Trial decision

Invalidation No. 2011-800233

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The case of trial regarding the invalidation of Japanese Patent No. 4767719, entitled "Method for producing liquid seasoning" between the parties above has resulted in the following trial decision.

Conclusion

The correction shall be approved.

The trial of the case was groundless.

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

Reason

No. 1 Epitome of history of the procedures

February 27, 2006	Application (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 (1)
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 (2)

No. 2 Suitability of correction

1 Corrected matter

The above described correction request (1) dated February 3, 2012 was regarded to be withdrawn in accordance with the provisions of Article 134-2(4) of the Patent Act, because the correction request (2) dated June 21, 2012 has been submitted.

The above described correction request (2) dated June 21, 2012 intends to correct the scope of claims and the description of the Patent, into the scope of claims and the description which are attached to the written correction request; and the contents of the correction are as follows.

(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

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 centre 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 centre 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.)

(3) Corrected matter 3

Regarding Claim 6 in the scope of claims of the Patent,

"a coffee bean extract or a γ-aminobutyric acid" shall be corrected into "a coffee bean extract" and

"[Claim 6]:

the method for producing the liquid seasoning according to any one of Claims 1 to 5, wherein the substance having the blood pressure-lowering effect is the coffee bean extract or γ-aminobutyric acid" shall be corrected into

"[Claim 6]:

the method for producing the liquid seasoning according to any one of Claims 1 to 5, wherein the substance having the blood pressure-lowering effect is the coffee bean extract.". (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 active function, but there is a substance having the blood pressure-lowering effect as one of the materials. Among the substances, there are peptides, γ-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.

(2) Regarding corrected matter 3

The correction that "a coffee bean extract or γ-aminobutyric acid" according to Claim 6 in the scope of claims of the Patent shall be corrected to "a coffee bean extract" is a correction which limits a substance that can be alternatively selected

from between the coffee bean extract and the γ-aminobutyric acid, to "a coffee bean extract", and is a correction which is aimed at restricting the scope of claims.

In addition, concerning "the coffee bean extract", as has been described in the above description (1), "the coffee bean extract" is well known as the "the substance having the blood pressure-lowering effect" before the riority date of the Patent. Concerning "the coffee bean extract" which is specified as "the substance having the blood pressure-lowering effect" according to Claim 6 in the scope of claims of the Patent, chlorogenic acids are cited in the paragraph [0014] in the description of the Patent; furthermore, it is described in the paragraph [0017] in the description of the Patent that a coffee bean is preferable, as the natural product extract containing the chlorogenic acids, particularly, the plant extract; in addition, the method for extracting the chlorogenic acids from the coffee bean is described in the paragraphs [0018] to [0024] in the description of the Patent; and furthermore, 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.

Therefore, when the above described matters are summed up, the correction that "a coffee bean extract or γ-aminobutyric acid" shall be corrected to "a coffee bean extract" 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 applicant, who is the demandee of the case, 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 correction of the case shall be approved as a legal correction, because of complying with the conditional clause of Article 134-2 of the Patent Act, and provisions in Article 126(3) and 126(4) of the Patent Act, which are applied mutatis mutandis in Article 134-2(5).

No. 3 Epitome of the demandant's allegation, and epitome of reasons for invalidation on the body

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) (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 the same as the invention described in Evidence A No. 1 that was a patent applied before the date of the Priority Claim, and the Patent Gazette has been issued or the patent has been applied and laid-open after the date of the Priority Claim, 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 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 described in Evidence A No. 2 which has been distributed in Japan or a foreign country before the priority date, 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 Evidence 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 is 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 was a patent applied before the date of the Priority Claim and the Patent Gazette was issued or the patent was applied and laid-open after filing, 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 at the time when the Patent was applied, and accordingly, the Demandee should not be granted a patent 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.

No. 4 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 (1), 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 (2) 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 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

1 Corrected invention of the case

As has been described in the above described "No. 2", the correction request dated June 21, 2012 concerning the case shall be approved, and accordingly the invention according to Claims 1 to 9 in the scope of claims of the Patent (hereinafter are each referred to as "Corrected invention 1 of the case" to "Corrected invention 9 of the case ", and are collectively referred to as "Corrected invention of the case") shall be approved 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 centre 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 6]

The method for producing the liquid seasoning according to any one of Claims 1 to 5, wherein the substance having the blood pressure-lowering effect is a coffee bean extract.

[Claim 7]

The method for producing the liquid seasoning according to Claim 6, wherein the coffee bean extract is a substance extracted from a coffee bean with water and/or a water-soluble organic solvent.

[Claim 8]

The method for producing the liquid seasoning according to Claim 7, wherein the coffee bean from which the coffee bean extract is extracted is a raw coffee bean or a coffee bean having a low degree of roast.

[Claim 9]

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

2 Regarding reasons for Invalidation 1 (requirements for support)

(1) Regarding requirements for support

The purpose of so-called requirements for support (Article 36(6)(i) of the Patent Act) is that the description in the scope of claims needs to be a content which the invention for which a patent is sought describes in the detailed description of the invention, in other words, complies with the requirements for support is based on such an intrinsic role of the description as to generally disclose the technical content of the invention for which the patent is sought, and also clarify the scope which the validity of the patent right covers after the patent right has been established. In the light of this purpose of the system, the detailed description of the invention in the specification needs to be described in such a level that a person skilled in the art can recognize that the object of the invention can be solved by considering the technical common sense of the person skilled in the art before the priority date.

(2) Regarding object of corrected invention of the case

Then, in order to examine the object of the corrected invention of the case, the statement of the detailed description of the invention in the corrected specification of the case has been referred, and the following matters are described.

"[0003]

Various materials are proposed as a material having a physiologically active function, but there is a substance having the blood pressure-lowering effect as one of the materials. Among the substances, there are peptides, γ-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). In particular, the γ-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 γ-aminobutyric acid, technologies for increasing the content in the foods are publicly known (Patent documents 7 to 13).

[0004]

However, when the γ-aminobutyric acid is added to the seasoning, there is a problem that an aftertaste and/or a harsh taste both peculiar to the substance appear and a sense of unity of a flavor is impaired. Then, 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)."

"[Object of the Invention]

[0006]

The present inventors have examined, and as a result, it has become clear that 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, in a case where the γ-aminobutyric acid is added to the seasoning, an aftertaste and/or a harsh taste both peculiar to the substance appear, and a sense of unity of the flavor has been impaired, even if it is

intended to improve the quality of the taste by blending an amino acid and/or a nucleic acid with the seasoning, in the above described conventional technology, a delicious taste is imparted and the flavor results in being unbalanced. In addition, such a new problem also occurs that the cost results in increasing, under the present conditions.

[0007]

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 or a liquid seasoning containing the soy sauce which is a food that is daily ingested; 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.

[Means for solving problem]

[0008]

The present inventors have examined means for improving the flavor of the liquid seasoning which contains the substance having the blood pressure-lowering effect, by a production method. As a result, the present inventors 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 by heat-treating the mixture while mixing the substance having the blood pressure-lowering effect with the liquid seasoning."

According to the above described description of the detailed description of the invention in the corrected specification of the case, it is described that: the substance having the blood pressure-lowering effect is known as a material having a physiologically active function, and a food is proposed which contains the substance and is effective for hypertension; but when the γ-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 a flavor is impaired; and there

has been a conventional technology for improving the quality of the taste in order to solve the problem, by blending an amino acid and/or a nucleic acid with the seasoning.

In addition, in the above-described same description, it is described that according to the examination by the present inventors, it has become clear that 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; and "the problem that when the substance having the blood pressure-lowering effect is blended with the liquid seasoning in such a level that the substance favorably acts for the blood pressure-lowering effect, the flavor changes and the substance becomes difficult to be continuously ingested" is indicated.

In addition, problems are also indicated together which include: "the problem that the liquid seasoning is daily ingested and if the flavor varies depending on a menu, it is concerned that the change may affect the continuous ingestion"; "the problem that when the γ-aminobutyric acid is added to the liquid seasoning, the aftertaste and/or the harsh taste both peculiar to the substance appear, and the sense of unity of the flavor is impaired"; and the problem in the conventional technology which has intended to improve the change of the flavor, specifically, the problem that a delicious taste is imparted and a flavor results in being unbalanced by the conventional technology which has 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 same description, the object and the means for solving the problem of the invention are described as follows: the object of the corrected invention of the case 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 liquid seasoning, 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" (paragraph [0007]); and furthermore "as a result of having examined means for improving the flavor of the liquid seasoning which contains the substance having the blood pressure-lowering effect by a production method, the present inventors 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, becomes 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"(paragraph [0008]).

When considering from the above described indication of the problems, it can be said that the corrected invention of the case is directed at "improving the change of the flavor" in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning; "plans to impart a sense of unity of the flavor" by solving the problem, specifically, plans to solve "the problem that when the γ-aminobutyric acid is added to the liquid seasoning, the aftertaste and/or the harsh taste both peculiar to the substance appear, and the sense of unity of the flavor is impaired"; in addition, "reduces the fluctuation of the flavor depending on the menu", specifically, plans to solve "the problem that the liquid seasoning is daily ingested and if the flavor varies depending on a menu, it is concerned that the change may affect the continuous ingestion"; by solving these problems, makes the liquid seasoning "be easy to be continuously ingested", and "exhibit a pharmacological action such as a blood pressure-lowering effect at high level", specifically, plans to solve "the problem that when the substance having the blood pressure-lowering effect is blended with the liquid seasoning in such a level that the substance favorably acts for the blood pressure-lowering effect, the flavor changes and the substance becomes difficult to be continuously ingested"; and by "improving the change of the flavor", plans to solve the above described conventional problem eventually.

Then, an object of the corrected invention of the case is approved to be: "to provide a simple method for producing a liquid seasoning in which a change of a flavor is improved in a case where a substance having a blood pressure-lowering effect is blended with the liquid seasoning"; or "to obtain a liquid seasoning by the simple method for producing the liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning". In addition, the corrected invention of the case is intended to solve the above described conventional problem by solving the problems.

Then, it is described that a liquid seasoning is obtained in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning, 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 by heat-treating the mixture while mixing the substance having the blood pressure-lowering effect with the liquid seasoning" (paragraph [0008]).

(3) Regarding peptide having angiotensin conversion inhibitory activity

A Demandant's allegation

The demandant's allegation is as follows.

(AA) In the example of the corrected specification of the case, it is described that the flavor of the liquid seasoning which has been produced by an operation of adding a coffee bean extract and γ-aminobutyric acid to a soy sauce has been improved due to the production method in the corrected invention of the case. However, a case where the peptide having the angiotensin conversion inhibitory activity (hereinafter referred to as "ACE inhibitory peptide") is added is not described in the example, and it cannot be grasped from the description in the example whether the flavor is improved or not even in a case where the ACE inhibitory peptide has been added. Accordingly, the corrected invention of the case in which the ACE inhibitory peptide has been added exceeds the scope in which such a content that the object can be solved which is to provide a method for producing the liquid seasoning in which the change of the flavor is improved is described so that a person skilled in the art can recognize, in the detailed description of the invention.

(BB) When the requirements for support are judged, "detailed description of the invention" which should be compared and examined with respect to the invention relating to the claims should be limited to the detailed description of the invention in the specification in the initial application, and it cannot be said that the description in the scope of claims in such an extent that it cannot be judged whether the scope of claims satisfies the requirements for support or not unless experimental data is submitted later satisfies the requirements for support.

B Judgment

(Regarding corrected invention 1 of the case)

(AA) The corrected invention 1 of the case is the invention as described in the above described "1 Corrected invention of the case", and is the invention of a method for producing the liquid seasoning, which includes: 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 ACE inhibitory peptides; and heat-treating the mixture.

(BB) Then, it will be examined whether the corrected invention 1 of the case in which the ACE inhibitory peptide is selected as the substance having the blood pressure-lowering effect exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention of the case can be solved, or not.

The ACE inhibitory peptide is described to be preferable as a substance having the blood pressure-lowering effect in the corrected invention of the case, in the paragraph [0013] of the corrected specification of the case, and accordingly the ACE inhibitory peptide is described as the substance which is used in the corrected invention 1 of the case.

In addition, preferable types of the ACE inhibitory peptide are described in the paragraph [0027] in the corrected specification of the case; a numerical value of a specific concentration of the intensity of the ACE inhibitory activity that is used in the corrected invention of the case is described, at which the blood pressure-lowering effect of the ACE inhibitory peptide can be expected, in the paragraph [0028]; commercialized products of the peptide which can be blended in the Invention are described in the paragraph [0029]; and a method and a kit for measuring the ACE inhibitory activity are described in the paragraph [0030]. Furthermore, in the paragraph [0030], the specific numerical value of the amount of the peptide to be blended is described to be "preferably 0.5 to 20%, further preferably 1 to 10%, and particularly preferably 2 to 5%, in the liquid seasoning, from the viewpoint of the blood pressure-lowering effect and the flavor". The description of "from the viewpoint of the flavor" is recognized as a meaning of "from the viewpoint that the flavor is adequate", and accordingly it is recognized that as a result of having confirmed that the change of the flavor is improved in a case where the ACE inhibitory peptide has been blended, the preferable amount of the ACE inhibitory peptide to be blended is specified and is described.

(CC) In addition, it is sure that the change of the flavor in a case where the ACE inhibitory peptide is blended is not proved in the example, and it is considered that the ACE inhibitory peptide is different in the substance from those of the coffee

bean extract and the γ-aminobutyric acid which are proved in the example, and accordingly that the flavor derived from the substance of the ACE inhibitory peptide is naturally different from those of the coffee bean extract and the γ-aminobutyric acid. Accordingly, it is not immediately considered that a similar result is obtained even when the ACE inhibitory peptide is blended, on the basis of the example in a case where the coffee bean extract and the γ-aminobutyric acid are blended.

However, it is a widely known matter before the priority date of the Patent that the ACE inhibitory peptide has a bitter taste and a foreign taste, as is described in Japanese Unexamined Patent Application Publication No. 2004-99552 (paragraph [0003]), Japanese Unexamined Patent Application Publication No. 2003-128694 (paragraph [0004]), Japanese Unexamined Patent Application Publication No. H6-220097 (paragraph [0006]), domestic re-publication of PCT international publication 2002-055546 (4th line to 8th line in the third page), and the like. In addition, the test result report 1 of Evidence B No. 4 which the demandee has submitted is a report in which the flavor has been evaluated on a sample that has been prepared by adding a soybean peptide and a bonito peptide to a raw soy sauce, adjusting the mixture and heating the adjusted mixture; and referring to "5-1 Evaluation of flavor", it is shown that the flavor derived from the peptide is more improved and the flavor balance is more adequate than the flavor of the sample which has not been heat-treated. Thereby, it can be confirmed that the change of the flavor has been improved when the ACE inhibitory peptide has been blended, as is described in the paragraph [0030] in the corrected specification of the case. Incidentally, the test result report 1 of Evidence B No. 4 is not a report in which the demandee has intended to assert a new matter by submitting the experimental data for the matter that is not described in the corrected specification of the case, but is merely a report in which the demandee has proved that the amount of the peptide to be blended is preferable from "the viewpoint of the flavor" which is described in the paragraph [0030] of the corrected specification of the case, and accordingly grasping whether the object of improving the change of the flavor is solved or not with reference to this report is merely to confirm the technical content described in the description.

(DD) Then, it cannot be said that the corrected invention 1 of the case in which the ACE inhibitory peptide is blended exceeds the scope that is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention 1 of the case can be solved, which is "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering

effect is blended with a liquid seasoning"; and it cannot be concluded that the corrected invention 1 of the case violates the requirements for support.

(Regarding corrected invention 2 of the case to corrected invention 9 of the case)

Corrected invention 2 of the case is also similar to the above description (Regarding corrected invention 1 of the case).

Furthermore, the corrected invention 3 of the case to the corrected invention 8 of the case which quote the corrected invention 1 of the case and the corrected invention 2 of the case are also similar to the above described corrected invention 1 of the case.

In addition, it is also similar to the above description (corrected invention 1 of the case) that: it cannot be said that the corrected invention 9 of the case in which the ACE inhibitory peptide is blended exceeds the scope that is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention 9 of the case can be solved, which is "to obtain the liquid seasoning by a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with a liquid seasoning"; and it cannot be concluded that the corrected invention 1 of the case violates the requirements for support.

(4) Regarding blood pressure-lowering effect

A Demandant's allegation

The demandant's allegation is as follows.

(AA) the liquid seasoning which has been produced by an operation of adding a coffee bean extract and γ-aminobutyric acid is described in the example of the corrected specification of the case, but the data concerning the blood pressure-lowering effect is not described at all even in the liquid seasoning to which the substance is added. Therefore, the corrected invention of the case exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of obtaining the liquid seasoning which has an excellent blood pressure-lowering effect can be solved.

(BB) Such a content cannot be said to be the matter which a person skilled in the art can predict on the basis of a widely known technology of the Patent before the priority date that a liquid seasoning having an "excellent" blood pressure-lowering effect or a liquid seasoning exhibiting a pharmacological action such as the blood

pressure-lowering effect "at high level" is obtained as in the corrected invention of the case.

(CC) Even if such data is shown that the content of the γ-aminobutyric acid or the ACE inhibitory peptide has not been lowered in the production process, the data does not prove that the liquid seasoning relating to the corrected invention of the case (a liquid seasoning having an "excellent" blood pressure-lowering effect or a liquid seasoning exhibiting a pharmacological action such as the blood pressure-lowering effect "at high level") can be obtained.

B Judgment

(Regarding corrected invention 1 of the case)

(AA) The corrected invention 1 of the case is the invention as is described in the above described "1 Corrected invention of the case", and is the invention of a method for producing a liquid seasoning, which includes: mixing the 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 heat-treating the mixture.

Incidentally, the demandant alleges that a case where the γ-aminobutyric acid is added, which has been included in the invention according to Claim 1 in the scope of claims of the Patent, exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object can be solved, but the corrected invention 1 of the case in which Claim 1 in the scope of claims of the Patent is corrected has become not to include the method for producing the liquid seasoning to which the γ-aminobutyric acid is added, and accordingly a case where the γ-aminobutyric acid is added shall not be judged.

(BB) In addition, the object of the corrected invention of the case is approved to be "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where a substance having a blood pressure-lowering effect is blended with the liquid seasoning", as has been described in "2 (2) Regarding object of corrected invention of the case". In addition, as has been described in "2 (2) Regarding object of corrected invention of the case", the corrected invention of the case is intended to solve an object of improving the change of the flavor, thereby facilitate the continuous ingestion of the liquid seasoning, and make the effect due to blending of the substance having the blood pressure-lowering effect be sufficiently exhibited, and accordingly it can be said that the liquid seasoning obtained by the corrected invention of the case is expected to exhibit the

blood pressure-lowering effect in such a level that the blended substance having the blood pressure-lowering effect functions.

Incidentally, the demandant alleges that it is the object to obtain a liquid seasoning having the "excellent" blood pressure-lowering effect or the liquid seasoning exhibiting the pharmacological action such as the blood pressure-lowering effect "at high level"; but as has been described in "2 (2) Regarding object of corrected invention of the case", the object of the corrected invention of the case is "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning", and is intended to solve the object of improving the change of the flavor, thereby facilitate the continuous ingestion of the liquid seasoning, and make the effect due to blending of the substance having the blood pressure-lowering effect be sufficiently exhibited. In addition, the meaning of exhibiting the pharmacological action such as the blood pressure-lowering effect "at high level" described in the corrected specification of the case is interpreted to intend to exhibit the effect in such a level as to be achieved by a result that even when the substance having the blood pressure-lowering effect is blended in such a level that the blood pressure-lowering effect favorably acts, the change of the flavor is improved by solving the object of improving the change of the flavor, and thereby the continuous ingestion is enabled. In addition, in order that the object of improving the change of the flavor is solved, thereby the liquid seasoning becomes easy to be continuously ingested, and the effect by blending of the substance having the blood pressure-lowering effect is exhibited, it is at least necessary that the substance functions which has been blended in the obtained liquid seasoning and has the blood pressure-lowering effect.

(CC) Then, it will be examined below whether the corrected invention 1 of the case exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object including the intention can be solved, or not.

It is well known substances before the priority date of the Patent that the ACE inhibitory peptide and the coffee bean extract have the blood pressure-lowering effect and a food having the blood pressure-lowering effect is obtained by addition of these substances to the food, as is described in the paragraph [0003] in the corrected specification of the case, as "Various materials are proposed as a material having a physiologically active function, and there is a substance having the blood pressure-lowering effect as one of the materials. Among the substances, there are

peptides, γ-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).", with reference 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 a 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.

In addition, as for the coffee bean extract, concerning preferred polyphenols, it is described in the paragraph [0014] in the corrected specification of the case that the polyphenols preferably include chlorogenic acids; furthermore, it is described in the paragraph [0017] in the corrected specification of the case 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 corrected specification of the case. In addition, in the paragraphs [0064] to [0070], the paragraph [0073] and the paragraphs [0075] to [0076] in the corrected specification of the case, an example is described in which such a liquid seasoning 1 is produced that a coffee bean extract is added to a raw soy sauce, and it is described that an example in which the liquid seasoning is applied to boiled spinach seasoned with soy sauce and simmered splendid alfonsino in sweetened soy sauce has a more adequate flavor balance than a comparison article that has not been heat-treated, and accordingly it can be grasped that the liquid seasoning obtained by the heating treatment has an improved change of the flavor.

Furthermore, it is described that the content of the chlorogenic acid in the liquid seasoning is measured, and the content of the chlorogenic acid is not lowered even when the liquid seasoning is heat-treated (paragraph [0076]), and accordingly it can be grasped that the liquid seasoning obtained through the heating treatment has

the blood pressure-lowering effect in such a level that the blended substance having the blood pressure-lowering effect functions.

The content that the change of the flavor is improved by the heating treatment in the corrected invention 1 of the case in which the ACE inhibitory peptide is blended is as described in the paragraph [0030] in the corrected specification of the case; and such a content that the improvement is confirmed from the test result report 1 of the submitted Evidence B No. 4 is as has been examined in the above described "(3) Judgment of peptide having angiotensin conversion inhibitory activity (Regarding corrected invention 1 of the case)".

In addition, it is not described in the detailed description of the invention whether the liquid seasoning obtained by blending the ACE inhibitory peptide therein and being heat-treated has the blood pressure-lowering effect in such a level that the ACE inhibitory peptide functions which is a blended substance having the blood pressure-lowering effect, or not. Concerning this point, the test result report 1 of the Evidence B No. 4 which the demandee has submitted describes a test result showing that a sample obtained by adding a soybean peptide and a bonito peptide to a raw soy sauce, adjusting the condition and heating the mixture keeps the ACE inhibitory activity even after having been heated. Then, it is recognized that even when the ACE inhibitory peptide has been added, the blood pressure-lowering effect acts after the heating treatment.

(DD) From the above description, it cannot be said that the corrected invention 1 of the case exceeds the scope that is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention of the case can be solved, which is "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning", which intends to: solve such a problem that when the substance having the blood pressure-lowering effect is blended in such a level that the blood pressure-lowering effect favorably acts, the flavor changes, and the continuous ingestion has been unable; has the change of the flavor improved, and enable the continuous ingestion even when the substance having the blood pressure-lowering effect has been blended in such a level that the blood pressure-lowering effect favorably acts; and thereby make the effect due to blending of the substance having the blood pressure-lowering effect sufficiently exhibited. Accordingly, it cannot be concluded that the corrected invention 1 of the case violates the requirements for support.

(Regarding corrected invention 2 of the case to corrected invention 9 of the case)

The corrected invention 2 of the case is also similar to the above description (Regarding corrected invention 1 of the case).

Furthermore, the corrected invention 3 of the case to the corrected invention 8 of the case which quote the corrected invention 1 of the case and the corrected invention 2 of the case are also similar to the above described corrected invention 1 of the case.

In addition, it is also similar to the above description (corrected invention 1 of the case) that: it cannot be said that the corrected invention 9 of the case exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object can be solved, which is "to obtain a liquid seasoning by a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning", which is intended to solve such a problem that when the substance having the blood pressure-lowering effect is blended in such a level that the blood pressure-lowering effect favorably acts, the flavor changes, and the continuous ingestion is unable; and it cannot be concluded that the corrected invention 9 of the case violates the requirements for support.

(5) Regarding upper limit value and lower limit value

A Demandant's allegation

The demandant's allegation is as follows.

(AA) As for the content of the γ-aminobutyric acid which is added to the liquid seasoning, when the content exceeds the upper limit value, the flavor is impaired, and when the content is lower than the lower limit value, the pharmacological action such as the blood pressure-lowering effect cannot be exhibited; but in the example of the corrected specification of the case, the liquid seasoning produced by the addition of the coffee bean extract and the γ-aminobutyric acid is described, but the upper limit value and the lower limit value of the contents of the coffee bean extract and the γ-aminobutyric acid are not described. Therefore, the corrected invention of the case exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object can be solved which is to obtain the liquid seasoning that does not cause the flavor derived from the substance having the blood pressure-lowering effect, and has the blood pressure-lowering effect.

(BB) When it is considered that the range of the numerical values of the amount of the γ-aminobutyric acid and the like to be added is not limited in any one of Claims 1 to 9 in the scope of claims, and on the other hand, that the effect that "the liquid seasoning does not cause the flavor derived from the substance, has little fluctuation of the flavor depending on the menu, and is easy to be continuously ingested, in spite of containing the substance having the blood pressure-lowering effect" and the effect of "exhibiting the pharmacological action such as the blood pressure-lowering effect at high level" of the corrected invention of the case cannot be achieved, even when the amount of the γ-aminobutyric acid and the like to be added is too small and too large, Claims 1 to 9 which do not limit the amount of the γ-aminobutyric acid and the like to be added requests the patent exceeding the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the problems of the invention can be solved.

(CC) The preferable range of the numerical value of the coffee bean extract is not described in the corrected specification of the case; in the example, only a part of the effect of the improvement of the flavor is proved on a case where the coffee bean extract is 1.2% and the γ-aminobutyric acid are 0.4% and 0.53%, and data for the blood pressure-lowering effect does not exist; accordingly it is impossible to predict the effect of the corrected invention of the case concerning the range of the numerical values other than the range of the numerical values, which has been proved in the example of the corrected specification of the case, and concerning that the liquid seasoning has the excellent blood pressure-lowering effect, by only a conventional technical knowledge; and it cannot be said that the corrected invention of the case describes that the object of obtaining the liquid seasoning having the blood pressure-lowering effect can be solved so that a person skilled in the art can recognize. In other words, the corrected invention of the case does not meet the requirements for support.

B Judgment

(Regarding corrected invention 1 of the case)

(AA) The corrected invention 1 of the case is as described in the above described "1 Corrected invention of the case", and is the invention of the method for producing the liquid seasoning as follows. "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 centre of the mixture so as to become 60 to 90°C, after the step (A).

(BB) In addition, the object of the corrected invention 1 of the case is recognized to be "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where a substance having a blood pressure-lowering effect is blended with the liquid seasoning", as has been described in "2 (2) Regarding object of corrected invention of the case".

(CC) Then, it will be examined below whether the corrected invention 1 of the case, which does not show the content of the substance having the blood pressure-lowering effect, exceeds the scope which is described in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention 1 of the case can be solved, which is "to provide a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning", or not.

(DD) In the detailed description of the invention of the corrected specification of the case, the amount of the polyphenols to be blended which are "coffee bean extract" is described in the paragraph [0026] of the corrected specification of the case as follows. "The amount of the polyphenols to be blended with the liquid seasoning of the Invention is preferably 0.1 to 5 mass% (hereinafter simply 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. Here, the amount of the polyphenols to be blended is the amount of the polyphenols which have been added to the liquid seasoning. 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.". Furthermore, in the example, the flavor of the liquid seasoning 1 (paragraph [0064]) to which 1.2% of the "coffee bean extract" has been added is evaluated, and it is proved that a liquid seasoning having the improved flavor is obtained.

In addition, as for the amount of the "ACE inhibitory peptide" to be blended, it is described in the paragraph [0030] of the corrected specification of the case that "the amount of the 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."

(EE) In consideration of the above described description and the other description in the corrected specification of the case, it is grasped that: as for the amounts of "coffee bean extract" and "ACE inhibitory peptide" to be blended in the corrected invention 1 of the case, there are preferable amounts to be blended from the viewpoint of the blood pressure-lowering effect and the flavor; but the corrected invention does not find a special technical significance in the range of the numerical values of the upper limit value and the lower limit value of the amounts to be blended itself, in order to solve the object of "providing a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with the liquid seasoning"; and the amount to be blended may be such a level that the "liquid seasoning" can be used as a liquid seasoning which has the blood pressure-lowering effect and has an improved flavor.

(FF) Furthermore, in the corrected specification of the case, [background of the Invention] is described with reference to Patent document 1 to Patent document 3; in Patent Document 1 (Japanese Unexamined Patent Application Publication No. 2004-194515), a liquid seasoning which is blended with a raw coffee bean extract is described, in Patent Document 2 (Japanese Unexamined Patent Application Publication No. 2004-290088), a liquid seasoning which is blended with a peptide having the angiotensin converting enzyme inhibitory activity is described, and in Patent Document 3 (Japanese Unexamined Patent Application Publication No. 2002-87977), a soy sauce which is blended with a coffee bean extract is described in (paragraph [0040]); and accordingly, it can be said that the liquid seasonings which are blended with the coffee bean extract and/or the ACE inhibitory peptide have been well known technologies before the priority date of the Patent. Then, it can be said that on the basis of the description of the "liquid seasoning" which is mixed with the substance having the blood pressure-lowering effect, a person skilled in the art can grasp what kind is the "liquid seasoning", and that also as for the amount of the substance to be blended which has the blood pressure-lowering effect, a person skilled in the art could recognize how much amount of the substance was blended, both on the basis of the above description.

(GG) In addition, it is described in the detailed description of the invention that the object of improving the change of the flavor can be solved, by "mixing the substance having the blood pressure-lowering effect before the mixture is heat-treated in the step of producing the liquid seasoning, and subsequently heat-treating the mixture"(paragraph [0008]).

(HH) Then, the corrected invention 1 of the case includes a step of mixing the seasoning liquid containing the raw soy sauce, and the substance having the blood pressure-lowering effect, and a subsequent step of heat-treating the mixture, and the steps reflect the means for solving the object of mixing the substance having the blood pressure-lowering effect before the heating treatment of the mixture, and then heat-treating the mixture; and accordingly, it cannot be said that in the corrected invention 1 of the case, the corrected invention 1 does not reflect the solution for the problem to be solved by the invention, which is described in the detailed description of the invention, on the ground that amount of the substance to be blended is not stipulated, which has the blood pressure-lowering effect. Therefore, it cannot be said that the corrected invention 1 of the case requests the patent exceeding the scope stated in the detailed description of the invention.

(II) Furthermore, a person skilled in the art can roughly grasp the amount of the substance to be blended which has the blood pressure-lowering effect in the corrected invention 1 of the case, on the basis of the description of the "liquid seasoning" which is mixed with the substance having the blood pressure-lowering effect, in light of the technical common sense known before the priority date of the Patent. Then, the content which has been disclosed in the detailed description of the invention in the corrected specification of the case can be expanded and generalized to the scope of "a method for producing a liquid seasoning" of the corrected invention 1, in which the amount to be blended is not stipulated.

(JJ) As in the above description, the corrected invention 1 of the case is within the scope described in the detailed description of the invention so that a person skilled in the art can recognize that the object of obtaining the liquid seasoning having the blood pressure-lowering effect can be solved, which does not cause the flavor derived from the substance having the blood pressure-lowering effect.

(Regarding corrected invention 2 of the case to corrected invention 9 of the case)

Corrected invention 2 of the case is also similar to the above description (Regarding corrected invention 1 of the case).

Furthermore, the corrected invention 3 of the case to the corrected invention 8 of the case which quote the corrected invention 1 of the case and the corrected invention 2 of the case are also similar to the above described corrected invention 1 of the case.

In addition, it is also similar to the above description (corrected invention 1 of the case) that: the corrected invention 9 of the case which describes a liquid seasoning in which the ACE inhibitory peptide is blended is within the scope stated in the detailed description of the invention so that a person skilled in the art can recognize that the object of the corrected invention 9 of the case can be solved, which is "to obtain a liquid seasoning by a simple method for producing a liquid seasoning in which the change of the flavor is improved in a case where the substance having the blood pressure-lowering effect is blended with a liquid seasoning".

(6) Regarding heating temperature

A Demandant's allegation

The demandant's allegation is as follows.

In the heating treatment in the example of the corrected specification of the case, the temperature in the center of the mixture of the raw soy sauce and the substance having the blood pressure-lowering effect is not measured, but the temperature which is set for a water bath is determined to be the heating temperature as-is. In addition, in the example, the sample is approximately 7 ml and is not a sample of a large-capacity tank which is carried out in an actual site where the soy sauce is produced, and accordingly it cannot be said that an appropriate example is described in which the temperature in the center of the mixture has been measured.

Therefore, because the appropriate example in which the temperature in the center of the mixture has been measured does not exist in the detailed description of the invention, it cannot be said that the description disclosed in the detailed description of the invention can be expanded and generalized to the scope of the corrected invention of the case, in which the temperature in the center of the mixture is stipulated.

B Judgment

(Regarding corrected invention 1 of the case)

(AA) The corrected invention 1 of the case is the invention as is described in the above described "1 Corrected invention of the case", and is the invention of a method for producing a liquid seasoning, which includes the steps of: mixing the

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 "heat-treating the mixture so that the temperature in the center of the mixture becomes 60 to 90°C".

(BB) In addition, it will be examined below whether the description of "the mixture is heat-treated so that the temperature in the center of the mixture becomes 60 to 90°C" is described in the detailed description of the invention, or not.

In the detailed description of the invention of the corrected specification of the case, it is described that the step of heat-treating the mixture is described in the paragraph [0036] to the paragraph [0039]. In addition, in the paragraph [0065] in the example, it is described that the mixture is heated by being immersed in a water bath.

It is true that it is not explicitly stated how to measure the temperature in the center of the mixture, but it is clear that the temperature in the center of the mixture can be measured with the use of such means as to measure with a thermometer, which is publicly known before the priority date of the Patent. Furthermore, it can be said that in the case of the sample of approximately 7 ml, the temperature in the center of the sample becomes the same level as the temperature of the water bath, and it can be said that the example is described in which the temperature in the center of the mixture is determined to be a stipulated temperature. In addition, it is clear from the technical common sense that even in the large-capacity tank which is used at the actual site where the soy sauce is produced, a desired temperature in the center can be obtained by a process of warming the hot water at the target temperature in the center with the use of a hot-water bath type double can or the like, which is described in the paragraph [0039] of the corrected specification of the case, and stirring the soy sauce as needed.

(CC) Then, the corrected invention 1 of the case is substantially within the scope stated in the detailed description of the invention of the corrected specification of the case, in the light of the technical common sense known before the priority date of the Patent.

(Regarding corrected invention 2 of the case to corrected invention 9 of the case)

The corrected invention 2 of the case to the corrected invention of the case 4 in which the temperature in the center of the mixture is stipulated are also similar to the above description (corrected invention 1 of the case).

Furthermore, the corrected invention 5 of the case to the corrected invention 9 of the case which quote the corrected invention 1 of the case to the corrected invention 4 of the case are also similar to the above description (corrected invention 1 of the case).

3 Regarding reasons for invalidation 2 (enablement requirement)

(1) Regarding enablement requirement

The corrected invention 1 of the case to the corrected invention 8 of the case are the invention of "a method for producing a liquid seasoning", and are the invention of "a method for producing a product", which produces "a product" of "the liquid seasoning". In addition, the corrected invention 9 of the case is the invention of "a liquid seasoning", and is "the invention of a product" of "the liquid seasoning."

In addition, the description that the invention of the method can be carried out means that the method can be used; in addition, when the invention of the method corresponds to "a method for producing a product", the description of "the method can be used" means that the product can be produced by the method; and accordingly the method needs to be described in the detailed description of the invention so that the product can be produced with the method.

In addition, in the invention of the product, the description that the invention can be carried out means that the product can be produced according to the invention and the product can be used, and accordingly the above description is needed to be described also in the detailed description of the invention so that the product can be produced and used.

Then, as for "a method for producing a liquid seasoning", which is the invention for producing the product, in the corrected invention 1 of the case to the corrected invention 8 of the case, the detailed description of the invention of the corrected specification of the case must be described in such an extent that the product of "the liquid seasoning" can be produced, in order that the invention can be carried out.

In addition, as for the invention of the product of "the liquid seasoning" in the corrected invention 9 of the case, the detailed description of the invention must be described in such an extent that the product of "the liquid seasoning" can be produced and the product of "the liquid seasoning" can be used, in order that the invention can be carried out. In addition, the product of "the liquid seasoning" in the corrected invention 9 of the case is intended to be used because the change of the flavor occurring when the substance having the blood pressure-lowering effect is blended

with the liquid seasoning is improved, and thereby the liquid seasoning becomes easy to be continuously ingested, and exhibits a blood pressure-lowering effect. Accordingly, the above intention shall be noted and then the enablement requirement shall be judged.

Then, it will be examined below whether the statement of the detailed description of the invention of the corrected specification of the case is clearly and sufficiently described in such an extent that a person skilled in the art can carry out the invention on the basis of the matter in the statement and the technical common sense known before the priority date of the Patent, or not, and whether the statement meets the enablement requirement (the requirement stipulated in Article 36(4)(i) of the Patent Act), or not.

(2) Regarding ACE inhibitory peptide

A Demandant's allegation

The demandant's allegation is as follows.

In the example of the corrected specification of the case, it is described that the flavor has been improved in the liquid seasoning relating to the corrected invention of the case, to which a coffee bean extract and γ-aminobutyric acid have been added. However, it cannot be grasped from the description in the example whether the flavor is improved or not even in a case where the ACE inhibitory peptide has been added.

Therefore, it cannot be said that the patented invention in which the ACE inhibitory peptide is added is described so that a person skilled in the art can carry out, in the detailed description of the invention of the corrected specification of the case.

B Judgment

(AA) As for "a method for producing a liquid seasoning" in which the ACE inhibitory peptide has been added, in the corrected invention 1 of the case to the corrected invention 8 of the case, the corrected invention 1 of the case to the corrected invention 8 of the case are the invention of a method for producing a product, which is "a method for producing a liquid seasoning", and is a method of producing a product; and accordingly three matters of (i) a raw material, (ii) a treatment step of the raw material and (iii) a product need to be described so that a person skilled in the art can produce the product according to the production method on the basis of the detailed description of the invention and the technical common sense known before the priority date of the case.

When referring to the detailed description of the invention of the corrected specification of the case, the seasoning liquid containing the raw soy sauce as (i) the raw material is described, in the paragraph [0012] in the corrected specification of the case.

In addition, as for the ACE inhibitory peptide which is the raw material, a preferable type of the ACE inhibitory peptide is described in the paragraph [0027] in the corrected specification of the case; a numerical value of the specific concentration of the intensity of the ACE inhibitory activity at which the blood pressure-lowering effect of the ACE inhibitory peptide can be expected that is used in the corrected invention of the case is described in the paragraph [0028]; a commercialized product of the peptide which can be blended in the Invention is described in the paragraph [0029]; and a method and a kit for measuring the ACE inhibitory activity are described in the paragraph [0030]. Furthermore, in the paragraph [0030], specific numerical values of the amount of the peptide to be blended are described to be "preferably 0.5 to 20%, further preferably 1 to 10%, and particularly preferably 2 to 5% in the liquid seasoning, from the viewpoint of the blood pressure-lowering effect and the flavor". The description of "from the viewpoint of the flavor" is recognized as the meaning of "from the viewpoint that the flavor is adequate", and accordingly it is recognized that as a result of having confirmed that the change of the flavor is improved in a case where the ACE inhibitory peptide has been blended, the preferable amount of the ACE inhibitory peptide to be blended is specified and is described. Then, it can be said that the ACE inhibitory peptide is also described as the raw material.

In addition, as for (ii) the treatment step of the raw material, which mixes the seasoning liquid containing the raw soy sauce and the ACE inhibitory peptide of the raw material, and heats the mixture, the mixing step is described in the paragraph [0035] in the corrected specification of the case, the heat-treating step is described in the paragraphs [0036] to [0039], and furthermore, the filling step is described in the paragraphs [0053] to [0062] in the corrected specification of the case.

Furthermore, as for (iii) the product, "the liquid seasoning according to the Invention has an effect of remarkably improving hypertension by being continuously ingested" is described in the paragraph [0063], and accordingly it is described that the liquid seasoning is obtained which has the effect of remarkably improving the hypertension by being continuously ingested.

When these described matters are comprehensively considered, it can be said that "a method for producing a liquid seasoning" in which the ACE inhibitory peptide

is added, in the corrected invention 1 of the case to the corrected invention 8 of the case, is clearly and sufficiently described in the detailed description of the invention of the corrected specification of the case, to such an extent that a person skilled in the art can carry out the production method.

(BB) As for "the liquid seasoning" in which the ACE inhibitory peptide has been added, in the corrected invention 9 of the case, the corrected invention 9 of the case is the invention of a product which is "the liquid seasoning", and the invention of the product needs to be clearly and sufficiently described in the detailed description of the invention so that a person skilled in the art can produce the product and can use the product; and it is as described in the above description (AA) that the detailed description of the invention of the corrected specification of the case is described so that a person skilled in the art can produce the product.

It is clear from the technical common sense known before the priority date of the case that the "liquid seasoning" can be used in various dishes such as "boiled spinach seasoned with soy sauce" and "simmered splendid alfonsino in sweetened soy sauce", similarly to a general seasoning, as is described, for instance, in the paragraphs [0064] to [0078] in the corrected specification of the case. In addition, "The liquid seasoning according to the Invention has an effect of remarkably improving hypertension by being continuously ingested" is described in the paragraph [0063], and accordingly it can be grasped that the obtained liquid seasoning has the effect of significantly improving the hypertension by being continuously ingested. Furthermore, in the paragraph [0030] in the corrected specification of the case, the specific numerical value of the amount of the peptide to be blended is described to be "preferably 0.5 to 20%, further preferably 1 to 10%, and particularly preferably 2 to 5%, in the liquid seasoning, from the viewpoint of the blood pressure-lowering effect and the flavor. This description of "from the viewpoint of the flavor" is recognized as the meaning of "from the viewpoint that the flavor is adequate", and accordingly it can be said that it has been confirmed that the change of the flavor of the liquid seasoning has been improved in which the ACE inhibitory peptide has been blended.

Then, when these described matters are comprehensively considered, it can be said that "the liquid seasoning" of the corrected invention 9 of the case, in which the ACE inhibitory peptide has been added, is clearly and sufficiently described in the detailed description of the invention of the corrected specification of the case, to such an extent that a person skilled in the art can carry out.

(3) Regarding blood pressure-lowering effect

A Demandant's allegation

The demandant's allegation is as follows.

The liquid seasoning which has been produced by an operation of adding a coffee bean extract and γ-aminobutyric acid is described in the example of the corrected specification of the case, but the data concerning the blood pressure-lowering effect is not described at all even in the liquid seasoning to which the substances are added.

Therefore, it cannot be said that the detailed description of the invention of the corrected specification of the case is described to such an extent that a person skilled in the art can carry out the corrected invention of the case.

B Judgment

(AA) The corrected invention 1 of the case to the corrected invention 8 of the case are the invention of a method for producing a product which is "a method for producing a liquid seasoning", and are a production method of a product; and accordingly three matters of (i) a raw material, (ii) a treatment step of the raw material and (iii) a product need to be described so that a person skilled in the art can produce the product according to the production method on the basis of the detailed description of the invention and the technical common sense known before the priority date of the case.

In addition, when referring to the detailed description of the invention of the corrected specification of the case, the seasoning liquid containing the raw soy sauce as (i) the raw material is described, in the paragraph [0012] in the corrected specification of the case.

Furthermore, as for the ACE inhibitory peptide which is the raw material, preferable types of the ACE inhibitory peptide are described in the paragraph [0027] in the corrected specification of the case; a numerical value of a specific concentration of the intensity of the ACE inhibitory activity that is used in the corrected invention of the case is described, at which the blood pressure-lowering effect of the ACE inhibitory peptide can be expected, in the paragraph [0028]; commercialized products of the peptide which can be blended in the Invention are described in the paragraph [0029]; and a method and a kit for measuring the ACE inhibitory activity are described in the paragraph [0030]. Furthermore, in the paragraph [0030], the specific numerical value of the amount of the peptide to be blended is described to be "preferably 0.5 to 20%, further preferably 1 to 10%, and particularly preferably 2 to 5%, in the liquid seasoning, from the viewpoint of the

blood pressure-lowering effect and the flavor.". This description of "from the viewpoint of the flavor" is recognized as the meaning of "from the viewpoint that the flavor is adequate", and accordingly it is recognized that as a result of having confirmed that the change of the flavor is improved in a case where the ACE inhibitory peptide has been blended, the preferable amount of the ACE inhibitory peptide to be blended is specified and is described. Then, it can be said that the ACE inhibitory peptide is also described as the raw material.

As for the coffee bean extract, the amount of the polyphenols which are coffee bean extracts to be blended is described in the paragraph [0026] of the corrected specification of the case as follows. "The amount of the polyphenols to be blended with the liquid seasoning of the Invention is preferably 0.1 to 5 mass % (hereinafter simply referred to as "%"), 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. Here, the amount of the polyphenols to be blended is the amount of the polyphenols which have been added to the liquid seasoning. 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.". Furthermore, in the example, the flavor of the liquid seasoning 1 (paragraph [0064]) is evaluated to which 1.2% of the "coffee bean extract" has been added, and it is proved that a liquid seasoning having the improved flavor is obtained. Then, it can be said that the coffee bean extract is also described as the raw material.

In addition, as for (ii) the treatment step of the raw material, which mixes the seasoning liquid containing the raw soy sauce and the ACE inhibitory peptide and/or the coffee bean extract of the raw material, and heats the mixture, the mixing step is described in the paragraph [0035] in the corrected specification of the case, the heat-treating step is described in the paragraphs [0036] to [0039], and furthermore, a filling step is described in the paragraphs [0053] to [0062] in the corrected specification of the case.

Furthermore, as for (iii) the product, "the liquid seasoning according to the Invention has an effect of remarkably improving hypertension by being continuously ingested" is described in the paragraph [0063], and accordingly it can be said that it is described that the liquid seasoning is obtained which has the effect for remarkably improving the hypertension by being continuously ingested.

When these described matters are comprehensively considered, it can be said that "a method for producing a liquid seasoning" in the corrected invention 1 of the

case to the corrected invention 8 of the case is clearly and sufficiently described in the detailed description of the invention of the corrected specification of the case, to such an extent that a person skilled in the art can carry out.

(BB) The corrected invention 9 of the case is the invention of a product which is "the liquid seasoning", and the invention of the product needs to be clearly and sufficiently described in the detailed description of the invention in such an extent that a person skilled in the art can produce the product and the product can be used; and it is as described in the above description (AA) that the detailed description of the invention of the corrected specification of the case is described in such an extent that a person skilled in the art can produce the product.

It is clear from the technical common sense known before the priority date of the case that the "liquid seasoning" can be used in various dishes such as "boiled spinach seasoned with soy sauce" and "simmered splendid alfonsino in sweetened soy sauce", similarly to a general seasoning, as is described, for instance, in the paragraphs [0064] to [0078] in the corrected specification of the case. In addition, "The liquid seasoning according to the Invention has an effect of remarkably improving hypertension by being continuously ingested" is described in the paragraph [0063], and accordingly it can be grasped that the obtained liquid seasoning has the effect of significantly improving the hypertension by being continuously ingested.

Then, when these described matters are comprehensively considered, it can be said that "the liquid seasoning" of the corrected invention 9 of the case is clearly and sufficiently described in the detailed description of the invention of the corrected specification of the case, to such an extent that a person skilled in the art can carry out.

(4) Regarding upper limit value and lower limit value of γ-aminobutyric acid and the like

A Demandant's allegation

The demandant's allegation is as follows.

As for the content of the γ-aminobutyric acid which is added to the liquid seasoning, when the content exceeds the upper limit value, the flavor is impaired, and when the content is lower than the lower limit value, the pharmacological action such as a blood pressure-lowering effect cannot be exhibited; but in the example of the corrected specification of the case, the liquid seasoning is described which is produced by the addition of the coffee bean extract and the γ-aminobutyric acid, but the upper limit value and the lower limit value of the contents are not described.

Therefore, the detailed description of the invention of the corrected specification of the case is not described to such an extent that a person skilled in the art can carry out the corrected invention of the case.

B Judgment

As for the coffee bean extract, the amount of the polyphenols which are coffee bean extracts to be blended is described in the paragraph [0026] of the corrected specification of the case as follows. "The amount of the polyphenols to be blended with the liquid seasoning of the Invention is preferably 0.1 to 5 mass% (hereinafter simply 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. Here, the amount of the polyphenols to be blended is the amount of the polyphenols which have been added to the liquid seasoning. 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.". Furthermore, in the example, the flavor of the liquid seasoning 1 (paragraph [0064]) to which 1.2% of the "coffee bean extract" has been added is evaluated, and it is proved that the liquid seasoning having the improved flavor is obtained.

In addition, as for the ACE inhibitory peptide, preferable types of the ACE inhibitory peptide are described in the paragraph [0027] in the corrected specification of the case; a numerical value of a specific concentration of the intensity of the ACE inhibitory activity that is used in the corrected invention of the case is described, at which the blood pressure-lowering effect of the ACE inhibitory peptide can be expected, in the paragraph [0028]; commercialized products of the peptide which can be blended in the Invention are described in the paragraph [0029]; and a method and a kit for measuring the ACE inhibitory activity are described in the paragraph [0030]. Furthermore, in the paragraph [0030], the specific numerical value of the amount of the peptide to be blended is described to be "preferably 0.5 to 20%, further preferably 1 to 10%, and particularly preferably 2 to 5%, in the liquid seasoning, from the viewpoint of the blood pressure-lowering effect and the flavor.". This description of "from the viewpoint of the flavor" is recognized as the meaning of "from the viewpoint that the flavor is adequate", and accordingly it is recognized that as a result of having confirmed that the change of the flavor is improved in a case where the ACE inhibitory peptide has been blended, the preferable amount of the ACE inhibitory peptide to be blended is specified and is described.

Then, the detailed description of the invention of the corrected specification of the case is clearly and sufficiently described in such an extent that a person skilled in the art can carry out the corrected invention of the case.

(5) Regarding heating temperature

A Demandant's allegation

The demandant's allegation is as follows.

In the heating treatment in the example of the corrected specification of the case, the temperature in the center of the mixture of the raw soy sauce and the substance having the blood pressure-lowering effect is not measured, but the temperature which is set for a water bath is determined to be the heating temperature as-is. In addition, in the example, the sample is approximately 7 ml and is not a sample of a large-capacity tank which is carried out in an actual site where the soy sauce is produced, and accordingly it cannot be said that an appropriate example is described in which the temperature in the center of the mixture has been measured.

Therefore, because it is not described what type of the heating treatment may be carried out, in the detailed description of the invention of the corrected specification of the case, the detailed description of the invention is not described to such an extent that a person skilled in the art can carry out the patent invention.

B Judgment

In the paragraph [0039] of the corrected specification of the case, it is described that "in the Invention, (B) an apparatus which is used for the heating treatment may be any heating equipment as long as the heating equipment can easily provide a temperature of 60°C or higher, but a direct-heating type of iron pot, a steam or hot-water bath type of double can or wound coil, a multi-tube type of continuous heater (pipe heater) and a plate type heat exchanger (plate heater) are illustrated."; the heating method is described in the detailed description of the invention of the corrected specification of the case, in such an extent that a person skilled in the art can produce the liquid seasoning; and as for the temperature in the center of the mixture, it is clear that the temperature in the center of the mixture can be measured with the use of such means as to measure with a thermometer, which is publicly known before the priority date of the Patent.

Therefore, the detailed description of the invention of the corrected specification of the case is described in such an extent that a person skilled in the art can carry out the corrected invention 1 to the corrected invention 9.

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. 2006-87328) was applied on September 22, 2004 before the date (April 15, 2005) of Priority Claim 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 γ-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 γ-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 γ-aminobutyric acid to this KCl-containing low-salt soy sauce, and that when both of KCL and γ-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 γ-aminobutyric acid) that the rise of the blood pressure can be expected to be suppressed by the increase of a concentration of γ-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 γ-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 γ-aminobutyric acid to the KCl-containing low-salt soy sauce."

(1e) "[0015]

In addition, the γ-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 γ-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 γ-aminobutyric acid is added, as the distinctive bitter taste of KCl disappears, 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 γ-aminobutyric acid (containing approximately 6 wt% of γ-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 γ-aminobutyric acid (containing approximately 6 wt% of γ-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		γ-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 γ-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 "a method for producing a low-salt soy sauce, which includes: adding and dissolving potassium chloride and a powder containing γ-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 γ-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 γ-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) "

(The 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 γ-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 γ-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 γ-aminobutyric acid in the Invention A No. 1 A, when the description of Evidence A No. 1 is referred to, it is described that γ-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 γ-aminobutyric acid is to add γ-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, γ-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 γ-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 γ-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 8 of the case

Also as for the corrected invention 2 of the case to corrected invention 8 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 corrected invention 8 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 "a low-salt soy sauce produced by being subjected to the steps of: adding and dissolving potassium chloride and a powder containing γ-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)."

(The 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 γ-aminobutyric acid" in the 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 is 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 "2 Suitability of correction", it was decided that the correction in the written correction request dated June 21, 2012 was approved, and accordingly Reasons for invalidation 4 (violation of novelty) and Reasons for invalidation 5 (violation of inventive step) resulted in being withdrawn.

6 Conclusion

As described above, the reasons for invalidation arigated and means of proof submitted by the demandant, and the reasons for invalidation on the body cannot invalidate the Patent according to Claims 1 to 9 in the corrected patent of the case.

The costs in connection with the trial shall be borne by the demandant 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 13, 2012

Chief administrative judge: AKIZUKI, Mikiko
Administrative judge: SUGANO, Tomoko
Administrative judge: SAITO, Mayumi