in the description of the Patent, as has been described in the above description 2, accordingly is within the scope of matters described in the description or the drawings attached to the application, and shall not substantially expand or change the scope of claims.

In addition, Evidence A No. 11 is a matter relating to a procedure concerning another application, the judgment of suitability of the correction request concerning the Patent should not be restricted by the matter, and accordingly Evidence A No. 11 cannot be taken into consideration in the judgment of suitability.

#### 4 Conclusion for correction request

As has been described above, the corrected matters 1 and 2 shall be approved as a legal correction, because of complying with the conditional clause of Article 134-2 of the Patent Act before revision, and provisions in Article 126(3) and 126(4) of the Patent Act, which are applied mutatis mutandis in Article 134-2(5).

There is no discrepancy between this conclusion and the judgment rendered on April 11, 2013.

Incidentally, as has been described in the above described "No. 2", the corrected matter 3 relating to claim 6 already became final and binding on April 25,



2013 as described in the first trial decision.

No. 4 Epitome of allegation of party concerned, and epitome of reasons for invalidation of the body

These procedures have been performed before the first trial decision that the allegation of the invalidation for claims 6 to 8 is "groundless" has become final and binding, which has been described in the above described "No. 2", and accordingly include also a portion regarding claims to 6 to 8.

1 Epitome of the demandant's allegation

The demandant has requested such an trial decision that Japanese Patent No. 4767719 shall be invalidated and the costs in connection with the trial shall be borne by the demandee, has submitted Evidences A No. 1 to A No. 10 together with a written demand for trial, has submitted a written refutation, and has submitted Evidence A No. 11 together with an oral proceedings statement brief, which state that: the patent invention according to Claims 1 to 9 in the scope of claims of the Patent does not meet the requirement stipulated in Article 36(6)(i) of the Patent Act (Reason for invalidation 1); the description of the Patent does not meet the requirement stipulated in Article 36(4)(i) of the Patent Act (Reason for invalidation 2); furthermore, the patent invention according to Claims 1, 2, 6 and 9 in the scope of claims of the Patent is a patent applied before the priority date, and is the same as the invention in the Patent Gazette that has been issued or has been applied and laid-open after the priority date, and has been described in Evidence A No. 1, besides, the inventor of this application is not the same as the person who invented the invention described in Evidence A No. 1, in addition, also the applicant is not the same as the applicant in Evidence A No. 1 at the time when the patent was applied, and accordingly, the Demandee should not be granted a patent for the Invention in accordance with the provisions of Article 29-2 of the Patent Act (reason for invalidation 3); the patent invention according to Claims 1, 2 and 9 in the scope of claims of the Patent is an invention which has been distributed in Japan or a foreign country before the priority date, and has been described Evidence A No. 2, accordingly falls under Article 29(1)(iii) of the Patent Act, and the Demandee should not be granted a patent (Reason for invalidation 4); and the patent invention according to Claims 1 to 9 in the scope of claims of the Patent should have been easily invented before the priority date by a person skilled in the art, on the basis of the invention described in Evidences A No. 2 to A No. 9, and the Demandee should not be granted a patent in accordance with the

provisions of Article 29(2) of the Patent Act (Reason for invalidation 5).

Therefore, the demandant consequently alleges that the Patent falls under Article 123(1)(ii) and (iv) of the Patent Act and should be invalidated.

In addition, in the written refutation and the oral proceedings statement brief, the demandant alleges that a new matter is added in the correction and the correction should not be approved.

Furthermore, in the oral proceeding on June 21, 2012, the demandant states that in a case where the correction according to the correction request dated June 21, 2012 has been approved, the demandant will withdraw the reason for invalidation 4 (violation of novelty) and the reason for invalidation 5 (violation of inventive step) (see 1st oral proceeding record dated June 21, 2012).

The evidences which the demandant has submitted are as follows.

- Evidence A No. 1: Japanese Unexamined Patent Application Publication No. 2006-87328
- Evidence A No. 2: Japanese Unexamined Patent Application Publication No. H11-127
- Evidence A No. 3: "Zymurgy" written and edited by Kikuo Nojiro, Michio Ozaki, and Hisao Yoshii published by Kodansha Scientific, April 10, 1982
- Evidence A No. 4: Japanese Patent Application Publication No. S62-40982
- Evidence A No. 5: "Encyclopedia of brewing and fermented food" edited by Kiyoshi Yoshizawa, Yusho Ishikawa, Makoto Tadenuma, Michitaro Choukon, and Kenzo Nagami, published by Asakura Publishing Co., Ltd., January 15, 2002
- Evidence A No. 6: "Science and technology of soy sauce" written and edited by Tatsurokuro Tochikura, published by Brewing Society of Japan, March 30, 1988
- Evidence A No. 7: Japanese Unexamined Patent Application Publication No. H3-143533
- Evidence A No. 8: Japanese Patent Application Publication No. H4-20583
- Evidence A No. 9: Japanese Unexamined Patent Application Publication No. 2002-87977

Evidence A No. 10: Japanese Unexamined Patent Application Publication No. 2004-81053

## 2 Epitome of notice of reasons for invalidation

The invention according to Claims 3 to 5 of the Patent and the invention according to Claim 9 which quotes the Claims 3 to 5 is the same as the invention described in Evidence A No. 1 which is the Patent Gazette that is the patent applied before the priority date and was issued or applied and laid-open after the application, and besides, the inventor of this application is not the same as the person who invented the invention described in Evidence A No. 1, in addition, also the applicant is not the same as the applicant in Evidence A No. 1, and accordingly, the Demandee should not be granted a patent for the Invention in accordance with the provisions of Article 29-2 of the Patent Act. Therefore, the Patent should be invalidated in accordance with the provisions of Article 123(1)(ii) of the Patent Act.

## 3 Epitome of the demandee's allegation

The demandee has requested such an trial decision that the demand for trial of the case is groundless and the costs in connection with the trial shall be borne by the demandant, has submitted Evidences B No. 1 to B No. 3 together with a written reply, also has submitted a written correction request (first time), in addition, has submitted Evidences B No. 4 and B No. 5 together with an oral proceedings statement brief, further has submitted a written statement, has submitted a written correction request (second time) for the notification of reasons for invalidation on the body, and alleges that the reason and the evidence which the demandant alleges cannot invalidate the Invention.

The evidences which the demandee has submitted are as follows.

- Evidence B No. 1: Mimasaka University and Mimasaka junior college department bulletin 2010. Vol. 55 pp. 65 to 70
- Evidence B No. 2: Food Chemistry 120 (2007) pp. 880-888
- Evidence B No. 3: "Flavor evaluation result of the Invention product"  
(January 27, 2012, Kao Corporation, Jun Kaita)
- Evidence B No. 4: "Test result report 1" dated June 4, 2012
- Evidence B No. 5: "Test result report 2" dated June 4, 2012

## No. 5 Judgment on the body

As has been described in the above described "No. 2", the portion relating to claims 1 to 5 and claim 9 shall be proceeded.

### 1. Regarding corrected invention of the case

#### (1) The description of the scope of claims

As has been described in the above described "No. 3", the corrected matters 1 and 2 of the written correction request (second time) dated June 21, 2012 shall be approved, and accordingly the invention according to claims 1 to 5 and claim 9 in the scope of claims of the Patent (hereinafter each referred to as "Corrected invention 1 of the case " to "Corrected invention 5 of the case ", and "Corrected invention 9 of the case", and collectively referred to as "Corrected invention of the case") shall be recognized to be as follows.

#### "[Claim 1]

A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce, and a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity, while controlling a temperature in the center of the mixture so as to become 60 to 90°C, after the step (A).

#### [Claim 2]

A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce, and a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity, wherein the step (B) comprises a step of heat-treating the mixture so that a temperature in the center of the mixture becomes 60 to 90°C, while mixing the seasoning liquid containing the raw soy sauce, and the

substance having a blood pressure-lowering effect, which is at least one selected from among the coffee bean extracts and the peptides having the angiotensin conversion inhibitory activity.

[Claim 3]

The method for producing the liquid seasoning according to claim 1 or 2, wherein

when the mixture is heat-treated so that the temperature in the center of the mixture becomes 60°C, the mixture is heated for 20 minutes to 2 hours from the time when the temperature in the center has reached 60°C, and

when the mixture is heat-treated so that the temperature in the center of the mixture becomes 90°C, the mixture is heated for 5 minutes to 40 minutes from the time when the temperature in the center has reached 90°C.

[Claim 4]

The method for producing the liquid seasoning according to Claim 1 or 2, wherein

a heating treatment temperature is 60 to 80°C, and when the mixture is heat-treated so that the temperature in the center of the mixture becomes 60°C, the mixture is heated for 20 minutes to 2 hours from the time when the temperature in the center has reached 60°C, and

when the mixture is heat-treated so that the temperature in the center of the mixture becomes 80°C, the mixture is heated for 10 minutes to 1.5 hours from the time when the temperature in the center has reached 80°C.

[Claim 5]

The method for producing the liquid seasoning according to any one of Claims 1 to 4, further comprising performing a filling step (C) after the heating treatment step (B).

[Claim 9]

A liquid seasoning which is produced by the method according to any one of Claims 1 to 8."

(2) The description in the description of the case

In the detailed description of the invention of the specification of the case, the followings are generally described.

A The Invention relates to a method for producing a liquid seasoning which is mixed with a substance having a blood pressure-lowering effect ([0001]).

B In recent years, an interest for a physiological action of various components contained in foods has increased ([0002]), and there is a substance having the blood pressure-lowering effect as one of the materials having physiologically activating functions. Among the substances, as a substance which is contained in foods and has high safety, there are peptides,  $\gamma$ -aminobutyric acid, chlorogenic acid, coffee bean extracts and the like, and foods are proposed which contain the substances and are effective for hypertension (Patent documents 1 to 3). In particular, the  $\gamma$ -aminobutyric acid is contained in foods, and is known to have the blood pressure-lowering effect, an ataractic effect, an anti-menopausal syndrome effect and the like (Patent documents 4 to 6, and Non-patent literatures 1 to 3). As for thus useful  $\gamma$ -aminobutyric acid, technologies for increasing the content in the foods are publicly known (Patent documents 7 to 13) ([0003]). However, when the  $\gamma$ -aminobutyric acid is added to the seasoning liquid, such a problem arises that an aftertaste and/or a harsh taste both peculiar to the substance appear, and a sense of unity of the flavor is impaired; and accordingly a method for improving the quality of the taste by blending an amino acid and/or a nucleic acid with the seasoning is disclosed (Patent document 14) ([0004]). However, when a large amount of the substance having the blood pressure-lowering effect is blended with the liquid seasoning, the substance favorably acts for the blood pressure-lowering effect, but there is a case where the flavor changes, and the substance resists being continuously ingested. In the liquid seasoning which is daily ingested, in particular, the change of the flavor affects the ingestion, and accordingly if the flavor varies depending on a menu, it is concerned that the change may affect the continuous ingestion. For instance, even if it has been intended to improve the quality of the taste by blending an amino acid and/or a nucleic acid with the liquid seasoning, in the above described conventional technology, such new problems also occur that a delicious taste is imparted and a flavor results in getting out of balance, and besides the cost results in increasing ([0006]).

C An object of the Invention is to improve the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended with the liquid seasoning, and impart a sense of unity of the flavor, in a soy sauce which is a product that is daily ingested or a liquid seasoning containing the soy sauce; and to provide a simple method for producing a liquid seasoning which causes little fluctuation of the flavors depending on a menu, is easy to be continuously ingested, and exhibits a pharmacological action such as a blood pressure-lowering effect at high level

([0007]).

D The present inventors of the Invention have found out that a liquid seasoning which does not have a flavor derived from the substance, even when the substance having the blood pressure-lowering effect has been blended, causes little fluctuation of the flavors depending on a menu, is easy to be continuously ingested and has an excellent blood pressure-lowering effect is obtained by an operation of: mixing the substance having the blood pressure-lowering effect with a liquid seasoning which is an object to be blended or to be produced, before heating treatment is performed, and subsequently heat-treating the mixture, in a process of producing the liquid seasoning; or heat-treating the mixture while mixing the substance having the blood pressure-lowering effect with the liquid seasoning." ([0008]). Specifically, the Invention provides a method for producing a liquid seasoning including: a step (A) of mixing a seasoning liquid containing a raw soy sauce and a substance having a blood pressure-lowering effect; and a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce ([0009]).

According to the Invention, a liquid seasoning can be obtained which does not cause the flavor derived from the substance, has little fluctuation of the flavor depending on the menu, becomes easy to be continuously ingested, in spite of containing the substance having the blood pressure-lowering effect, and exhibits a pharmacological action such as the blood pressure-lowering effect at high level ([0010]).

E The liquid seasoning in the Invention means a liquid seasoning including a soy sauce ([0011]). In the Invention, it is needed to mix the seasoning containing the raw soy sauce and the substance having the blood pressure-lowering effect. The raw soy sauce means a liquid portion formed by charging raw materials for production, fermenting and aging the resultant raw material, and then compressing and squeezing the resultant raw material, in the production process of the soy sauce, and is a liquid existing in a stage in which the raw soy sauce has the components of the raw materials, though there exist an enzyme produced by *Aspergillus* which has been implanted in the production process, and bacteria originating in the raw material or in the air, in the liquid ([0012]).

The substance having the blood pressure-lowering effect in the Invention means polyphenols, a peptide (ACE inhibitory peptide) having the angiotensin conversion inhibitory activity, a sympathetic nerve inhibitory substance, vinegar,

nicotianamine, a nucleic acid derivative, soy sauce cake, sphingolipid and the like, and is preferably one or two or more substances selected from these substances ([0013]).

More preferable polyphenols include chlorogenic acids, and the chlorogenic acids are particularly preferable, because of being commercially available and having a stable and continuous blood pressure-lowering effect ([0014]). There are, for instance, a coffee bean and the like, as a natural product extract containing the chlorogenic acids, but the coffee bean is preferable from the viewpoint of the content ([0017]); as for a method of extracting the chlorogenic acids from the coffee bean, a method of extracting the chlorogenic acids by hot water or a water soluble organic solvent; and the coffee bean is preferably a raw or slightly-roasted coffee bean from the viewpoint that the content of the chlorogenic acids is high, and particularly preferably is a raw coffee bean extract. Such a raw coffee bean extract is commercially available from a plurality of companies ([0018]). The amount of the polyphenols to be blended with the liquid seasoning of the Invention is preferably 0.1 to 5 mass% (hereinafter shown by "%"), further preferably is 0.2 to 3%, and particularly preferably is 0.25 to 2%, from the viewpoint of the blood pressure-lowering effect and the flavor. When the amount of the polyphenols is 0.1% or less, the sufficient blood pressure-lowering effect is not obtained. In addition, when 5% or more of the polyphenols are blended, the foreign taste becomes excessively strong, which is not preferable ([0026]).

Peptides derived from foods can be used as the ACE inhibitory peptide. A peptide derived from milk, a peptide derived from a grain and a peptide derived from fish meat are particularly preferable. Here, the peptide derived from the grain is preferably a peptide which is derived from a grain (particularly, corn) and has a molecular weight of 200 to 4,000. Furthermore, a peptide is (particularly) preferable which is obtained by treating corn protein, soybean protein, wheat protein and the like with (alkaline) protease, and has a molecular weight of 200 to 4,000. The peptide derived from the fish meat is preferably a peptide which is derived from the fish meat and has a molecular weight of 200 to 10,000, and further preferably is a peptide which is obtained by treating a fish meat such as mackerel, (particularly) bonito, tuna and pacific saury, with protease, and has a molecular weight 200 to 10,000 ([0027]).

The intensity of the angiotensin converting enzyme inhibitory activity is represented by the concentration (IC<sub>50</sub>) at which the activity of the angiotensin converting enzyme is inhibited by 50%. As for the ACE inhibitory peptide which is used in the Invention, if the IC<sub>50</sub> is approximately 50 to 1,000 µg/mL, the blood



pressure-lowering effect can be expected in a reduced-salt soy sauce base ([0028]). There are a plurality of commercialized products such as the peptide derived from the corn, the peptide derived from the wheat, the peptide derived from the soybean, and the peptide derived from the bonito, as the peptide which can be blended in the Invention ([0029]).

The amount of the ACE inhibitory peptide to be blended is preferably 0.5 to 20%, further preferably is 1 to 10%, and particularly preferably is 2 to 5% in the liquid seasoning, from the viewpoint of the blood pressure-lowering effect and the flavor ([0030]).

The sympathetic nerve inhibitory substances include  $\gamma$ -aminobutyric acid, taurine and salts thereof. The  $\gamma$ -aminobutyric acid means 4-aminobutyric acid ( $C_4H_9NO_2$ ), and is one type of amino acids which largely exist in the neuromuscular junction of a marine crustacea, the brain of a mammal, and the like ([0031]).

F In the Invention, the step (A) of mixing the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect means a step of: adding a predetermined amount of the substance having the blood pressure-lowering effect to the seasoning liquid containing the raw soy sauce which has been obtained by charging raw materials to be produced, fermenting and aging the resultant raw material, and then compressing and squeezing the resultant raw material; and mixing the mixture. The mixture is preferably stirred when being mixed; it is acceptable to add the substance having the blood pressure-lowering effect while stirring the seasoning liquid containing the raw soy sauce; or it is also acceptable to add the substance having the blood pressure-lowering effect to the seasoning liquid containing the raw soy sauce, and then stir the mixture. In the method for producing the soy sauce product which is blended with an additive, usually, the steps of adding and mixing the additive are performed before the filling step which is the final stage of the production step, but in the Invention, the substance having the blood pressure-lowering effect needs to be added to and mixed with the seasoning liquid containing the raw soy sauce ([0035]).

In the Invention, the step (B) of heat-treating the seasoning liquid containing the raw soy sauce means a step of heating the seasoning liquid containing the raw soy sauce on particular conditions. The step (B) is desirably performed after the step (A). In addition, the step (A) and the step (B) may be performed in parallel, from the viewpoint of the simplicity of the production step. Specifically, the liquid seasoning may be produced by an operation of: performing the heating treatment while adding

and mixing the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect; or after the heat-treating step has been started, in a stage in which the raw soy sauce is still contained, adding the substance having the blood pressure-lowering effect to and mixing with the seasoning liquid containing the raw soy sauce. Even though the step (B) is performed after the step (A), or even though the step (A) and the step (B) are performed in parallel, the effect is obtained which does not cause the flavor derived from the substance, and has little fluctuation of the flavor depending on the menu, in spite of that the liquid seasoning contains the substance having the blood pressure-lowering effect. It is preferable that the heating temperature at the time of the heating treatment is 60°C or higher though being different depending on the type and the amount of the seasoning liquid and the substance having the blood pressure-lowering effect, because even when the substance having the blood pressure-lowering effect has been mixed with the seasoning liquid, the liquid seasoning does not cause a flavor derived from the substance, causes little fluctuation of the flavors depending on a menu, and has good flavor. The heating temperature is further preferably 60 to 130°C, particularly is 70 to 120°C, and most preferably is 75 to 95°C, from the viewpoint of the flavor, the stability, the color and the like ([0036]).

In the Invention, the heating treatment may be stipulated by the product temperature of the liquid seasoning. At the time of the heat-treatment, the mixture is preferably heated so that the product temperature (temperature in center of sample) becomes 60°C or higher, and further preferably becomes 70 to 130°C, particularly preferably becomes 80 to 98°C, and most preferably becomes 85 to 95°C, from the viewpoint of the flavor, the stability, the color and the like. In a case where the product temperature is 60°C, the heating treatment is preferably performed for 10 hours or shorter from the time when the product temperature has reached 60°C (reached temperature of 60°C), further preferably for 20 minutes to 5 hours from the time of the reached temperature of 60°C, particularly preferably for 30 minutes to 2 hours, and most preferably for 40 minutes to 1.5 hours, from the viewpoint of the flavor, the stability, the color and the like. In a case where the product temperature is 80°C, the heating treatment is preferably performed for 3 hours or shorter from the time when the product temperature has reached 80°C (reached temperature of 80°C), further preferably for 5 minutes to 2 hours from the time of the reached temperature of 80°C, particularly preferably for 10 minutes to 1.5 hours, and most preferably for 20 minutes to 1 hour, from the viewpoint of the flavor, the stability, the color and the like. In a case where the product temperature is 85°C, the heating treatment is

preferably performed for 1 hour or shorter from the time when the product temperature has reached 85°C (reached temperature of 85°C), further preferably for 3 minutes to 50 minutes from the time of the reached temperature of 85°C, particularly preferably for 5 minutes to 40 minutes, and most preferably for 10 minutes to 30 minutes, from the viewpoint of the flavor, the stability, the color and the like. In a case where the product temperature is 90°C, the heating treatment is preferably performed for 50 minutes or shorter from the time when the product temperature has reached 90°C (reached temperature of 90°C), further preferably for 30 seconds to 40 minutes from the time of the reached temperature of 90°C, particularly preferably for 2 minutes to 30 minutes, and most preferably for 5 minutes to 20 minutes, from the viewpoint of the flavor, the stability, the color and the like ([0038]).

#### G Example

(AA) Boiled spinaches seasoned with soy sauce were prepared with the use of: test articles 1 to 9 produced by charging 7 ml of a liquid seasoning 1 in which a coffee bean extract in an amount of 1.2% was added to a raw soy sauce, in a glass screw bottle, stoppling the bottle, immersing the bottle in a water bath of 40°C, 60°C or 80°C, heating the immersed bottle for 30 minutes, 60 minutes or 120 minutes, and then cooling the resultant bottle with running water; and a comparison article "a" which was not heat-treated ([0065]). Then the flavors of the prepared boiled spinaches were evaluated. As a result, such evaluations were obtained that the flavor balance of the boiled spinach using the comparison article "a" was "slightly unbalanced and not preferable so much", and on the other hand, that the flavor balances of boiled spinaches using the test articles 7 to 9 which were heated at 40°C were the same as that of the comparison article "a". As for all other boiled spinaches than the above boiled spinaches, such an evaluation was obtained that the flavors were "extremely well balanced and preferable" or were "well balanced and reasonably preferable"; and in addition, according to the criteria for evaluation for the flavor derived from the coffee bean extract, such a result was obtained that "there was no flavor derived from coffee bean extract at all", or that the flavor was "considerably reduced" or "slightly reduced" as compared to that of the comparison article. In addition, simmered splendid alfonsinos in sweetened soy sauce were prepared with the use of the above described test articles 1 to 9 and the comparison article "a", and the flavors were evaluated. As a result, such an evaluation was obtained that the flavor of any of the simmered splendid alfonsinos was "extremely balanced and preferable", and besides according to the criteria for evaluation for the flavor derived

from the coffee bean extract, such an evaluation was obtained that "there was no flavor derived from coffee bean extract at all". Thus, the fluctuation of the flavor depending on a cooked food clearly existed on the comparison article "a", and the comparison article "a" was not good. Incidentally, even when the test articles were heat-treated at 80°C for 120 minutes, the content of the chlorogenic acids which are an effective component was not lowered ([0064] to [0070], [0073], [0075], [0076] and [Table 1]).

(BB) Test articles 10 to 18 were prepared by an operation of: charging 7 ml of a liquid seasoning 2 in which 39.5 parts by mass of pure water and 0.5 parts by mass of 4-aminobutyric acid were added, mixed and dissolved in 60 parts by mass of a raw soy sauce, into a glass screw bottle; stoppling the bottle; immersing the bottle in a water bath at 40°C, 60°C or 80°C; heating the immersed bottle for 30 minutes, 60 minutes or 120 minutes; and then cooling the resultant bottle with running water, and the test articles and a comparison article "b" which was not heat-treated ([0065]) were submitted to sensory evaluation. As a result, as for the comparison article "b", such an evaluation was obtained that the flavor balance was "slightly unbalanced and not preferable so much", and on the other hand, as for any of the test samples, such an evaluation was obtained that "the flavor was extremely balanced and was preferable", "the flavor was balanced and was reasonably preferable" or "the flavor was slightly unbalanced and was not preferable so much". However, any one of the test articles which were heat-treated particularly at 60°C for 120 minutes and heat-treated at 80°C for 30 minutes or 60 minutes was evaluated in such a way that "the flavor was extremely balanced and was preferable". In addition, as for the criteria for evaluation for the flavor derived from the  $\gamma$ -aminobutyric acid, any of the test articles which were heat-treated at 60°C for 120 minutes and heat-treated at 80°C was evaluated in such a way that "there was no harsh taste and/or aftertaste derived from the  $\gamma$ -aminobutyric acid at all", and besides, the test article which was heat-treated at 60°C for 30 minutes or 60 minutes was evaluated in such a way that the harsh taste was "considerably reduced" or "slightly reduced" as compared to that of the comparison article "b". Thus, the comparison article "b" showed strong aftertaste derived from the  $\gamma$ -aminobutyric acid, and showed poor flavor balance ([0064], [0065], [0070] to [0072], [0077], [0078] and [Table 2]).

(CC) A liquid seasoning P which is packed in a container was produced by an operation of: adding 23.28 parts by mass of pure water, 0.24 parts by mass of 4-aminobutyric acid and 0.48 parts by mass of potassium chloride to 36 parts by mass of a raw soy sauce; stirring and dissolving the added substances; charging the

dissolved substances into a glass sample bottle with 50 mL; stoppling the bottle; immersing the bottle in a water bath (80°C) and heating the bottle for 60 minutes; and then cooling the bottle with running water. The bottle was opened and the flavor of the liquid seasoning P was evaluated. As a result, the harsh taste and the aftertaste derived from the  $\gamma$ -aminobutyric acid were not almost sensed, the foreign taste of potassium was suppressed, a sense of unity of the flavor was imparted, and the flavor was good ([0074]).

### (3) Regarding problem of corrected invention of the case

A According to the statement of the detailed description of the invention in the above described description of the case, the problem to be solved of the corrected invention of the case is recognized to be that when a large amount of a substance having the blood pressure-lowering effect ([0013], [0014] and [0017]) such as the ACE inhibitory peptide and the coffee bean extract which contains the chlorogenic acids as the effective component is blended with the liquid seasoning containing the soy sauce ([0011]), the substance favorably acts for the blood pressure-lowering effect, but the flavor changes, and as a result, the liquid seasoning resists being continuously ingested ([0003] and [0006]), as described in the above described "(2)B".

In addition, the reason why the liquid seasoning resists being continuously ingested is because the flavor changes when the substance having the blood pressure-lowering effect is blended with the liquid seasoning, and accordingly it can be said that the problem to be solved of the corrected invention of the case is more specifically to improve the change of the flavor occurring when the substance having the blood pressure-lowering effect has been blended with the liquid seasoning.

### (4) Regarding technical idea in corrected invention of the case

From the above description, it can be said that: in order to solve such a problem that when a large amount of the substance having the blood pressure-lowering effect ([0013], [0014] and [0017]) such as the ACE inhibitory peptide and the coffee bean extract which contains the chlorogenic acids as the effective component is blended with the liquid seasoning containing the soy sauce ([0011]), the substance favorably acts for the blood pressure-lowering effect, but the flavor changes, and as a result, the liquid seasoning resists being continuously ingested (more specifically, such a problem as to improve the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended with the liquid seasoning) ([0003] and [0006]), the corrected invention of the case adopts means of mixing the ACE

inhibitory peptide or the coffee bean extract both of which are a substance having the blood pressure-lowering effect, with the liquid seasoning containing the soy sauce, before heat-treating the liquid seasoning, and subsequently heat-treating the mixture, or means of heat-treating the liquid seasoning while mixing these substances ([0008], [0009], [0035], [0036] and [0038]): and the corrected invention of the case has working effects of thereby improving the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended with the liquid seasoning that is a food of being daily ingested, imparting a sense of unity of a flavor, and achieving a liquid seasoning (corrected invention 9 of the case) which causes little fluctuation of the flavors depending on a menu, is easy to be continuously ingested, and exhibits a pharmacological action such as a blood pressure-lowering effect at high level, and a simple method for producing the same (corrected invention 1 of the case to corrected invention 5 of the case) ([0007]) to [0010]).

## 2 Regarding reasons for invalidation 2 (enablement requirement)

Reasons for invalidation 2 (enablement requirement) were judged as follows based on the judgment rendered on April 11, 2013.

### (1) Regarding enablement requirement

It is stipulated in Article 36(4)(i) of the Patent Act that the statement of the detailed description of the invention must be "clearly and sufficiently described in such an extent that those who have the usual knowledge in a technical field of the invention can carry out the invention".

The patent system is a system which imparts a monopolistic right of carrying out the invention, to the inventors for a fixed time period, in return for the disclosure of the invention, and accordingly such a content as to disclose the technical content of the invention to general people must be described in the description. The purpose of the provisions described as above in Article 36(4)(i) of the Patent Act is understood to be because when the constitution and the like of the invention are not described in the detailed description of the invention of the specification, in such an extent that a person skilled in the art can easily carry out the invention, the invention results in not having been disclosed, and neglects the precondition that the monopolistic right stipulated by Patent Act is imparted to the inventor.

In addition, the carrying out of the invention in the invention of the method means an action of using the method (Article 2 (3)(ii) of the Patent Act), and accordingly the invention of the method needs specific description which enables the

invention to be used, in the description, but even though there is no such description, if a person skilled in the art can use the method on the basis of the description, the description in the drawing, and the technical common sense at the time when the patent was applied, it can be said that the invention meets the above described enablement requirement. In addition, the carrying out of the invention in the invention of the product means an action of producing and using the product, and the like (Article 2(3)(i) of the Patent Act), and accordingly the invention of the product needs to specifically describe a method of producing the product in the description, but even though there is no such description, if a person skilled in the art can produce the product on the basis of the description, the description in the drawing, and the technical common sense at the time when the patent was applied, it can be said that the invention meets the above described enablement requirement.

(2) Regarding suitability of enablement requirement of corrected invention of the case

Any of the corrected invention 1 of the case to the corrected invention 5 of the case is an invention of a method, but the meaning, the production method or the acquiring method of any one of the "raw soy sauce" ([0012]), "coffee bean extract" ([0018]), "peptide having angiotensin conversion inhibitory activity" (ACE inhibitory peptide, [0027] and [0029]) and "liquid seasoning" ([0011]) in the description of the scope of claims are specifically described in the description of the case. In addition, the methods of the corrected invention 1 of the case to the corrected invention 5 of the case are methods which include: mixing the seasoning liquid containing the above described "raw soy sauce", and a substance having a blood pressure-lowering effect, which is at least one raw material selected from among "coffee bean extracts" and "peptides having angiotensin conversion inhibitory activity" (ACE inhibitory peptide), and heat-treating the mixture at a specific temperature (time period); or similarly heat-treating the mixture while mixing the substances; and then subjecting the heat-treated mixture to a filling step. However, any of these specific techniques is described in the description of the case ([0035], [0036] and [0038]), which include the heat-treating method of the liquid seasoning ([0065]), and heat-treating the liquid seasoning before the filling step ([0035]).

Therefore, it can be said that there is specific description in the detailed description of the invention in the specification of the case, in which a person skilled in the art, who contacts the description, can use the corrected invention 1 of the case to the corrected invention 5 of the case.

In addition, the corrected invention 9 of the case is the invention of a product

which is the liquid seasoning that has been produced by any method of the corrected invention 1 of the case to the corrected invention 5 of the case, but as has been described above, because there is the specific description in the detailed description of the invention in the specification of the case, which enables a person skilled in the art, who contacts the invention, to use the corrected invention 1 of the case to the corrected invention 5 of the case, it can be said that a person skilled in the art can produce the corrected invention 9 of the case.

### (3) Regarding the demandant's allegation

The plaintiff alleges that the liquid seasoning of the corrected invention of the case shows a possibility that the flavor thereof largely changes depending on a derivation of the ACE inhibitory peptide, the amount of the ACE inhibitory peptide to be blended and the like, does not always exhibit the blood pressure-lowering effect, and besides has mutually contradictory relationship between the change of the flavor and the amount of the substance having the blood pressure-lowering effect to be blended; and accordingly that the corrected invention of the case does not satisfy the enablement requirement as long as the example in which the ACE inhibitory peptide is used is not described in the detailed description of the invention.

However, there is such specific description in the description of the subject case as to enable the use of the corrected invention 1 of the case to the corrected invention 5 of the case, and a person skilled in the art can produce the corrected invention 9 of the case; accordingly, it can be said that the corrected invention of the case can be carried out. Then, though the above described allegation of the plaintiff has a room to be considered to be related to the requirements for support, it should be said that the above described allegation lacks in the ground concerning a relationship between the allegation and the enablement requirement.

Therefore, the above described allegation of the demandant cannot be adopted.

### (4) Summary

As has been described above, the corrected invention of the case complies with the enablement requirement of Article 36(4)(i) of the Patent Act.

## 3 Regarding reasons for Invalidation 1 (requirements for support)

The reasons for invalidation 1 (requirements for support) were judged as follows, on the basis of the judgment rendered on April 11, 2013.



(1) Regarding requirements for support

It is stipulated in Article (36)(6)(i) of the Patent Act that the description of the scope of claims must be "the description in which the invention for which a patent is sought is described in the detailed description of the invention".

The patent system purports to: impart the patent to the invention, and guarantee that the inventor monopolistically and exclusively carries out the invention as commercial working for a fixed time period, on the precondition that the invention is disclosed; thereby promote the invention; and contribute to the development of the industry. In addition, the description to be attached to the request which a person who intends to seek a patent for a certain invention has such a role as to generally disclose the technical content of the invention, and also clarify the scope (technical scope of patent invention) which the validity of the patent right covers after the patent right has been established. Accordingly, it should be said that in order to describe the invention in the scope of claims and seek a patent, the invention must be described in the detailed description of the invention of the specification so that a person skilled in the art can recognize that the problem to be solved by the invention can be solved. The reason why the requirements for support of the description stipulated by Article (36)(6)(i) of the Patent Act limits the description of the scope of claims to the above described stipulation as in the above described stipulation is because if the invention which is not described in the detailed description of the invention has been described in the scope of claims, a monopolistically and exclusively right results in being generated on the invention that is not disclosed, which deprives a profit of the free use from the general public, consequently may disturb the development of the industry, and results in opposing the purpose of the above described patent system.

In addition, It should be judged whether the description of the scope of claims complies with the requirements for support of the description or not, after it has been examined by the comparison between the description of the scope of claims and the statement of the detailed description of the invention, whether or not the invention described in the scope of claims is the invention described in detailed description of the invention and is within such a scope that a person skilled in the art can recognize that the problem to be solved by the invention can be solved, from the statement of the detailed description of the invention, or whether or not the invention described in the scope of claims is within such a scope that a person skilled in the art can recognize that the problem to be solved by the invention can be solved in the light of the technical common sense upon filing the application, even though there is no description and suggestion.

(2) Regarding suitability of requirements for support of corrected invention of the case

A The descriptions of the corrected invention 1 of the case to the corrected invention 5 of the case, and the corrected invention 9 of the case are described as in the above described "1(1)".

On the other hand, as is described in the above described "1(2)E", the detailed description of the invention of the specification of the case enumerates polyphenols, ACE inhibitory peptide and the like as the substances having the blood pressure-lowering effect ([0013]); describes also a method for obtaining a coffee bean extract containing chlorogenic acids which are one type of polyphenols, and the like ([0014] [0017] [0018]); and describes also a specific example, an acquiring method and the like of the ACE inhibitory peptide ([0027] to [0030]). In addition, as is described in the above described "1(2)F", the detailed description of the invention of the case specifically describes a method of: mixing the substance having the blood pressure-lowering effect with the liquid seasoning, before heat-treating the liquid seasoning, and subsequently heat-treating the mixture; or heat-treating the liquid seasoning while mixing these substances, in which a temperature at the time of heating treatment is included ([0035], [0036] and [0038]). It can be said that any of these methods corresponds to the description in the scope of claims of the corrected invention 1 of the case to the corrected invention 5 of the case, and in addition, it is as instructed in the above described "2" that the liquid seasoning of the corrected invention 9 of the case can be produced according to these methods.

Therefore, it can be said that the corrected invention of the case is an invention described in the detailed description of the invention in the specification of the case.

B As is instructed in the above described "1", in order to solve a problem that when a large amount of the substance having the blood pressure-lowering effect such as the ACE inhibitory peptide and the coffee bean extract which contains chlorogenic acids as the effective component is blended with the liquid seasoning containing the soy sauce, the substance favorably acts for the blood pressure-lowering effect, but the flavor changes, and as a result, the liquid seasoning resists being continuously ingested (more specifically, such a problem as to improve the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended with the liquid seasoning), the corrected invention of the case adopts means of mixing the ACE inhibitory peptide or the coffee bean extract, both of which are a substance

having the blood pressure-lowering effect, with the liquid seasoning, before heat-treating the liquid seasoning, and subsequently heat-treating the mixture, or means of heat-treating the liquid seasoning while mixing these substances; and the corrected invention of the case has working effects of thereby improving the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended with the liquid seasoning that is a food of being daily ingested, imparting a sense of unity of a flavor, and achieving a liquid seasoning (corrected invention 9 of the case) which causes little fluctuation of the flavors depending on a menu, is easy to be continuously ingested, and exhibits a pharmacological action such as a blood pressure-lowering effect at high level, and a simple method for producing the same (corrected invention 1 of the case to corrected invention 5 of the case).

Therefore, in the corrected invention of the case, if the substance having the blood pressure-lowering effect is mixed, and the change of the flavor of the heat-treated liquid seasoning as in the above description is improved, it should be said that the problem has been solved.

C Then, it shall be examined for the description of the case whether or not a person skilled in the art can recognize that the problem in the corrected invention of the case can be solved as in the above description, by the statement of the detailed description of the invention. Then, it is described in the example that in a case where the coffee bean extract among the substances described in the above described "B" is mixed with the liquid seasoning, as the substance having the blood pressure-lowering effect in the corrected invention of the case, and the mixture is heat-treated, as is described in the above "1(2) F(AA)", the change of the flavor of the liquid seasoning is improved and thereby the problem of the corrected invention of the case can be solved ([0064] to [0070], [0073], [0075], [0076] and [Table 1]). Accordingly, it can be said that it is described that the problem of the corrected invention of the case can be solved in this case.

Incidentally, the corrected invention 1 of the case to the corrected invention 5 of the case and the corrected invention 9 of the case in a case where the coffee bean extract is used as the substance having the blood pressure-lowering effect solve the above described problem, and the steps of mixing and heating treatment are very simple which are means for solving the problem; and accordingly it can be said that the working effect of achieving the liquid seasoning (corrected invention 9 of the case) which imparts a sense of unity of the flavor, causes little fluctuation of the flavor depending on a menu, and is easy to be continuously ingested, and a simple

method for producing the same (corrected invention 1 of the case to corrected invention 5 of the case) is also disclosed in the detailed description of the invention in the specification of the case.

In addition, in the detailed description of the invention in the specification of the case, the specific description is not found which describes whether the liquid seasonings (corrected invention 9 of the case) produced by the methods of the corrected invention 1 of the case to the corrected invention 5 of the case, in a case where the substance having the blood pressure-lowering effect is the coffee bean extract, have the blood pressure-lowering effect, or not. However, Evidence A No. 9 is a publication of unexamined patent application of the invention of "preventive, improving and therapeutic agent of hypertension" (Japanese Unexamined Patent Application Publication No. 2002-87977 published on March 27, 2002), and it is shown there that the blood pressure has been significantly lowered in a test group in which the coffee bean extract is administered to the stomach of a male spontaneous hypertension rat of 12 ages in week, as compared to a control group ([0021] to [0026]). In addition, Evidence A No. 10 is the publication of unexamined patent application of the invention of "method for refining coffee extraction liquid" (Japanese Unexamined Patent Application Publication No. 2004-81053 published on March 18, 2004), and it is described there that the component contained in the coffee raw bean, in particular, is applied as a preventive, improving and therapeutic agent of hypertension, while quoting Evidence A No. 9 as a conventional technology ([0002]). Thus, when it is collectively considered that it has been a well-known matter for a person skilled in the art at the time of the priority date of the case that the coffee bean extract has the blood pressure-lowering effect, and that it is described in the description of the case that the content of the chlorogenic acids which are effective components of the coffee bean extract in the liquid seasoning does not vary depending on the heating treatment, as is described in the above described "1(2)F(AA)" ([0076]), in a case where the coffee bean extract has been mixed with the liquid seasoning and the mixture has been heat-treated, it is recognized that the chlorogenic acids which are effective components of the coffee bean extract does not lose the activity, and exhibit the blood pressure-lowering effect also after having been heat-treated.

Therefore, it can be said that a working effect of achieving the liquid seasoning (corrected invention 9 of the case) of which the coffee bean extract exhibits a pharmacological action such as a blood pressure-lowering effect at high level, in spite of that the liquid seasoning has been submitted to the heating treatment and the like, and the method for producing the same (corrected invention 1 of the case to corrected

invention 5 of the case) is disclosed in the detailed description of the invention in the specification of the case; and accordingly even if it is an object to be solved of the corrected invention of the case to achieve the liquid seasoning which imparts a sense of unity of the flavor, causes little fluctuation of the flavors depending on a menu, is easy to be continuously ingested, and exhibits the pharmacological action such as the blood pressure-lowering effect at high level, and the easy production method, it can be said that it is described in the detailed description of the invention in the specification of the case that the corrected invention 1 of the case to the corrected invention 5 of the case and the corrected invention 9 of the case in a case where the coffee bean extract is used as the substance having the blood pressure-lowering effect can solve the object.

D On the other hand, in the detailed description of the invention in the specification of the case, the example is not described in a case where the ACE inhibitory peptide among the substances described in the above described "B" has been mixed with the liquid seasoning as the substance having the blood pressure-lowering effect in the corrected invention of the case, and the mixture has been heat-treated.

In addition, in the detailed description of the invention in the specification of the case, as is described in the above described "1(2)E", there are enumerated polyphenols, ACE inhibitory peptide, a sympathetic nerve inhibitory substance, vinegar, nicotianamine, a nucleic acid derivative, soy sauce cake, sphingolipid and the like as the substances having the blood pressure-lowering effect ([0013]), and it is described that the coffee bean extract contains the chlorogenic acids which are one type of the polyphenols ([0014] and [0017]), and that the  $\gamma$ -aminobutyric acid is one type of the sympathetic nerve inhibitory substance ([0031]); and as is described in the above described "1(2)F(AA) to (CC)", it is described in the example that also in a case where the coffee bean extract ([0064] to [0070], [0073], [0075], [0076] and [Table 1]) or the  $\gamma$ -aminobutyric acid ([0064], [0065], [0070] to [0072], [0074], [0077], [0078] and [Table 2]) has been mixed with the liquid seasoning as the substance having the blood pressure-lowering effect in the corrected invention of the case, and the mixture has been heat-treated, the change of the flavor of the liquid seasoning is improved, and the problem to be solved of the corrected invention of the case can be solved.

However, any sort of commonality of the chemical structure cannot be found between the above described substances having the blood pressure-lowering effects described in the detailed description of the invention in the specification of the case,

and any commonalty of the flavor also cannot be found between the above described substances; and it is also clear in the light of the technical common sense that any of the chlorogenic acids and the  $\gamma$ -aminobutyric acid which are described as the example in the detailed description of the invention has no common chemical structure to the ACE inhibitory peptide, and has no common flavor to the ACE inhibitory peptide, and besides, the flavor of the substance having the blood pressure-lowering effect is not related to the blood pressure-lowering effect.

According to the above description, in the detailed description of the invention in the specification of the case, there is the example of a case where the coffee bean extract or the  $\gamma$ -aminobutyric acid has been mixed with the liquid seasoning as the substance having the blood pressure-lowering effect in the corrected invention of the case, and the mixture has been heat-treated, and it is shown that the change of the flavor of the liquid seasoning is thereby improved, and the problem to be solved of the corrected invention of the case can be solved; but the above content does not show that the object to be solved of the corrected invention of the case can be solved, which is to improve the change of the flavor of the liquid seasoning, in a case where the ACE inhibitory peptide has been mixed with the liquid seasoning as the substance having the blood pressure-lowering effect in the corrected invention of the case, and the mixture has been heat-treated.

In addition, it is not described in the detailed description of the invention in the specification of the case that the above described problem has been solved in a case where the ACE inhibitory peptide has been mixed with the liquid seasoning as the substance having the blood pressure-lowering effect in the corrected invention of the case and the mixture has been heat-treated; accordingly it cannot be said that a person skilled in the art which contacts the detailed description of the invention in the specification of the case can recognize that the corrected invention 1 of the case to the corrected invention 5 of the case and the corrected invention 9 of the case which include a case where the ACE inhibitory peptide has been used as the substance having the blood pressure-lowering effect can solve the object of improving the change of the flavor of the liquid seasoning; and in addition, there is also no evidence enough to accept that a person skilled in the art can recognize in light of the technical common sense at the time when the case was applied that the problem of the corrected invention of the case can be solved.

### (3) Summary

According to the above description, the corrected invention 1 of the case to the

corrected invention 5 of the case and the corrected invention 9 of the case which include a case where the ACE inhibitory peptide in addition to the coffee bean extract has been used as the substance having the blood pressure-lowering effect can be said to be the inventions described in the detailed description of the invention in the specification of the case; but are not such inventions that a person skilled in the art can recognize that the problem can be solved by the statement of the detailed description of the invention, and cannot be said either to be such inventions that a person skilled in the art can recognize in the light of the technical common sense at the time when the case was applied that a problem to be solved by the invention can be solved; and accordingly cannot be said to be the inventions which meet the requirements for support.

#### 4 Reasons for Invalidation 3 (Article 29-2 of the Patent Act)

##### (1) Evidence A No. 1 and described matters therein

Evidence A No. 1 (Japanese Unexamined Patent Application Publication No. 2006-87328A) was applied on September 22, 2004 before the priority date (April 15, 2005) of the Patent, and was laid-open on April 6, 2006 after the application of the Patent and the inventor of the application of the Patent is not the same as the inventor of the invention described in the Evidence A No. 1, and also the applicant is not the same as the applicant of the Evidence A No. 1 at the time when the Patent was applied; and the following matters are described therein.

##### (1a) "[Claim 1]

A low-salt soy sauce comprising: 1.0 to 10.0 wt% of potassium chloride and 0.1 to 5.0 wt% of  $\gamma$ -aminobutyric acid which are added to a reduced-salt soy sauce.

##### [Claim 2]

A low-salt soy sauce comprising: 0 to 10 wt% of salt, 1.0 to 10.0 wt% of potassium chloride, and 0.1 to 5.0 wt% of  $\gamma$ -aminobutyric acid, each by concentration."

##### (1b) "[0001]

The Invention relates to a low-salt soy sauce which has a good flavor, remarkably suppresses the rise of the blood pressure, besides, can prevent cardiac hypertrophy, and can be used also as a special nutritious food. Incidentally, a reduced-salt soy sauce in the Invention means a soy sauce which contains 0 to 10 wt% (W/V%) of sodium chloride (occasionally referred to as NaCl or salt)."

(1c) "[0006]

Furthermore, a method of replacing one part of the salt in soy sauce with potassium chloride (KCl) is also proposed.

For instance, several methods for obtaining the low-salt soy sauce in a production process for an ordinary soy sauce are proposed such as a method (patent document 1) of: producing a KCl-containing soy sauce which does not contain salt, on one hand, by preparing a KCl solution as a mother water in place of a saline solution, charging a malted rice in the KCl solution, fermenting the malted rice, and aging the solution; on the other hand, producing an ordinary salt-containing soy sauce by preparing a saline solution as the mother water, charging a malted rice in the solution, fermenting the malted rice, and aging the solution; and subsequently mixing both of the soy sauces, and a method (patent document 2) of preparing a mixed solution of salt and KCl as a mother water, charging malted rice for soy sauce in the solution, fermenting the malted rice, and aging the solution.

The method of producing the low-salt soy sauce by replacing one part of the salt with KCl is simple in a field of an industrial operation and is extremely advantageous, but on the other hand, KCl has a distinctive bitter taste and the bitter taste becomes a fatal flaw for the soy sauce. Accordingly there has been such an inconvenience that the amount of being replaced with KCl is naturally limited."

(1d) "[0008]

An object of the Invention is to obtain a low-salt soy sauce which has a low concentration of salt, has a good flavor, also remarkably suppresses a rise of the blood pressure, and can be used as a special nutritious food.

[Summary of the invention]

[0009]

The present inventors focused attention on the fact that a method for producing the low-salt soy sauce by replacing one part of the salt with KCl is simple in the field of the industrial operation and is extremely advantageous, and repeatedly made examinations in order to resolve this distinctive bitter taste of KCl and obtain the low-salt soy sauce which can remarkably suppress the rise of the blood pressure. As a result, surprisingly, the present inventors found that a soy sauce not causing the bitter taste can be obtained by the addition of  $\gamma$ -aminobutyric acid to this KCl-containing low-salt soy sauce, and that when both of KCL and  $\gamma$ -aminobutyric acid are added to the reduced-salt soy sauce, the rise of blood pressure can be



remarkably suppressed.

[0010]

It is conventionally publicly known (Japanese Unexamined Patent Application Publication No. H11-151072, soybean food material enriched with  $\gamma$ -aminobutyric acid) that the rise of the blood pressure can be expected to be suppressed by the increase of a concentration of  $\gamma$ -aminobutyric acid in the soy sauce, but the soy sauce described in this invention means an ordinary salt-containing soy sauce, and does not contain KCl. In addition, in this invention, the purpose of increasing  $\gamma$ -aminobutyric acid is to produce a special nutritious food for patients of hypertension, and is different from the purpose of obtaining the soy sauce which does not cause the bitter taste of the KCl in the KCl-containing low-salt soy sauce.

In addition, such knowledge was found by the present inventors for the first time that the bitter taste (bitterness) of KCl disappears by the addition of  $\gamma$ -aminobutyric acid to the KCl-containing low-salt soy sauce."

(1e) "[0015]

In addition, the  $\gamma$ -aminobutyric acid which is added to such a KCl-containing low-salt soy sauce is an inhibitory nerve transmitter substance which exists in the brain and the spine of mammals; and is a publicly known substance which is reported to activate a blood flow in the brain, increase the amount of oxygen supply to enhance a metabolic function of the brain, act on the vasomotor center of the spine to lower the blood pressure, suppress an secretion of vasopressin which is an antidiuretic hormone, and expand a blood vessel to lower the blood pressure (new edition of cerebral metabolism activators, edited by Eiichi Otomo, published by medicine journal company, 1987)."

(1f) "[0020]

The timing of adding  $\gamma$ -aminobutyric acid may be set in an arbitrary step in the production process of the soy sauce, but is preferably set in a step as close to the end of producing products as possible, for instance, at a step in which a raw soy sauce (or unrefined squeezed juice) is produced before being subjected to a heating step.

[0021]

Thus, the KCl-containing low-salt soy sauce to which the  $\gamma$ -aminobutyric acid is added, the distinctive bitter taste of KCl disappears and the KCl-containing low-salt soy sauce becomes a product with a good flavor."

(1g) "[0024]

(Production Example of low-salt soy sauce according to the Invention)

A raw soy sauce which has approximately 18% of salt and approximately 1.7% of T.N was obtained by the steps of: mixing approximately equal amounts of the defatted soybean which has been steamed and denatured and the wheat which has been roasted and parched; seeding seeds of a malted rice in the mixture; passing air thereinto for 42 hours to produce a malted rice and obtain a malted rice for the soy sauce; charging the malted rice for the soy sauce in a high-concentration saline solution, controlling the unrefined soy sauce for 150 days in a usual way while the mixture was appropriately stirred at 25 to 30°C; thereby fermenting and aging the mixture; and then press-filtering the mixture.

This raw soy sauce was desalinated with an electrodialyzer, and the desalinated soy sauce was obtained which had 0.5 wt% of salt and approximately 1.6 wt% of T.N.

This desalinated soy sauce was divided into four sections; and 9.5 wt% of sodium chloride was added and dissolved in the first section, and a low-salt soy sauce (with 10 wt% of salt concentration) of a control example section was obtained.

In addition, 6.5 wt% of sodium chloride and 3.0 wt% of potassium chloride were added into the second section, and a low-salt soy sauce of a Comparative Example 1 section was obtained.

In addition, 9.5 wt% of sodium chloride and 10 wt% of the powder containing  $\gamma$ -aminobutyric acid (containing approximately 6 wt% of  $\gamma$ -aminobutyric acid) which was obtained in Experiment Example 2 were added and dissolved in the third section, and a low-salt soy sauce of a Comparative Example 2 section was obtained.

In addition, 6.5 wt% of sodium chloride, 3.0 wt% of potassium chloride and 10 wt% of the powder containing  $\gamma$ -aminobutyric acid (containing approximately 6 wt% of  $\gamma$ -aminobutyric acid) which was obtained in Experiment Example 2 were added and dissolved in the fourth section, and a low-salt soy sauce of the Invention section was obtained.

Subsequently, each example was heated at 80°C for 3 hours, and was then clarified and filtered; and four types of low-salt soy sauces were obtained, which were the control example section, the Comparative Example 1 section, the Comparative Example 2 section and the Invention section.

[0025]

A sensory inspection was carried out for the bitter taste of these four types of low-salt soy sauces.

The sensory inspection was carried out by the trained panel having the

discrimination capability, and a method was adopted in which the bitter taste was evaluated in such criteria as sense of no bitter taste: "-", sense of slightly bitter taste: "+-", sense of bitter taste: "+", and sense of strongly bitter taste: "++".

The result was shown in Table 1.

[0026]

Table 1 Sensory inspection result of bitter taste of low-salt soy sauce

Item classification	Salt composition		$\gamma$ -aminobutyric acid	Sensory inspection result (presence or absence of bitter taste)	Brief comment
	NaCl	KCl			
Control example	10%	None	None	-	Good flavor
Comparative Example 1	7%	3%	None	+	Sense of bitter taste.
Comparative Example 2	10%	None	0.60%	-	Good flavor
the Invention	7%	3%	0.60%	-	Good flavor

[0027]

As is clear from the result of the sensory inspection shown in Table 1, it is understood that the bitter taste of the soy sauce disappears by the addition of  $\gamma$ -aminobutyric acid into KCl-containing soy sauce and that the Invention is advantageous as a method for producing the low-salt soy sauce.

Incidentally, the low-salt soy sauces were prepared in which in the method for producing the low-salt soy sauce of the Invention in the above described Example 1, the total salt concentration of NaCl and KCl in the soy sauces were changed to 8%, 9%, 11% and 12%, while the ratio of the salt composition of NaCl to KCl, which was 7 to 3, was not changed in the state, and the sensory inspection was carried out similarly to the above described inspection. As a result, an approximately similar result was obtained."

(1h) "[0035]

The low-salt soy sauce which is obtained in the Invention suppresses the rise of

blood pressure, further shows an effect of being capable of suppressing cardiac hypertrophy though the salt is ingested, and the flavor is good; and can be used also as a special nutritious food for patients with hypertension. In addition, the low-salt soy sauce has a properly salty taste in spite of containing little salt; and accordingly can be used as a dipping soy sauce for sliced raw fish, Japanese deep-fried food, pickles and the like, as a pouring soy sauce for fermented soybeans, soybean curd and the like, and as a soy sauce for raw materials such as a noodle soup, basting, dressing, soup for Chinese-style noodles and the like, similarly to the soy sauce having an ordinary concentration of salt. In addition, the low-salt soy sauce can be used also as a soy sauce for processing, such as food boiled in soy sauce, pasty marine products and pasty livestock products."

## (2) Comparison/judgment

### A Regarding corrected invention 1 of the case

From the above described matters (particularly (1a), (1f) and (1g)) of Evidence A No. 1, in the Evidence A No. 1,

it is recognized that the invention relating to "a method for producing a low-salt soy sauce, which includes: adding and dissolving potassium chloride and a powder containing  $\gamma$ -aminobutyric acid in a raw soy sauce before being subjected to a heating step, and then subjecting the resultant soy sauce to the heating step" (hereafter, referred to as "Invention A No. 1 A") is described.

Then, the Invention A No. 1 A shall be compared with the corrected invention 1 of the case.

(AA) In [0011] of the corrected specification of the case, it is described that the description that "the liquid seasoning in the Invention means a liquid seasoning including a soy sauce, processed goods of a soy sauce, a reduced-salt soy sauce and other soy sauces" is described and "the liquid seasoning" in the corrected invention 1 of the case includes the reduced-salt soy sauce. Accordingly, "the reduced-salt soy sauce" in the Invention A No. 1 A corresponds to "the liquid seasoning" in the corrected invention 1 of the case.

(BB) The "heating step" in the Invention A No. 1 A is a step of heating, and accordingly the "heating step" of the Invention A No. 1 A corresponds to "the heat-treating step" in the corrected invention 1 of the case.

(CC) The "powder containing  $\gamma$ -aminobutyric acid" in the Invention A No. 1 A is used for suppressing the rise of the blood pressure (1d), and accordingly the "powder containing  $\gamma$ -aminobutyric acid" in the Invention A No. 1 A and "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" in the corrected invention 1 of the case are common in the point of being "a substance having a blood pressure-lowering effect".

Therefore, there are following corresponding feature and different feature between both inventions.

(Corresponding feature)

"A method for producing a liquid seasoning comprising:

a step (A) of mixing a seasoning liquid containing a raw soy sauce and a substance having a blood pressure-lowering effect; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect, after the step (A)  
"

(Different feature)

The substance having the blood pressure-lowering effect is "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity", in the corrected invention 1 of the case, and in contrast to this, the substance having the blood pressure-lowering effect in the Invention A No. 1 A is "a powder containing  $\gamma$ -aminobutyric acid".

Then, the above described different feature is examined

(Regarding the different feature)

"A substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" in the corrected invention 1 of the case and "a powder containing  $\gamma$ -aminobutyric acid" in the Invention A No. 1 A are different in the substance, and accordingly are different from each other. Therefore, the corrected invention 1 of the case and the Invention A No. 1 A are not the same.

In addition, as for the action and effect of the addition of the powder containing  $\gamma$ -aminobutyric acid in the Invention A No. 1 A, when the description of Evidence A No. 1 is referred to, it is described that  $\gamma$ -aminobutyric acid is a publicly known substance which is reported to lower the blood pressure (1e), but it is also described that the purpose of the addition of  $\gamma$ -aminobutyric acid is to add  $\gamma$ -aminobutyric acid to a KCl-containing low-salt soy sauce in a process of producing a low-salt soy sauce by replacing one part of salt with KCl, so as to resolve the distinct bitter taste of KCl, and thereby the soy sauce which does not cause the distinct bitter taste of KCl can be obtained (1d); and in the Invention A No. 1 A,  $\gamma$ -aminobutyric acid is added in order to resolve the distinct bitter taste of KCl in the KCl-containing low-salt soy sauce, and the bitter taste and the foreign taste of  $\gamma$ -aminobutyric acid itself are not taken up as the problem.

Then, since it is not technical common sense before the priority date of the case that "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" resolves the distinct bitter taste of KCl in the KCl-containing low-salt soy sauce, it is not a conversion of a known technology or a conventional technique to use "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" in place of a powder containing  $\gamma$ -aminobutyric acid, in Invention A No. 1 A, and also cannot be said to be a slight difference in substantiating means for solving the problem. Therefore, it cannot be said either that the corrected invention 1 of the case and the Invention A No. 1 A are substantially the same.

Therefore, since the corrected invention 1 of the case is not the same as that of the invention described in Evidence A No. 1, it cannot be decided that the Demandee should not be granted a patent for the corrected invention 1 of the case in accordance with the provisions of Article 29-2 of the Patent Act.

B Regarding corrected invention 2 of the case to corrected invention 5 of the case

Also as for the corrected invention 2 of the case to the corrected invention 5 of the case, it cannot be decided that the Demandee should not be granted a patent for the corrected invention 2 of the case to the corrected invention 5 of the case in accordance with the provisions of Article 29-2 of the Patent Act, based on a similar reason to "A Regarding corrected invention 1 of the case".

C Regarding corrected invention 9 of the case

From the above described matters (particularly (1a), (1f) and (1g)) of Evidence A No. 1, in the Evidence A No. 1,

it is recognized that the invention relating to "a low-salt soy sauce produced by being subjected to the steps of: adding and dissolving potassium chloride and a powder containing  $\gamma$ -aminobutyric acid in a raw soy sauce before being subjected to a heating step; and then subjecting the resultant soy sauce to the heating step" (hereinafter, referred to as "Invention A No. 1 B") is described.

Then, when the Invention A No. 1 B is compared with the corrected invention 9, there are following corresponding feature and different feature, as have been described in the above "A Regarding corrected invention 1 of the case (AA), (BB) and (CC)"

(Corresponding feature)

"A liquid seasoning produced by a production method comprising being subjected to:

a step (A) of mixing a seasoning liquid containing a raw soy sauce and a substance having a blood pressure-lowering effect; and

a step (B) of heat-treating a mixture of the seasoning liquid containing the raw soy sauce and the substance having the blood pressure-lowering effect, after the step (A)."

(Different feature)

The different feature is the point that the substance having the blood pressure-lowering effect is "a substance having a blood pressure-lowering effect, which is at least one selected from among coffee bean extracts and peptides having angiotensin conversion inhibitory activity" in the corrected invention 9 of the case, and in contrast to this, the substance having the blood pressure-lowering effect is "a powder containing  $\gamma$ -aminobutyric acid" in Invention A No. 1 B.

Then, the above described different feature is as has been described in the above "A regarding corrected invention 1 of the case (Regarding the different feature)"; and is not the same and cannot be said either to be substantially the same.

Therefore, since the corrected invention 9 of the case is not the same as that of

the invention described in Evidence A No. 1, it cannot be decided that the Demandee should not be granted a patent for the corrected invention 9 of the case in accordance with the provisions of Article 29-2 of the Patent Act.

5 Regarding reasons for invalidation 4 (violation of novelty) and reasons for invalidation 5 (violation of inventive step)

In oral proceedings on June 21 2012, the demandant states that in a case where the correction has been approved, the demandant will withdraw the reason for invalidation 4 (violation of novelty) and the reason for invalidation 5 (violation of inventive step) (see 1st oral proceeding record dated June 21, 2012).

Then, as described in the above "3 Suitability of correction", it was decided that the correction in the written correction request dated June 21, 2012 (second time) was approved, and accordingly Reasons for invalidation 4 (violation of novelty) and Reasons for invalidation 5 (violation of inventive step) resulted in being withdrawn.

#### No. 6 Conclusion

As has been described above, the patent according to corrected claims 1 to 5 and claim 9 of the case does not meet the requirements stipulated in Article 36(6)(i) of the Patent Act, falls under the provisions of Article 123(1)(iv) of the Patent Act, and accordingly shall be invalidated.

As for the costs in connection with the trial, which include the conclusion of the first trial decision, 1/3 shall be borne by the demandant, and 2/3 shall be borne by the demandee under the provisions of Article 61 of the Code of Civil Procedure which is applied mutatis mutandis in the provisions of Article 169(2) of the Patent Act.

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

July 8, 2013

Chief administrative judge: TAMURA, Akiteru

Administrative judge: KORIYAMA, Jun

Administrative judge: ITAYA, Kazuhiro