Note: When any ambiguity of interpretation is found in this provisional translation, the Japanese text shall prevail.

2. Court precedents relating to Requirements for Description (Article 36 of the Patent Act)

Classification	Content	No.	Date of Decision (Case number)	Relevant Portion of Examination Guideline
21	Regarding the enablement requirement	1	Intellectual Property High Court Decision, December 8, 2010 (2010 (Gyo KE) No. 10125) Intellectual Property High Court Decision, February 12, 2013 (2012 (Gyo KE) No. 10071)	Part II, Chapter 1, Section 1
21-1	Regarding whether or not excessive experiment and/or trial and error are needed	2	Intellectual Property High Court Decision, June 30, 2005 (2005 (Gyo KE) No. 10280) Intellectual Property High Court Decision, April 14, 2011 (2010 (Gyo KE) No. 10247)	Part II, Chapter 1, Section 1, 2.(2)
21-2	Regarding the enablement requirement and the support	1 2 3	Intellectual Property High Court Decision, October 19, 2005 (2005 (Gyo KE) No. 10013) Intellectual Property High Court Decision, April 11, 2012 (2011 (Gyo KE) No. 10147) Intellectual Property High Court Decision, October 29, 2012 (2012 (Gyo KE) No. 10076) Intellectual Property High Court	Part II, Chapter 1, Section 1, 4.1.2
	requirement	4 5 6	Intellectual Property High Court Decision, April 11, 2013 (2012 (Gyo KE) No. 10299) Intellectual Property High Court Decision, April 28, 2015 (2013 (Gyo KE) No. 10250) Intellectual Property High Court Decision, March 31, 2016 (2015 (Gyo KE) No. 10052)	
22	Regarding the Ministerial Ordinance Requirement		-	Part II, Chapter 1, Section 2

			Intellectual Property High Court	
		1	Decision, November 11, 2005	
			(2005 (Gyo KE) No. 10042)	
		2	Intellectual Property High Court	
		2	Decision, October 11, 2007	
			(2006 (Gyo KE) No. 10509)	
		3	Intellectual Property High Court	
			Decision, March 31, 2009	
			(2008 (Gyo KE) No. 10065)	
		4	Intellectual Property High Court	
		4	Decision, September 29, 2009	
			(2008 (Gyo KE) No. 10484)	
		5	Intellectual Property High Court	
		5	Decision, July 28, 2010	
	Regarding the support requirement		(2009 (Gyo KE No. 10252)	
		6	Intellectual Property High Court	
		6	Decision, March 24, 2011	Part II, Chapter 2,
23			(2010 (Gyo KE No. 10214)	
		7	Intellectual Property High Court	Section 2
			Decision, September, 29, 2011	
			(2011 (Gyo KE) No. 10010)	
		8	Intellectual Property High Court	
			Decision, December 26, 2011	
			(2010 (Gyo KE) No. 10402)	
			Intellectual Property High Court	
			Decision, November 7, 2012	
			(2011 (Gyo KE) No. 10235)	
		10	Intellectual Property High Court	
			Decision, June 6, 2013	
			(2012 (Gyo KE) No. 10365)	
		11	Intellectual Property High Court	
		11	Decision, September 10, 2013	
			(2012 (Gyo KE) No. 10424)	
		12	Intellectual Property High Court	
			Decision, September 19, 2013	
			(2012 (Gyo KE No. 10387)	

			Intellectual Property High Court	
		13	Decision, April 13, 2018	
			(2018 (Gyo-Ke) Nos. 10182 and	
			10184)	
		1	Intellectual Property High Court	
		1	Decision, October 30, 2007	
			(2007 (Gyo KE) No. 10024)	
		2	Intellectual Property High Court	
		2	Decision, December 10, 2009	
			(2009 (Gyo KE) No. 10272)	
		2	Intellectual Property High Court	
		3	Decision, July 28, 2010	
			(2009 (Gyo KE) No. 10329)	
		4	Intellectual Property High Court	
		4	Decision, September 15, 2011	Part II, Chapter 2, Section 3
	Regarding the clarity requirement		(2010 (Gyo KE) No. 10265)	
		5	Intellectual Property High Court	
24			Decision, December 20, 2012	
24			(2012 (Gyo KE) No. 10117)	
		6	Intellectual Property High Court	
			Decision, November 28, 2013	
			(2013 (Gyo KE) No. 10121)	
		7	Appeal Decision dated March 2,	
			2016 (Fufuku No. 2014-17732)	
		8	Appeal Decision dated June 20,	
			2016 (Fufuku No. 2014-10863)	
		0	Intellectual Property High Court	
		9	Decision, September 20, 2016	
			(2015 (Gyo KE) No. 10242)	
		10	Intellectual Property High Court	
			Decision, December 21, 2017	
			(2017 (Gyo KE) No. 10083)	

Relevant portion	Part II, Chapter 1, Section 1
of Examination	
Guidelines	
Classification of	21: Regarding the enablement requirement
the Case	
Keyword	

## (21)-1

# 1. Bibliographic Items

Case	" Commodity display determination device" (Appeals against an Examiner's Decision)
	Intellectual Property High Court Decision, December 8, 2010 (2010 (Gyo KE) No. 10125)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2000-198633 (JP 2002-15231 A)
No.	
Classification	G06F 17/60
Conclusion	Dismissal
Related	(Former) Article 36(4)
Provision	
Judges	IP High Court Fourth Division, Presiding judge Takaomi TAKIZAWA, Judge Makiko
	TAKABE, Judge Yasuhito INOUE

#### 2. Overview of the Case

[FIG. 3]

#### (1) Summary of Claimed Invention

The claimed invention carries out predetermined matching arithmetic processing by collating store visitor data on an accessing store visitor and pieces of commodity attribute data in a commodity database to compute an appeal point, the appeal point being a figure of prediction that will be correlated with interest in each commodity that the store visitor has; selects several commodities having large appeal points as display target commodities from the commodity database; and allocates commodities having larger appeal points among the selected commodities to display positions of higher priority and thus determines the display layout of a virtual store so as to provide a commodity display control method in an electronic store server which displays and presents a group of commodities selected for each store visitor in an attractive layout by making the most of computer



information processing technology that only the electronic store has.

## (2) Disclosure of Detailed Explanation of the Invention (Findings in the Court Decision)

The following descriptions are provided: "As commodity data, "image data such as a design and a picture indicative of the appearance of commodity" is registered in the commodity database" (paragraph [0008]);

"a predetermined number of commodities are selected in order of magnitude of the appeal point as display target commodities, where it is not necessary to decide the number of the commodities to be selected in advance as a fixed value. The number of commodities may be finally increased or decreased in accordance with the display occupancy area of the selected commodities" (paragraph [0013]); and

"when the group of commodities to be displayed is decided, then necessary information is retrieved from the commodity database and a virtual store Web page is created in which these commodities are displayed ... further, each of the commodities is allocated to a dominant display position in the order of the magnitude of the appeal point and thus the layout is decided. Here, a scheme may be adopted according to which factors other than the appeal point may slightly change the display layout. For example, some display position candidates are decided on the basis of the appeal points and from among them the final position may be decided on the basis of the factors such as the size of the commodity data and colors" (paragraph [0014])"(extracts taken from the court decision with line breaks added as appropriate).

(3) Common General Knowledge, etc. Considered (description of Exhibit A15) (Findings of the Court Decision) "Exhibit A15 describes ... with regard to the digital content of a plurality of moving images, but <u>this is a document</u> <u>issued on April 25, 2007, and it does not immediately substantiate the common general knowledge at the time of</u> <u>filing of the patent application (June 30, 2000)" (extracts taken from the court decision).</u>

### (4) The Claims (Amended) (Only claim 1 is cited therefrom.) (The Invention as Amended)

[Claim 1] A commodity display determination device for determining display of commodities in an electronic store, in an electronic store server configured to exchange HTTP requests and responses with a user computer via the Internet, present and provide, to the user, an electronic store on a Web page, the electronic store being visualized by a browser of the user computer, and process a selling procedure of digital content via the electronic store, the device characterized by the fact that it comprises: a commodity database in which commodity attribute data is recorded, the commodity attribute data being information regarding digital content that is a sales target commodity, wherein pieces of information including the digital content as such and are classified and aggregated on a per commodity basis and recorded in the form of commodity data, the commodity attribute data being expressed in the form of data that organizes a piece of attribute information such as a category of a commodity and another piece of the attribute information regarding a consumer expected to have an interest in the commodity in such a manner that the attribute data is associated with each of the commodity data; a unit for acquisition of store visitor data including personal information of a store visitor who accesses the electronic store server by the user computer; a unit for calculating an appeal point, the unit being configured to collate the personal information included in the store visitor data with respect to the store visitor having made the access with each of the commodity attribute data in the commodity database, subject the personal data and the commodity attribute data to predetermined matching arithmetic processing, determine a level of agreement, similarity, or relevance between the personal information and the commodity attribute data, evaluate the level in the form of scores, and thereby calculate the appeal point which is a numeric value of prediction correlated with the magnitude of interest the store visitor will have with respect to each of the commodities; a unit for selecting a display target commodity in accordance with a predetermined rule or in a random manner from the group of commodities for which the appeal point equal to or higher than a predetermined value was calculated, the display target commodity being selected by a number that corresponds to the display occupancy area of the display target commodities; and a unit for determining the display positions of each of the commodities selected as the display target commodities on the basis of the appeal point of each commodity and the size or color of the image of the commodity data, and generating data of the Web page that presents an electronic store in which each of the commodities are allocated to the determined display positions.

#### (5) Procedural History

June 25, 2008	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2008-
		16145)
July 23, 2008	:	Amendment (See the above-described "The Claims.")
March 15, 2010	:	Dismissal of entry of the above amendment and the Appeal Decision dismissing the
		request for appeal

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

### Appeal Decision (cited from the Court Decision)

... The Description as amended does not describe that the multimedia information, which is registered in the commodity database and associated with the commodity ID, includes the size of the image of the commodity data. In addition, the sizes of the images of the commodity data are not necessarily the same one size for each of the commodities. On the basis of these findings, the appeal decision found that although it is necessary to perform allocation of the display positions of the images of the commodities to be selected with the size of the image of the commodity data so as to calculate the number of commodities to be selected with the size of the image of the commodity data and the display occupancy area taken into consideration and determine whether or not the calculated number of commodities is appropriate, the appeal decision further found that the concrete information processing for the above allocation is not described, and thus concluded that the description is not clear and sufficient as to enable any person skilled in the art to work ... the Invention as Amended.

### Decision

### Allegations by Plaintiff

... As a result of this amendment, the target commodities of the Invention as Amended are delimited to the digital content that is an intangible computer program; as a result, it is not possible to conceive a visible image data of the commodity. Specifically, in the Invention as Amended, it is impossible that the commodity becomes an object, and the image of the commodity is only displayed in the form substituted by an image such as an icon, and in this case, the sizes and shapes of the commodity images are stylized in accordance with the technique of Exhibit A15. Hence, the problems mentioned in the appeal decision do not occur in the display screen or selling screen.

Also, the Description as amended describes that the layouts and display positions of the commodity data are fixed. Moreover, it is stated therein that a slight change may be made to the extent that the stylized state of the image data is not lost (paragraph [0014]). Accordingly, it is clear that this statement describes the fact that the sizes of the images of the commodity data are stylized and suggested the possibility of change made thereto in practice.

### Allegations by Defendant

(1) The Description as amended only describes that the digital content that is the sales target commodity is associated with the commodity ID and registered in the commodity database (paragraph [0008]). Moreover, if the sizes of the commodity images are stylized, then the sizes of the images of the commodity data cannot serve as the factor for determination of the display positions. Meanwhile, it is described that the sizes of the images of the commodity data may serve as a factor for determination of the display positions of the commodities (paragraph [0014]). In view of the foregoing, when the digital content is used as the commodities in the Invention as Amended, it cannot be said that the sizes and shapes of the images of the commodity data are obviously stylized, and it is natural to interpret that the sizes and shapes do not necessarily the same for each of the commodities.

... according to the Description as amended, the number of the display target commodities are determined in accordance with the display occupancy area of the commodity (paragraph [0013]). In the meantime, the decision of the display position of the display target commodity is determined on the basis of (3) Therefore, the Description as amended is clear and the sizes of the images of the commodity data, etc. sufficient as to enable any person skilled in the art ... (paragraph [0014]). As a result, it is necessary to to work the Invention as Amended ... The compare the display occupancy areas with the sum of determination of the appeal decision, which assumes the sizes of the images of the display target the presence of an image of the commodity data, is commodities in order to make decision of the final constructed on an erroneous assumption that the sizes display positions. However, it is necessary to perform of the images of the commodity data are not optimization processing using information such as the necessarily the same one size for each of the size of the commodity image and shape of the commodities, and the decision erred in the commodity in order to determine the display target commodities. The Description as amended includes no determination regarding the requirement as provided for in Article 36(4) of the Patent Act. description or suggestion of the management of these sizes and shapes, which is not obvious to any person

### Judgment by the Court

(1) The Invention as Amended, is a commodity display determination device characterized by the fact that it includes: a unit for acquiring the commodity database in which the commodity data and the commodity attribute data are recorded and the store visitor data including personal information of the store visitor; the unit for calculating the appeal point by processing the relevance between the personal information and the commodity attribute data into the form of the scores, in which the appeal point is a numeric value of prediction correlated with the magnitude of interest the store visitor will have with respect to each of the commodities, and for selecting a commodity to be displayed on the Web page (the display target commodity) by a number that corresponds to the display occupancy area of the display target commodities;" and a unit for "determining the display positions of each of the commodities on the basis of the appeal point of each commodity and the size or color of the image of the commodity data, and generating an electronic store in which each of the commodities are allocated to the determined display positions."

skilled in the art.

... With regard to the digital content which is treated by the Invention as Amended as the sales target commodity, it is recognized that any one of the digital content assumes the presence of an image of the commodity data having a predetermined size, and the size of the image serves as the condition for determination of the display position, thereby it is made possible to allocate the display positions for each of the sales target commodities .

Accordingly, <u>in the context of working of the Invention as Amended</u>, it has to be elucidated in what form the commodity display determination device stores and manages the information regarding <u>these sizes of the images of the commodity data</u>, and, how the commodities to be displayed on the Web page are selected as well as how the display positions are determined.

However, from the description of the claims of the Invention as Amended, it cannot be said that these aspects are unambiguously clear including what is meant by the image of the commodity data.

(3) ... The Invention as Amended delimits the sales target commodity to the digital content. In the first place,

however, with regard to intangible digital content of this sort, it is very difficult to conceive image data regarding "appearance of commodity, etc." (paragraph [0008]) that may be displayed on the Web page and made viewable. Moreover, the Description as amended in no way describes the relationship between the "appearance of commodity, etc." in this context and the digital content that is the sales target commodity. As such, even when reference is made to the description of the detailed description of the invention as amended, the technical significance of the "image of data" regarding the digital content that is the "commodity" as recited in the claims of the Invention as Amended is indefinite. For this reason, it cannot be said that the Description as amended elucidates, when the digital content that is stored and managed in what kind of form; how the number of commodities to be displayed is determined in accordance with the occupancy area (paragraph [0013]) of the (image data) of the commodity selected as the display target commodity; and, in determining the final display position of the commodity (paragraph [0014]), how the sizes of the images of the commodity data are taken into consideration as a factor. Any one of these aspects is not clearly stated therein.

(21)-2

) _	
Relevant portion	Part II, Chapter 1, Section 1
of Examination	
Guidelines	
Classification of	21: Regarding the enablement requirement
the Case	
Keyword	Use

## 1. Bibliographic Items

Case	"Method of use of uridine for preparing medicine for increasing brain cytidine levels in a human		
	to be treated" (Appeals against an Examiner's Decision)		
	Intellectual Property High Court Decision, February 12, 2013 (2012 (Gyo KE) No. 10071)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. 2000-562028 (JP 2003-517437 A)		
No.			
Classification	A61K 31/7072		
Conclusion	Dismissal		
Related	(Former) Article 36(4)		
Provision			
Judges	IP High Court Second Division, Presiding judge: Shuhei SHIOTSUKI, Judge: Akira		
	IKESHITA, Judge: Kenjiro FURUYA		

## 2. Overview of the Case

#### (1) Summary of Claimed Invention

The claimed invention relates to methods of increasing cytidine levels by administering an exogenous uridine source and in particular to the pharmacological use of said uridine or uridine source alone or in combination with other pharmaceutical substances in treating certain neurological disorders.

(2) Disclosure of Detailed Explanation of the Invention

#### [0034]

### EXAMPLE 2

Gerbils rather than rats or other rodents are selected for this example, as the pyrimidine metabolism of gerbils is closer to humans. For practical and ethical reasons humans cannot always be used for certain experimental studies and those skilled in the art generally recognize that the gerbil model is equivalent to a human model. Indeed, gerbils are the choice model for certain human diseases and brain disorders such as cerebral ischemia (Ginsburg et al., Rodent models of cerebral ischemia. Stroke 20: 1627-1642, 1989). Gerbils



are given orally uridine and 60 minutes later plasma and brain levels of cytidine and uridine are measured by modified HPLC method described in Example 1. Fig. 3 shows the relative ratio between uridine and cytidine levels in plasma after oral administration of 250 mg/kg body weight of uridine. Fig. 4 shows the relative ratio between uridine and cytidine levels in the brain after oral administration of 250 mg/kg of uridine. These results indicate that the metabolic processing of uridine in the brain is different than systemic processing of uridine in plasma. The results also indicate that uridine, when transported into the brain, is immediately converted to cytidine and this conversion is more efficient in the brain than in plasma. Similar experiments are also carried out in humans wherein instead of measuring brain levels of nucleosides the CSF levels are measured. The finding that uridine is immediately converted to cytidine especially in the brain is totally unexpected and constitutes the basis for the present invention.

#### (3) The Claims (Amended) (claimed invention)

[Claim 7] A composition, comprising (a) uridine, uridine salts, uridine phosphates or an acylated uridine compound, and (b) a compound selected from choline and choline salts, for use as oral administration medicine for increasing brain cytidine levels in a human to be treated.

#### (4) Procedural History

May 21, 2007	:	Amendment (See the aforementioned "The claims")
June 10, 2008	:	Decision of refusal
September 16, 2008	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2008-
		23607)
October 16, 2008	:	Amendment (Regarding supplement of reason for appeal)

October 11, 2011 : Appeal Decision that "the request for the appeal is to be dismissed"

### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)

The claimed invention relates to "A composition, comprising (a) uridine ..., and (b) a compound selected from ..., for use as oral administration medicine for increasing brain cytidine levels in a human to be treated." However, in the detailed explanation of the invention, there is no statement on any test results to confirm that brain cytidine levels increase when a composition comprising both ingredients (a) and (b) is orally administered.

...Since no pharmacological test results are stated, it is considered that no guidance is provided on what kind of diseases medicine of the claimed invention is used for, ...how much each dose should be. ...Therefore, it is not considered that the statement is clear and sufficient as to enable a person skilled in the art to work the invention.

### Decision

Allegations by Plaintiff

(3) As a working example to support medicinal use, the paragraph [0034] states ...that the observation that uridine is immediately converted into cytidine particularly in the brain was unexpected and constitutes the basics of the claimed invention. It is proved experimentally that uridine is converted into cytidine in the brain.

No experimental result of combined use of choline and uridine is stated in the Description. However, it is known as of filing of the Application that cytidine is a rate-limiting precursor, as cytidine triphosphate (CTP), for the synthesis of membrane phosphatides including phosphatidylcholine (PC), a phosphatide constituting the cell membrane, and of others. It was known as of filing of the Application that choline is an important precursor for the synthesis of membrane phosphatides, such as PC. Combining this with the discovery that uridine is converted into cytidine in the brain, a person skilled in the art could understand, that combination of uridine and choline should be effective for the synthesis of membrane phosphatides.

...The compounds are known, methods of producing respective compounds are also known, methods of administering respective compounds are also known, even use as a compound for treatment of predetermined indications is known. Therefore, the technical field has been adequately developed, and the state of the art and the common general knowledge of those skilled in the art are at high levels. This fact has been ignored unfairly by the examination and the proceeding that misunderstood and underestimated the state of the art and the common general knowledge of those skilled in the art.

The Application includes sufficient information

Allegations by Defendant

(2) Plaintiff alleges that "it is not necessary to state experimental results showing that the combination of uridine and choline act synergistically for the synthesis of phosphatides."

The aforementioned allegation by Plaintiff is based on the following statement in Exhibit A17 about the synergy of cytidine and choline: "The total PtdCho concentration was slightly but significantly increased in cultured cells supplemented with both choline and cytidine, compared with the concentration in the control cells or cells supplemented with choline only."

However, there is no statement, ...in the evidence ..., about the relation between increase in the PC concentration, that is, the concentration of phosphatidylcholine and the therapeutic effect for "certain neurological disorders."

In the Description, as Example 2, the relative ratios of uridine and cytidine in plasma and in the brain after administration of uridine alone to gerbils are shown (paragraph [0034]). Even in the assumption that it is demonstrated that uridine is converted into cytidine in the brain, concrete numerical values are not stated about the correlation between the dose of uridine and the cytidine level (concentration).

Accordingly, in combination use of choline and uridine, it is not clear how much respective doses are necessary to increase cytidine levels in the brain to get synergy between them or to increase the concentration of phosphatidylcholine sufficient for therapy. Therefore, it is not considered that the statement of the detailed explanation of the invention is clear and sufficient to the extent that the claimed invention which is a medicinal invention can be carried out.

Plaintiff alleges that respective active ingredients of the claimed invention are known, methods of

as to enable a person skilled in the art to work the invention and the experiments stated in the Application as of the filing. A person skilled in the art who reads and understands the Application in relation with the common general knowledge and general pharmacologic principles ...can easily work the teaching of the Application. In light of the state of the art and the common general knowledge of those skilled in the art, experimental evidence of combination of uridine and choline or a choline salt is not necessary.

The articles of 2003 and 2005 (Exhibit A19 to Exhibit A21) were published after the filing of the Application. However, the Application provided sufficient information and guidance to those skilled in the art to obtain the results stated in these articles.

...Both of the articles ...carry out the statement of the Application. Both articles, when contemplated in combination, reveal that uridine and choline increase cytidine levels in humans. In both articles, the information of the Application is used in combination with the common general knowledge of those skilled in the art. This means that the Application provided technical information that uridine and choline increase cytidine in the brain in human subjects as to enable a person skilled in the art to work the information. producing the respective ingredients are known, and methods of administering the respective ingredients for treatment of diseases are known, and therefore, the technical field has been adequately developed, and the state of the art and the common general knowledge of those skilled in the art are high, and thus experimental evidence of combination use of uridine and choline or a choline salt is not necessary.

However, the state of the art and the common general knowledge of those skilled in the art, which Plaintiff regard as high levels, cannot rationally explain that a composition comprising uridine and choline or a choline salt increases cytidine levels in the brain in humans. ...

...Exhibit A19 to Exhibit A21 exhibited by Plaintiff are academic articles published after the filing of the Application. Their contents cited by Plaintiff cannot be regarded as the common general knowledge and the state of the art prior to the priority date of the Application. Therefore, Plaintiff's allegation is not based on the common general knowledge and the state of the art as of the priority date of the Application.

Judgment by the Court

(1) Claim 7 ...is an invention of medicine for oral administration in which a composition combining the two ingredients (a) uridine ...and (b) choline ...exhibits a pharmacologic action to increase brain cytidine levels in humans.

Accordingly, in order to consider that the statement of the Descripiton is clear and sufficient as to enable a person skilled in the art to carry out the claimed invention, it is necessary to demonstrate or rationally explain with results of pharmacological tests that the active ingredient has its attribute.

In the description, it is stated, as Example 2, that cytidine levels in the brain increased after oral administration of said (a) ingredient of uridine alone to gerbils. However, the result of the experiment that increment of cytidine levels in the brain after combination use of the (a) ingredient and the (b) ingredient is not

exhibited. The experimental result showing that cytidine levels in the brain increased after administration of the ingredient (b) alone is not exhibited. Moreover, in the Description, there is no statement from which one can infer that there was, prior to the priority date of the claimed invention, the common general knowledge that cytidine levels in the brain increase after administration of the (b) ingredient alone or in combination with the ingredient (a).

Accordingly, <u>the attribute that the combination of the two ingredients (a) and (b)</u>, the active ingredients of the claimed invention, increases brain cytidine levels is not stated in the description. Therefore, it is not considered that the statement of the description is clear and sufficient to the extent that the claimed invention can be carried out.

Plaintiff alleges that respective active ingredients of the claimed invention are known, methods of producing the respective ingredients are known, and methods of administering the respective ingredients for treatment of diseases are known, ...and the state of the art and the common general knowledge of those skilled in the art are high, and thus the experimental evidence of combination use of uridines and choline or a choline salt is not necessary.

However, the state of the art and the common general knowledge of those skilled in the art, which Plaintiff regards as high levels, <u>cannot rationally explain</u> that a composition comprising uridines and choline or a choline salt increases cytidine levels in the brain in humans. Therefore, the Plaintiff's allegation is unfounded.

Plaintiff also alleges that since there is statements in Exhibit A19 to Exhibit A21 that the prescribed effect can be obtained in vivo by administering uridine and choline, ...and a person skilled in the art can easily carry out the claimed invention according to the teaching of the description of the Application ...the experimental evidence is not necessary.

However, Exhibit A19 to Exhibit A21 exhibited by Plaintiff are academic articles published after the filing of the Application. Their contents cited by Plaintiff cannot be regarded as the common general knowledge and the state of the art prior to the priority date of the Application. ...

### (21-1)-1

Relevant portion	Part II, Chapter 1, Section 1, 2 (2)
of Examination	
Guidelines	
Classification of	21-1: Regarding whether or not excessive experiment and/or trial and error are needed
the Case	
Keyword	

## 1. Bibliographic Items

Case	"Ultrafine nickel powder for laminated ceramic capacitor" (Opposition to the Grant of a Patent)
	Intellectual Property High Court Decision, June 30, 2005 (2005 (Gyo KE) No. 10280)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. H7-50905 (JP H8-246001 A)
No.	
Classification	B22F 1/00
Conclusion	Dismissal
Related	(Former) Article 36(4), Article 113(4)
Provision	
Judges	IP High Court Fourth Division, Presiding judge: Tomokatsu TSUKAHARA, Judge: Masato
	TANAKA, Judge: Tatsubumi SATO

### 2. Overview of the Case

### (1) Summary of Claimed Invention

The claimed invention aims to provide nickel powder as a low-resistance electrode material which is hardly cracked or released in the process for producing a ceramic capacitor. The nickel powder has an average grain diameter of 0.1 to 1.0  $\mu$ m; a tap density satisfying the condition represented by a certain expression; the geometrical standard deviation of the particle size distribution being 2.0 or less; and an average crystallite diameter being 0.2 or more times of the average grain diameter.



#### (2) Disclosure of Detailed Explanation of the Invention

"The nickel purity is preferably 99.5% by weight or more. With a nickel purity of less than 99.5% by weight, delamination and cracking are liable to occur during firing, and moreover the quality as electrode reduces (resistivity

increases). Methods of producing nickel powder having such properties include vapor phase hydrogen reduction of nickel chloride. In conventional wet processes, production temperatures of nickel powder is low (<100°C), whereas in the vapor phase hydrogen reduction of nickel chloride, production temperatures are high (around 1,000°C). Therefore, the crystals grow up to large sizes (not fine clusters of primary particles) and excessive sintering during firing is less probable. Moreover, the vapor phase hydrogen reduction has advantages that grain shapes become more spherical and a purity of more than 99.5% is more obtainable. Methods suitable to efficiently produce nickel powder having the aforementioned properties are methods using a reactor and causing chemical reaction between nickel chloride vapor and hydrogen. Specifically, nickel chloride vapor concentration (partial pressure) is controlled to 0.05 to 0.3 and nickel chloride vapor and hydrogen is chemically reacted at temperatures of 1,004°C (1277K) to 1,453°Cs (1726K)." (cited from the Court Decision)

(3) The Claims (Amended) (only claim 1 is shown) (the Invention 1)

[Claim 1] Ultrafine nickel powder for a laminated ceramic capacitor, wherein the nickel superfine powder has an average grain diameter of 0.1 to 1.0  $\mu$ m; <u>a tap density satisfying the condition represented by expression (2)</u>; the geometrical standard deviation of the particle size distribution being 2.0 or less; and an average crystallite diameter being 0.2 or more times of the average grain diameter.

<u>tap density  $\geq$  -2.5 × (average grain diameter)<sup>2</sup> + 7.0 × (average grain diameter) + 0.8</u> ... Expression (2)

(4) Procedural History

April 23, 2001	:	Amendment (See the aforementioned "The Claims")and submission of written
		opinion
June 8, 2001	:	Registration of establishment of the patent right
November 12, 2001	:	Opposition to grant of patent (Igi No. 2001-73067)
February 19, 2003	:	Decision to "revoke the patent"

In the amendment on April 23, 2001, "tap density  $\geq -2.5 \times (average grain diameter)^2 + 7.0 \times (average grain diameter) + 0.6 ... Expression (1)" was limited to Expression (2) stated in "the claims" above; requirements that "the geometrical standard deviation of the particle size distribution being 2.0 or less; and an average crystallite diameter being 0.2 or more times of the average grain diameter" are added; and Working Example 7 and Working Example 8, in which tap densities "satisfy Expression (1), but not Expression (2)", in the description as of the filing were changed to Comparative Example 1 and Comparative Example 2.$ 

## 3. Portions of Opposition/Trial Decisions relevant to the Holding

Opposition Decision (cited from the Court Decision)

... In the detailed explanation of the invention in the Description, there are statements that "nickel chloride vapor concentration (partial pressure) is controlled to 0.05 to 0.3 and nickel chloride vapor and hydrogen is chemically reacted at temperatures of 1,004°C (1277K) to 1,453°C (1726K)," and that in this chemical reaction, "10 liters/m of argon gas" and "hydrogen 7 supplied downward from the central nozzle 6 of the reaction portion 5 at the rate of 5 liters/m" are used. However, there is no statement about the ranges of nickel chloride vapor

concentrations and reaction temperatures and the ranges of flow rates of argon gas and hydrogen required to obtain ultrafine nickel powder having "a tap density satisfying the condition expressed by Expression (2); the geometrical standard deviation of the particle size distribution being 2.0 or less; and an average crystallite diameter being 0.2 or more times of the average grain diameter." Accordingly, when a person skilled in the art tries to produce the ultrafine nickel powder according to the statement of the aforementioned detailed explanation of the invention, much trial and error must be done unduly without knowing whether it can be produced. Therefore, it is not considered that a person skilled in the art can easily produce ultrafine nickel powder having "a tap density satisfying the condition expressed by Expression (2); the geometrical standard deviation of the particle size distribution being 2.0 or less; and an average crystallite diameter being 0.2 or more times of the average grain diameter." Such a statement of the detailed explanation of the invention cannot to be regarded as a statement that is "sufficient as to enable a person ordinarily skilled in the art to which the invention pertains to work the invention easily." ...

### Decision

### Allegations by Plaintiff

... The Invention is not an invention of a novel product, but it provides indicators to select nickel fines having use of high utility. With such indicators provided, a person skilled in the art can determine suitable production conditions by changing detailed technical conditions for specific production apparatus within the process for manufacturing stated in the Description within the usual trial and error and comparing the properties of the resultant powder with the indicators.

... The difference between Expression (1) and Expression (2) corresponds to the difference of ultrafine nickel powder of the Invention whether laminated ceramic capacitors produced thereof have cracking and/or delamination at an incidence of 10% or less or 5% or less, as stated in the description as of the filing. In production of such powders, such a remarkable process for manufacturing that can produce them distinguishably, if exist, should be granted a patent as an invention of a process for manufacturing. For the Invention that is an invention of indexes for use or evaluation of ultrafine nickel powder, it is an error to demand the statement

### Allegations by Defendant

... Working Examples 1 to 5 and Comparative Examples 1 and 2 are the same in that the production conditions of vapor phase hydrogen reduction of nickel chloride are set within the ranges concretely disclosed in the paragraph [0013] in the Description. Referring to their results in comparison, the nickel powders according to Working Examples 1 to 5 satisfy all the properties stated in Claim 1, while the nickel powder according to Comparative Example 1 does not satisfy the properties of tap density and particle size distribution and the nickel powder according to Comparative Example 2 does not satisfy the properties of tap density and average crystallite diameter/average grain diameter.

... <u>To produce ultrafine nickel powder satisfying</u> all the properties of claim 1, the production conditions <u>stated in the Description are not sufficient</u>. Since such an ultrafine nickel powder cannot be produced by a person skilled in the art based on the statement of the <u>Description and the common general knowledge</u>, the Description has a deficiency in the description as judged in the Opposition Decision.

... The ultrafine nickel powder according to the

of a process for manufacturing to distinguish them.	Invention cannot be easily produced within trial and
	error of a person skilled in the art as Plaintiffs allege.
	From the statement of the Description, it is not clear
	what kind of conditions enable the production.

Judgment by the Court

In the case of "an invention of product", "work" here means, for example, to produce and to use the product. Therefore, without doubt, the statement must be sufficient as to enable a person skilled in the art to produce the product. To that end, <u>unless a person skilled in the art as of the filing of the patent application can produce the</u> <u>product based on the statement of the description and the entire drawings and the common general knowledge,</u> <u>it should be construed that a concrete process for manufacturing must be stated</u>.

... In the Description, as a concrete process to produce nickel powder according to the Invention, there are the statements of the manufacturing process in which the vapor phase hydrogen reduction of nickel chloride is adopted, nickel chloride vapor concentration (partial pressure) is controlled from 0.05 to 0.3, and nickel chloride vapor and hydrogen is chemically reacted at the temperature in the range from 1,004°C (1277K) to 1,453°C (1726K). ... The tap density of the nickel powders in Working Examples 1 to 5 satisfy Expression (2) (tap density  $\geq$  -2.5 × (average grain diameter)<sup>2</sup> + 7.0 × (average grain diameter) + 0.8), but the tap density of the nickel powders in Comparative Examples 1 and 2 do not satisfy Expression (2),whereas they satisfy Expression (1) (tap density  $\geq$  -2.5 × (average grain diameter)<sup>2</sup> + 7.0 × (average grain diameter) + 0.6). This indicates that producing nickel powder according to the aforementioned process for manufacturing stated in the Description may result in failing in producing nickel powder satisfying the properties according to Claim 1.

... As described above, since the nickel powder produced according to the process for manufacturing stated in the detailed description of the invention in the Description satisfies Expression (1), but not always satisfy Expression (2), the process for manufacturing stated in the detailed description of the invention in the Description is not considered to be stated to the extent that a person skilled in the art can easily work the Invention.

... Regarding what kind of conditions should be set other than the production conditions stated in the Description for a person skilled in the art to produce ultrafine nickel powder that satisfies the properties according to the Claim 1, there is no implication in the Description and the drawings. ... It is not clear even in light of exhibited evidence what kind of conditions except the nickel chloride vapor concentration and the reaction temperature have an effect on the average grain diameter or the tap density. Nor there is precise evidence showing that there was a common general knowledge on such a condition setting as of the filing of the Application. Therefore, it is apparent that in order to work the Invention, a person skilled in the art are required many trials and errors unduly, that is, through setting and changing various conditions other than the nickel chloride vapor concentration and the reaction temperatures stated in the Description. ... It is not considered that a person skilled in the art can easily work ... the invention based on the statement of the detailed description of the invention.

## (21-1)-2

Relevant portion	Part II, Chapter 1, Section 1, 2 (2)
of Examination	
Guidelines	
Classification of	21-1: Regarding whether or not excessive experiment and/or trial and error are needed
the Case	
Keyword	

## 1. Bibliographic Items

Case	"Carbon film for field emission devices" (Appeals against an Examiner's Decision)
	Intellectual Property High Court Decision, April 14, 2011 (2010 (Gyo KE) No. 10247)
Source	Website of Intellectual Property High Court, HANREI JIHO No. 2130, page 109, HANREI
	TIMES No. 1401, page 296
Application	Japanese Patent Application No. 2000-510154 (JP 2001-516127 A)
No.	
Classification	C01B 31/02
Conclusion	Acceptance
Related	(Former) Article 36(4)
Provision	
Judges	IP High Court Fourth Division, Presiding judge Takaomi TAKIZAWA, Judge Makiko TAKABE,
	Judge Yasuhito INOUE

## 2. Overview of the Case

(1) Summary of Claimed Invention

The claimed invention is a field emission device comprising a layer of carbon film on a substrate. The carbon film has a UV Raman band in the range from 1578 cm<sup>-1</sup> to 1620 cm<sup>-1</sup>, and the UV Raman band has a full width at half maximum ("FWHM") from 25 cm<sup>-1</sup> to 165 cm<sup>-1</sup>.

## (2) Disclosure of Detailed Explanation of the Invention

"...the Description of this patent application states as follows with regard to the manufacturing process of the claimed invention (paragraph [0010]):

- (A) The carbon layer may be deposited using a hot filament assisted chemical vapor deposition ("CVD") process.
- (B) The substrate is placed on a holder in a CVD reactor.
- (C) A hydrogen gas is flowed into the reactor for approximately less than 10 minutes.

(D) Then a hydrogen and methane mixture with the methane percentage less than 50% is flowed into the reactor for less than one hour.

(E) Another hydrogen and methane mixture with the methane percentage lower than in the above step is flowed into

the reactor for less than two hours.

(F) Then, a hydrogen flow for less than 15 minutes is performed within the CVD reactor.

Also, the Description of this patent application states as follows with regard to the manufacturing conditions in the above manufacturing process (paragraphs [0011] and [0012]).

- (G) A small amount of oxygen, nitrogen, or boron dopant can also be included in the above gas flow.
- (H) The filament temperature is set in the range from 1600 degrees centigrade (°C) to 2400°C.
- (I) The substrate temperature is between 600°C and 1000°C.
- (J) Deposition pressure is between 5 to 300 torr."(extracts taken from the court decision)"

(3) The Claims (Amended) (Only claim 1 is cited therefrom.)(the Claimed Invention 1)

[Claim 1] A field emission device comprising a layer of carbon film on a substrate, the carbon film emitting electrons in response to an electric field, the carbon film having a UV Raman band in the range from 1578 cm<sup>-1</sup> to 1620 cm<sup>-1</sup>, and the UV Raman band having a full width at half maximum ("FWHM") from 25 cm<sup>-1</sup> to 165 cm<sup>-1</sup>.

## (4) Procedural History

July 26, 2006	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2006-
		16055)
July 6, 2009	:	Submission of an amendment (See the above-described "The Claims.") and a written
		opinion
March 23, 2010	:	Appeal Decision dismissing the appeal

### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)

... the description of the Detailed Explanation of the Invention of the Description of this patent application is not clear and sufficient as to enable any person skilled in the art to work the inventions according to the claimed invention 1 to 3 and the claimed invention 6 to 8, and fails to meet the so-called enablement requirement as provided for in Article 36(4) of the Patent Act (hereinafter referred to as the "Act") prior to revision by Act No. 24 of 2002, and the claimed invention is not patentable.

... The appeal decision found that "the other parameters that may affect the formation of carbon film (for example, the size of the reactor and the volume of methane flow, etc.) are not identified at all" ...

Decision	
Allegations by Plaintiff	Allegations by Defendant
(1) With regard to the manufacturing method of the	(1) With regard to the manufacturing method of the
carbon film for field emission devices according to the	carbon film for field emission devices according to the
claimed invention	claimed invention
A The Detailed Explanation of the Invention of the	(A) With regard to the manufacturing method of
Description of this patent application describes that	"the carbon film for field emission devices" according

the following gases flow into the CVD reactor in the sequence set forth:

(C) a hydrogen gas for less than 10 minutes;

(D) a hydrogen and methane mixture for less than one hour;

(E) another hydrogen and methane mixture for less than two hours; and

(F) a hydrogen for less than 15 minutes.

Accordingly, an embodiment representative of a typical manufacturing method of the claimed invention has to include all of the manufacturing stages of (C) to (F). Hence, the appeal decision is completely improper in that it discriminated the essential matters from the optional matters among the matters described therein as the typical embodiment by Plaintiff and that it relied upon this discrimination as the basis for the determination of the enablement requirement.

B The appeal decision found that "... the other parameters that may affect the formation of the carbon film (for example, the size of the reactor and the volume of methane flow, etc.) are not identified at all," but <u>it would be too much of a burden for an applicant</u> to enumerate all possible parameters.

Such unduly strict standard regarding the enablement requirement undermines the very purpose of protection of inventions and should not be adopted. to the claimed invention, it is grasped according to the Detailed Explanation of the Invention of the Description of this patent application (paragraphs [0010] to [0012]) that the manufacturing method of the carbon film for field emission devices according to the claimed invention includes, as Plaintiff alleges, the manufacturing stages of (C) to (F). The respective flowing times of the above stages are only defined by their upper limit and lack the recitation of lower limits, and accordingly these flowing times include flowing times of zero minute. Zero minute of flowing time means that a corresponding flowing stage does not exist.

The manufacturing stages (C), (E) and (F) are all optional manufacturing stages that can be omitted, and the finding of the appeal decision is in no way erroneous.

The explanation of the appeal decision, i.e., "nothing is identified regarding the parameters that may affect the formation of the carbon film," is intended to point out that the description of the manufacturing method of the carbon film according to the claimed invention is limited to the portions of description of the Detailed Explanation of the Invention of the Description of this patent application (paragraphs [0010] to [0012]), and, in contrast to the Plaintiff's allegation, the explanation in question in no way demands that all possible parameters that are necessary for the claimed manufacturing method be enumerated.

Judgment by the Court

... Out of the manufacturing stages, , it is not appropriate to interpret that, the above ... stages of (C), (E), and (F) can be omitted since only the upper limit of the time is mentioned therefor, and only the other remaining stages of (A), (B) and (D) are essential manufacturing stages ;;. Also, ... according to the description of the Description of this patent application (paragraphs [0010] to [0012]) and the above description of the Written Opinion (Exhibit A5), etc., it is stated that microcrystal diamond can be formed by making the speed of the hydrogen flow very small, and it can be said that the fact is suggested that the microcrystal diamond can be

formed under conditions that do not increase the size of the crystal by ensuring that the gas concentration is kept low within the ranges set forth in paragraphs [0010] to [0012] in the Description of this patent application.

... <u>It is not necessary that the claimed invention can be manufactured in all of the full ranges of the multiple</u> <u>conditions</u> described in the Description of this patent application, it will be sufficient to specify the specific manufacturing conditions from the ranges described in paragraphs [0010] to [0012] on the basis of the adjustment of the conditions that should be carried out by any person skilled in the art by taking the technical field and the problem into consideration.

... Under ordinary circumstances, it is not necessary that the working examples be provided for the entire applicable condition ranges in the invention of product. It is interpreted that the level or standard required for comprehensiveness of the working examples in the case of an invention of product is different from that of a case where the ranges of manufacturing conditions are set forth in the Claims in the case of an invention of process for producing a product and the effects of the invention of process is claimed as manufacturing methods of known substances.

In view of the foregoing, the ranges of conditions of paragraphs [0010] to [0012] of the Description of this patent application should be understood as enumeration of the ranges of parameters within which the manufacturing is possible, and a person skilled in the art should decide the specific manufacturing conditions with the common general knowledge taken into account.

## (21-2)-1

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2
of Examination	
Guidelines	
Classification of	21-2: Regarding the relationship between the enablement requirement and the support
the Case	requirement
Keyword	Regarding the relationship between the enablement requirement and the support
	requirement

## 1. Bibliographic Items

Case	"Modulator of body weight" (Appeals against an Examiner's Decision)	
	Intellectual Property High Court Decision, October 19, 2005 (2005 (Gyo KE) No. 10013)	
Source	Website of Intellectual Property High Court	
Application	Japanese Patent Application No. H10-4989 (JP H10-262688 A)	
No.		
Classification	B21B 17/14	
Conclusion	Dismissal	
Related	Article 36(6)(i)	
Provision		
Judges	IP High Court First Division, Presiding Judge: Katsumi SHINOHARA, Judge: Kaoru	
	AOYAGI, Judge: Mitsuru SHISHIDO	

### 2. Overview of the Case

(1) Summary of Claimed Invention

The claimed invention relates to the control of body weight of mammals (including animals and humans), and more particularly to detectably labeled nucleic acid molecules hybridizable to a DNA molecule used to obtain the expression of obese (OB) polypeptide having the biological activity of modulating body weight of mammals.

## (2) Disclosure of Detailed Explanation of the Invention (found in the Court Decision)

"The detailed explanation of the invention in the Description states, "a sequence of the nucleic acid molecule corresponds to a nucleotide sequence of the same number of nucleotides in the nucleotide sequences of ...SEQ ID NO:1 ...SEQ ID NO:3 ...SEQ ID NO:22 ...or a sequence complementary thereto.' (paragraph [0106]). According to the description of base sequence of the OB Gene set forth in SEQ ID NO: 1, 3, 22, or 24 and the gist of the whole argument, 'detectably labeled nucleic acid molecules of at least 15 nucleotides" according to the claimed invention are randomly selected from a gene sequence set forth in SEQ ID NO: 1, 3, 22, or 24 having a length of 2739 bp, 700 bp, 414 bp, or 801 bp, respectively. It is considered that the lengths of the nucleic acid molecules range from 15 nucleotides in length, at least, to about the same length as the aforementioned gene sequence, at most. Among

them, nucleic acids 'hybridizable under highly stringent conditions' to the OB Gene are nucleic acid molecules which can be a subject of the claimed invention. It is inferred that such nucleic acids are numerous." (cited from the Court Decision)

"...As to the rest of nucleic acid molecules imagined to be numerous except about 50 working examples, ... only a general statement, 'The present invention provides such nucleic acid probes, which can be readily prepared from the specific sequences disclosed herein, e.g., a hybridizable probe having a nucleotide sequence corresponding to a nucleotide fragment of at least 10, and preferably 15, nucleotide fragment of the sequences depicted in ...SEQ ID NO:1 ...SEQ ID NO:3 .... Preferably, a fragment is selected that is highly unique to the modulator peptides of the invention. Those DNA fragments with substantial homology to the probe will hybridize. As noted above, the greater the degree of homology, the more stringent the hybridization conditions that can be used.' (paragraph [0176]) is found, and no concrete statements can be found in the rest of the statement of the detailed explanation of the invention." (cited from the Court Decision)

### (3) The Claims (Amended)

[Claim 1] A detectably labeled nucleic acid molecule of at least 15 nucleotides, hybridizable under high stringent conditions to a consecutive sequence in a DNA molecule set forth in SEQ ID NO: 1, 3, 22, or 24 or a complementary strand of a DNA molecule set forth in SEQ ID NO: 1, 3, 22, or 24.

### (4) Procedural History

August 30, 2000	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2000-
		13740)
December 25, 2003	:	Amendment (See the aforementioned "The Claims")
March 17, 2004	:	Appeal Decision that "the request for the appeal is to be dismissed"

### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)
(4) The claimed invention is not stated substantially in the detailed explanation of the invention.

Therefore, the Application does not comply with the requirements under Patent Act Article 36(6)(i) ... ..."A nucleic acid molecule" according to claim 1 of the Application is a detectably labeled nucleic acid molecule of 15 or more nucleotides, hybridizable under high stringency conditions to a consecutive sequence or a complementary strand of a DNA molecule set forth in SEQ ID NO: 1, 3, 22, or 24, which include numerous

short and long nucleic acid molecules containing irregular mismatch in nucleic acid sequence with their original DNA molecules. ..."Labeled nucleic acid molecules" concretely disclosed in the detailed explanation of the invention in the Description as those that were available as a probe or primer were only SEQ ID NOs: 8, 9, 13-16, 29-37, 39-76, and 93, which are of 18-40 nucleotides. ...The Applicant does not concretely disclose in the description that nucleic acid molecules of only 15 nucleotides in length are available as a detection probe or amplification primer. Moreover, the Applicant only discloses the results of these dozens of target nucleic acid

molecules, but does not concretely explain in the description that numerous short and long target nucleic acid molecules in the claims having sequences irregularly different from their original DNA molecules are also available as a detection probe or amplification primer for the OB polypeptide gene.

#### Decision

### Allegations by Plaintiff

The Patent Act does not demand to state in the detailed explanation of the invention all experimental data of the inventions stated in the claims. "The invention" protected under the Patent Act is "a technical idea" as specifically stated in Article 2, and it does not mean individual concrete experimental data alone. Therefore, what Article 36(6)(i) demands is that "the invention" stated in the claims in terms of "technical idea" must be stated in the detailed explanation of the invention, <u>but not that all</u> experimental data of the embodiments of the invention for which a patent is sought must be stated in the detailed in the detailed explanation of the invention.

#### Allegations by Defendant

...Although the claimed invention is directed to an enormous amount of nucleic acid molecules nearly innumerable, only dozens of target nucleic acid molecules are concretely disclosed in the detailed explanation of the invention. Therefore, the claim of the plaintiff is not supported sufficiently by the statement in the Description.

#### Judgment by the Court

In general, the essential purpose for inventions of chemical substances can be construed to be to provide new and industrially applicable chemical substances (or in other words, useful chemical substances). In the case of chemical substances that originally exist in nature, such as genes, a person who has only proved or identified the existence of such chemical substances should be regarded as having only discovered the substances, and even if he has separated the substances from their original state in nature and made some modifications to them, he cannot be regarded as having provided industrially applicable chemical substances in the form of product inventions. It is not until such chemical substances have been proved to be useful and given new technical aspects that cannot be found in prior art that they can be regarded as having been completed as industrially applicable inventions.

In the case of inventions of gene-related chemical substances, their utility should be proved by a detailed description of the invention in the specification, and to this, the enablement requirement under Article 36 (4) of the old Patent Act that provided for how to describe the detailed description of the invention in the specification, applies. This is because, in order that a person skilled in the art can carry out the invention of the chemical substances, it is required that he/she can produce such substances and can use them based on the common general knowledge at the time of filing the application. Thus, if their utility is not proved in the detailed description in the invention, the substances cannot be used. Therefore, the detailed description of the invention by a person skilled in the art.

... Even if reviewing the whole specification and taking into consideration of other factors such as the prior art which can understand from the records of the present case and the common general knowledge at the priority date of the original application of the present application, the results of more than 50 examples described in the detailed description of the invention in the specification cannot be deemed to be sufficient to enable persons skilled in the art to recognize utility or clear distinctiveness in the present invention.

(1) The description requirement under Patent Act Article 36(6)(i) concerns whether the claims is supported by the detailed explanation of the invention ...and therefore is closely connected with the discussion on the description requirement under Article 36(4).

...the claimed invention comprises, according to the claims, all the Nucleic Acid Molecules having a nature or working-effect of being "hybridizable under high stringent hybridization conditions to the OB Gene," ...the results of about 50 working examples in the detailed explanation of the invention in the Description are not sufficient for a person skilled in the art to recognize that they have utility, i.e. a clear distinctive feature, and moreover there is an objective reason that some of the nucleic acid molecules have no utility.

...<u>An invention relating to a gene should not be regarded as an invention which is industrially applicable</u> <u>until its utility is elucidated.</u> <u>The claims of the claimed invention</u> which encompasses not only the nucleic acid molecules with evident utility stated in the detailed explanation of the invention in the description, but also the nucleic acid molecules having no utility <u>states inventions beyond those stated in the detailed explanation of the</u> <u>invention</u>. Such scope of claims does not comply with the description requirement under Article 36(6)(i).

...The claimed invention has a problem that the extent of the invention may be unclear, because the Nucleic Acid Molecules are not specified in terms of material structure, such as base sequences. Because the patent application is filed in such a way, the detailed explanation of the invention of the Description is required to state utility, i.e., being available as a probe or primer to specifically detect or amplify the OB Gene, for all the nucleic acid molecules satisfying the constitution stated in the claims....

...<u>If experiments are necessary to determine nucleic acid molecules to be or not to be the invention</u>, and confirmation by hybridization under specific conditions is needed, then <u>the invention is regarded to be not stated</u> in the detailed explanation of the invention. ...

## (21-2)-2

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2
of Examination	
Guidelines	
Classification of	21-2: Regarding the relationship between the enablement requirement and the support
the Case	requirement
Keyword	Regarding the relationship between the enablement requirement and the support
	requirement

## 1. Bibliographic Items

Case	"Medicine" (Trial for Invalidation)
	Intellectual Property High Court Decision, April 11, 2012 (2011 (Gyo KE) No. 10147)
Source	Website of Intellectual Property High Court; HANREI JIHO No. 2154, page 105
Application	Japanese Patent Application No. H9-360756 (JP H10-167986A)
No.	
Classification	A61K 31/4439
Conclusion	Acceptance
Related	(Former) Article 36(4), Article 36(6)(i),
Provision	
Judges	IP High Court Fourth Division, Presiding judge: Takaomi TAKIZAWA, Judge: Yasuhito
	INOUE, Judge: Akimitsu ARAI

### 2. Overview of the Case

(1) Summary of Claimed Invention

The present invention relates to a medicine for treatment of diabetes, comprising a combination of pioglitazone (insulin sensitivity enhancer) and a biguanide agent or glimepiride (an SU agent). It is an invention of the combination of two agents.

## (2) Disclosure of Detailed Explanation of the Invention (found in the Court Decision)

"According to the statement of the claims for the claimed inventions and the statement in the Description, it is found that each of the claimed inventions had a problem of having an insufficient effect or a side effect when used alone as a single agent in diabetes treatment, that medicines in which pioglitazone, an insulin sensitivity enhancer that has little side effect, is combined with a biguanide agent having an effect of enhancing anaerobic glycolysis (phenformin, metformin, or buformin) or glimepiride, an SU agent having an effect of enhancing insulin secretion from pancreas  $\beta$  cells, were not known, and that the technical idea of the invention is therefore to produce a prophylactic or therapeutic agent or a pharmaceutical composition for diabetes having little side effect even in the long-term administration of the drug and being effective for many diabetics by combining pioglitazone with a biguanide agent having the mechanism of action different from that of pioglitazone or pioglitazone.

In the Description, there is a statement on an experiment of the combination of pioglitazone hydrochloride and glibenclamide, an SU agent, but no statements on experiments on the combination of pioglitazone and a biguanide agent or the combination of pioglitazone and glimepiride, an SU agent as described in (1) E. and H." (cited from the Court Decision)

(3) Common general knowledge and the like taken into consideration (found in the Court Decision)

"According to the statements of the aforementioned document such as the Description and the citation, at least the following can be found to be the common general knowledge of those skilled in the art at the time on prophylactic or therapeutic agents for diabetes or diabetic complications because there are a plurality of documents stating essentially same matters prior to the priority date and the filing date of the Application: (1) glibenclamide, an SU agent that enhances insulin secretion from pancreas  $\beta$  cells, had been previously administered for non-insulin dependent diabetes mellitus (NIDDM) and <u>glimepiride was used as a new SU agent</u>; ... (5) <u>SU agents, insulin</u> <u>sensitivity enhancers,  $\alpha$ -glucosidase inhibitors, and biguanide agents ... are different in the mechanism of action for decreasing the blood sugar level.</u>" (cited from the Court Decision)

(4) The Claims (Amended) (only claims 1 and 7 are shown) ("Invention 1" and "Invention 7," respectively)

[Claim 1] A medicine for prevention/treatment of diabetes or a diabetic complication, comprising a combination of pioglitazone or a pharmacologically acceptable salt thereof and a biguanide agent

[Claim 7] A medicine for prevention/treatment of diabetes or a diabetic complication, comprising a combination of pioglitazone or a pharmacologically acceptable salt thereof at a dose of 0.05 to 5 mg/kg body weight and glimepiride.

#### (5) Procedural History

May 11, 2010	: Request for a trial for patent invalidation by Plaintiff (Muko No. 2010-800088)
July 27, 2010	: Request for correction by Defendant (Patentee) (See the aforementioned "The
	Claims")
March 22, 2011	: Appeal Decision that "the correction is to be approved, the patents for the inventions
	according to claim 1 are to be invalidated, and the request for the appeal on the
	invention according to claim 7 is to be dismissed."

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)

... The reasons of Appeal Decision are essentially the following: (1) the patent for Invention 1 ... violates the enablement requirement set forth in Patent Act Article 36(4) and the support requirement set forth in Patent Act Article 36(6)(i) before the revision by Act No. 24 of 2002; (2) the patent for Invention 7 ... does not violate the enablement requirement and the support requirement ...

... Based on the statement of the Description, which concretely states the results of a pharmacological test

(Experiment Example 2) of the combination of pioglitazone and glibenclamide, a sulfonylurea agent (an SU agent), and the common general knowledge on SU agents, a person skilled in the art can understand how to carry out Invention 7. Therefore, the Description does not violate the enablement requirement and the support requirement regarding Invention 7 ...

... A person skilled in the art recognizes the biguanide agent in Invention 1 ... as a therapeutic drug for diabetes ... different from the SU agent (glimepiride) and the  $\alpha$ -glucosidase inhibitor (voglibose) stated in the Description ... has a different mechanism of action for the effect ... it can not be recognized that the matters newly found on diabetes treatments with SU agents and  $\alpha$ -glucosidase inhibitors are immediately applicable to biguanide agents. Therefore, a person skilled in the art cannot determine whether Invention 1 can be carried out based on the teaching stated in the Description and the common general knowledge on the matters. Moreover, Invention 1 exceeds the scope that a person skilled in the art can recognize from the Description ...

Decision \* Hereinafter, the italic letters indicate matters added to the citation.

Allegations by Plaintiff

1 ... Regarding ... compliance of Invention 7 ... with enablement requirement and support requirement

... In the detailed description of the invention in the Description, the effect of the invention including the problem to be solved and the means for solving the problem is required to be stated so that a person skilled in the art can understand that the invention claimed in the application includes a technical content that cannot be easily achieved based on a known technique.

In the Description, only the combination of glibenclamide, an SU agent different from glimepiride in Invention 7, and pioglitazone is stated. ...

Therefore, the Description includes no statement of the effect of the invention and do not meet the enablement requirement and the support requirement. *3 Regarding compliance of Invention 1 with enablement requirement and support requirement* 

(2) α-Glucosidase inhibitors and biguanide agents are different in the mechanism of action. ... It was difficult to expect the effect of biguanide agents from the statement of the effect of α-glucosidase inhibitors .... As above, it is not possibly admitted that a person Allegations by Defendant

*I Regarding compliance of Invention 7 with enablement requirement and support requirement* 

... The Description includes a demonstration of marked increase of the blood sugar decreasing effect in a combined administration of pioglitazone with the  $\alpha$ -glucosidase inhibitor voglibose (Experiment Example 1) and a combined administration of pioglitazone with the SU agent glibenclamide (Experiment Example 2) compared with the single administration.

Glimepiride is classified as an SU agent same as glibenclamide, ... the combinational effect of pioglitazone and glimepiride is sufficiently inferred.

... The Description states the combinational effect in Invention 7 ..., and there is not the problem of the deficiency in the description.

3 ... Regarding ... compliance of Invention 1 ... with enablement requirement and support requirement

... In order to judge the enablement of medicinal invention ... the technical significance of the invention should be understood and whether it is stated in the detailed explanation of the invention should be judged in light of all circumstances including the disclosure in the description. It should not be judged only based on whether there is a statement of pharmacological data. skilled in the art could recognize that the matters newly found on diabetes treatments with  $\alpha$ glucosidase inhibitors such as voglibose and SU agents such as glibenclamide are immediately applicable to biguanide agents.

Therefore, the Description does not meet the support requirement for Invention 1 ...

Pioglitazone and biguanide agents were both known substances as of the priority date of the Application and a person skilled in the art could produce them. It is apparent that the combination thereof can be produced and used as a prophylactic or therapeutic agent for diabetes based on the statement of the Description.

... Support requirement ... of medicinal invention should be judged by comparing the statement of the detailed explanation of the invention and the statement of the claims and considering whether the statement of the detailed explanation of the invention is within the scope that a person skilled in the art can recognize, based on the statement of the detailed explanation of the invention, that the problem to be solved by the invention can be solved, in light of the common general knowledge as of the filing. It should not be judged from whether there is a statement of pharmacological data. ...

In light of the disclosure in the Description and the common general knowledge as of the filing, a person skilled in the art can expect a combinational effect (technical significance of the claimed inventions) of the combination of pioglitazone and a biguanide agent.

... It is considered that in the Description, the technical significance of the claimed inventions ... is specifically stated that it is found and demonstrated that a combination of an insulin sensitivity enhancer (pioglitazone) and another prophylactic or therapeutic agent for diabetes having a mechanism of action different from insulin sensitivity enhancers decreases blood sugar and prevents or treats diabetes or diabetes treatment-related complications more effectively than the single administration ... Therefore, it is considered that there is a statement to the extent recognizable that the problem to be solved by the invention stated in the claims (Invention 1 ...) can be solved.

Judgment by the Court

(1) Regarding enablement requirement

... The working of invention regarding the invention of product refers to producing or using the product. Therefore, if a person skilled in the art can produce the product based on the statements of the description and the drawings and the common general knowledge as of the filing, then it is considered that the aforementioned enablement requirement is satisfied. ...

... In order to consider that the claimed inventions is enabled to working, ... it should be considered that each of the Compounds is required to be producible for a person skilled in the art based on the statement of the Description and the common general knowledge as of the filing date of the Application. ... It is apparent that t each drug and pharmacologically acceptable salts of pioglitazone had been already producible as a drug for the treatment of NIDDM at the time of filing the application.

Therefore, it is clear that the Description satisfies enablement requirement regarding Invention 1 ... and Invention 7.

(2) Regarding support requirement

... Whether the statement of the claims meet the support requirement of a description should be determined by comparing the statement of the claims and the statement of the detailed description of the invention, and by considering whether the invention stated in the claims are the invention stated in the detailed description of the invention and that is within the scope that a person skilled in the art can recognize, based on the statement of the detailed description of the invention, that the problem to be solved by the invention can be solved, and also by considering whether the invention stated in the claims are an invention within the scope that a person skilled in the art can recognize, in light of the common general knowledge as of the filing, that the problem to be solved by the invention can be solved, even without the statement and suggestion thereof. ....

... When drugs different in the mechanism of action are used in combination, it is usually unlikely that the durgs antagonize each other. Therefore, it is considered that such drugs used in combination act by respective mechanisms, and their effects are exerted individually. ...

... It should be considered that a person skilled in the art can naturally assume that when decreasing the blood sugar level by administering the insulin sensitivity enhancer pioglitazone or a pharmacologically acceptable salt thereof, if phenformin, metformin, or buformin, each being a biguanide agent that decreases the blood sugar level by a mechanism of action different from that of pioglitazone is administered together, the blood sugar level can be also dereased by the mechanism of action different from that of pioglitazone, thereby producing an effect on diabetes, which is the problem to be solved by the claimed inventions.

... <u>The statement of the Description is within the scope that a person skilled in the art can recognize that</u> the aforementioned problems of the claimed inventions can be solved in light of the common general knowledge as of the filing date of the Application. Therefore, it is considered that Invention 1 ... are the inventions stated in the Description.

... The Description does not violate the support requirement regarding Invention 1 ...

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2			
of Examination				
Guidelines				
Classification of	21-2: Regarding the relationship between the enablement requirement and the support			
the Case	requirement			
Keyword	Regarding the relationship between the enablement requirement and the support			
	requirement			

## (21-2)-3

## 1. Bibliographic Items

Case	"Hindered phenolic antioxidant composition" (Appeals against an Examiner's Decision)		
	Intellectual Property High Court Decision, October 29, 2012 (2012 (Gyo KE) No. 10076)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. 2002-72173 (JP 2002-317179 A)		
No.			
Classification	C09K 15/08		
Conclusion	Acceptance		
Related	Article 36(6)(i)		
Provision			
Judges	IP High Court Second Division, Presiding judge: Shuhei SHIOTSUKI, Judge: Tomoko		
MANABE, Judge: Minoru TANABE			

### 2. Overview of the Case

## (1) Summary of Claimed Invention

The claimed invention relates to hindered phenolic antioxidant compositions which has improved oxidative stability, improved oil solubility, low volatility and low bioaccumulation compared to conventional, methylene-crosslinked, multi-ring hindered phenolic antioxidant compositions, and comprises very low levels of single ring hindered phenolics, such as ortho-tert-butylphenol, 2,6-di-tert-butylphenol, and 2,4,6-tri-tert-butylphenol.

## (2) Disclosure of Detailed Explanation of the Invention

"... It is stated that "The hindered phenolic compositions of the present invention provide improved oxidative stability to fuel and lubricant compositions containing said hindered phenolics compared to hindered phenolic compositions containing levels of single ring hindered phenolics outside of the scope of the present invention." (paragraph [0001]), "[the problem to be solved] OTBP and DTBP are starting materials for the multi-ring hindered phenolic antioxidants that remain in the product after production. TTBP is a material generally found as a contaminant in the OTBP and DTBP used to prepare the multi-ring hindered phenolic antioxidants. These single ring hindered phenolics are soluble in water and are more volatile than the multi-ring hindered phenolic antioxidants.

The multi-ring hindered phenolic antioxidants, because of their much higher molecular weight, have a much lower water solubility and are much less volatile." (paragraph [0008]), "these antioxidants have improved oil solubility and can be easily handled in the liquid form by blending in the appropriate ... process oil." (paragraph [0010]), "The multi-ring hindered phenolic antioxidants produced under these conditions give compositions that are effective antioxidants in lubricants, have low volatility, and low bioaccumulation, and are easily handled as an oil dilution," (paragraph [0020]) ... " (cited from the Court Decision)

### (3) Common general knowledge and the like taken into consideration (found in the Court Decision)

"Decrease of ingredients exhibiting the antioxidant effect by volatilization also reduces the antioxidant ability of the composition. Therefore, it is also consistent with the common general knowledge of those skilled in the art that the antioxidant ability of a composition improves by decreasing amounts of volatile ingredients of the compositions. ..." (cited from the Court Decision)

### (4) The Claims (Amended) (Claimed invention)

[Claim 1] A hindered phenolic antioxidant composition comprising a mixture of compounds, the mixture of compounds comprising a plurality of compounds represented by the formula:

[Chemical formula 1]



wherein n may be 0, 1, 2, and 3 and optionally more than 3, and wherein the composition comprises, on an undiluted basis, (a) less than 3.0 wt% ortho-tert-butylphenol, (b) less than 3.0 wt% 2,6-di-tert-butylphenol, and (c) less than 50 ppm 2,4,6-tri-tert-butylphenol.

### (5) Procedural History

June 9, 2008	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2008-	
		14384)	
September 5, 2011	:	Amendment (See the aforementioned "The Claims ")	
October 11, 2011	:	Appeal Decision that "the request for the appeal is to be dismissed"	

### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision) ... No examples of concretely producing the compositions of the claimed invention, evaluating oxidative stability, oil solubility, volatility, and bioaccumulation, and confirming that the aforementioned problem can be solved are stated in the detailed explanation of the invention. Therefore, it can not be recognized that the claimed invention can solve the aforementioned problem based on the statement of the detailed explanation of

### the invention.

Moreover, there is grounds to consider that a person skilled in the art can recognize, in light of the common general knowledge as of the filing, that "oxidative stability, oil solubility, volatility and bioaccumulation" are improved by comprising single ring hindered phenolics at lower level than conventional hindered phenolic antioxidants, that is, "comprising (a) less than 3.0 wt% ortho-tert-butylphenol, (b) less than 3.0 wt% 2,6-di-tert-butylphenol, and (c) less than 50 ppm 2,4,6-tri-tert-butylphenol." Accordingly, it is not considered that a person skilled in the art can recognize that the problem to be solved by the Invention can be solved in light of the common general knowledge as of the filing of the Application, even without an example of concrete confirmation.

Neither it is recognized that the Invention is the invention described in the detailed explanation of the invention that is within the scope that a person skilled in the art can recognize, based on the statement of the detailed explanation of the invention, that the problem to be solved by the invention can be solved, nor it is recognized that the Invention is within the scope that a person skilled in the art can recognize that the problem to be solved by the invention can be solved in the problem to be solved by the invention can be solved in light of the common general knowledge as of the filing. Therefore, the statement of the claims of the Application does not comply with Patent Act Article 36(6)(i).

Decision

Allegations by Plaintiff

... The whole scope of technical matters stated in "the claims" is stated in "the detailed description of the invention."

... In light of the common general knowledge that when a single ring compound was contained in a mixture of polyphenolic compounds, the single ring compound has effect of making the mixture more volatile, more water-soluble and less oil soluble, a person skilled in the art recognizes that the composition of the claimed invention characterized by comprising a small amount of a single ring hindered phenol defined in (a) to (c) of claim 1 has improved oil solubility and low volatility and that it is an improved antioxidant having a few volatile ingredients that is lost during the period of using the lubricating oil. It is supported by the statement of the paragraph [0022] that the problem for improving an antioxidant can be solved by a composition having low volatility. Therefore, the invention stated in the claims is within the scope that a person skilled in the art can recognize

### Allegations by Defendant

... Neither examples of confirming the concrete production of the composition of the claimed invention, nor technical grounds to consider that these can naturally be expected from the common general knowledge are stated. Therefore, it is not considered that "the invention stated in the claims of the Application is the invention stated in the detailed description of the invention."

... It cannot be possibly considered that the compositions of the claimed invention can be produced concretely based on the statement of the detailed description of the invention in which nothing is revealed on the concrete means to obtain DTBP monomer.

Single ring compounds contained in conventional hindered phenolic antioxidants as impurities are very small amounts. Therefore, it can not be recognized that reducing the amounts of single ring compounds, which are contained in only very small amounts, will bring about sufficient effects on improvement of oil

that the problem to be solved by the invention can be	solubility and low volatility to make a significant
solved in light of the common general knowledge as	difference compared with the conventional
of the filing.	antioxidants.
	In the detailed description of the invention,
	neither technical proof that the problem to be solved
	by the claimed invention to achieve "improved
	oxidative stability and low bioaccumulation" can be
	solved, nor technical grounds to consider that the
	problem to be solved by the claimed invention
	toachieve "improved oxidative stability and low
	bioaccumulation" can naturally be expected to be
	solved from the common general knowledge.

Judgment by the Court

... In the detailed description of the invention, it is found to be stated that by including very low levels of the single ring hindered phenolics OTBP, DTBP and TTBP, compositions having higher oil solubility than conventional methylene-crosslinked, multi-ring hindered phenolic antioxidant compositions and compositions having low volatility and consequently having improved oxidative stability can be obtained. Therefore, a person skilled in the art can recognize, based on the statement of the detailed description of the invention, that the problem to be solved by the claimed invention can be solved by adopting the constitution of the claimed invention.

Thus, it is considered that regarding the invention according to claim 1, the detailed description of the invention is stated within the scope that a person skilled in the art can recognize that the problem to be solved by the invention can be solved. Therefore, it is considered that the invention according to claim 1 is stated in the detailed description of the invention. Meanwhile, the judgment in the Appeal Decision on support requirement has an error.

The defendant' allegation premises that single ring compounds (DTBP, OTBP, and TTBP) included as impurities in conventional hindered phenolic antioxidants are very small amounts. However, in the detailed description of the invention, there are statements .... Based on these statements, conventional hindered phenolic antioxidants use DTBP and OTBP containing TTBP as impurities as starting materials for the production thereof. Therefore, it is recognized that the preparations of the antioxidants contain amounts equal to or more than certain amounts of non-reacted DTBP and OTBP and TTBP as impurities. Then, it is not considered that single ring compounds (DTBP, OTBP, and TTBP) included as impurities in conventional hindered phenolic antioxidants are very small amounts. The defendant's allegation premises that single ring compounds included as impurities in conventional hindered phenolic antioxidants are very small amounts and therefore it cannot be adopted.

... The detailed description of the invention does not have the statement showing that the problem regarding bioaccumulation can be solved. However, when a plurality of problems to be solved by the claimed invention

can be found from the statement of the detailed description of the invention, it is not adequate not to determine, without considering the importance of each problem in the claimed invention, that the support requirement is not satisfied unless all of the plurality of problems that can be found are recognized to be solved based on the statement of the detailed description of the invention

... If the compositions according to the claimed invention cannot be produced based on the statement of the detailed description of the invention and the common general knowledge as of the filing, then it should be dealt as a matter of compliance with Patent Act Article 36(4)(i) (enablement requirement). Since the Appeal Decision decided to maintain the decision of refusal on the grounds that the Application does not meet the requirement set forth in Patent Act Article 36(6)(i) (support requirement), and concluded that the request is to be dismissed, the aforementioned allegation by Defendant cannot be adopted for approving the judgment of the Appeal Decision. Defendant also alleges that no examples of confirming the concrete production of the state an example of confirming the concrete production in the detailed description of the invention.
## (21-2)-4

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2
of Examination	
Guidelines	
Classification of	21-2: Regarding the relationship between the enablement requirement and the support
the Case	requirement
Keyword	Regarding the relationship between the enablement requirement and the support
	requirement

## 1. Bibliographic Items

Case	"Method for producing liquid seasoning" (Trial for Invalidation)					
	Intellectual Property High Court Decision, April 11, 2013 (2012 (Gyo KE) No. 10299)					
Source	Website of Intellectual Property High Court					
Application	Japanese Patent Application No. 2006-49713 (JP 2006-314316 A)					
No.						
Classification	A23L 1/238					
Conclusion	Partial Revoke, Partial Dismissal					
Related	Article 36(6)(i)					
Provision						
Judges	IP High Court Fourth Division, Presiding judge: Akio DOI, Judge: Yasuhito INOUE, Judge:					
	Akimitsu ARAI					

## 2. Overview of the Case

## (1) Summary of Claimed Invention

The claimed invention provides liquid seasonings and simple method for producing the same by mixing a liquid seasoning, before heating, with a substance having an antihypertensive effect, which is an <u>ACE inhibitory</u> <u>peptide or a coffee bean extract</u>, and then heating the mixture; or heating the liquid seasoning while mixing it with these substance (ACE inhibitory peptides refers to peptides having an angiotensin conversion inhibitory activity). The claimed invention is targeted to improve the flavor change when a substance having an antihypertensive effect is mixed with a liquid seasoning which is a food taken routinely and to provide the sense of harmony of flavors, thereby providing liquid seasoning that have less flavor difference in different dishes, are easy to take continuously, and exhibit a pharmacologic effect such as the antihypertensive effect at a high level.

(2) Disclosure of Detailed Explanation of the Invention (found in the Court Decision)

"The amount of the ACE inhibitory peptide to be mixed is preferably 0.5 to 20%, more preferably 1 to 10%, particularly 2 to 5% of the liquid seasoning in light of the antihypertensive effect and the flavor ([0030])." (cited from the Court Decision)

"In the detailed explanation of the invention in the Description, polyphenols, ACE inhibitory peptides, sympathetic nerve inhibitors, ... are listed as substances having the antihypertensive effect ([0013]), and it is stated that coffee bean extracts contain chlorogenic acids, which are a kind of polyphenols ([0014], [0017]) and that  $\gamma$ -aminobutyric acid is a sympathetic nerve inhibitor ([0031]). In addition, ... it is stated with working examples that also when a liquid seasoning is mixed with a <u>coffee bean extract</u> ([0064] to [0070], [0073], [0075], [0076], [Table 1]) <u>or  $\gamma$ -aminobutyric acid</u> ([0064], [0065], [0070] to [0072], [0074], [0077], [0078], [Table 2]) as a substance having an antihypertensive effect in the Invention and heated, the flavor change of the liquid seasoning was improved and the problem to be solved by the Invention can be solved" (cited from the Court Decision)

(3) Common general knowledge, additional test results, and the like taken into consideration

(i) Exhibit B1 to Exhibit B3: Patent Literature 1 to Patent Literature 3 listed in [0005] in the Description (found in the Court Decision)

"Materials having a physiologically active function include substances having the antihypertensive effect. Among them, peptides,  $\gamma$ -aminobutyric acid, chlorogenic acid, coffee bean extracts and the like are safe substances contained in foods and foods that contain them and are effective for hypertension have been proposed. (Exhibit B1 to Exhibit B3)" (cited from the Court Decision)

(ii) Exhibit A17: Experimental data

A report of results of tests performed after the Application showing that liquid seasonings mixed with ACE inhibitory peptides and heated have improved flavors

(4) The Claims (Corrected) (only claims 1 and 6 are shown) ("Invention 1" and "Invention 6," respectively)

[Claim 1] A method for producing a liquid seasoning, comprising: Step (A): a step of mixing a seasoning liquid containing a raw soy sauce with <u>at least one substance having an antihypertensive effect selected from coffee bean</u> <u>extracts and peptides having an angiotensin conversion inhibitory activity</u>; and Step (B): a step of heating, after the step (A), a mixture of the seasoning liquid containing the raw soy sauce and the at least one substance having an antihypertensive effect selected from coffee bean extracts and peptides having an angiotensin conversion-inhibitory activity so that the center temperature thereof reaches 60 to 90°C.

[Claim 6] The method for producing a seasoning liquid according to any one of the claims 1 to 5, wherein the substance having an antihypertensive effect is a coffee bean extract.

#### (5) Procedural History

November 14, 2011	:	Request for a trial for patent invalidation by Plaintiff (Muko No. 2011-800233)
June 21, 2012	:	Request for correction by Plaintiff (Patentee) (See the aforementioned "The Claims")
July 13, 2012	:	Appeal Decision that "the correction is to be approved and the request for the appeal
		is to be dismissed."

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)

... (3) In light of the common general knowledge prior to the priority date of the Application, the Invention is substantially within the scope stated in the detailed explanation of the invention in the Description and meets requirement (so-called support requirement) set forth in Article 36(6)(i). ...

## Decision

#### Allegations by Plaintiff

... Exhibit A17 has a variety of problems, including that <u>no data showing that the liquid</u> <u>seasonings containing an ACE inhibitory peptide have</u> <u>the antihypertensive effect is stated</u> (in addition, experimental data required for the matter described in the Description <u>should be experimental data as of the</u> <u>filing, but not newly obtained</u> like Exhibit A17).

In light of the problem to be solved by the invention, ... in order to make a judgment on compliance of support requirement of the Description, an evaluation test for the antihypertensive effect must be actually carried out using the liquid seasoning (Invention 9) containing an ACE inhibitory peptide. However, there is neither such working example stated in the Description, nor experimental data stated in Exhibit B1 to 3 or Exhibit A17 that the liquid seasonings containing an ACE inhibitory peptide have the antihypertensive effect as mentioned above. Therefore, ... it is evident that the Description does not meet the support requirement.

#### Allegations by Defendant

... In the Description, it is stated that <u>ACE</u> <u>inhibitory peptides are preferred as substances having</u> <u>an antihypertensive effect used in the Invention</u> ([0013]) ... and also the amount of the ACE inhibitory peptide to be mixed is stated, with specific values, to be "preferably 0.5 to 20%, more preferably 1 to 10%, particularly 2 to 5% of the liquid seasoning in light of the antihypertensive effect and the flavor" ([0030]) ...

... It is a matter well-known prior to the priority date of the Application that ACE inhibitory peptides have bitter tastes and Exhibit A17 shows that the liquid seasonings prepared by adding such a peptide and heating had improved flavor. These support the statement ([0030]) in the Description. <u>Exhibit A17</u> serves only to confirm the technical content stated in the Description.

Judgment by the Court

... Neither common features in the chemical structure nor common characteristics in the flavors can be found among the substances having the antihypertensive effect listed in the detailed description of the invention in the Description. Moreover, chlorogenic acids and  $\gamma$ -aminobutyric acid of which working examples are stated in the detailed description of the invention share neither common chemical structures nor common flavors with ACE inhibitory peptides. In addition, in light of the common general knowledge, it is also clear that there is no relation between the flavors of the substances having the aforementioned antihypertensive effect and the antihypertensive effect thereof.

Based on the foregoing, because the working examples in which a coffee bean extract and  $\gamma$ -aminobutyric acid, as substances having the antihypertensive effect according to the Invention, are mixed with liquid seasonings and heated are presented and it is shown to be possible to thereby improve the flavor change of the

liquid seasonings and solve the problem to be solved by the Invention in the detailed description of the invention in the Description, <u>it does not follow that these have shown that the problem to be solved by the Invention that</u> is to improve the flavor change of the liquid seasonings when ACE inhibitory peptides are mixed therewith and <u>heated as the substances having the antihypertensive effect according to the Invention</u> can be solved.

In addition, in the detailed description of the invention in the Description, there is no statement showing that the aforementioned problem was solved when ACE inhibitory peptides, as the substances having the antihypertensive effect according to the Invention, are mixed with liquid seasonings and heated. Therefore, it is not considered that a person skilled in the art who has seen the detailed description of the invention in the Description can recognize that Inventions 1 to 5 and 9 can solve the problem that is to improve the flavor change of liquid seasonings, including the cases where ACE inhibitory peptides are used as the substances having the antihypertensive effect. Moreover, there is no evidence sufficient to prove that a person skilled in the art can recognize that the problem to be solved by the Invention can be solved in light of the common general knowledge as of the filing of the Application. ...

Defendant <u>alleges that the report (Exhibit A17) of results of tests performed after filing the Application</u> shows that liquid seasonings mixed with ACE inhibitory peptides and heated have improved flavors, and it <u>confirms and supports the technical content stated in the Description</u> as the grounds to consider that Inventions 1 to 5 and 9 meet the support requirement.

<u>However, ... in the detailed description of the invention in the Description, there is no other statement</u> showing that the aforementioned problem was solved when <u>ACE inhibitory peptides</u>, as substances having the antihypertensive effect according to the Invention, are miexed with liquid seasonings <u>and heated</u>. Moreover, there is no common general knowledge showing it. Therefore, the results of tests performed after the filing of the Application cannot be taken into consideration in a determination on satisfaction of support requirement

Based on the foregoing, it is considered that <u>Inventions 6 to 8 in which coffee bean extracts are exclusively</u> <u>used as</u> a substance having the antihypertensive effect <u>meet the support requirement</u> ..., while <u>Inventions 1 to</u> <u>5 and 9</u>, which include the cases where <u>ACE inhibitory peptides</u> in addition to coffee bean extracts <u>are used</u> as the substances having the antihypertensive effect, ... <u>do not meet the support requirement</u> because they are neither what a person skilled in the art can recognize, based on the statement of the detailed description of the invention, possible to solve the problem to be solved by the invention, nor what a person skilled in the art can recognize possible to solve the problem to be solved by the invention in light of the common general knowledge as of the filing.

# (21-2)-5

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2
of Examination	
Guidelines	
Classification of	21-2: Regarding the relationship between the enablement requirement and the support
the Case	requirement
Keyword	Regarding the relationship between the enablement requirement and the support
	requirement

## 1. Bibliographic Items

Case	"Polyimide film and copper clad laminate using the film as base material" (Trial for								
	Invalidation)								
	Intellectual Property High Court Decision, April 28, 2015 (2013 (Gyo KE) No. 10250)								
Source	Website of Intellectual Property High Court								
Application	Japanese Patent Application No. 2010-180128 (JP 2011-012270 A)								
No.									
Classification	H05K 1/03								
Conclusion	Acceptance								
Related	Article 36(4)(i) and Article 36(6)(i)								
Provision									
Judges	IP High Court Fourth Division, Presiding Judge: Yoshinori TOMITA, Judge: Ichiro OTAKA,								
	Judge: Yoshiki TANAKA								

# 2. Overview of the Case

# (1) Summary of Claimed Invention

[Problem to be solved] To provide a polyimide film which is excellent in size stability and suitable for a fine pitch circuit substrate, particularly a COF (Chip on Film) for wiring in a narrow pitch toward a film width; and a copper clad laminate using the film as a base material.

[Solution] The polyimide film is characterized to have a thermal expansion coefficient  $\alpha$ MD of 3-10 ppm/°C in the machine-transferring direction (MD) and a thermal expansion coefficient  $\alpha$ TD of 10-20 ppm/°C in the width direction (TD). The copper clad laminate is characterized to use the polyimide film as a base material, on which the copper laminate is formed to have a thickness of 1-10 µm.

(2) Disclosure of Detailed description of the invention

"[Background Art]

[0002] Along with the elevated fineness of the flexible printed substrate and the semiconductor packaging, requirement items for polyimide film used therein are increased. The requirement item includes that the change

in its size and the curl due to laminating it with the metal is reduced and that the handleability is high. It has been required that the film has the coefficient of thermal expansion similar to those with the metal as the physiological property of the polyimide film and has high elasticity, and that the film has a little in the change in its size by absorbing water. Such a polyimide film in response to such a requirement had been developed.

[0005] Nowadays, a two layer type not using any adhesive agent (the copper layer is directly formed on the polyimide film) is employed for a copper-attached laminate, in response to the fineness of wiring. While the method for manufacturing the same includes a method of forming the copper layer on the film by the plating method, and a method of imidating after the polyamic acid is casted on the copper foil, both methods are not a thermocompression bonding. Accordingly, it is not necessary that the coefficient of thermal expansion in the MD of the film is decreased. Further, in the COF application composing the major portion of the two layer type, the pattern which is wired with narrow pitch in the TD of the film is common. On the other hand, when the coefficient of thermal expansion in the TD is large, the change in its size between the wirings is increased at the time of bonding for mounting the chip, and the correspondence for demanding the fine pitching is difficult. In order to correspond thereto, while it is ideal that the coefficient of thermal expansion of the time of bonding for mounting the chip, since the difference in the thermal expansion with the copper is created.

[Problem to be solved by the Invention]

[0007] The present invention is made upon examining the aforementioned conventional technical problem to solve the problem as a problem to be solved, as a result of examining the same. And is to provide a polyimide film which is suitable for a fine pitch circuit substrate such as for the COF, which can reduce the change in its size in the TD of the film while the coefficient of thermal expansion similar to those with the metal is maintained, and to provide a copper clad laminate using the film as a base material.

[Means for Solving the Problem]

[0008] In order to attain the aforementioned goal, the polyimide film according to the present invention is characterized to have a thermal expansion coefficient  $\alpha$ MD of 10-20 ppm/°C in the machine-transferring direction (MD) and a thermal expansion coefficient  $\alpha$ TD of 3-10 ppm/°C in the width direction (TD), preferably  $\alpha$ MD of 14-18 ppm/°C and  $\alpha$ TD of 3-7 ppm/°C.

[Advantageous Effect of Invention]

[0011] The polyimide film according to the present invention can suppress the coefficient of thermal expansion in this direction to be low by enhancing the orientation of the film into the TD, and the coefficient of thermal expansion in the MD has the similar value as those with the metal, and further the heat shrinkage ratio is low and high tensile resilient modulus is maintained.

[Mode for Carrying Out the Invention]

[0039] The so obtained polyimide film and the copper clad laminate using the same as the substrate is suitable for the fine pitch circuit substrate, particularly COF (Chip on Film) for wiring in a narrow pitch in the TD of the film, since these can suppress the coefficient of thermal expansion in this direction to be low by enhancing the orientation of the film into the TD, and the coefficient of thermal expansion in the MD has the similar value as those with the metal, and further the heat shrinkage ratio is low and high tensile resilient modulus is maintained.

[Examples]

[0058] [Example 1]

239.1 g of DMAc was introduced in 500 mL of separable flask, and 4.53 g (0.042 mol) of PPD, 21.53 g (0.108 mol) of 4,4'-ODA, 8.79 g (0.030 mol) of BPDA and 26.06 g (0.119 mol) of PMDA were introduced therein and reacted for 1 hour at normal temperature and normal pressure and mixed until it is uniform to obtain a polyamic acid solution. [0059] Subsequently, a slurry of N,N-dimethyl acetoamide with a silica having 0.30  $\mu$ m in an average particle diameter in which the silica having less than 0.08  $\mu$ m and 2  $\mu$ m or larger in the particle diameter is excluded was added in the aforementioned polyamide acid solution, with 0.03 % by weight based on the weight of the resin, sufficiently stirred and dispersed.

[0060] Then, after the polyamic acid solution was cooled at -5°C, 15 % by weight of acetic anhydride and 15 % by weight of  $\beta$ -picoline were mixed relative to 100 % by weight of the polyamic acid solution.

[0061] After the mixed solution was spread onto a rotating drum having 90°C in its temperature, the obtained gel film was stretched 1.1 times in the moving direction while the film was heated at 100°C for 5 minutes. Next, after the film was stretched 1.5 times in the width direction upon holding both ends in the width direction while the film was heated at 270°C for 2 minutes, the film was heated at 380°C for 5 minutes to obtain a polyimide film having 38  $\mu$ m in thickness. After this polyimide film was subjected to the annealing treatment for 1 minute in a furnace in which the temperature is set at 220°C with a tension of 20 N/m, each property was evaluated for this film.

Coefficient of thermal expansion of the film in the MD aMD: 15.8 ppm/°C

Coefficient of thermal expansion of the film in the TD  $\alpha$ TD: 4.8 ppm/°C

[0062] [Examples 2 to 15]

The materials were reacted according to the same procedure as Example 1 to obtain the ingredients and the ratio of an aromatic diamine component and an aromatic tetracarboxylic acid component, an added amount of silica and an average particle diameter as shown in Tables 1, 2 and 3, and polyamic acid solutions were obtained, respectively. Thereafter, the film was stretched to obtain the stretched ratio in the crosswise direction and the lengthwise direction as shown in Tables 1, 2 and 3, each property of the polyimide film which was obtained according to the same operation as those in Example 1 was evaluated and the result was shown in Tables 1, 2 and 3.

[0067] [Comparative Examples 1 to 4]

After each polyamic solutions were obtained to obtain the ingredients and the ratio of an aromatic diamine component and an aromatic tetracarboxylic acid component, an added amount of silica and an average particle diameter as shown in Table 4, according to the same procedure as Example 1, the film was stretched to obtain the stretched ratio in the crosswise direction and the lengthwise direction as shown in Table 4, each property of the polyimide film which was obtained according to the same operation as those in Example 1 was evaluated and the result was shown in Table 4."

#### (3) The Claims (Claim 9 is only described)

[Claim 9]

A polyamide film, which is manufactured using one or more of aromatic diamine components selected from

the group consisting of paraphenylene diamine, 4,4'-diamino diphenyl ether and 3,4'-diamino diphenyl ether and one or more of acid anhydride components selected from the group consisting of pyromellitic dianhydride and 3,3'-4,4'-diphenyl tetra carboxylic acid dianhydride, wherein the polyimide film contains a fine silica having 0.07 to 2.0  $\mu$ m in particle diameter,  $\alpha$ MD, a coefficient of thermal expansion in a machine transferring direction of the film measured by TMA-50 made by Shimadzu Corporation with conditions of 50 to 200°C in a range of temperature for the measurement and 10°C/min in speed of elevating the temperature, is in a range between 10 ppm/°C and 20 ppm/°C,  $\alpha$ TD, a coefficient of thermal expansion in a width direction (TD) as measured with the conditions is in a range between 3 ppm/°C, and 7 ppm/°C, and the fine silica is uniformly dispersed in the film.

#### (4) Procedural History

November 30, 2012	:	Request for Trial for Invalidation by the Plaintiff (Muko No. 2012-080199)
July 30, 2013	:	Trial Decision that "the request for the Present Trial is dismissed."

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

## Appeal Decision (cited from the Court Decision)

...(i) The detailed explanation of invention in the description of the present case states the technical significance for the present invention, a general means to obtain the polyimide film according to the present invention and the specific example for the polyimide film having 4 component basis, respectively. It is obvious that the invention of the polyimide film having 4 component basis, which is one of several candidates in the present invention complies with the requirement under Article 36(4)(i) of the Patent Law (hereinafter, sometimes referred to as "enablement requirement"), and it cannot be said that there is no specific reason not to practice the polyimide film having 2 components basis in the present invention based on the statement of the detailed explanation of invention and the general common knowledge at the time of filing the present original application. It can be said that the detailed explanation of invention of the art can understand and practice the present invention, and it can be said that the detailed explanation of invention of the description for the present invention, and it can be said that the requirement requirement.

(ii) In consideration of the general common knowledge at the time of filing the present original application based on the statement of the description for the present case for the present invention, it can be recognized that the problem to be solved in the present patent invention can be solved by specifying the coefficient of thermal expansion in the TD and MD of the polyimide film to be particular values, regardless of the resin composition constituting the polyimide film. And, it can be said that there is a statement of recognizing that the present invention of containing the two components basis of "A polyamide film, which is manufactured using one or more of aromatic diamine components selected from the group consisting of paraphenylene diamine, 4,4'-diamino diphenyl ether and 3,4'-diamino diphenyl ether and one or more of acid anhydride components selected from the group consisting of pyromellitic dianhydride and 3,3'-4,4'-diphenyl tetra carboxylic acid dianhydride" can solve the problem to be solved in the present invention by a person skilled in the art. Accordingly, it can

be said that the present invention is an invention stated in the detailed explanation of invention and complies with the requirement prescribed in Article 36(6)(i) of the Patent Law (hereinafter, sometimes referred to as a "support requirement"), ...

#### Decision

#### Allegations by Plaintiff

... Since the diamine component is limited into one type in the polyimide film having two components basis, the coefficient of thermal expansion cannot be adjusted by chancing a ratio of compounding the diamine component. Since the coefficient of thermal expansion for the polyimide film which is manufactured using the chemical imidation method for two components basis of PPD/BPDA is low, the coefficient of thermal expansion for the film in the state of not stretching cannot be set to be a range of 6.5 ppm/°C to 13.5 Hence, it is impossible to adjust the ppm/°C. coefficient of thermal expansions into those in the MD and the TD recited in the present invention 9 by stretching the film during the process for manufacturing the polyimide film based on the description of the present case. In addition, since the value of the coefficient of thermal expansion is oppositely too large in the two components basis including PMDA/ODA and ODA/BPDA, it is impossible to set the coefficient of thermal expansion in the state of not stretching to be the range of 6.5 ppm/°C to 13.5 ppm/°C. Accordingly, even if it is stretched, it is impossible to adjust the coefficient of thermal expansion into the range of the coefficient of thermal expansions in the MD and the TD recited in the present invention 9.

As mentioned above, in the case of the polyimide film having the two components basis, it is theoretically impossible to obtain the value of the coefficient of thermal expansion recited in the present invention 9 using the method stated in the description

#### Allegations by Defendant

... a coefficient of thermal expansion which is finally obtained for a polyimide film is affected by many conditions including content of solvent, condition of temperature, speed for stretching and the like when it is stretched, while it is greatly affect by a magnitude of stretching. In addition, Exhibit A9 states that it is also affected by a thickness of a film. Accordingly, it cannot be concluded that the numerical range of the coefficient of thermal expansion recited in the present invention 9 for the aforementioned two components basis cannot be attained based only on the date described in Exhibit A8.

In addition, even if there is the polyimide film having the two components basis which does not have the coefficient of thermal expansion recited in the present invention 9, this is not encompassed within the range of the present invention 9 and is not the product for the present invention 9. Accordingly, that there is such a polyimide film having two components basis does not mean that the present invention 9 violates the enablement requirement. The present invention 9 is an invention to provide a polyimide film which is suitable for a fine pitch circuit substrate such as for COF and solving the problem by the polyimide film having anisotropy on the coefficient of thermal expansion with a specific range. The essential feature of the invention is to specify the coefficient of thermal expansion, the polyimide resin may be publicly known, and it is not essential for the present invention to select compounds used for manufacturing the polyimide. Although a selection range of an ingredient for manufacturing the polyimide film is specified, it will

of the present case.	comply with the enablement requirement, if a film		
since the description of the present case does	which complies with the predetermined numeral range		
not describe that the polyimide film having 2	can be o-btained in the selection range. It is not		
components basis of the present invention to the	reasonable that it is necessary to prove that the		
extent that it can be practiced, it is obvious that the	predetermined coefficient of thermal expansion can be		
present invention is not supported by the description	obtained for the range of all materials including the		
of the present case.	aromatic diamine components and the acid anhydride		
	components recited in the Claim		

Judgment by the Court

... Especially, the polyimide film having the two components basis comprising 4,4'-ODA/BPDA which has a large value of the coefficient of thermal expansion (as mentioned in the aforementioned I, according to Exhibits A8 and A10, the value of the coefficient of thermal expansion is 45.6 ppm/°C even in the condition of Bifix.), are examined.

Generally, it has been known that the coefficient of thermal expansion decreases as the thickness of layer is thinner (Exhibit A9, Page 1 of the translation). Accordingly, while it can be said that the coefficient of thermal expansion in the polyimide film which is manufactured by thermal imidation as described in Exhibits A8 and A10 can be further decreased by making thinner in the thickness of the layer, the present description does not specifically point out to what degree of the coefficient of thermal expansion can be decreased.

In addition, in the case of the polyimide film which is manufactured by the thermal imidation, it has been difficult to stretch it, since the solid content is too large (paragraph [0018] of Exhibit A13). Further, even if stretch of about 1.04 times can be performed as mentioned in Example 5 of Exhibit A29, there is no basis that 45.6 ppm/°C of the coefficient of thermal expansion can be decreased into a low value of 3 to 7 ppm/°C, and there is no specific indication in the description of the present case.

Further, even if the polyimide film having the 2 components basis of 4,4'-ODA/BPDA is manufactured by chemical imidation to adjust the thickness of the layer, the magnitude for stretching and the like, there is no basis that the coefficient of thermal expansion can be decreased into the low value of 3 to 7 ppm/°C, and there is no specific indication in the description of the present case.

The Defendant has asserted on this point that since the coefficient of thermal expansion which is finally obtained for the polyimide film is affected by many conditions including content of solvent, condition of temperature, speed for stretching and the like when it is stretched, while it is greatly affected by a magnitude of stretching, and Exhibit A9 states that it is also affected by a thickness of a film, it cannot be concluded that the numerical range of the coefficient of thermal expansion recited in the present invention 9 for the 2 components basis of ODA/BPDA cannot be obtained based only on the data of Exhibit A8. However, the description of the present case does not indicate a specific guideline on how to decrease the coefficient of thermal expansion into the value recited in the present invention 9 by how to specifically control the content of solvent, the condition of temperature, the speed for stretching and the like. Originally, while the burden of proof for the enablement requirement shall be on the Defendant which is the present applicant, the Defendant has not asserted

and proved that the polyimide film having the two components basis of ODA/BPDA which complies with the range of the coefficient of thermal expansion recited in the present invention 9.

Therefore, <u>it cannot be said that a person skilled in the art could not perform that the film having the two</u> <u>components basis of 4,4'-ODA/BPDA is arranged to have the range of the coefficient of thermal expansion</u> recited in the present invention 9, even considering the statement of the description of the present case and the technical common knowledge at the time of the priority date for the present case.

Article 36(6)(i) of the Patent Law stipulates the requirement of the claim statement that the invention for which a patent is sought should be stated in the detailed description of the invention in order to eliminate a grant of an exclusive right which has a broader range in comparison with the technical matter disclosed in the detailed description of the invention. Accordingly, it can be understood that whether or not the statement of the Claims complies with the support requirement should be determined, upon comparing the statement of the Claims with the statement of the detailed description of the invention stated in the detailed description of the invention stated in the detailed description of the invention and is within the range which can be recognized by a person skilled in the art such that the problem in the invention can be solved by the statement of the Claims is within the range which can be recognized by a person skilled in the light of the technical common knowledge at the time of filing the present application, even though there is no statement and/or suggestion in the detailed description of the invention.

(2) Hence, in comparison of the statement of the Claims with the statement of the detailed description of the invention of the description of the present case, the statement of the present invention 9 in the Claims is as [Claim 9] as stated in the aforementioned 2-2. In addition, the detailed description of the invention of the description of the present case states, as mentioned in the aforementioned 2(3), that the present invention 9 is to provide the polyimide film which is suitable for the fine pitch circuit substrate such as for COF which can reduce the change in its size in the TD of the film while maintaining the similar coefficient of thermal expansion as those in the metal (paragraphs [0002], [0005] and [0007]). Further, the detailed description of the invention states that, as the means for solving the problem, the film is oriented in the TD such that the coefficient of thermal expansion in this direction can be suppressed with low degree, and the coefficient of thermal expansion in the MD has the similar value with those in the metal, and the constituent of "a range between 10 ppm/°C and 20 ppm/°C in the coefficient of thermal expansion in the machine transferring direction (MD) of the film  $\alpha$ MD" and "a range between 3 ppm/°C and 7 ppm/°C in the coefficient of thermal expansion in the width direction (TD) of the film  $\alpha$ TD" is employed, whereby an effect of obtaining the polyimide film which is suitable for the fine pitch circuit substrate such as for COF is exerted (paragraphs [0008], [0011] and [0039]). Moreover, the detailed description of the invention states that, as the Example, where a gel film containing 4 components of PPD/4,4'-ODA and BPDA/PMDA (Examples 1 to 10) or 4 components of PPD/3,4'-ODA and BPDA/PMDA (Examples 11 to 15) is formed by the chemical imidation to manufacture the polyimide film which is stretched with 1.1 times in the MD and 1.5 times in the TD, and it is indicated to be the polyimide film complying with

the coefficient of thermal expansion recited in the present invention 9 and being low in the "ratio of dimensional change of the film in the TD" and having a lower amount of the "curl" (paragraphs [0058] to [0066]). Furthermore, the detailed description of the invention states that, as the Comparative Examples 1 and 2, where the polyimide film is manufactured using the same 4 components as stated in Examples 1 to 10 and changing its ratio of each component and the magnitude for stretching, such a film does not comply with the coefficient of thermal expansion recited in the present invention 9, as the result, the ratio in dimensional change of the film in the TD and the curl are large (paragraphs [0067] to [0069]).

In addition, the polyimide film having the 4 components basis of PPD/ODA and BPDA/PMDA and the polyimide film having the 2 components basis of PPD/BPDA as mentioned in the aforementioned 2(4) can be practiced by a person skilled in the art based on the statement of the description of the present case and the technical general knowledge at the time of the priority date for the present case. Hence, it can be said that the present invention 9 of the constituent of the polyimide film having the 4 components basis of PPD/ODA and BPDA/PMDA and the polyimide film having the 2 components basis of PPD/ODA and BPDA/PMDA and the polyimide film having the 2 components basis of PPD/DDA is a range which can be recognized by a person skilled in the art to solve the problem of the present invention 9, based on the statement of the description of the present case and the technical general knowledge at the time of the priority date for the present invention 9, based on the statement of the description of the present case and the technical general knowledge at the time of the priority date for the present case, and it should be said that the present invention 9 complies with the support requirement.

<u>However</u>, as mentioned in the aforementioned 2(5), <u>at least the polyimide film having the 2 components</u> <u>basis of ODA/BPDA cannot be practiced by a person skilled in the art based on the statement of the description</u> <u>of the present case and the technical general knowledge at the time of the priority date for the present case.</u> <u>Hence, it cannot be said that the present invention 9 of the constituent of the polyimide film having the</u> <u>aforementioned 2 components basis is a range which can be recognized by a person skilled in the art to solve</u> <u>the problem of the present invention 9, based on the statement of the description of the present case and the</u> <u>technical general knowledge at the time of the priority date for the present case, and it should be said that the</u> <u>present invention 9 does not comply with the support requirement.</u>

## (21-2)-6

Relevant portion	Part II, Chapter 1, Section 1, 4.1.2
of Examination	
Guidelines	
Classification of	21-2: Regarding the relationship between the enablement requirement and the support
the Case	requirement
Keyword	Regarding the relationship between the enablement requirement and the support
	requirement

## 1. Bibliographic Items

Case	"Treatment of diseases using nalmefene and its analogs" (Appeals against an Examiner's							
	Decision)							
	Intellectual Property High Court Decision, March 31, 2016 (2015 (Gyo KE) No. 10052)							
Source	Website of Intellectual Property High Court							
Application	Japanese Patent Application No. 2007-531272 (JP 2008-512462 A)							
No.								
Classification	A61K 31/485							
Conclusion	Dismissal							
Related	Article 36(4)(i) and Article 36(6)(i)							
Provision								
Judges	IP High Court First Division, Presiding Judge: Ryuichi SHITARA, Judge: Asayo OYORI,							
	Judge: Shingo OKADA							

## 2. Overview of the Case

# (1) Summary of Claimed Invention

6-methylene morphinans such as nalmefene are used for a new purpose different from the conventional purpose of preventing or treating health conditions selected from (1) infections of hepatitis B virus, (2) organ damage such as liver damage, lung damage and kidney damage, (3) diseases selected from the group consisting of Crohn's disease, Ulcerative colitis and Ulcerative colitis.

# (2) Disclosure of Detailed description of the invention (cited from the Court Decision)

" The present invention relates to new medical uses of 6-methylene morphinans such as nalmefene ([0001]). Nalmefene, acting as a morphine derivative and a narcotic antagonist, has been found to be useful for treating various health conditions such as reumatoid arthritis, allergic rhintis, pruritus, hyperkinesiain children, senile dementia, sudden infant death syndrome, autoimmune diseases, and alcoholism ([0003], [0004], [0013] and [0022]), and these uses of nalmefene have generally focused on the investigation of the use as analgesics, morphine antagonists, or antitussives. However, a recent literature has reported potential new uses for some morphine

derivatives which may not be mediated through morphine receptors ([0022]). A problem to be solved by the invention is to provide new medical uses of 6-methylene morphinans such as nalmefene (a compound of the formula R-A-X) and the problem can be solved in such a manner that a compound of the formula R-A-X described in claim 1 is used as a medicine administering to a human or an animal for preventing or treating health conditions selected from (1) infections of hepatitis B virus, (2) organ damage such as liver damage, lung damage and kidney damage, and (3) diseases selected from the group consisting of Crohn's disease, Ulcerative colitis and Ulcerative colitis (claim 1) "

#### (3) The Claims (Claim 1 is only described)

[Claim 1] A medicine for preventing or treating health conditions selected from viral infections selected from hepatitis B, organ damage caused by non-intravenous ischaemia reperfusion consisting of liver damage, lung damage and kidney damage, and diseases associated with overproduction of TNF- $\alpha$  selected from the group consisting of Crohn's disease, Ulcerative colitis and Ulcerative colitis, which comprises administering to a human or an animal in need thereof a therapeutic amount of a compound of the formula R-A-X,

wherein R is H, alkyl, allyl, phenyl, benzyl, or  $(CH_2)_mR_4$ , wherein m is from 0 to 6, and  $R_4$  can be a ring structure, A is



X can be hydrogen, allyl, cinnamoyl, crotonyl,  $(CH_2)C_6H_5$ -4F,  $(CH_2)_nC=CR_1R_2$ ,  $(CH_2)_nC\equiv CR_3$ ,  $(CH_2)_nR_5$ , and  $(CH_2)_mCHR_6R_7$ ,

wherein m is 0 to 6 and n is from 0 to 6,  $R_3$  can be H, alkyl, or the same as  $R_4$ , wherein  $R_4$  is described above and  $R_5$  can be alkyl, CN, COR<sub>8</sub>, or structures selected from the group consisting of the following structures:



wherein  $R_6$  and  $R_7$  are each independently the same as  $R_4$  as defined above, and  $R_8$  is alkyl, the same as  $R_4$  as defined above, or the same as  $R_5$  when  $R_5$  can be the structures described above (IX - XVIII).

(4) Procedural History

June 14, 2012	:	Decision of refusal	
October 19, 2012	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No.	
		2012-20646)	
		Amendment (See the aforementioned "The Claims ")	
October 27, 2014	:	Appeal Decision that "the request for the appeal is to be dismissed"	

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Appeal Decision (cited from the Court Decision)

...The claimed invention includes "a medicine for preventing or treating viral infections selected from hepatitis B" "which comprises administering to a human or an animal in need thereof a therapeutic amount of a compound of the formula R-A-X" such as nalmefene. A problem to be solved by the invention is to provide "a compound of the formula R-A-X" as "a medicine for preventing or treating viral infections selected from hepatitis B".

In order that a person skilled in the art can recognize the problem can be solved, it should be recognized by a person skilled in the art that "a compound of the formula R-A-X" is useful in a medicinal-use for "preventing or treating viral infections selected from hepatitis B".

"A compound of the formula R-A-X" such as nalmefene herein is a well-known compound (see 1. (3) B).

However, it cannot be found any description that the chemical compound described above is used for "viral infections selected from hepatitis B", even considering each summarized item in the above (1). The summarized items A to C include the description of viral infections, but they merely enumerate a part of the conditions to be prevented or treated and do not include an objective ground that "a compound of the formula R-X-A" can be used as "a medicine for preventing or treating viral infections selected from hepatitis B".

Consequently, it cannot be said that the detailed description of the invention describes the claimed invention, that is, "a medicine for preventing or treating viral infections selected from hepatitis B" "which comprises administering to a human or an animal in need thereof a therapeutic amount of" "a compound of the formula R-A-X" such as nalmefene. In other words, it cannot be said that the claimed invention is the invention described in the detailed description of the invention.

## (3-2) Patent Act, Article 36 (4) (i)

As described in the above (3-1), the description of the application concerned does not describe any working examples which were actually carried out to find out whether or not "a compound of the formula R-A-X" can be specifically used for preventing or treating "viral infections selected hepatitis B", but the description merely

enumerates the conditions to be prevented or treated. It is also not recognized that the description includes a logical explanation, as an alternative of working examples, clarifying "viral infections selected from hepatitis B" can be prevented or treated by using "a compound of the formula R-A-X".

Moreover, it is also not recognized that there is the common general knowledge that the relationship between "a compound of the formula R-A-X" and "viral infections selected from hepatitis B" has been obvious, in the field to which the invention pertains at the priority date of the application concerned.

Then, it cannot be said that the description of the detailed description of the invention is not described so that a medicine can be used as intended.

Accordingly, it cannot be said that the statement of the detailed description of the invention of the description is clear and sufficient in such a manner that a person skilled in the art can work the claimed invention. Decision

## Allegations by Plaintiff

... When the appeal decision determines that the application concerned does not satisfy the requirements under the provisions of Article 36 (6) (i) and Article 36 (4) (i) of Patent Act, the following test results were not found and judged: a pharmacological test result attached to a request for appeal (a written amendment filed on December 5, 2012) (Exhibit A11. hereinafter referred to as "a test result attached to a request for appeal"), and a test result described in US Patent Application No. 10/936431 which serves as a basic application of claiming priority under Paris Convention in the application concerned (hereinafter referred "a to as basic application". US2005/0107415A1 [A15]). The appeal decision should judge whether or not the description of each of these test results is beyond the scope of disclosure of the original description, etc. of the application concerned, or whether or not they are merely supplementary materials within the scope of the effects of the claimed invention. It is deemed that there is an error in the method of judging the appeal decision that the application concerned does not satisfy the requirements under the provisions of Article 36 (6) (i) and Article 36 (4) (i) of Patent Act.

## Allegations by Defendant

...The description of the application concerned does not give any explanation about a mechanism of preventing or treating hepatitis B and does not show any utility as a medicine for preventing or treating "viral infections selected from hepatitis B". In addition, even during the procedures of a written opinion, a written amendment, a written reply, etc. relevant to the application concerned, the Plaintiff has never alleged with an objective ground about "viral infections selected from hepatitis B". As a result, there is no error in not finding the test result attached to a request for appeal.

Judgment by the Court

# (3) ...

(A) Article 36 (6) (ii) of Patent Act stipulates that the description of the claims should satisfy the requirement that "the invention for which a patent is sought is stated in the detailed description of the invention"

The object of the patent system is to encourage inventions and contribute to the development of industry by granting patents to the inventions on the premise to disclosure of the inventions and thereby guaranteeing the monopolistic and exclusive implementation of the inventions as a business for a certain period of time. A description, which a person who seeks for a patent of an invention should attach to a request, originally has a role of clarifying the scope (technical scope of the patented invention) where a patent right extends after establishment of the patent right, as well as disclosing the technical content of the invention to the public. Therefore, it should be said that in order to obtain a patent of the invention by describing the invention in the claims, it is necessary that the invention should be described in the detailed description of the invention in the description in such a way that a person skilled in the art can recognize that the problem to be solved by the invention can be solved. Whether or not the statement of the claims satisfies the Support Requirement of the description should be determined, through comparison of the statements of the claims and of the detailed description of the invention, by considering whether the invention described in the claims is the invention described in the detailed description of the invention and also the statement of the detailed description of the invention is within the scope for which a person skilled in the art can recognize that the invention can solve the problem based on the statement, or by considering whether the statement of the invention described in the detailed description of the invention is within the scope which a person skilled in the art can recognize that the invention can solve the problem in light of the common general knowledge as of the filing, even the invention described in the claims neither state nor indicate in the detailed description of the invention. (Judgment of the Intellectual Property High Court on November 11, 2005 Grand Panel Case)

...For a medicinal-use invention such as the claimed invention, when there is a description of use of administering a specific medicine for preventing or treating a certain medical condition but there is neither a description of an objective support nor the common general knowledge regarding the operation and working effect on the condition, it is usually difficult to predict for a person skilled in the art whether or not the operation and working effect of the invention has utility, namely the invention can solve the problem.

Then, it cannot be said that the detailed description of the invention of the description is described in such a way that a person skilled in the art can understand a compound of the formula R-A-X can be used for a medicinal-use as "a medicine for preventing or treating viral infections selected from hepatitis B", namely the compound has an antiproliferative activity on hepatitis B in vivo in a human or in an animal.

Therefore, the claimed invention is not recognized within the scope for which a person skilled in the art can recognize that the invention can solve the problem based on the statement of the detailed description of the invention and the common general knowledge as of the filing. Hence, the claimed invention does not comply with the regulation under the provision of Patent Law, Article 36 (6) (i).

#### (4) Patent Act, Article 36 (4) (i) (Enablement Requirement)

The statement of the detailed description of the invention requires that "in accordance with Ordinance of the Ministry of Economy, Trade and Industry, the statement shall be clear and sufficient in such a manner as to enable any person ordinarily skilled in the art to which the invention pertains to work the invention." (Patent Act, Article 36 (4) (i))

As held to the above (3), it cannot be said the detailed description of the invention of the description is not described in such a manner that a person skilled in the art can understand a compound of the formula R-A-X can be used as "a medicine for preventing or treating viral infections selected from Hepatitis B".

Therefore, the statement of the detailed description of the invention of the description is not clear and sufficient in such a manner that a person skilled in the art can work the claimed invention.

(5) ... There may be a case that the description refers to a pharmacological test result etc., and a written opinion, a pharmacological test result, etc. is permitted to submit after the filing as a supplemental document for the test result referred to. However, as stated in the above (3), the detailed description of the invention of the description only states a use of a compound of the formula R-A-X for preventing or treating viral infections selected from hepatitis B, but it does not state any objective support on utility of the compound for the relevant use. It should say that in such a case it is not allowed based on the purpose of patent system stated in the above (3) (A) to take account of a pharmacological test result submitted after the filing and a test result of a basic application.

Then, it can be said that it is reasonable that the appeal decision is made to explicitly exclude such allegation of the plaintiff that a test result attached to a request for appeal and a test result of a basic application should be included in a subject of consideration in the appeal procedure (Exhibits A11 and A13). The pharmacological test result submitted with a request for appeal after the filing and the test result of a basic application both cannot be treated as a document supplementary to the statement of the description within the scope of the technical effects of the claimed invention described in the description, (...)therefore, it is not deemed that the method of judging this appeal decision is illegal where the decision that the claimed invention does not satisfy the support requirement and the enablement requirement is made without considering those submitted test results. It is also not recognized that this issue gives an influence on the final judgment of the appeal decision, and therefore, it cannot be a ground for cancellation of the appeal decision.

# (23)-1 Relevant portion Part II, Chapter 2, Section 2 of Examination Guidelines Guidelines Classification of Classification of 23: Regarding the support requirement the Case Keyword Parameter, Certificates of Experimental Results

# 1. Bibliographic Items

Case	"Method of manufacturing polarizing film" (Opposition to the grant of the patent)						
	Intellectual Property High Court Decision, November 11, 2005 (2005 (Gyo KE) No. 10042)						
Source	Website of Intellectual Property High Court, Hanrei Jiho, No. 1911, Page 48, HANREI						
	TIMES, No. 1192, Page 164						
Application	Japanese Patent Application No. H05-287608 (JP H7-120616 A)						
No.							
Classification	G02B 5/30						
Conclusion	Dismissal						
Related	(Former) Article 36(5)(i)						
Provision							
Judges	IP High Court, Special Division						
	Presiding Judge: Katsumi SHINOHARA, Judge: Tomokazu TSUKAHARA, Judge: Hisao						
	SATO, Judge: Kaoru AOYAGI, Judge: Gaku OKAMOTO						

#### 2. Overview of the Case

(1) Summary of Claimed Invention

The claimed invention has a main characteristic of select a rolled web film (piece goods as a raw material) for obtaining a polarized film which is superior in polarization performance and durability and is superior in stability at the time of manufacturing by uniaxial stretching, and <u>uses a rolled web film of polyvinyl</u> alcohol basis indicating the following formulae (I) and (II) of a temperature for complete bathing in hot water (indicating resistance to the hot water) (X) and an equilibrated swelling degree (a degree in increasing the weight when immersing in a liquid) (Y).

Y>-0.0667X+6.73 ... (I)

X≥65 ... (II)

The right figure is a graph in which the

[FIG. 1]



○,●: Example and Comparative Example disclosed in the description □,■: Example according to the Certificate of Experimental Results

experimental data stated in the Juridical judgment document is plotted (including the data submitted in the Certificates of Experimental Results after filing the present application).

(2) Disclosure of Detailed description of the invention

"... "[Means for solving the Problem] Hence, as the result that the present inventors has been continuously and keenly investigated to solve such a problem, upon manufacturing a polarized film in which a rolled web film with polyvinyl alcohol basis is uniaxially stretched, where the rolled web film has a thickness of 30 to 100  $\mu$ m, and a film with polyvinyl alcohol basis is used with a range indicating the following formulae of a temperature for complete bathing (X) and an equilibrated swelling degree (Y) in hot water, and it is uniaxially stretched into 1.2 to 2 times during the step of the dying treatment and into 2 to 6 times during the step of the treatment with boron compound, especially where a film with polyvinyl alcohol basis has an average polymerization degree of 2600 or more, the inventors has found to achieve the aforementioned purpose to complete the present invention.

Y>-0.0667X+6.73 ... (I)

X≥65 ... (II)

X: a temperature for complete bathing a film piece having 2 cm×2 cm in hot water (°C), Y: an equilibrated swelling degree (weight ratio), calculated from the following formula, a weight of film after immersion/a weight of film after drying, where after the film piece having 10 cm×10 cm is immersed in a thermostat water tank having 20°C to swell the piece, the piece is dried at 105°C for 2 hours" (paragraph [0008]) (abridged from the juridical decision)

"... [Example] A PVA film having 80 µm in thickness and having the following value in the temperature for complete bathing (X) and the equilibrated swelling degree (Y) was immersed in an aqueous solution containing 0.2 g/L iodine and 60 g/L potassium iodine at 30°C for 240 seconds, uniaxially stretched 1.2 times, simultaneously, then immersed in an aqueous solution having a composition of 60 g/L boric acid and 30 g/L potassium iodine and

uniaxially stretched 6 times, simultaneously, and treated with boric acid for 5 minutes. The film was dried at room temperature for 24 hours to obtain a polarizing film. The temperature for decoloring in water was measured for the obtained polarizing film in order to evaluate the wet heat resistance. As the result, the following values were obtained. In addition, while the breakage and cracking of the film were not observed where after the film was decolored, the film was uniaxially stretched into 6.4 times during the treatment with boric acid in Examples 1 and 2, the breakage of the film was observed where after the film was decolored, the film was uniaxially stretched with the ratio of stretching exceeding with 6 times during the treatment with boric acid.

	Example 1	Example 2	Comparative example 1	Comparative example 2
Temperature for complete bathing (X) (°C)	71.6	72.0	74.5	75.3
Equilibrated swelling degree (Y)	2.4	2.2	1.6	1.6
Range of (Y) <calculated value=""></calculated>	Y > 1.95	Y > 1.93	Y > 1.76	Y > 1.71
Temperature for decoloring in water (°C)	63	62	52	54

(summary of the statement from paragraphs [0020] to [0026])"

(abridged from the juridical decision, the Table is abridged from the [Table 1] of JPH7-120616A)

#### (3) The Claims (Claim 1 is only described)

[Claim 1] A method for manufacturing a polarizing film, wherein, upon manufacturing a polarizing film in which a rolled web film having polyvinyl alcohol basis is uniaxially stretched, the thickness of the rolled web film being 30 to 100  $\mu$ m, a film having polyvinyl alcohol basis having a range of relationship between a temperature for complete bathing (X) and an equilibrated swelling degree (Y) in hot water, indicated by the following formulae, is used, and the film is uniaxially stretched 1.2 to 2 times during a treatment of dying and 2 to 6 times during a treatment with boric acid compound.

Y>-0.0667X+6.73 ... (I)

X≥65 ... (II),

wherein X: a temperature for complete bathing a film piece having 2 cm×2 cm in hot water (°C), Y: an equilibrated swelling degree (weight ratio), calculated from the following formula, a weight of film after immersion/a weight of film after drying, where after the film piece having 10 cm×10 cm is immersed in a thermostat water tank having 20°C to swell the piece, the piece is dried at 105°C for 2 hours.

#### (4) Procedural History

July 12, 2002	:	Registration of establishment of the patent right (see the aforementioned "The
		Claims")
March 20, 2003	:	Opposition to the grant of a patent (Igi No. 2003-070728)
November 26, 2004	:	Decision that " the patent shall is invalidated"

#### 3. Abridgement of Decision/Juridical decision corresponding to the matter to be held

#### Decision

... The range prescribed with the two formulae of Y>-0.0667X+6.73 and X $\geq$ 65 covers a wide range, and the Example is not enough for obtaining a conviction that all of the films complying with these formulae

provides a superior effect in polarizing performance and durability performance. In addition, there is no other fact to obtain a certain evidence that the film complying with the aforementioned two formulae provides the aforementioned superior effect in light of the statement of the description for the present case and the technical general knowledge in the technical art. Hence, ... since its basis and reason are still unknown as to how the two formulae recited in the present invention 1 is introduced, it cannot be recognized that the invention to grant a patent is finally stated in the detailed explanation of invention. Therefore, the statement of the Claims for the present case violates the provision of Article 36(5)(i) of the Patent Law.

... The addition of experiments which have a large difference in experimental condition does not supplement the Example of the present invention, constitutes an addition of new Example, and the result of these experiments cannot be considered for examining the present case. Therefore, there is no reason for the assertion made by the patentee based on such a Certificate of Experimental Results.

#### Decision

Allegations by Plaintiff

... [Formula (I)] was introduced by plotting 14 experimental data of 10 data stated in the Certificate of Exhibit A6, in addition to the 4 experimental data in the Example and the like stated in the description for the present case. In addition, the description for the present case states that the PVA film having 65°C or lower in the temperature (X) for complete bathing in hot water is not practical since the partial dissolution and deterioration in the film occurs at the Therefore, it can be easily time of stretching. understood by a person skilled in the art that the PVA film in hot water in which the two formulae of formula (I) and formula (II) is within the limited range provides a superior effect in the polarizing performance and the durable performance.

A The experiments 1 to 8 stated in the Certificate of Exhibit A6 merely control the temperature for complete bathing and the equilibrated swelling degree in hot water by simply using the well-known technique.

Therefore, the experimental data stated in the Certificate of Exhibit A6 supplements the Example stated in the description for the present case, and to determine the decision that the Certificate of Exhibit

## Allegations by Defendant

... What the detailed explanation of invention of the description for the present case states, ... the correlation between the values of the temperature (X) for complete bathing and the equilibrated swelling degree (Y) and the specific characteristic is <u>only a</u> <u>method for manufacturing 4 types of films in the</u> <u>Example and the Comparative example</u>.

... It is impossible to introduce, from these 4 points, that the range of the temperature (X) for complete bathing and the equilibrated swelling degree (Y) in hot water for which the desired property is obtained is a range which goes beyond the numerical values according to the temperature (X) for complete bathing to be 65°C or more and the equilibrated swelling degree (Y) to be a formula of -0.0667X+6.73 [Formula (I)].

A decision whether or not the statement of the Claims is complied with the provision of the former Article 36(5)(i) of the Patent Law should be made by considering the technical general knowledge of a person skilled in the art at the time of filing a patent application in addition to the statement of the description and the drawing attached to the request of the patent application.

A6 cannot be considered is unreasonable.	Therefore, where the experimental data stated in
	the Certificate of Exhibit A6 is the technical general
	knowledge of a person skilled in the art at the time of
	filing the present application, it is construed that such
	data can be considered in the aforementioned
	determination, and otherwise, such data cannot be
	considered.

Judgment by the Court

1 Regarding Reason for cancellation 1 (an error in determination on violation of the former Article 36(5)(i) of the Patent Law)

(1) The former Article 36(5) of the Patent Law prescribes that "The statement of the claims as provided in paragraph (3), item (iv) shall comply with each of the following items", and its item (i) prescribes that "the invention for which a patent is sought is stated in the detailed description of the invention" (In the revised Law at 1994, the item prescribes the same wording as Article 36(6)(i) of the Patent Law, the situation continues up to today. The prescription is also referred to as a "support requirement of the description").

In the patent system, it is intended that, upon a premise to disclose an invention, the invention is granted a patent to ensure to exclusively practice the invention as a business for a certain period of time whereby encouraging inventions and to contribute to the development of industry. In addition, since the description which a person who intends to obtain a patent for an invention should be attached to a request originally has a role that the technical content of the invention is disclosed to a public and that the effective range (the technical range of the claimed invention) is clarified after it is established as a patent right, it should be said that the invention should be stated in the detailed description of the invention in the description such that a person skilled in the art can recognize that the problem to be soveld by the invention can be solved. The reason why the support requirement for the description prescribed in the former Article 36(5)(i) of the Patent Law limits the aforementioned provision for the statement of the Claims is that, if an invention which is not stated in the detailed of the former and exclusive right will be established for an invention which is not disclosed, a benefit of its free utilization is deprived from the general public, the development of industry is possibly inhibited, and it will run counter to the aforementioned meaning of the patent system.

In addition, whether or not the statement of the Claims is complied with the support requirement in the description should be determined by examining whether, upon comparing the statement of the Claims and the statement of the detailed description of the invention, the invention stated in the Claims is the invention stated in the detailed description of the invention and a range that a person skilled in the art can recognize to solve the problem of the invention by the statement of the detailed description of the detailed description of the detailed description of the invention and a range that a person skilled in the art can recognize to solve the invention stated in the Claims is within a range that a person skilled in the art can solve the problem of the invention in light of the technical general knowledge at the time of filing the application even though there is no statement and no suggestion. It is reasonable to construe that a patent applicant (a plaintiff of a suit for

cancelling the trial decision which was decided as dismissal in request to trial against the Examiner's decision of refusal) or a patentee (a plaintiff of a suit for cancelling the trial decision to decide the cancellation of the patent or a plaintiff of a suit for cancelling the trial decision, to be an acceptance, based on the appendix Article 2(9) of Law No. 47 at 2003, and a defendant of a suit for cancelling the trial decision in the trial for invalidating the patent to be dismissal) bear the burden of proof for the existence of the support requirement in the description.

(4) Comparison between the invention stated in the detailed description of the invention and the invention stated in the Claims

...

A ... while the invention for the present case ... relates to so-called parameter invention, it is reasonable to construe that, in order that the statement of the Claims is complied with the support requirement for the description in such an invention, the detailed explanation of invention is stated to such an extent that a person skilled in the art can understand the technical relational meaning between the range indicated by the formula and the obtained effect (performance) at the time of filing the patent application even though there is no specific disclosure, or it is necessary to state to such an extent that a person skilled in the art can recognize to obtain a desired effect (performance) if it is within the range indicated by the formula in consideration of the technical general knowledge at the time of filing the present application, upon disclosing the specific example.

B Hence, upon examining whether the statement of the description for the presence case is complied with the support requirement, while the statement states to employ the arrangement stated in Claim 1 for the present case as means for manufacturing a polarizing film which is superior in the polarization performance and has a superior performance in the stability at the time of manufacturing, the detailed such of invention only states two Examples and two Comparative examples, as a specific example for indicating an efficacy to employ such an arrangement, wherein the Example indicates to obtain a polarizing film which has a high durability and can be resistance to high magnitude for stretching, and wherein the Comparative example indicates to obtain a polarizing film which is enough for durability and cannot be resistant to high magnitude for stretching.

On the other hand, while the invention for the present case can obtain the polarizing film having the aforementioned desired performance by being a relationship of presence in a range defined by the two formulae of ... [formula (I)] and ... [formula (II)] with the temperature (X) for complete bathing and the equilibrated swelling degree (Y) with which the PVA film used as the rolled web film should be complied, there is no evidence which is enough to recognize that at least to define the aforementioned range as standard formulae of formula (I) and formula (II) could be understood by a person skilled in the art at the time of filing the application for the present case, even though there is no specific disclosure.

... <u>if</u> the temperature (X) for complete bathing and the equilibrated swelling degree (Y) <u>have a relationship</u> present in the range defined by the lines indicating the standard formula of the formula (I) and the standard line of the formula (II) in XY plane, it should be said to be impossible for a person skilled in the art, who reads the description for the present case, to recognize, supported by the aforementioned four specific examples that the problem for which the conventional PVA polarizing film is possessed is dissolved and the polarizing film having

the aforementioned desired performance can be manufactured, even though the technical general knowledge at the time of filing the application for the present case is considered. In addition, it cannot be said, only with such a statement in the detailed description of the invention in the description for the present case, that the detailed description of the invention states by disclosing the specific example to such an extent that a person skilled in the art can recognize to obtain the desired effect (performance) if it is within the range indicated by the formulae, in consideration of the technical general knowledge at the time of filing the application for the present case. ... it cannot be said that the statement of Claim 1 for the present case complies with the support requirement of the description.

(5) Item 10 stated in Exhibit A6 submitted by the plaintiff during the procedure of the present opposition

... it should be said that <u>it run to opposite against the meaning of the patent system of granting the patent</u> on premise of disclosure of the invention and not allowed that the content of the invention is expanded or generalized into the range of the invention stated in the Claims by supplementing the content of stating the detailed description of the invention with out of the range for statement upon submitting the experimental data after filing the patent application so as to comply with the support requirement for the description, where it cannot be said that the detailed description of the invention does not disclose the specific example to such an extent that a person skilled in the art can recognize to solve the problem of the invention and that the content disclosed in the detailed explanation of invention can be expanded or generalized into the range of invention stated in the Claims, even though the technical general knowledge of a person skilled in the art at the time of filing the application for the present case is considered.

C Hence, ... the experimental data stated in the Certificate of Exhibit A6 is just for disclosing a relationship between the result for measurement of the performance of the polarizing film which was obtained from the PVA film having the numeral values of the specific temperature (X) for complete bathing and the equilibrated swelling degree (Y) and the numerical values of the temperature (X) for complete bathing and the equilibrated swelling degree (Y) and the performance of the polarizing film, which is not specifically disclosed in the detailed description of the invention in the description for the present case, which is determined based on the data for measurement, after filing the application for the present case, it should be said that what it is considered as a matter of supplementing the content of the statement of the detailed explanation of invention with out of range for the statement, ... is not allowed.

· ·	
Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	

## (23)-2

## 1. Bibliographic Items

Case	"Mid-chain branched surfactants" (Appeals against an Examiner's Decision)
	Intellectual Property High Court Decision, October 11, 2007 (2006 (Gyo KE) No. 10509)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. H9-537385 (JP 2000-503700 A)
No.	
Classification	C11D 1/14
Conclusion	Dismissal
Related	(Former) Article 36(6)(i)
Provision	
Judges	IP High Court Second Division, Presiding judge: Tetsuhiro NAKANO, Judge: Yoshiyuki
	MORI, Judge: Katsuumi SHIBUYA

## 2. Overview of the Case

# (1) Summary of Claimed Invention

An object of the claimed invention is to provide cleaning compositions having one or more advantages including greater surfactancy at low use temperatures, increased resistance to water hardness, greater efficacy in surfactant systems, improved removal of greasy or body soils from fabrics, improved compatibility with detergent enzymes, and the like. <u>Problems to be solved by the claimed invention include detergency and biodegradability at low water temperatures.</u> The detergent surfactant compositions of the claimed invention comprise longer alkyl chain, mid-chain branched surfactant compounds.

# (2) Disclosure of Detailed Explanation of the Invention

"... <u>It has now unexpectedly been determined that</u> certain relatively long-chain alkyl sulfate surfactant compositions containing mid-chain branching are preferred for use in laundry products, especially under cool or <u>cold water washing conditions (e.g., 20°C-5°C)</u>. ... " (cited from p.14 in JP 2000-503700A)

"... In the background of the claimed invention, there was an observation that as branching moves away from the 2-alkyl position towards the center of the alkyl hydrophobe moiety there is a lowering of Krafft temperatures, although both common practice and the published literature are equivocal on the desirability of branching in the mid-chain region ..., and a situation where it is not immediately evident which direction to take in the development of further improvements in branched alkyl sulfates. ... " (cited from the Court Decision)

(3) The Claims (Amended) (Claimed Invention 1)

[Claim 1] A detergent surfactant composition comprising at least 5% by weight of longer alkyl chain, mid-chain branched surfactant compounds of the formula:

A<sup>b</sup>-X-B

wherein:

(a) Ab is a hydrophobic C<sub>9</sub> to C<sub>22</sub>, total carbons in the moiety, mid-chain branched alkyl moiety ... has an average total number of carbon atoms in the  $A^b$ -X moiety in the above formula within the range of greater than 14.5 to 17.5; (b) B is a hydrophilic moiety selected from sulfonates, amine oxides, <u>alkoxylated sulfates</u> ...; and

(c) X is selected from -CH<sub>2</sub>- and -C (O) -; and

(d) A<sup>b</sup> comprises substantially no geminal substituted carbon atoms.

(4) Procedural History

June 19, 2001	:	Request for Appeals against an Examiner's Decision of Refusal (Fufuku No. 2001-
		10354)
January 5, 2006	:	Amendment (See the aforementioned "The Claims")
July 5, 2006	:	Appeal Decision that "the request for the appeal is to be dismissed"

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision (cited from the Court Decision)

Claimed Invention 1 ... is not stated nor indicated in the description of the claimed invention. Therefore, the statement of the claims ... do not meet the requirements set forth in Article 36(6)(i) of the Patent Act ...

... "... Generally, since it is difficult to precisely predict the performance as a detergent surfactant composition from the chemical structure and the blending ratio of the blended ingredients, the detailed explanation of the invention is required to disclose its effects sufficiently by providing, on the composition, data that supports its performance as a detergent surfactant or a description equivalent to such data" ... To consider that the Application meets the requirements set forth in former Article 36(6)(i), "... since the Description states that this detergent surfactant compositions are used in a washing process under cold water washing conditions (Stated Matter 1) and biodegradable (Stated Matter 2), the Description is required to disclose objectively that the compositions of the claimed invention have a performance as a detergent surfactant by providing data on the matters or a description equivalent to such data"....

#### Decision

Allegations by Plaintiff

... The detailed explanation of the invention is only required to have a statement to the extent that a person skilled in the art could recognize that the invention stated in the claims could solve the problem to be solved by the invention.

Accordingly, it should be construed that in order to consider that the Application meets the requirements set forth in former Article 36(6)(i), <u>even</u> <u>a qualitative statement on a performance as a</u> <u>detergent surfactant is sufficient</u>.

... Without data supporting a performance or a description equivalent to such data, only if there is a qualitative statement on a performance as a detergent surfactant, then a person skilled in the art can understand the relation between the chemical structure and the performance as a detergent surfactant composition. For a person skilled in the art, it is not a major issue whether the performance as a detergent surfactant surfactant is stated with a correction of concrete experimental data or the performance is only stated qualitatively as a conclusion of experiments. Accordingly, the aforementioned decision of the Appeal Decision is an error.

Allegations by Defendant

B ... "Introduction to Surfactants" (completely revised Japanese version, "Zenteiban Shin Kaimen Kasseizai Nyumon" in Japanese) written by Takehiko Fujimoto and published in October 2003 ... states "the washing effect of surfactants ... has not been actually well-studied so far", and the Description ... also states "... it is not immediately evident which direction to take in the development of further improvements in branched alkyl sulfates." ...

C Based on the foregoing statements, it is considered that the washing performance cannot be predicted from the chemical structure of the mid-chain branched primary alkyl sulfate compounds, and therefore it is considered that <u>the washing performance</u> of compounds having a substituent B which is not an alkyl sulfate compound <u>is even less predictable</u>.

Accordingly, an allegation that only if there is a qualitative statement on a performance as a detergent surfactant, then a person skilled in the art can understand the relation between the chemical structure and the performance as a detergent surfactant composition is simply a guess and it is not convincing.

Judgment by the Court

2 Regarding fulfillment of requirements under former Article 36(6)(i)

... A description which a person requesting the grant of a patent for an invention should attach to an application has the role of disclosing the technical content of the invention to the public as well as manifesting, after establishment of the patent right, the scope (technical scope of the patented invention) to which a patent right extends. Therefore, it should be considered that in order to obtain a patent by stating an invention in the claims, it is required to state the invention in the detailed description of the invention in the description so that a person skilled in the art can recognize that the problem to be solved by the invention can be solved.

... Whether the statement of the claims meet the support requirement of a description should be determined by considering, through comparison of the statement of the claims and the statement of the detailed description of the invention, whether the invention stated in the claims are the invention described in the detailed description of the invention that is within the scope for which a person skilled in the art can recognize,

based on the statement of the detailed description of the invention, that the problem <u>can be solved by the</u> <u>invention</u>, and also by considering <u>whether the invention stated in the claims are an invention within the scope</u> which a person skilled in the art can recognize, in light of the common general knowledge as of the filing, that <u>the problem</u> <u>can be solved by the invention</u>, even without the statement or suggestion thereof.

... It is clear that <u>the problem to be solved by the invention includes cold water detergency and</u> <u>biodegradability</u>. Therefore, it should be considered that the detailed description of the invention is required to disclose objectively that the invention is effective in these performances.

... In the Description, ... Example 9 to Example 16 and Example 23 to Example 25 are the examples of the compounds in which the substituent B is an alkoxylated sulfate. These examples meet the requirement of substituent B but state <u>only an exemplary composition of ingredients in these examples except Excample 23</u> and <u>there is no statement on the effect on cold water detergency and biodegradability</u> ....

... Regarding the performance of the detergent surfactant composition of Example 23, there is a statement "The resulting composition is a stable anhydrous heavy duty liquid laundry detergent which provides an excellent stain and soil removal performance when used in normal fabric laundering operations." ... but this statement provides no concrete evaluation on cold water detergency and biodegradability.

(6) In light of the foregoing, it is considered that the detailed description of the invention in the Application is not sufficiently described to the extent that a person skilled in the art (a person ordinarily skilled in the art to which the invention pertains) can recognize that a composition of Invention 1 can solve the problem to be solved by the invention, which is cold water detergency and biodegradability (see the former Article 36(4)).

3 Supplementary explanation regarding Allegations by Plaintiff

(1) The Plaintiff alleges that in order to consider that the present application meets the requirements set forth in the former Article 36(6)(i), even a qualitative statement on a performance as a detergent surfactant is sufficient ....

... In view of these circumstances, it is considered to be <u>difficult for a person skilled in the art to recognize</u> concretely a solution of the problem to be solved by the <u>invention</u>, such as cold water detergent performance, based on only the qualitatively statement of the compositions of the detergent surfactants according to the <u>invention</u>. Therefore, the plaintiff's aforementioned allegation cannot be accepted.

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Point of the invention and the support requirement

## (23)-3

## 1. Bibliographic Items

Case	"Adsorbents for oral administration, remedies or preventives for kidney diseases and remedies
	or preventives for liver diseases" (Trial for Invalidation)
	Intellectual Property High Court Decision, March 31, 2009 (2008 (Gyo KE) No. 10065)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2004-548107 (WO 2004/39381 A)
No.	
Classification	A61K 33/44
Conclusion	Dismissal
Related	Article 36(6)(i)
Provision	
Judges	IP High Court Second Division, Presiding Judge; Tetsuhiro NAKANO, Judge: Yoshiyuki
	MORI, Judge: Katsumi SHIBUYA

## 2. Overview of the Case

# (1) Summary of Claimed Invention

An absorbent for oral administration characterized by comprising a spherical active carbon which is produced with the use of a thermosetting resin as a carbon source and has a diameter of from 0.01 to 1 mm and a specific surface area determined in accordance with Langmuir's adsorption equation of  $1000 \text{ m}^2/\text{g}$  or more. An adsorbent for oral administration characterized by comprising a surface-modified spherical active carbon which is produced with the use of a thermosetting resin as a carbon source and has a diameter of from 0.01 to 1 mm and a specific surface area determined in accordance with Langmuir's adsorption equation of  $1000 \text{ m}^2/\text{g}$  or more. An adsorbent for oral administration characterized by comprising a surface-modified spherical active carbon which is produced with the use of a thermosetting resin as a carbon source and has a diameter of from 0.01 to 1 mm and a specific surface area determined in accordance with Langmuir's adsorption equation of  $1000 \text{ m}^2/\text{g}$  or more and carries 0.40 to 1.00 meq/g of acidic groups in total and 0.40 to 1.10 meq/g of basic groups in total. These adsorbents for oral administration scarcely adsorb useful components in vivo and have favorable performance of adsorbing toxic substances, i.e., showing advantageous selective adsorption properties.

# (2) Disclosure of Detailed description of the invention

[0022] The spherical activated carbon or the surface-modified spherical activated carbon used as the adsorbent for oral administration of the present invention is produced by, for example, the above methods using the thermosetting

resin as a starting material, and has a diameter of 0.01 to 1 mm. If the diameter of the spherical activated carbon or the surface-modified spherical activated carbon is less than 0.01 mm, an exterior surface area of the spherical activated carbon or the surface-modified spherical activated carbon is increased, and useful substance such as digestive enzymes are easily adsorbed. That is unfavorable. When the diameter is more than 1 mm, a diffusion distance of toxic substances into the inside of the spherical activated carbon or the surface-modified spherical activated carbon is increased, and an adsorption rate is lowered. That, too, is unfavorable. The diameter is preferably 0.02 to 0.8 mm. The expression that "a diameter is D1 to Du" as used herein means that a screen passing percentage (%) in a range of a screen opening D1 to Du is 90% or more in a particle-sizes accumulating standard curve prepared in accordance with JIS K 1474, as mentioned below in relation with a method for determining an average particle diameter.

[0023] In the spherical activated carbon or the surface-modified spherical activated carbon used as the adsorbent for oral administration of the present invention, a specific surface area (referred to as "SSA" hereinafter) determined by Langmuir's adsorption equation is 1000 m<sup>2</sup>/g or more. When the spherical activated carbon or the surface-modified spherical activated carbon has an SSA of less than 1000 m<sup>2</sup>/g, an adsorbability of toxic substance is unfavorably lowered. The SSA is preferably 1000 m<sup>2</sup>/g or more. The upper limit of the SSA is not particularly limited, but the SSA is preferably 3000 m<sup>2</sup>/g or less in view of a bulk density and strength.

[0024] the above-mentioned Japanese Examined Patent Publication (Kokoku) No. 62-11611 discloses an adsorbent comprising a surface-modified spherical activated carbon wherein a volume of voids having a pore radius of 100 to 75000 angstrom, that is, a volume of pores having a diameter of 20 to 15000 nm, is 0.1 to 1 mL/g. However, in the spherical activated carbon or the surface-modified spherical activated carbon used as the adsorbent for oral administration of the present invention, a volume of pores having a diameter of 20 to 15000 nm may be 0.1 to 1 mL/g, or 0.1 mL/g or less. When a volume of pores having a diameter of 20 to 1000 nm is more than 1 mL/g, an adsorbed amount of useful substances, such as digestive enzymes, may be increased. Therefore, a volume of pores having a diameter of 20 to 1000 nm is preferably 1 mL/g or less.

In the spherical activated carbon or the surface-modified spherical activated carbon used as the adsorbent for oral administration of the present invention, a volume of pores having a diameter of 7.5 to 15000 nm is preferably less than 0.25 mL/g, more preferably 0.2 mL/g or less, as a more excellent selective adsorbability is thus obtained. [0025] In a constitution of functional groups of the surface-modified spherical activated carbon, that is, the product prepared by oxidizing and reducing the spherical activated carbon, which is used as the adsorbent for oral administration of the present invention, a total amount of acidic groups is 0.40 to 1.00 meq/g, and a total amount of basic groups is 0.40 to 1.00 meq/g. When the constitution of basic groups is 0.40 to 1.00 meq/g, the selective adsorbability is improved, and particularly, the adsorbability of harmful substances is favorably enhanced. In the constitution of functional groups, a total amount of acidic groups is preferably 0.40 to 1.00 meq/g.

#### (3) The Claims (Claim 1 is only described)

[Claim 1] An adsorbent for oral administration, characterized by comprising a spherical activated carbon prepared

from a phenolic resin or an ion-exchange resin as a carbon source, wherein a diameter is 0.01 to 1 mm, a specific surface area determined by Langmuir's adsorption equation is 1000 m<sup>2</sup>/g or more, a volume of pores having a diameter of 7.5 to 15000 nm is less than 0.25 mL/g, provided that the spherical activated carbon having 1.4 or more of a ratio of diffraction intensities (R value) determined by the following formula is excluded:

Formula (I):

 $R = (I_{15} - I_{35})/(I_{24} - I_{35})$  (I)

[wherein  $I_{15}$  is a diffraction intensity at 15° in diffraction angle (2 $\theta$ ) by the X-ray diffraction method,  $I_{35}$  is a diffraction intensity at 35° in diffraction angle (2 $\theta$ ) by the X-ray diffraction method and  $I_{24}$  is a diffraction intensity at 24° in diffraction angle (2 $\theta$ ) by the X-ray diffraction method].

(4) Technical common knowledge and the like in consideration

... The publication of Exhibit A5 states:

"... as shown in the working Examples of the present specification, when the volume of pores having a pore diameter of 20 to 15000 nm is adjusted to range from not less than 0.04 mL/g to less than 0.10 mL/g, an adsorbability of  $\alpha$ -amylase that is a useful substance, is significantly lowered, while maintaining a high adsorbability of  $\beta$ -aminoisobutyric acid, that is a toxic substance. When the volume of pores having a pore diameter of 20 to 15000 nm is increased, the useful substances such as digestive enzymes are more easily adsorbed. Therefore, a smaller volume of pores having a pore diameter of 20 to 15000 nm is preferable from a viewpoint that an adsorption of useful substances is reduced. On the other hand, if the volume of pores having such a pore diameter becomes too small, the adsorption of harmful substances is lowered." (paragraph [0007]).

Hence, it can be recognized that the knowledgement that the selective adsorbability can be changed due to large or small in the volume of pores, including that the adsorbability of the toxic substance is deteriorated as the volume of pores becomes too small, and it can be recognized that such a knowledgement was the publicly-known technique at the time of filing the application for the present case (October 31, 2003).

#### (5) Procedural History

August 4, 2006	:	Registration of establishment of the patent right (see the aforementioned "The
		Claims")
June 4, 2007	:	Request for Trial for Invalidation by the Plaintiff (Muko No. 2007-800108)
January 23, 2008	:	Trial Decision that "the request for the Present Trial is dismissed."

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial decision

... in the manufacturing example of the description for the present case, where the phenolic resin was used as the carbon source, the examples having 0.04 mL/g and 0.60 mL/g were only indicated, and where the ion-exchange resin was used as the carbon source, the example having 0.42 mL/g (larger than 0.25 mL/g which is specified in the present invention) was only indicated.

However, ... it can be understood that the condition for such a volume of pores is merely a guideline simply expressing that the pore having a large diameter should be reduced in order to improve the selective adsorbability, rather than that it is understood that the condition for such a volume of pores has a critical significance. On the other hand, it is obvious as the publicly-known technique that the adsorbability of the toxic substance is deteriorated as the volume of pores becomes too small.

Hence, the assertion made by the Demandant that "it cannot be also presumed that the matter having the large volume of pores as about 0.25 mL/g or the matter having the extremely small volume of pores as less than 0.04 mL/g is effectively functioned as the adsorbent for oral administration." cannot be accepted.

#### Decision

#### Allegations by Plaintiff

... the requirement for the volume of pores according to the present claimed invention is limited as a clear numerical value of "less than 0.25 mL/g" in the volume of pores. Accordingly, it is obvious that it has a critical significance. Further, if it is said that it is obvious as the publicly-known technique that the adsorbability of the toxic substance is deteriorated as the volume of pores becomes too small ..., it can be presumed that the matter of "extremely small less than 0.04 mL/g" cannot be effectively functioned as the adsorbent for oral administration. Where the phenolic resin and the ion-exchange resin are used as the carbon source, whether or not the matter of "extremely small less than 0.04 mL/g" can be manufactured through the trial-and-error is extremely irrelevant to whether or not the description states that it is effectively functioned as the adsorbent for oral administration.

#### Allegations by Defendant

... the "volume of pores having a diameter of 7.5 to 15000 nm" can be variously controlled according to the statement of the description for the present invention and by utilizing the conventional method at the time of filing the application for the present invention, and it can be found that the spherical activated carbon in which the "volume of pores having a diameter of 7.5 to 15000 nm" is, for example, "0.08 mL/g" can be manufactured by a person skilled in the art according to the conventional method.

As mentioned above, since a person skilled in the art can easily practice to control the "volume of pores having a diameter of 7.5 to 15000 nm" based on the statement of the description of the original application for the present invention and the technical general knowledge at the time of filing the application for the present invention, it is obvious that the present patent invention is stated in the description for the present invention. Therefore, there is no violation of Article 36(6)(i) of the Patent Law.

## Judgment by the Court

... the description of the present case has the same tables as Tables 1 and 2 of the original description (paragraphs [0047] and [0049]), and states that the selective adsorption rate is relatively inferior to be 2.1 where the volume of pores having a diameter of 7.5 to 15000 nm is 0.42 mL/g (when it is reviewed as an Example, it is not important whether or not the ratio of diffraction intensities is 1.4 or more as explained for the reason 1 for cancellation). It can be recognized that the knowledge that the selective adsorption rate can be changed according to the volume of pores, including the adsorbability of the toxic substance is deteriorated as the volume

of pores becomes too small, was the publicly known technique at the time of filing the application for the present case (October 31, 2003).

Hence, if the aforementioned knowledgement that the selective adsorbability can be expressed with stepwise manner along with the decreasing thereof is considered (excluding a case that the volume of pores is extremely small), in addition to the aforementioned statement of the Example in the description for the present invention, since a person skilled in the art recognizes to attain the superior selective adsorbability according thereto, it can be said that the statement of the Claims for the present case is stated in the detailed description of invention in the description for the present case.

... since a person skilled in the art can understand, regarding the condition for the volume of pores specifying the present patent invention, that it expresses that the large pore should be reduced to have the superior selective adsorption rate, rather than that it has a critical significance in its strict meaning, and that the numerical value of "0.25 mL/g" as one guideline is specified, it cannot be said that it cannot solve the problem of the present patent invention for a person skilled in the art, even if the significance of the aforementioned numerical value is not particularly elucidated on the statement of the description.

... since it is publicly known for a person skilled in the art that the adsorbability of the toxic substance is deteriorated as the volume of pores becomes too small, it should be said to be clear for a person skilled in the art that the matter having extremely small volume of pores to an extent which cannot generally provide the adsorbability is not substantially encompassed in the present patent invention. Therefore, even if there is no special statement for that the numerical value of the volume of pores is extremely small, it cannot be said that a person skilled in the art cannot recognize to solve the problem of the present patent invention according thereto, and the assertion on this regard made by the Plaintiff cannot be accepted.

(23)-4	
Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Point of the invention and the support requirement

## 1. Bibliographic Items

Case	"Lead-free solder alloy" (Trial for Invalidation)
	Intellectual Property High Court Decision, September 29, 2009 (2008 (Gyo KE) No. 10484)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 11-548053 (WO 1999/48639 A)
No.	
Classification	B23K 35/26
Conclusion	Acceptance
Related	Article 36(6)(i)
Provision	
Judges	IP High Court Second Division, Presiding Judge: Tetsuhiro NAKANO, Judge: Yoshiyuki
	MORI, Judge: Katsumi SHIBUYA

## 2. Overview of the Case

# (1) Summary of Claimed Invention

It is an object of the present invention to provide a lead-free solder alloy having tin as a base material with other additive materials that are easily industrially available as good as the conventional tin-lead eutectic allow, and offers a stable and liable solder joint. By a lead-free solder alloy comprising 0.3 to 0.7 wt% Cu, 0.04 to 0.1 wt% Ni and the remaining percent Sn, whereby the development of an intermetallic compound is suppressed and the flowability is improved, the purpose is attained.

# (2) Disclosure of Detailed description of the invention

"... In the formation of a lead-free solder alloy, it is important to fully exploit the property of tin and to determine the content of an additive metal for the purpose of imparting, to the lead-free solder alloy, strength and flexibility as good as those of the conventional tin-lead eutectic alloy.

It is an object of the present invention to provide a lead-free solder alloy having tin as a base material with other additive materials that are easily industrially available as good as the conventional tin-lead eutectic allow, and offers a stable and liable solder joint."

"... A tin itself, without lead of a large specific gravity, is light in its molten state, and cannot offer enough

flowability to be appropriate for a nozzle-type soldering operation. The crystalline structure of such solder alloy is too soft and not mechanically strong enough. By addition of copper the alloy reinforces strongly."

"The optimum amount of additive copper is within a range of 0.3-0.7 wt%, and if more copper is added, the melting temperature of the solder alloy rises. The higher the melting point, the higher the soldering temperature needs to be. A high soldering temperature is not preferable to thermally weak electronic components. Typical soldering temperature upper limit is considered to be 300°C or so. With the liquidus temperature of 300°C, the amount of additive copper is about 2 wt%. The preferable value and limits are set as the above."

(C) "In the present invention, not only a small amount of copper is added to tin as a base material, but also 0.04-0.1 wt% Ni is added. Ni controls intermetallic compounds such as  $Cu_6Sn_5$  and  $Cu_3Sn$ , which are developed as a result of reaction of tin and copper, and dissolves the developed compounds. As such intermetallic compounds have a high temperature melting point, they hinder flowability of solder and make solder function declined. Therefore, it these intermetallic compounds remain on patterns at a soldering operation, these become to be so-called bridge that shorts conductors. Namely, needle-like projections remains when leaving from melting solder. To avoid such problems, Ni is added. Although Ni itself produces intermetallic compound with Sn, Cu and Ni are always solid soluble at any ratio. Therefore, Ni cooperates with the development of Sn-Cu intermetallic compounds. Since the addition of Cu to Sn helps the alloy to improve its property as a solder compound in the present invention, a large amount of Sn-Cu intermetallic compound is not preferable. For this reason, Ni, in an all-ratio solid soluble relationship with Cu, is thus employed to control the reaction of copper with Sn.

The liquidus temperature rises if Ni is added because a melting point of Ni is high. In consideration of the typical permissible upper temperature limit, the amount of additive Ni is limited to 0.1 wt%. It was learned for an inventor that the amount of additive Ni as low as or greater than 0.04 wt% held a good flowability and solderability showed a sufficient strength of a soldered joint. Accordingly to the present invention, a lower limit of the amount of additive Ni is thus 0.04 wt%."

(E) "Regarding the content ratio of both of Cu and Ni, which rises a problem of its optimum range, referring to FIG. 1, a range of 0.04-0.1 wt% Ni, and a range of 0.3-0.7 wt% Cu result in a good solder joint. When the base allow is Sn-Cu, the content of Cu represented by the X axis is limited to a constant value within a range of 0.3-0.7 wt%. If the content of Ni is varied within a range of 0.04-0.1 wt% with the Cu content limited to within a range of 0.3-0.7 wt%, a good solder alloy is obtained. When the base alloy is Sn-Ni, the content of Ni represented by the Y axis is limited to a constant value within a range of 0.04-0.1 wt%. If the content of Ni represented by the Y axis is limited to a constant value within a range of 0.04-0.1 wt%. If the content of Cu is varied within a range of 0.04-0.1 wt%, a good solder alloy is obtained. These ranges remain unchanged even if an unavoidable impurity, which obstructs the function of Ni is mixed in the alloy."

#### (3) The Claims (Claim 1 is only described)

[Claim 1] A lead-free solder alloy comprising 0.3 to 0.7 wt% Cu, 0.04 to 0.1 wt% Ni and the remaining percent Sn, whereby the development of an intermetallic compound is suppressed and the flowability is improved.

#### (4) Technical common knowledge and the like in consideration

"It can be recognized to have been widely known that Cu and Ni has a relationship of being always solid
soluble at any ratio (Exhibit A4, written by Ryo YOKOYAMA, "Zukai Gokin Jotai-Zu Dokuhon", page 63, Ohmsha, June 25, 1974, published as first version, first printing)" (abridged from the juridical decision)

# (5) Procedural History

January 17, 2001	:	Registration of establishment of the patent right (see the aforementioned "The
		Claims")
December 24, 2004	:	A first Request for Trial for Invalidation by the Plaintiff (Muko No. 2004-80275)
November 22, 2005	:	Trial Decision that "the request for the Present Trial is dismissed."
January 30, 2007	:	Dismissal of the suit for cancelling the Trial Decision (2005 (Gyo KE) No. 10860)
June 22, 2007	:	Refusal of receipt for the petition for acceptance of final appeal (2007 (Gyo HI) No.
		123)
October 30, 2006	:	A second Request for Trial for Invalidation by the Plaintiff (Muko No. 2006-80224)
July 31, 2007	:	Trial Decision that "the request for the Present Trial is dismissed."
September 8, 2008	:	Decision of cancelling the second Request for Trial for Claims 1 to 4 (2007 (Gyo KE)
		No. 10307)
April 6, 2007	:	Request of the Present Trial for Invalidation by the Plaintiff
November 12, 2008	:	The present Trial Decision that " the patent is invalidated"

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial decision

... that is, as the statement of the result that the characteristic that "the development of an intermetallic compound is suppressed and the flowability is improved" is obtained and its reason by comprising the constituent of the lead-free solder alloy in the present invention 1, there is merely a statement of the gist that "since Cu and Ni have a relationship that being always solid soluble at any ratio, Ni controls the development of the Sn-Cu intermetallic compounds. There is not only no specific disclosure supporting to attain that "the development of an intermetallic compound is suppressed and the flowability is improved" but also a specific method (method for measuring) for confirming whether or not the characteristic is attained.

Hence, since it cannot be said that the "detailed explanation of invention" of the description for the present case states to an extent such that a person skilled in the art can recognize that the characteristic that "the development of an intermetallic compound is suppressed and the flowability is improved" recited in the present invention 1 by comprising the present constituent of the lead-free solder alloy, it cannot be said that the statement of the Claims according to the present invention 1 complies with the requirement prescribed in Article 36(6)(i) of the Patent Law.

Decision	
Allegations by Plaintiff	Allegations by Defendant
based on that the "detailed explanation of	What is demanded for the support requirement is
invention" discloses that, in the solder alloy with Sn-	to make a disclosure which can be recognized by a
Cu basis, the Sn-Cu intermetallic compound such as	person skilled in the art that the problem of the
$Cu_6Sn_5$ inhibits the flowability to decrease the	invention can be solved. Since the present invention
property as the solder and to rise a problem of short	1 recites "a lead-free solder alloy comprising 0.3 to 0.7
and on the fact to have been known at the time of filing	wt% Cu, 0.04 to 0.1 wt% Ni and the remaining percent
the application that Cu and Ni have a relationship of	Sn, whereby the development of an intermetallic
being always solid soluble at any rate (all proportional	compound is suppressed and the flowability is
solid solution), the fact stated therein is that the	improved", it should be specifically disclosed how the
present inventors found the aforementioned (iii) that	invention-specifying matter provides a working effect
"Ni cooperates with the development of Sn-Cu	for its problem in the solder joining.
intermetallic compound". These relations are a	
content which can be sufficiently understood for a	
person skilled in the art.	

Judgment by the Court

... the "detailed explanation of invention" of the description (Exhibit A3) as corrected for the present case does not state a specific result for measuring regarding that "the development of an intermetallic compound is suppressed and the flowability is improved".

Certainly, there may be a case which cannot be recognized by a person skilled in the art that the problem of the invention can be solved according to the statement of the detailed explanation of invention, if it is an invention in which a numerical range has a characteristic such as an invention in which the limitation of the numerical range has a critical significance. However, according to all evidences for the present case, it cannot be recognized that an invention that "the development of an intermetallic compound is suppressed and the flowability is improved" by "adding Cu and Ni into Sn, the main component" (or an invention in which such an invention 1 is that "the development of an intermetallic compound is suppressed and the flowability is improved" by,"adding Cu and Ni into Sn, the main component" <u>and the numerical limitation of Cu and Ni merely indicates the preferable numerical range</u>. Accordingly, it should be said not to be necessary to support it with a specific result for measuring, in the aforementioned context.

In addition, it can be recognized prior to filing the present patent application to have been widely known that Cu and Ni have a relationship of being always solid soluble at any rate (Exhibit A4, written by YOKOYAMA, Toru, "Zukai Gokin Jotai-Zu Dokuhon", page 63, Ohmusha, June 25, 1974, published as first edition, first printing). It is not unreasonable to consider that Ni provides an action of suppressing the reaction of Cu against Sn as an explanation for the reason that "the development of an intermetallic compound is suppressed and the flowability is improved" by "adding Cu and Ni into Sn, the main component". Therefore, it is confirmed from

the statement of the description (Exhibit A3) as corrected for the present case not to raise the problem of flowability produced from the development of the conventional intermetallic compound and the like and to be suitable for the flow plating (jet plating) when Ni is added starting from the Cu-Sn basis and Cu is added starting from the Ni-Sn basis. Regarding its cause, in consideration of the aforementioned technical general knowledge of the relationship of being always solid soluble for Ni and Cu and of the aforementioned technical general knowledge that the problem of flowability is raised in the case of producing the CuSn intermetallic compound, it should be said that the statement of the description (Exhibit A3) as corrected for the present case supports that Ni provides the action of suppressing the action of Cu against Sn.

Relevant portion	Part II, Chapter 2, Section 2	
of Examination		
Guidelines		
Classification of	23: Regarding the support requirement	
the Case		
Keyword	Point of the invention and the support requirement	

# (23)-5

# 1. Bibliographic Items

Case	"Electric sitch having a push rod" (Trial for Invalidation)	
	Intellectual Property High Court Decision, July 28, 2010 (2009 (Gyo-KE) No. 10252)	
Source	Website of Intellectual Property High Court	
Application	Japanese Patent Application No. H4-27179 (JP H7-262864 A)	
No.		
Classification	H01H 9/24	
Conclusion	Dismissal	
Related	Article 36(6)(i)	
Provision		
Judges	IP High Court Second Division, Presiding Judge: Tetsuhiro NAKANO, Judge: Tomoko	
	MANABE, Judge: Minoru TANABE	

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The purpose of the present invention is to ensure safety control at the time of maintenance, etc. by employing a mechanism in which a connector opens the electric circuit when the operation unit is detached from the contact retention unit.

# (2) Disclosure of Detailed description of the invention[0005]

[Means for solving the problems] In order to achieve the above purpose, the present invention has the following technical means. Namely, the present invention relates to an electric switch comprising a contact device opening/closing the contact of the electric circuit, an operation unit operating to open/close the contact device, and a push rod conveying the movement of

# [FIG. 2]



the operation unit to the contact device, wherein the push rod has a state in which the contact device has closed the electric circuit and connected the electric circuit, and a state in which the contact device can interrupt the electric circuit by opening the electric circuit, characterized in that the above contact device is constituted to remain closed when the operation unit and the contact retention unit having the contact device are in integrated state and when the push rod is in stopped state, and connect the electric circuit, and to open when the push rod is pressed down through operation of the operation unit and interrupt the electric circuit, and, other than those actions, when the operation unit and contact retention unit are detached, the contact device opens the electric circuit and interrupts the electric circuit by spring action.

# [0006]

[Operation] In the above constitution, safety can be ensured at the time of maintenance, etc. because the contact device opens the electric circuit by action of the spring when the operation unit is detached from the contact retention unit.

# (3) The Claims (Only Claim 1 is shown.)

[Claim 1] An electric switch having a push rod, comprising (a) a contact device opening/closing the contact of an electric circuit, (b) an operation unit operating to open/close the contact device, and (c) a push rod conveying the movement of the operation unit to the contact device, (d) wherein the push rod has two states; a state in which the contact device has closed the electric circuit and connected the electric circuit, and a state in which the contact device is constituted, (e-1) to remain closed when the operation unit and the contact the electric circuit, and (e-2) to open when the push rod is pressed down through operation of the operation unit and interrupt the electric circuit, and, other than those actions, when the operation unit and the contact retention unit are detached, the contact device opens the electric circuit and interrupts the electric circuit by spring action.

# (4) Procedural History

January 9, 1997	:	Registration of establishment of the patent right (Refer to above "The Claims.")
October 27, 2008	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2008-800219)
July 13, 2009	:	Trial decision to the effect that "Demand for trial in the present case is not upheld"

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

:

#### Trial decision

Presenting Exhibit A1 as an evidence, Demandant alleges that the present case falls under the case of "'(1) When it is obvious that a matter corresponding to a matter described in Claims is not described in the detailed description of the invention' in Exhibit A1, pages 2 to 3, '3.2.1 Types of non-satisfaction of Article 36(5)(i) of the Patent Law'." (Written Demand, page 19, lines 1 to 4). As stated above, however, the "spring" and the

"contact device" are described in the detailed description of the invention. Namely, it does not fall under the type shown in Examination Guidelines.

#### Decision

Allegations by Plaintiff

... with respect to the example of a spring for the purposes of realizing the function and the operation of the constituent features e-1 and e-2 without intervention of the spring, and realizing the function and the operation of the constituent feature e-3 by the contact device being opened by spring action when the operation unit and the contact retention unit are detached, there is no disclosure in the detailed description of the invention and the present patent does not satisfy the requirement for support in description stipulated in the former Article 36(5)(i) of the Patent Law.

#### Allegations by Defendant

... the problem to be solved by the present invention is "making advantageous with respect to safety control by arranging so that, when detached, the contact device is opened without exception and the electric circuit is interrupted" and, since a working example realizing the constituent features e-1 to e-3 by spring action is clearly described in the detailed description of the invention, it can be said that it is a matter which a person skilled in the art could recognize that the problem to be solved by the present invention can be solved. Namely, the premise by Plaintiff that, unless a specific constitution in which the function and the operation of the constituent features e-1 and e-2 can be realized without intervention of the spring, and, the function and the operation of the constituent feature e-3 can be realized by the contact device being opened by spring action when the operation unit and the contact retention unit are detached, is described in the detailed description of the invention, the requirement of support in description is not satisfied is not correct.

In addition, as stated above, since a switch without intervention of spring was a well-known art for a person skilled in the art, even if any working example of the constituent features e-1 and e-2 without intervention of spring is not specifically described, the art of such level is same as described for a person skilled in the art.

# Judgment by the Court

Plaintiff argues that, while the present invention includes electric switches that realize the constituent features e-1 and e-2 without intervention of spring and realize the constituent feature e-3 with spring action since constituent features e-1 and e-2 do not require spring action, the detailed description of the invention does not disclose any specific constitution, and therefore, the enablement requirement and the requirement of support in description are not satisfied.

However, while it is considered that the constituent features e-1 and e-2 are to define general functions of electric switches and not technical features of the present invention, it is not understood that the Patent Law requires disclosing working examples exhaustively for such parts as the enablement requirement and the requirement of support in description. Namely, while existence of intervention by spring in the functions of the constituent features e-1 and e-2 is not a matter identifying the invention, it is not appropriate to require satisfaction of the enablement requirement and the requirement of support in description focusing attention to technical matters that are not matters identifying the invention. In addition, in light of the fact that, concerning electric switches, it is not acknowledged that it is common to classify them focusing attention to whether or not any spring intervenes the function of the constituent features e-1 and e-2 and it is understood to classify them as by Plaintiff, even if the detailed description of the invention does not specifically describe any constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and realizes the constituent features e-1 and e-2 without intervention of spring and the requirement of support in description are not satisfied. Therefore, the above argument by Plaintiff cannot be accepted.

·			
	Relevant portion	Part II, Chapter 2, Section 2	
	of Examination		
	Guidelines		
ĺ	Classification of	23: Regarding the support requirement	
	the Case		
	Keyword	Point of the invention and the support requirement	

# (23)-6

# 1. Bibliographic Items

Case	"Highly compressed filter tow bale, a , nd manufacturing process thereof" (Trial for				
	invalidation)				
	Intellectual Property High Court Decision, March 24, 2011 (2010 (Gyo-KE) No. 10214)				
Source	Website of Intellectual Property High Court				
Application	Japanese Patent Application No. 2003-586035 (JP 2005-528096 A)				
No.					
Classification	A24D 3/02				
Conclusion	Dismissal				
Related	Article 36(6)(i)				
Provision					
Judges	IP High Court Fourth Division, Presiding Judge: Takaomi TAKIZAWA, Judge: Tomonari				
	HONDA, Judge: Akimitsu ARAI				

# 2. Overview of the Case

(1) Summary of Claimed Invention

[Problem to be solved] Provision of a filer tow bale having no bulging portion or constricted portion that might become an obstacle at the top or the bottom of the bale which is packed and highly compressed into a block form

[Solution] What is described herein is a bale characterized in that:

(a) the bale has a packing density at least  $300 \text{ kg/m}^3$ ;

(b) the bale is completely packed with mechanically self-supporting elastic packing material, and this material has one or more combining portion having airtightness against convection; and

(c) when a flat plate is pressure-contacted to the top of the bale with a force of 100 N working in vertical direction in the center of the bale in a state where the non-opened bale is placed on the horizontal plane, the top surface and the bottom surface of the bale are flat so that, within the largest rectangle inscribed in the vertical projection of the



bale to the pressure-contacted plate, at least 90% of the section of the top surface of the bale located in the inscribed rectangle is apart from the flat plate by approximately 40 mm or less.

#### (2) Disclosure of Detailed description of the invention

[0006] The problem to be solved by the present invention is to provide a filter tow bale having no bulging portion that might block movement of the bale, or no constricted portion that might block sending out filter tow at the top and bottom of the tow bale, and highly compressed into an ideal block form, and, in this case, since the load applied to the packed filter tow is decreased, opening by rupture of packages under the influence of inner pressure can be almost totally avoided. Further problem to be solved by the present invention is to provide a packing process relating thereto.

[Means for solving the problem]

[0007] Those problems can be solved according to the present invention through a bale in the form of block of filter tow in Claim 1 and the process according to Claim 14.

[0008] Namely, the present invention relates to a filter tow bale packed and highly compressed into a form of block, and having no bulging portion or no constricted portion that might become an obstacle on the top surface or the bottom surface of the bale, characterized in that,

(a) the bale has a packing density of at least  $300 \text{ kg/m}^3$ ,

(b) the bale is completely packed with a mechanically self-supporting elastic packing material, and the material has one or more combining portions having airtightness against convection, and

(c) when a flat plate is pressure-contacted to the top of the bale with a force of 100 N working in vertical direction in the center of the bale in a state where the non-opened bale is placed on the horizontal plane, the top surface and the bottom surface of the bale are flat so that, within the largest rectangle inscribed in the vertical projection of the bale to the pressure-contacted plate, at least 90% of the section of the top surface of the bale located in the inscribed rectangle is apart from the flat plate by approximately 40 mm or less.

[0016] The process to pack the filter tow bale according to the claimed invention comprises:

- (a) a step to bring filter tow to compressed form;
- (b) a step to pack compressed filter tow with a package wrapping material;
- (c) a step to seal the package wrapping material airtightly; and
- (d) a step to release the load applied to the packed bale.

If the load to a bale sealed airtightly is released, a negative pressure is generated in the package wrapping material. It is preferable that this negative pressure be at least 0.01 bars, and, in especially preferable method, it is within the range of 0.15 to 0.7 bars.

[0017] Therefore, the negative pressure generated in the area encompassed by the wrapping material can be maintained by airtight seal of the package wrapping material. With this negative pressure, the pressure applied by resilience of flexible material from the inside to the package is attenuated. Because of this reason, inflation normally occurring in a filter tow bale can be prevented by the latest art. With this, production of laminated bales becomes far easier. Since the mechanical pressure working from the inside of the package is attenuated (by

negative pressure), the risk of failure in packing and tendency of cleavage of packages are decreased. In addition, higher packing density can be obtained, and, by this, the advantage of smaller packages can be obtained and storing volume and moving volume can be minimized. In particular, with this method, use of storing volume of containers storing the thus packed filter tow can be optimized.

(3) The Claims (Only Claim 1 is shown.)

[Claim 1] A bale of filter tow packed and highly compressed in the form of block, and having no bulging portion or no constricted portion that might become an obstacle on the sides of the top and bottom of the bale, characterized in that:

(a) the bale has a packing density of at least 300 kg/m<sup>3</sup>;

(b) the bale is totally packed with a mechanically self-supporting elastic packing material, and the material has one or more connection portions having airtightness against convection, and the material is a film having a gas permeability with respect to air of smaller than 10,000 cm<sup>3</sup>/(m<sup>2</sup> · d · bar) measured according to DIN 53, 380-V at a temperature of 23°C, and relative humidity of 75%;

(c) when a flat plate is pressure-contacted to the top of the bale with a force of 100 N working in vertical direction with respect to the center of the bale in a state where the non-opened bale is placed on the horizontal plane, the top surface and the bottom surface of the bale are flat so that, within the largest rectangle inscribed in the vertical projection of the bale to the pressure-contacted plate, at least 90% of the section of the top surface of the bale located in the inscribed rectangle is apart from the flat plate by approximately 40 mm or less;

(d) the bale has a height of at least 900 mm; and

(e) at least after the bale is packed, at least 0.01 bars of negative pressure against the external pressure is applied to the bale.

# (4) Procedural History

February 16, 2007	:	Registration of establishment of the patent right
May 23, 2008	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2007-800098)
September 30, 2008	:	Trial decision to invalidate present inventions 1 to 26
September 3, 2009	:	Court decision to revoke the trial decision
January 29, 2010	:	Demand for a trial for correction by Defendant
May 31, 2010	:	Trial decision to the effect that "correction is accepted; demand for the present trial
		does not hold good."

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

Trial decision
Presenting Exhibit A1 as an evidence, Demandant alleges that the present case falls under the case of "(1)
When it is obvious that a matter corresponding to a matter described in Claims is not described in the detailed
description of the invention' in Exhibit A1, pages 2 to 3, '3.2.1 Types of non-satisfaction of Article 36(5)(i) of
the Patent Law'." (Written Demand, page 19, lines 1 to 4). As stated above, however, the "spring" and the

"contact device" are described in the detailed description of the invention. Namely, it does not fall under the type shown in Examination Guidelines.

#### Decision

## Allegations by Plaintiff

Also in the detailed description of [0025] in Corrected Description, there is a statement about solution of the problem with rather high negative pressure of 0.15 bars to 0.7 bars, but a solution of the problem with rather low negative pressure of 0.01 bars is not disclosed at all in the detailed description of the invention in Corrected Description.

(3) While Corrected Invention 1 does not have substantial difference with Cited Inventions 1 and 2 excluding the part of numerical limitation, and is a socalled parameter invention in which the difference from well-known art is elicited by numerical limitation relating negative pressure and flatness, it cannot be recognized that a person skilled in the art can solve the problem to be solved by the invention in question according to the detailed description of the invention of Corrected Description, and it cannot be within the scope that it can be recognized that a person skilled in the art can solve the problem to be solved by the invention in question in light of common general technical knowledge at the time of filing an application for the present patent even if there is no statement or suggestion.

#### Allegations by Defendant

With respect to Corrected Invention 1, since it is acknowledged that, in Corrected Description, there are statements, as measures to solve the problem of inflated portions being generated in the top and the bottom of the bale, causing an obstacle in stacking and transfer and, the problem of occurrence of constriction by using straps, causing an obstacle in sending out, that the top surface and the bottom surface of the bale are flat so that, at least 90% of the section of the top surface of the bale located in the inscribed rectangle is apart from the flat plate by approximately 40 mm or less, and that the package wrapping material for the filter tow is sealed airtightly and at least after the bale is packed, negative pressure of at least 0.01 bars against external pressure is applied to the bale, and a statement about a method for controlling negative pressure, it can be said that the problem to be solved and means for solving the problem are described in Corrected Description, and that Corrected Invention 1 is described in Corrected Description.

The definition in Corrected Invention 1, "negative pressure of at least 0.01 bars against external pressure is applied to the bale," expresses technical idea of "controlling the shape of the bale by negative pressure" that did not exist before filing an application for the present patent.

# Judgment by the Court

In Corrected Invention 1, negative pressure generated in an area encompassed with a wrapping material is maintained by an airtight seal of the package wrapping material. The negative pressure attenuates the pressure applied to the package from the inside by resilience of flexible material, and, simultaneously, absorbs and equalizes the pressure gradient generated between the top and the bottom of the bale in the manufacturing process, and because of the above, it can be understood that a negative pressure against external pressure is applied to the bale at least after the bale is packed. In addition, Corrected Invention 1 states that "it is preferable

that the negative pressure be at least 0.01 bars," and its meaning is also obvious.

Under the situation that a numerical value of the negative pressure used to control the form of the bale cannot be uniquely determined, since variation in the air pressure because of weather condition is expected, and the restoring expansion force of the highly compressed bale is rather large and the various compression rates for the bale are expected and the rates differ depending on the material of the bale, it can be deemed that Corrected Invention 1 <u>defined the range of values of "at least 0.01 bars" in order to express the technical idea of the invention by selecting significant values that can be treated substantially as a negative pressure. And, in Corrected Invention 1, after the bale, in light of facts that the value of the negative pressure of at least 0.01 bars against the external pressure is applied to the bale, in light of facts that the value of the packed material is released, and on the other hand, that, in Corrected Invention 1, the time in which the tow continues to expand is only a few hours (Exhibit A23), and normal variation of air pressures in a day is less than 0.01 bars, although it depends on the weather condition, it can be said that a negative pressure against external pressure is being applied to the bale during that time in which the filter tow material should be prevented from expanding so as not to generate the expanded portion and constricted portion in the bale.</u>

In addition, although it is not 0.01 bars or similar value, multiple working examples are disclosed in Corrected Description within the range of numerical values of negative pressure of "at least 0.01 bars."

Therefore, there is no error in the trial decision that determines the statements in Claims according to Corrected Invention 1 satisfy the requirement of support in description.

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123	)- /
(20)	, ,

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Point of invention and support requirement

# 1. Bibliographic Items

Case	" Heat pump type heating and cooling apparatus" (Trial for Invalidation)		
	Intellectual Property High Court Decision, September 29, 2011 (2011 (Gyo KE) No. 10010)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. H9-188864 (JP H10-339511 A)		
No.			
Classification	F25B 13/00		
Conclusion	Dismissal		
Related	Article 36(6)(i)		
Provision			
Judges	IP High Court Fourth Division, Presiding judge Takaomi TAKIZAWA, Judge Makiko		
	TAKABE, Judge Iwao SAITO		

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The claimed invention is a heat pump type heating and cooling apparatus comprising a compressor 1, a condenser 2, and an evaporator 3. The compressor 1 and the condenser 2 are coupled to each other by a gas pipe 6 via a four way valve 10 provided therein. A capillary tube 4 provided at a refrigerant gas outlet of the condenser 2 and an additionally arranged condenser 9 are connected to each other by a gas

pipe 7. The additionally arranged condenser 9 and a capillary tube 5 of the evaporator 3 are connected to each other by a gas pipe 7'. A gas outlet of the evaporator 3 and the compressor 1 are connected to each other by a gas pipe 8 via the four way valve 10. The heat pump type heating and cooling apparatus having this configuration is capable of switching between cooling operation and heating operation. The heat pump type heating and cooling apparatus improves operation efficiency, prevents saturation of the refrigerant gas in the cooling operation in the summer season, and prevents attachment of frost within an outdoor unit in the heating operation in the winter season.

(2) Disclosure of Detailed Explanation of the Invention



[FIG. 1]

"(E) (According to the embodiment of FIG. 1) ... the refrigerant gas coming out of the capillary tube once starts to evaporate in the gas pipe. However, since the cross section of the gas pipe of the additionally arranged condenser is small, it does not evaporate any more, and the inside of the additionally arranged condenser is filled with the liquid refrigerant gas, and the additionally arranged condenser which starts condensation at this point has a good heat exchange property, so that the condensation is promoted. Further it is filled with the refrigerant gas whose liquefied state is improved, and only the liquid refrigerant gas passes through the capillary tube (paragraph [0018]).

When this is observed by the liquid level indicators that are attached to the refrigerant gas inlet and outlet of the additionally arranged condenser, at the inlet, blowing out of a mixture of liquid and gas is observed about 30 seconds after the compressor operated. Meanwhile, <u>gradual filling by liquid refrigerant gas mixed with bubbles is</u> <u>observed and at this point the evaporation stops</u>. When observation is conducted using the liquid level indicator attached to the outlet of the additionally arranged condenser, passage of the refrigerant gas which includes almost no bubbles is observed. While the refrigerant gas passes from the refrigerant gas inlet to the outlet of the additionally arranged condenser rises by 10°C, but the atmospheric temperature of the air passing through the additionally arranged condenser rises by 10°C near the refrigerant gas inlet, 0.2°C near the outlet, and thus by 5°C on average. It is appreciated from this observation that heat release takes place at all portions of the additionally arranged condenser and thus it operates as a condensing unit. When the rise in the atmospheric temperature at the exit of the additionally arranged condenser relative to the atmospheric temperature at the entry of the additionally arranged condenser becomes 1°C or more, the refrigerant gas is completely condensed. When the gas circuits is integrated into one circuit from the refrigerant gas inlet to the outlet and the distance for which the refrigerant gas flows is increased, this additionally arranged condenser allows the refrigerant gas to be <u>condensed</u> without evaporation.

In the heating operation (according to the embodiment of FIG. 1), the refrigerant gas circuit is switched by the four way valve, and the refrigerant gas is sent to the evaporator and condensed therein. After that, the refrigerant gas is sent to the additionally arranged condenser, which means that the flow of the refrigerant gas is inverted. Meanwhile, as in the case of the cooling operation, the additionally arranged condenser operates as a condensing unit. In the heating operation, since the additionally arranged condenser is mounted in the outdoor unit, the length of the gas pipe connecting the evaporator in the indoor unit to the additionally arranged condenser becomes long. However, even in this case, the temperature of the gas pipe is first decreased and then immediately increased. By observation using the liquid level indicator of the refrigerant gas inlet of the additionally arranged condenser, it is observed that liquefied gas mixed with air bubbles is flowing. In general, the refrigerant gas coming out of the capillary tube is evaporated in the subsequent heat exchanger, but in the present invention, since the cross section of the gas circuit of the additionally arranged condenser is made small and the length of the circuit in which the refrigerant gas flows is made long, the additionally arranged condenser always operates as a condensing unit (paragraph [0019]).

One condenser is additionally arranged in the gas circuit extending out of the condenser in the outdoor unit and reaching the evaporator in the indoor unit, and the refrigerant gas coming out of the existing condenser is passed through the additionally arranged condenser and sent to the evaporator (paragraph [0026]).

As indicated by the above data, the operational states in both the cooling operation and the heating operation

are sufficiently favorable. In the cooling operation, the gas temperature of 48.5°C in the additionally arranged condenser fell by 10.8°C to become 37.7°C, and in the heating operation, the gas temperature of 31.5°C fell by 20.4°C to become 11.1°C. In the cooling operation, by virtue of the gas temperature fall occurring in the additionally arranged condenser, increased heat release takes place compared with conventional techniques and absorption of heat and cooling calorie are increased to that extent. Since the condensation is sufficient, the operational pressure is kept low and saturation of the refrigerant gas does not occur. In the heating operation, the atmospheric temperature rises by 7.4°C on average at the location where the additionally arranged condenser is installed, and the absorption of heat of the existing condenser is improved to that extent ... (paragraph [0029])." (extracts taken from the court decision)

## (3) The Claims (Only claim 1 is cited therefrom.)

[Claim 1] A heat pump type heating and cooling apparatus characterized by the fact that the apparatus connects a compressor and an existing condenser to each other by a gas pipe via a four way valve provided therein; connects a capillary tube arranged at the refrigerant gas outlet of the existing condenser and an additionally arranged condenser to each other by a gas pipe, wherein the additionally arranged condenser whose internal gas pipe circuit has a thin pipe, an internal diameter of the pipe being equal to or less than 80 percent of the pipe of the gas pipe circuit in the existing condenser or whose internal gas pipe circuit has a thin pipe, a cross section of the pipe being equal to or less than 64 percent of the cross section of the pipe in the gas pipe circuit in the existing condenser; connects the additionally arranged condenser and a capillary tube of an evaporator to each other by a gas pipe; connects a refrigerant gas outlet of the evaporator and the compressor by a gas pipe via the four way valve, the apparatus being configured such that it is capable of switching between cooling operation and heating operation by the four way valve, wherein in the cooling operation, refrigerant gas is discharged from the compressor on the side of the gas pipe and sent to the existing condenser, the refrigerant gas is subjected to heat exchange with atmospheric air or coolant water by the existing condenser and is condensed, the refrigerant gas is passed through the gas pipe and sent to the additionally arranged condenser for heat release so as to be further condensed, the refrigerant gas is passed through the gas pipe and subjected to pressure reduction by the capillary tube arranged in the evaporator, the refrigerant gas is sent to the evaporator so that the refrigerant gas evaporates, and thereafter the refrigerant gas is sent back via the gas pipe to the compressor; wherein in the heating operation, the refrigerant gas is discharged from the compressor to the gas pipe, the evaporator is made to operate as a condenser and perform condensation of the refrigerant gas, the refrigerant gas is passed through the gas pipe and sent to the additionally arranged condenser for heat release so as to be further condensed, the refrigerant gas is passed through the gas pipe to the capillary tube arranged in the existing condenser and subjected to pressure reduction, the refrigerant gas is sent to the existing condenser and the existing condenser is made to operate as an evaporating unit and perform evaporation of the refrigerant gas, and the refrigerant gas is then sent back through the gas pipe to the compressor; and wherein heat release of the refrigerant gas and promotion of condensation thereof are carried out by the additionally arranged condenser both in the cooling operation and in the heating operation.

(4) Procedural History

October 31, 2008	:	Registration of establishment of the patent right (See the above-described "The
		Claims.")
March 2, 2010	:	Filing of a trial for patent invalidation by Defendant (Muko No. 2010-800034)
December 7, 2010	:	Trial Decision dismissing the trial

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

# Trial Decision

(1) With regard to the recitation of claim 1, "heat release of the refrigerant gas and promotion of condensation are carried out by the additionally arranged condenser both in the cooling operation and in the heating operation," Demandant alleges that, since (A) the relationship between the cross section of the gas circuit of the additionally arranged condenser and that of the evaporator; (B) integration of the circuits in which the refrigerant gas flows in the additionally arranged condenser into a single circuit and elongation of the length of the circuit; and (C) ensuring that the volume of flow of the liquefied gas flowing in the additionally arranged condenser becomes within 50 percent of the sum of the volume of flow in the existing condenser 2 and the volume of flow in the capillary tube 4, are specified at all as the necessary requirements of the invention in the detailed explanation of the invention, these requirements should be recited in claim 1 as a solution for the problem to be solved by the invention stated in the detailed explanation of the invention.

In response to the above allegation, in view of the Detailed Explanation of the Invention, the Invention of the Patent has its technical problem of only increasing the condensation capability of the refrigerant gas both in the cooling operation and in the heating operation in the heat pump type heating and cooling apparatus, and in order to provide a solution for this problem, the heat pump type heating and cooling apparatus includes the additionally arranged condenser, and has its essential matter of ensuring that the inner diameter of a pipe in a gas pipe circuit in the additionally arranged condenser is made small relative to the inner diameter of a pipe in the gas pipe circuit in the existing condenser, and thus makes the additionally arranged condenser always operate as a condensing unit both in the cooling operation and in the heating operation.

Also, it pertains to common general knowledge that there is interchangeability of a condenser and an evaporator in a refrigeration cycle capable of switching between heating and cooling operations.

In view of the above, it can be understood that it would be sufficient to identify in claim 1 at least the inner diameter of the pipe in the gas pipe circuit provided within the additionally arranged condenser in comparison with the inner diameter of the pipe in the gas pipe circuit provided within the existing condenser.

Decision			
Allegations by Plaintiff	Allegations by Defendant		
(A) In order to carry out condensation by the	the provision of the support requirement is		
additionally arranged condenser both in the cooling	provided in order to prohibit granting of too broad		
operation and in the heating operation, it is necessary,	exclusive rights for the claims compared with the		
with regard to the operation conditions of both of	description of the Detailed Explanation of the		
these operations, that $(1)$ at the stage of the inlet of the	Invention. Meanwhile, the provision of the enablement		

additionally arranged condenser, the refrigerant is not completely liquefied, and remain in the state of saturation, and (2) the temperature of the refrigerant in the additionally arranged condenser is higher than the temperature of the ambient air or the coolant water. The claimed invention assumes that the above condition (1) is satisfied, so that whether or not the condensation can be carried out by the additionally arranged condenser converges on the problem of whether or not the above condition (2) is satisfied. In the claimed invention, after refrigerant that exited the compressor was subjected to condensation ... by the first heat exchanger and before the refrigerant enter the additionally arranged condenser installed outside of the room, actually the refrigerant is passed through the capillary tube having a pressure reduction capability equivalent to that of the one provided before the heat exchanger performing the evaporation, and the refrigerant is subjected to the pressure reduction, and when the temperature thereof is lowered, then in normal cases, the temperature may become lower than the temperatures of the atmospheric air and the coolant water. For this reason, the above condition (2) may not be satisfied, which makes it impossible to carry out the condensation.

Defendant alleges that, with regard to the support requirement, it is inadmissible to bring interpretation and determination using the same methodology as that of the enablement requirement and that ... the Plaintiff's allegation is inconsistent with the spirit of the provision of the support requirement.

However, claim 1 recites this concrete features and has the form that includes this functional configuration, and the effects thereof described herein are all those that may only be contemplated on the basis of the functional configuration ... requirement is provided in order to prevent granting of exclusive rights in the absence of clear and sufficient disclosure for reduction to practice of the invention. The purposes of these provisions differ from each other, and with regard to the support requirement, it is inadmissible to bring interpretation and determination using the same methodology as that of the enablement requirement.

Accordingly, Plaintiff's allegation regarding the enablement of the function of the capillary tube is inconsistent with the spirit of the provision of the support requirement.

(B) Also, the problem to be solved by the invention is that only the condensation capability of the refrigerant is increased to the extent possible both in the cooling operation and in the heating operation in the heat pump type heating and cooling apparatus so as to improve the capability of the heat pump type heating and cooling apparatus ..., the description of the Description ... regarding the diameter of the gas pipe of the additionally arranged condenser is part of the description of the embodiments of the claimed invention, and Plaintiff solely relies upon that description and erroneously identifies the problem to be solved by the invention.

Judgment by the Court

A <u>It is found appropriate that whether or not the description of the claims complies with the support</u> requirement of the Description should be determined by comparing the recitations of the claims with the Detailed Description of the Invention; considering whether or not the Detailed Description of the Invention includes recitations or suggestions to such an extent that a person skilled in the art could have figured out that the problem to be solved by the invention can be solved based on the descriptions of the claims, or considering whether or not the range where a person skilled in the art could have figured out that the problem to be solved by the invention can be solved in the light of the common general knowledge as of filing of the patent application even in the absence of the recitations and/or suggestion to that extent.

... the claimed invention has been made in an attempt to ensure that only the condensation capability of the refrigerant gas is increased to the extent possible both in the cooling operation and in the heating operation. In response to the technical problem that attachment of frost to the condenser is prevented by increasing the saturation by improving the condensation of the refrigerant gas in the cooling operation and by sending the warm air coming out of the additionally arranged and enlarged condenser to the condenser serving as an evaporating unit and thereby increasing the atmospheric temperature for heat exchange by the condenser in the heating operation, and that both in the cooling operation and in the heating operation, the performance of the heat pump type heating and cooling apparatus is improved by the amount of the heat release calorie from the additionally arranged and enlarged condenser, the invention is characterized by the feature that it provides a solution for this technical problem by carrying out the condensation both in the cooling operation and in the heating operation and in the heating operation and in the refrigerant gas to the heat release and condensation both in the cooling operation and in the heating operation and in the heating operation describes, in the context of specific working examples, that it is achieved to subject the refrigerant gas to the heat release and condensation both in the cooling operation and in the heating operation by heat release and condensation both in the cooling operation and in the heating operation by heat release and condensation both in the cooling operation and in the heating operation by heat release and condensation both in the cooling operation and in the heating operation by the additionally arranged condenser.

Accordingly, it can be said that the Detailed Description of the Invention includes descriptions to such an extent that a person skilled in the art could have figured out that the problem to be solved by the invention can be solved based on the descriptions of the Scope of the Claims.

However, in general, in a case where the invention described in the claims are reduced to practice under the conditions different from those of the embodiments described in the Detailed Description of the Invention, it can be expected that a case may happen where the working effects described in the Detailed Description of the Invention are not obtained, and <u>even when the effects are not always obtained under the all design conditions</u> and environmental conditions, it cannot be said that the compliance with the support requirement should be denied on the ground that the Detailed Description of the Invention does not include recitations to such an extent that a person skilled in the art could have figured out that the problem to be solved by the invention described in the claims can be solved.

(23)-8

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	

Classification of	23: Regarding the support requirement
the Case	
Keyword	Experimental results submitted after filing the application

## 1. Bibliographic Items

Case	"Antibacterial, antiviral and antifungal composition" (Appeals against an Examiner's Decision)
	Intellectual Property High Court Decision, December 26, 2011 (2010 (Gyo KE) No. 10402)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2003-408761 (JP 2005-170797 A)
No.	
Classification	A01N 59/20
Conclusion	Dismissal
Related	Article 36(6)(i)
Provision	
Judges	IP High Court First Division, Presiding judge: Tetsuhiro NAKANO, Judge: Tamotsu SHOJI,
	Judge: Shunya YAGUCHI

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The claimed invention is a composition obtained by mixing (A) a metal ion compound having a catalytic function, (B) a mixture of a coenzyme having reducing ability,  $H_2O_2$  and a reagent having oxidizing ability, and (C) an additive, at an appropriate ratio and stirring the resulting mixture; and aimed to solve a problem for destroying and killing bacteria, viruses and fungi.

# (2) Disclosure of Detailed Explanation of the Invention (found in the Court Decision)

"In the description and drawings originally attached to the Application, there are statements on cuprous chloride as an ingredient (A), hydrogen peroxide, coenzyme NADPH and an azulenequinone derived compound as an ingredient (B), and an aqueous solution containing sodium chloride, sodium bicarbonate, potassium hydrogenphosphate, potassium dihydrogenphosphate, calcium sulfate and magnesium chloride as (C) (Working Example 1, paragraph [0011]), Additionally, it is stated that mixing the aforementioned aqueous solution and fatty acid results in destruction of 97% of the fatty acid within 30 minutes (Experimental Example 1, FIG. 2, paragraph [0015]) and that mixing the aforementioned aqueous solution and DNA results in destruction of 99% of the DNA (Experimental Example 2, FIG. 4, paragraph [0016])." (cited from the Court Decision)

(3) The Claims (Amended) (Amended Invention of the Application)

[Claim 1] An antibacterial, antiviral, and antifungal composition comprising following ingredients:

(A) a metal ion compound having a catalytic function, represented by a general formula of  $M^+$  a  $X^{-b}$ ,

wherein M is a metal element selected from the group consisting of nickel, cobalt, chrome, iron, copper, titanium, platinum and palladium, X is a negative group selected from the group consisting of chloride, bromide, ..., and a = 1-6 and b = 1-6;

(B) a mixture of coenzyme having reducing ability, H<sub>2</sub>O<sub>2</sub>, and a reagent having oxidizing ability,

wherein, regarding the above (b), the coenzyme having the reducing ability is selected from the group consisting of reduction flavin mononucleotide (FMNH<sub>2</sub>), reduced flavin adenine dinucleotide (FADH<sub>2</sub>), reduced nicotinamide adenine dinucleotide (NADH), and reduced nicotinamide adenine dinucleotide phosphate (NADPH), and the reagent having oxidizing ability is selected from the group consisting of azulenequinone, 1,2-dihydroquinone, and 1,4-dihydroquinone; and

(C) an additive comprising sodium chloride, sodium bicarbonate, potassium hydrogenphosphate, potassium dihydrogenphosphate, calcium sulfate, and magnesium chloride,

wherein the weight ratio of above (A), (B), and (C) is 1:10-50:1500-3000.

#### (4) Procedural History

September 3, 2007	:	Request for Appeals against an H	Examiner's Decision of Refusal (Fufuku No. 2007-
		24198)	
October 3, 2007	:	Amendment (the Amendment) (S	ee the aforementioned "The Claims")
August 23, 2010	:	The Amendment was dismissed.	Appeal Decision that "the request for the appeal is
		to be dismissed"	

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision				
(C) Regarding the statement of the detailed explanation of the invention in the Description				
among the choices of "M" in amended claim 1, only "copper" demonstrated in a specific example of				
"Working Example 1" stated in the Description is considered to be within the scope where a person skilled in				
the art can solve the problem to be solved by the invention based on the statement of the detailed explanation				
of the invention in the Description. The other seven choices, that is, "nickel, cobalt, chrome, iron, titanium,				
platinum and palladium", are not accepted as within the scope for which a person skilled in the art can recognize,				
based on the detailed explanation of the invention in the Description, that the invention can solve the problem				
to be solved by the invention.				

(D) Regarding the common general knowledge as of the filing

... <u>it cannot be construed that it was within the common general knowledge as of the filing of the</u> <u>Application that each of the seven choices for "M" in the amended claim 1 ... can be recognized to have a similar</u> <u>effect to "copper".</u> Therefore, the seven choices, "nickel, cobalt, chrome, iron, titanium, platinum and palladium" are not accepted as those that can be recognized to be able to solve the problem to be solved by the Invention in light of the common general knowledge as of the filing, even without a specific statement or indication thereof. Decision

Allegations by Plaintiff

... There is no doubt that "Nickel, cobalt, chrome, iron, copper, titanium, platinum and palladium" specified in the Amended Invention of the Application are well-known as substances having catalytic functions to persons skilled in the art.

These are not catalysts that exhibit their functions only under special conditions.

Therefore, since "copper" (cuprous oxide) is listed in Working Example 1 in the description originally attached to the Application, it should be considered that a person skilled in the art can presume, based on the common general knowledge as of the filing of the Application, that the seven other compounds naturally exhibit catalytic functions. Accordingly, the seven choices are within the scope which a person skilled in the art can recognize as those that can solve the problem to be solved by the invention in light of the common general knowledge as of the filing, even without a specific statement or indication in the detailed description of the invention in the description originally attached to the Application. Therefore, the aforementioned decision of the Appeal Decision is error.

In addition, ... in order to prove that various metal ions except copper, that is, metal ion compounds such as nickel ... exhibit catalytic functions, antibacterial, antiviral, and antifungal compositions containing various metal ions except copper were prepared in a procedure same as Working Example 1 in the Description and examined by the methods described in Experimental Examples 1 and 2; the results demonstrated that metal ion compounds such as nickel ... exhibit catalytic functions in the Amended Invention of the Application and compositions prepared with these compounds exhibit desired

## Allegations by Defendant

The Plaintiff alleges that there is no doubt that "nickel, cobalt, chrome, iron, copper, titanium, platinum and palladium" specified in the Amended Invention of the Application are well-known as substances having catalytic functions to persons skilled in the art. ... There is no evidence sufficient to prove the statement. Furthermore, generally, it is known that different kinds of catalysts have usually different catalytic functions when used (Kagaku Daihyakka (Encyclopedia of Chemistry), Exhibit B4), and there is a difference between the transition metal ions such as nickel, cobalt, chrome, and titanium and the transition metal ions such as iron at least in the catalytic function to "form OH\*" (pne document of Exhibit A11). Therefore, the Plaintiff's allegation "since "copper" (cuprous oxide) is listed in Working Example 1, it should be considered that a person skilled in the art can presume, based on the common general knowledge as of the filing of the Application, that the seven other compounds naturally exhibit catalytic functions" is unfounded.

antibacterial, antiviral, and antifungal effects.		
Therefore, it should be considered that metal ion		
compounds listed in Amended Invention of the		
Application having certain catalytic functions can be		
recognized to exhibit antibacterial, antivirus, and		
antifungal activities in the Amended Invention of the		
Application, even without showing Working		
Examples of all the metal ion compounds		

Judgment by the Court

... In the description originally attached to the Application ... concrete data on a composition using a metal <u>except "copper"</u> for M in the ingredient (A) represented by  $M^{+a} X^{-b}$  is not presented in the detailed description <u>of the invention</u>. In addition, there is neither a statement of the mechanism by which a composition of the Application degrades fatty acid and DNA nor a statement of demonstrating the roles of the ingredients in the composition in the degradation of fatty acid and DNA.

Meanwhile, <u>there is not sufficient common general knowledge to admit that a person skilled in the art can</u> <u>understand, even without demonstration of specific examples</u>, that a combination of three ingredients defined by the statement of the Amended Claim 1 can degrade fatty acid and DNA and consequently destroys and kills bacteria, viruses and fungiare.

Accordingly, it is not considered that <u>a composition containing a metal other than "copper"</u> for M in the ingredient (A) in the composition of the Application <u>can solve the problem by allowing to degrade fatty acid</u> <u>and DNA and destroy and kill bacteria and the like</u>. Therefore, <u>it is not considered that</u> the detailed description of the invention in the Application <u>states the invention to the extent that a person skilled in the art can recognize</u> <u>that an expected effect is obtained throughout the entire scope of M in the ingredient (A)</u> defined by the statement of the Amended Claim 1.

Therefore, the statement of the Amended Claim 1 (Amended Invention of the Application) does not comply with "the invention for which a patent is sought is stated in the detailed description of the invention" (fulfillment of support requirement).

(D) In addition, the Plaintiff alleges that ... were prepared in a procedure same as Working Example 1 in the Description and examined by the technique described in Experimental Examples 1 and 2; ... the results demonstrated that .. exhibit desired antibacterial, antiviral, and antifungal effects.

It should be considered, however, that <u>experimental results supplemented after filing the patent application</u> on the matter which was not stated in the original description are not permitted to be taken into consideration <u>unless there are special circumstances</u>. The aforementioned experimental results in the Plaintiff's allegation are not stated in the description originally attached to the Application., therefore, not only it is not clear when and where the experiment was actually conducted, but also, even it is presumed that the aforementioned experimentwas conducted after filing of suit, judging from the fact that the Plaintiff's allegation was made on the first time in writing entitled "Technical explanation" dated August 26, 2011. Besides, <u>there are no special</u> circumstances that the results of the aforementioned experiments are suggested or presumed from the description originally attached to the Application or the common general knowledge as of the filing. Therefore, it should be considered that the aforementioned experimental results cannot be taken into consideration in the first place.

. ,	
Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Problems to be solved by the invention

# (23)-9

# 1. Bibliographic Items

Case	"Complex of formula L2MX as phosphorescent dopant in organic LED" (Trial for Invalidation)
	Intellectual Property High Court Decision, November 7, 2012 (2011 (Gyo KE) No. 10235)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2005-241794 (JP 2005-344124 A)
No.	
Classification	С09К 11/06
Conclusion	Acceptance
Related	(Former) Article 36(6)(i), Article 123(1)(iv)
Provision	
Judges	IP High Court Fourth Division, Presiding judge: Akio DOI, Judge: Yasuhito INOUE, Judge:
	Akimitsu ARAI

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The claimed invention are compositions for use as an emissive layer of an organic light emitting device, comprising phosphorescent organic iridium complexes represented by the specific formula.

# (2) Disclosure of Detailed Explanation of the Invention

"... Referring to the detailed explanation of the invention in the Description, ... it is stated that the Invention relates to organometallic compounds of formula  $L_2MX$ , wherein L and X are distinct bidentate ligands, and M is a metal, especially iridium, their synthesis and use as dopants in certain hosts to form an emitting layer in organic light emitting devices (... [0001]). In addition, it is stated in the detailed explanation of the invention in the Description that since all excitons may participate in luminescence in phosphorescence, it is in principle more efficient luminescence than fluorescence and therefore successful utilization of phosphorescence holds promise for organic electroluminescent devices (... [0024], [0025]). Meanwhile, it is stated that many organic materials exhibit fluorescence from singlet excitons, but only a very few have been identified which are also capable of efficient room temperature phosphorescence from triplets (... [0006], [0007])" (cited from the Court Decision)

(3) Common general knowledge and the like taken into consideration (found in the Court Decision)

"... The state of the art as of the filing date of the Application is recognized as follows: Theoretically, the luminous efficiency of organic light emitting devices can be improved by using organometallic compounds that emit phosphorescence in an emissive layer as an emissive material. However, among numerous organometallic compounds, only a limited number of particular compounds were known to be available in an emissive layer as such an emissive material. Furthermore, such compounds remained to exhibit very low EL efficiencies, except Ir(ppy)<sub>3</sub>, which exhibited an EL efficiency of 8%." (cited from the Court Decision)

## (4) The Claims (Corrected) (only claim 1 is shown) (the Invention 1)

[Claim 1] A composition for use as an emissive layer in an organic light emitting device, comprising a phosphorescence complex of the formula  $L_2MX$ , wherein L and X are distinct monoanionic bidentate ligands, M is Ir, the L ligand is coordinated to M through a sp<sup>2</sup> hybridized carbon and a nitrogen atom, the X ligand is an O-O ligand or a N-O ligand; except that X is hexafluoroacetylacetonate or diphenylacetylacetonate in  $L_2MX$ .

## (5) Procedural History

April 28, 2010	:	Request for a trial for patent invalidation by Defendant (Muko No. 2010-800084)
September 17, 2010	:	Request for correction by Plaintiffs (See the aforementioned "The Claims")
March 23, 2011	:	Appeal Decision that "the correction is to be approved the patent is to be
		invalidated."

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

# Appeal Decision (cited from the Court Decision)

... is to obtain a quantum efficiency equivalent to or higher than "8%," which had been achieved by a prior art invention stated in Exhibit A1 when a light emitting device is configured with a compound represented by the formula "L<sub>2</sub>IrX" that is not "BTIr." ... It is not considered that a person skilled in the art can recognize that such high quantum efficiencies will be generally obtainable with such configurations based on the statement of the detailed explanation of the invention in the Description. This is same even in light of the common general knowledge. Therefore, Invention 1 is not stated in the detailed explanation of the invention. Inventions 2 to 7, which refer to Invention 1, are also not stated in the detailed explanation of the invention for the same reason. ...

Decision

Allegations by Plaintiff	Allegations by Defendant
In the Description, it is not stated that the	3 To find the problem to be solved by the invention, all
problem to be solved by the Invention is "to provide a	the matters stated in the description and the drawings
composition for use in an emissive layer in a light	should be considered. In the Description, there is a
emitting device that can emit phosphorescence at high	statement that a specific embodiment (BTIr) emits
quantum efficiency," which was found in the Appeal	phosphorescence at high quantum efficiency.

Decision. Even considering the statement of a quantum efficiency of 8% in Exhibit A1 regarding the prior art, there are no grounds to find that it is the problem to be solved by all phosphorescence organic light emitting devices including the Invention to provide a light emitting device that can emit phosphorescence at "a quantum efficiency equivalent to or higher than 8%." As such, the Appeal Decision has errors of finding the problem to be solved by the Invention which is not based on the statement of the Description and limiting the problem to an irrationally high level without any grounds.

... it should rather be considered that <u>a problem</u> to be solved by the Invention is "to provide, as a composition for use as an emissive layer in an organic light emitting device, a phosphorescence complex having a structure that is different from conventionally known structures of phosphorescence complexes represented by the formula  $L_3M$ ." This problem and means to solve the problem are stated in the detailed description of the invention in the Description. Therefore, the Invention does not exceed the scope disclosed in the detailed description of the invention in the Description. However, there is no statement, beyond that, regarding the problem to be solved by the invention as plaintiffs alleges in the aforementioned [Allegation by Plaintiff] 4. Rather, <u>no problem to be solved by the invention</u> <u>is clearly stated in the Description</u>. Considering the foregoing, it is rational to find in the Appeal Decision that the problem to be solved by the invention is "to provide a composition for use in an emissive layer in a light emitting device that can emit phosphorescence at high quantum efficiency."

... As of the filing date of the Application, a problem to be solved in the development of organic EL devices was to improve the quantum efficiencies (Exhibit A1, Exhibit A5, and Exhibit A6, and Exhibit B25). The invention stated in Exhibit A1, comprising an iridium complex, which is same as the Invention, in an emissive layer has a quantum efficiency of 8%, which is lower than the quantum efficiency theoretically expected for phosphorescence (15%). Therefore, it is a matter of course to consider that the problem to be solved by the invention is to achieve a quantum efficiency equivalent to or higher than 8%.

Judgment by the Court

... As a prerequisite to make a judgment regarding the support requirement, it is necessary to find the problem to be solved by the invention. Following that, it is necessary to compare the statement of the detailed description of the invention in the Description and the statement of the claims of the Invention, and to consider whether the invention stated in the claims are the invention stated in the detailed description of the invention in the Description, whether the invention stated in the scope of claim is within the scope that a person skilled in the art can recognize, based on the statement of the detailed description of the invention can solve the problem to be solved by the invention, and whether the invention stated in the claims are an invention within the scope that a person skilled in the art can recognize, in light of the common general knowledge as of the filing, that the problem can be solved by the invention, even without a statement or suggestion thereof.

... <u>Although the problem to be solved by the invention is not necessarily clearly stated in the Description</u>, the Description explains that the Invention is a composition that can be used as an emissive layer in an organic light emitting device, and that is different from the organometallic compounds known as of the filing date of the Application, subject to the aforementioned state of the art. Therefore, it is proper to find that the problem to be solved by the Invention is "to obtain a new organometallic compound that emits phosphorescent light when used in aluminescent layer in an organic light emitting device."

A Defendant alleges that the Appeal Decision is rational to find that the problem to be solved by the Invention is "to provide a composition that can emit phosphorescence at a high quantum efficiency, for use in an emissive layer in a light emitting device," specifically, to provide a composition for an organic light emitting device that can emit phosphorescence at an EL efficiency by equivalent to or higher than 8% as stated in Exhibit A1, and that it should not be considered satisfactory to obtain a quantum efficiency of phosphorescence of even 1% in L<sub>2</sub>MX according to the Invention.

However, according to the state of the art as of the filing date of the Application, it can be approved as a technical problem to be solved as of the filing date of the Application to find an organometallic compound that can be used as an emissive material in an organic light emitting device. Even considering that Ir (ppy)<sub>3</sub> of Exhibit A1 exhibited an EL efficiency of 8% before the filing date of the Application, it cannot be a ground to limit the technical problem to be solved in the art as of the filing date of the Application to "to provide a composition for use in an emissive layer in a light emitting device that can emit phosphorescence at a high EL efficiency equivalent to or higher than 8%.

... Whereas the problem to be solved by the Invention ... is "to obtain a new organometallic compound that emits phosphorescence when used in an emissive layer in an organic light emitting device.", the detailed description of the invention in the Description, ... not only concretely disclosing the <u>specific kind of organic</u> iridium complexe that was not known as a phosphorescent material prior to the filing date of the Application together with the manufacturing method and other constitutions of the Invention, but also ...

<u>concretely stating with the mechanism of action that phosphorescence</u> is emitted when the organic iridium <u>complexe is used in an emissive layer in an organic light emitting device</u>.

Therefore, the invention stated in the claims as the Invention is the invention stated in the detailed description of the invention in the Description and is within the scope that a person skilled in the art can recognize, based on the statement of the detailed description of the invention, that the problem can be solved by the invention. ...

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	A point of the invention and Support Requirment

## (23)-10

# 1. Bibliographic Items

Case	"Manufacturing method of rotatable toothbrush" (Trial for Invalidation)	
	Intellectual Property High Court Decision, June 6, 2013 (2012 (Gyo KE) No. 10365)	
Source	Website of Intellectual Property High Court	
Application	Japanese Patent Application No. 2002-99172 (JP 2003-289947 A)	
No.		
Classification	A46D 1/08	
Conclusion	Dismissal	
Related	Article 36(6)(i)	
Provision		
Judges	IP High Court Fourth Division, Presiding judge Akio DOI, Judge Ichiro OTAKA, Judge Iwao	
	SAITO	

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The claimed invention performs, for eliminating overlapping of wires constituting a brush single body and obtaining the uniform thickness thereof, a first step of causing a group of wires 1 to protrude outward by a predetermined amount via an insertion hole 51a provided in a pedestal 2; a second step of blowing air to the center of the protruding end of the group of wires 1, thereby causing the group of wires to radiate in a radiating direction, and performs, for finishing the shape of the central portion so that it is made uniform, following the first and second steps, a third step of welding the central portion of the group of wires 1 in a state where the radiating group of wires 1 are fixed to the pedestal 2; and a fourth step of removing the center of the welded central portion, so that simple, uniform and homogeneous manufacturing of the brush single body can be achieved.

# [FIG. 5]



(2) Disclosure of Detailed Explanation of the Invention[0002]

[Prior Art] ...A semispherical-shape welding part is formed by heat welding an end of a group of wires formed by gathering a number of wires in a bundle shape and subsequently the welding part is pressed into a flat shape. Following this, the portion serving as the shaft hole is cut and pressed, whereby the entire group of wires is made in a generally circular shape, and the flat portion is also made into a generally circular shape. Thereafter, both ends of the flat portion are joined by welding or the like and thus an annular part is formed, and in this manner a sheet-like brush single body is manufactured...

[Problem to be solved by the invention]

[0003] ... The rotatable brush produced in the above-described manner requires expertise for making the thickness of the brush single body uniform, and when the thickness of the brush single body is not uniform, the density of bristle tips becomes uneven. In addition, the rotatable brush necessitates a manufacturing process including a number of manufacturing stages and complicated stages, making it difficult to achieve consistent and continuous manufacturing and increasing the manufacturing cost.

[0004] In view of the above, an object of the present invention is to provide a manufacturing method of a brush single body and a device therefor that enable efficient manufacturing of the brush single body constituting the rotatable toothbrush with as small a number of manufacturing stages as possible and without the need of prominent expertise, thus enabling mass production of the rotatable toothbrush.

#### (3) The Claims (Only claim 2 is cited therefrom.)

[Claim 2] A manufacturing method of a brush single body in which a rotatable brush is formed by multiple overlapped brush single bodies, the method comprising:

a first step of causing a group of wires constituted by gathering a number of wires in a bundle shape to protrude outward by a predetermined amount via an insertion hole provided in a pedestal;

a second step of blowing air to the center of the protruding end of the group of wires and thereby causing the group of wires to radiate in a radiating direction;

a third step of welding the central portion of the group of wires in a state where the radiating group of wires are fixed to the pedestal; and

a fourth step of removing the center of the welded central portion.

## (4) Procedural History

July 6, 2007	:	Registration of establishment of the patent right (See the above-described "The
		Claims.")
December 22, 2011	:	Filing of trial for patent invalidation by Plaintiff (Muko No. 2011-800265)
September 19, 2012	:	Trial Decision dismissing the invalidation trial

3. Portions of Appeal/Trial Decisions relevant to the Holding

#### **Trial Decision**

The invention of embodiment 1 described in the Description has all of the features corresponding to the matters specifying the invention of the invention according to claim 2.

Also, the invention according to claim 2 manufactures the brush single body of the rotatable brush by carrying out the first to fourth steps for the group of wires formed by gathering a number of wires in a bundle shape, and the steps necessary for manufacturing of the brush single body are specified. When the invention of embodiment 1 is taken into consideration, the claimed invention does not go beyond the scope described such that the person skilled in the art can recognize that the problem to be solved by the invention described in paragraph [0003] of the Description can in effect be solved.

The invention according to claim 2 does not fall within the case where what is disclosed in the Detailed Explanation of the Invention cannot be expanded or generalized to the scope of the invention according to claim 2 even if common general knowledge as of filing of the patent application is taken into account, or the case where a patent is claimed beyond the scope stated in the Detailed Explanation of the Invention because a solution for the problem to be solved by the invention, which is stated in the Detailed Explanation of the Invention, is not reflected in claim 2.

Consequently, the invention according to claim 2 is the one that is stated in the Detailed Explanation of the Invention.

#### Decision

#### Allegations by Plaintiff

...Although the recitations of claims 2 and 3 are comprehensive description that includes the features of each of the exemplary embodiments, the Detailed Description of the Invention fails to describe the features of each of the exemplary embodiments, and even when the common general knowledge as of filing of the patent application is taken into account, it is not possible to expand or generalize what is disclosed in the Detailed Description of the Invention to the scope of the claimed invention that include the features of each of the exemplary embodiments.

## Allegations by Defendant

It is necessary to describe at least one embodiment in accordance with the claimed invention in the "Detailed Explanation of the Invention" of the Description. However, it is not necessary to enumerate all of more specific concepts that may be included in the (generic concept of the) claimed invention or embodiments of all possible alternatives included therein. The mere fact that the Detailed Explanation of the Invention does not contain the descriptions regarding every possible embodiment that would be contemplated does not necessarily constitute failure to comply with the support requirement.

#### Judgment by the Court

(1) Regarding Failure to Comply with Support Requirement

It should be understood that whether or not the description of the Claims comply with the support requirement of the Description should be determined by comparing the recitations of the claims with the Detailed Description of the Invention; considering whether or not the invention described in the claims is described in the Detailed Description of the Invention and falls within the range where a person skilled in the

art could have figured out that the problem to be solved by the invention can in effect be solved based on the description of the Detailed Description of the Invention, or considering whether or not the claimed invention falls within the range where a person skilled in the art could have figured out that the problem to be solved by the invention can in effect be solved in light of the common general knowledge as of filing of the patent application even in the absence of recitations and/or suggestions of the Detailed Description of the Invention.

Given the above-identified scheme (for determination of compliance with the support requirement), it is noted that the Detailed Description of the Invention of the Description describes the features of the invention (claims 2 and 3) and exemplary embodiments thereof, ... a person skilled in the art who would have the Description at hand would be able to recognize that the problems to be solved by the invention could in effect be solved by applying the features of the invention, the problems including: the need of expertise in making the thickness of the brush single body uniform; and the need of the large number of manufacturing stages and complicated manufacturing stages, thereby the difficulty in achieving consistent continuous manufacturing, and accordingly it should be understood that the Patent sought for the claimed invention is in compliance with the support requirement.

# (2) Regarding Allegations by Plaintiff

Plaintiff alleges that although the recitations of claims 2 and 3 are comprehensive description that includes the features of each of the exemplary embodiments, the Detailed Description of the Invention fails to describe the features of each of the exemplary embodiments, and even when the common general knowledge as of filing of the patent application is taken into account, it is not possible to expand or generalize what is disclosed in the Detailed Description of the Invention to the scope of the claimed invention that include the features of each of the exemplary embodiments, contending that "removal during welding" as in the feature of the exemplary embodiment 6 fails to bring the central portion in a fully solidified state prior to the removal and as a result it should fail to provide a solution to the problem of the thickness of the brush single body becoming uniform, also contending that the Description fails to provide description regarding any countermeasure to avoid this consequence and thus the invention at issue fails to comply with the support requirement, and alleges that the trial decision contradicting this fact contains an erroneous determination.

However, whether or not the description of the Claims comply with the support requirement of the Description should be determined by the above-identified standard <u>and the mere fact that the Detailed</u> <u>Description of the Invention failing to contain the description regarding every possible and conceivable</u> <u>embodiment does not necessarily constitute failure to comply with the support requirement.</u>

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Problem to be solved by the invention

# (23)-11

# 1. Bibliographic Items

Case	"Ships" (Trial for Invalidation)					
	Intellectual Property High Court Decision, September 10, 2013 (2012 (Gyo-KE) No. 10424)					
Source	Website of Intellectual Property High Court					
Application	Japanese Patent Application No. 2007-238381 (JP 2009-067253 A)					
No.						
Classification	B63D 13/00					
Conclusion	Acceptance					
Related	Article 36(6)(i)					
Provision						
Judges	IP High Court Second Division, Presiding Judge: Shuhei SHIOTSUKI, Judge: Akira					
	IKESHITA, Judge: Takaaki SHINTANI					

2. Overview of the Case

(1) Summary of Claimed Invention

[Problem to be solved] Provision of a ship structure which allows to easily install various types of ballast water treatment device in suitable places in a ship for a large variety of ships.

[Solution] A ship structure comprising a ballast water treatment device 20 to treat microorganisms in the ballast water to remove or annihilate them when taking or discharging ballast water, the ballast water treatment device 20 being placed in the steering machine room 9 in the back part of the ship.



LNG carrier

Steering machine room

- Stern part 4:
- Ballast tank 6: 7:
- Crew's quarter 8: Engine room
- Void 20: Ballast water treatment device 30: Deck

(2) Disclosure of Detailed description of the invention

[Problem to be solved by the invention]

[0005] Since the above-mentioned ballast water treatment device is for treating ballast water taken or discharged almost at the same time with progress of cargo handling, high treating speed (for example, approximately 7,000  $m^{3}$ /hr for a large-sized crude oil tanker) is required. Accordingly, there is a tendency that ballast water treatment devices become larger in size, and it is difficult to secure appropriate places for installing a ballast water treatment device in the ship because of the following reasons.

9:

[0006] (1) Since high level treatment using electricity and chemicals is required to ballast water treatment devices, it is preferable to install a ballast water treatment device in the ship rather than outboard such as a deck taking into consideration corrosion resistance against ocean waves and weather under marine environment.

(2) When a ballast water treatment device is placed in the ship, it is preferable to avoid placing it in the central portion of the hull and place it in the bow or stern taking into consideration securing cargo capacity and hazardous section concerned with loading of combustible cargo.

(3) According to common ship design, equipment such as a ballast pump is placed in the engine room in the stern. Therefore, if a ballast water treatment device is placed in the bow, a long piping from the intake provided in the vicinity of the ballast pump in the stern to the bow becomes necessary.

[0007] As described above, with respect to ballast water treatment devices of which installation will become compulsory in the future, it is desired to have a ship structure that does not require significant change in the ship design and is easily applicable not only when installed in a new ship, but also when installed by remodeling existing ship. Namely, a ship structure that allows easy installation of various types of ballast water treatment device in a suitable place in the ship without discrimination between new ships and existing ships, and for various types of ships such as tankers (LPG ships, LNG ships, and oil tankers, etc.), cargo ships (container ships, roll-on/roll-off ships, common cargo ships, etc.), and dedicated ships (bulk carriers, ore carriers, car carriers, etc.)(in particular, commercial vessels) is desired.

The present invention has been made in light of the above-described situations, and its objective is to provide a ship structure that allows to easily install various types of ballast water treatment devices in a suitable place in the ship for various ships.

[0027] To be more specific, because of the above-described problem of vibration, the space of the steering machine room 9 is normally left as a place (space) not suitable for installation of equipment. However, since the ballast water treatment device 20 is mainly used while the LNG ship 1 is stopped, it can be used when the above-described vibration does not exist. The present inventors focused attention on the above-described ship structure, and found that the steering machine room 9 is most suitable as a place for installing a ballast water treatment device 20.

Namely, since ballast water is taken or discharged while the ship is stopped in the port and cargo handling work is carried out, when the ballast water treatment device 20 is operated, the engine and the steering device for ship navigation are not used, and, therefore, the steering machine room 9 is most suitable as a place for installing the ballast water treatment device 20 because vibration in the surroundings is not required to be considered while operating the ballast water treatment device 20. Ballast water treatment is carried out during the voyage if necessary, but it is not negated.

[0028] From the viewpoint of placing the ballast water treatment device 20 in the vicinity of the ballast pump 13, it is conceivable to install the ballast water treatment device 20 in the engine room 8. In the normal ship design, however, the engine room 8 is considered as the place for placing various types of equipment unless special requirement exists, taking maintenance and operability into consideration. Furthermore, in the inside of the engine room 8, while the consideration for passability and workability is required, in reality, even the space minimum necessary for installation and maintenance of equipment is narrowly secured and there is substantially no extra space. Therefore, in order to install the ballast water treatment device 20 in the engine room 8, significant change in the ship structure and the hull form, such as changing the ship design to make the engine room 8 larger, is required

In particular, when applying to existing ships, in order to install the ballast water treatment device 20 in the engine room 8 by remodeling it, a large remodeling work for the ship structure is necessary. Since such remodeling work requires increase in costs and the time for the work, there are many problems to use the engine room 8 for a place for installing the ballast water treatment device 20 and it is very difficult.

[0029] In addition, the steering machine room 9 is close to the crew's quarter 7 placed above the engine room 8 and it is advantageous in accessibility when carrying out the work. From such viewpoint also, the steering machine room 9 is suitable for the place to install the ballast water treatment device 20.

Furthermore, since the steering machine room 9 is located in the inboard space, no special measures for anticorrosion against ocean waves and weather under marine environment is required, and it is suitable for the place to install the ballast water treatment device 20 from this point also.

•••

...

[0033] In addition, the steering machine room 9 is located adjacent to the engine room 8 where the ballast pump 13

is installed, and is thus close to the ballast pump 13. Therefore, the length of piping and the space needed for installing the piping necessary for the piping system 15 on the inlet of the treatment device and the piping system 16 on the outlet of the treatment device can be made small and the pressure loss because of ballast water treatment can be kept at the minimum level.

Furthermore, the steering machine room 9 is located in the non-explosion proof area, there is an advantage that there are fewer constraints in the types of control equipment and electrical equipment.

Still furthermore, since the steering machine room 9 is located above the draft line of the ship, there is also an advantage that ballast water can be easily discharged outboard even in emergency.

The present invention is not limited to the above-described embodiments, and it can be modified appropriately within the range not departing from the intent of the present invention.

#### (3) The Claims (Only Claim 6 is shown.)

[Claim 6] A ship equipped with a ballast water treatment device that treats microorganisms in the ballast water to remove or annihilate them when taking or discharging ballast water, and to that ballast water is supplied, characterized in that said ballast water treatment device to which ballast water is supplied is placed in the non-explosion proof area in the back part of the ship, above the draft line of the ship and below the top of the ballast tank.

#### (4) Technical common knowledge and the like in consideration

According to Exhibits A102 to A104 and A208 to A211, as of the time of filing the application for the present patent, the expression of "non-explosion proof area" is acknowledged as an expression commonly used in the field of ships and has the same meaning as non-hazardous area that is an antonym of hazardous area (hazardous section or zone) and denotes a sphere that does not require explosion-proof structure, namely a section or zone in which explosive gas mixture that requires special consideration for structure, installation and use of electrical equipment does not exist.

In addition, it is acknowledged that, as of the time of filing the application for the present patent, it was obvious for a person skilled in the art which place in the ship is "non-explosion proof area" because of the following reasons.

Namely, in Exhibit A102 ("Rules and Guidance for the Survey and Construction of Steel Ships, Part H, Electrical Installations," Nippon Kaiji Kyokai), it is described, with respect to each of tankers, liquefied gas bulkers, and hazardous chemical goods bulkers, that hazardous area must be classified into three classes, Class 0, Class 1 and Class 2, and it is specifically exemplified which place is classified to the hazardous area for each level of hazardous area.

In addition, Exhibit A215 ("JIS Electrical installation in ships - Part 502: Tanker - Individual regulations," Japan Standard Association) stipulates detailed rules with respect to classification of hazardous zone, and examples of classification of hazardous zone are shown specifically using drawings.

In addition, Exhibit A216 ("Electrical apparatus for explosive gas atmosphere - Part 10: Classification of hazardous zone," Japan Standard Association) also stipulates with respect to the classification of hazardous zones in details.

In light of those descriptions, it should be deemed that, at the time of filing an application for the present patent, it was obvious for a person skilled in the art which places in the ship are hazardous area or zone, and, since it is so, which places are "non-explosion proof areas" that are not hazardous area or zone is also obvious.

Furthermore, since Exhibits A102, A215 and A216 relate to the basic guidelines to be abided by in designing a ship, there is no problem to acknowledge that not only the meaning of "non-explosion proof area," but also specific places were common general technical knowledge of a person skilled in the art at the time of filing an application for the present patent.

## (5) Procedural History

May 14, 2010	:	Registration of establishment of the patent right
December 6, 2011	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2011-80251)
March 26, 2012	:	Demand for correction by Defendant
October 26, 2012	:	After accepting the correction, trial decision to the effect that the patent for the
		invention according to Claim 6 should be invalidated.

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

# Trial decision

Present Invention 6 has been corrected as "the ballast water treatment device to which ballast water is supplied is placed in the non-explosion proof area in the back part of the ship, above the draft line of the ship and below the top of the ballast tank," and it is characterized, in particular, by the constitution in which "the ballast water treatment device is placed in the non-explosion proof area in the back part of the ship."

With respect to the place for installing the ballast water treatment device 20 in Present Invention 6, it is described that "from the viewpoint of placing the ballast water treatment device 20 in the vicinity of the ballast pump 13, it is conceivable to install the ballast water treatment device 20 in the engine room 8. In the normal ship design, however, the engine room 8 is considered as the place for placing various kinds of equipment unless special requirement exists, taking maintenance and operability into consideration. Furthermore, in the inside of the engine room 8, while the consideration for passability and workability is required, in reality, even the space minimum necessary for installation and maintenance of equipment is narrowly secured and there is substantially no extra space. Therefore, in order to install the ballast water treatment device 20 in the engine room 8, significant change in the ship structure and the hull form, such as changing the ship design to make the engine room 8 larger, is required. In particular, when applying to existing ships, in order to install the ballast water treatment device 20 in the engine room 8 by remodeling it, a large remodeling work for the ship structure is necessary. Since such remodeling work requires increase in costs and the time for the work, there are many problems to use the engine room 8 for a place for installing the ballast water treatment device 20 and it is very difficult (refer to the description of the present patent, [0028])." It is also described that "the steering machine room 9 is close to the crew's quarter 7 placed above the engine room 8 and it is advantageous in accessibility when carrying out the work. From such viewpoint also, the steering machine room 9 is suitable for the place
to install the ballast water treatment device 20. In addition, since the steering machine room 9 is an inboard space, no special measures for anti-corrosion against ocean waves and weather under marine environment is required, and it is suitable for a place for installing the ballast water treatment device 20 from this viewpoint also (refer to the description of the present patent, [0029])." Judging from these descriptions, the intent of the description of the present patent is that it is suitable to place the ballast water treatment device 20 not in the engine room 8, but in the steering machine room 9.

Then, if a person skilled in the art interprets the expression, "non-explosion proof area," as "non-hazardous area" or "non-hazardous section," the "ballast water treatment device" may be installed in a place other than the steering machine room in the back part of the ship (including the engine room), and, judging from the intent of the description of the present patent, this is to grant a patent beyond the scope of statements in the detailed description of the invention in the description of the present patent, and it infringes the provision of Article 36(6)(i) and should be invalidated under the provisions of Article 123(1)(iv) of the Patent Law.

<b>n</b>	
Decision	

Allegations by Plaintiff

Paragraph [0033] of the description of the present patent contains a statement, "the steering machine room 9 is a non-explosion proof area having the advantage that there are fewer constraints in the types of control equipment and electrical equipment." A person skilled in the art who reads this statement can naturally understand that it means "since the steering machine room 9 is a non-explosion proof area, there are fewer constraints in the types of control equipment and electrical equipment constituting the ballast water treatment device." Namely, a person skilled in the art understands that, while the ballast water treatment device comprises various types of control equipment and electrical equipment, if the ballast water treatment device is placed in the nonexplosion proof area (non-hazardous area), compared to the case in which it is placed in the explosion-proof area (hazardous area), there is the advantage that there are fewer constraints in the types of control equipment and electrical equipment.

Allegations by Defendant

... the reasons why it is difficult to install the ballast water treatment device in the engine room are described.

Ongoingly ... the reasons why it is difficult to install the ballast water treatment device in the engine room are described.

The described reasons are, "there are many problems ...and it is very difficult," namely, in normal case, it means that it is nearly impossible to realize, and it can be understood that placement of the ballast water treatment device in the engine room is excluded.

In order to deny this "very difficult matter," normally, unless certain special situations to overcome the matter exist, it is normally understood that such "difficulty" cannot be overcome, but, even if all statements of the description of the present patent are examined from such viewpoint, there is no statement with respect to "situation to overcome the difficulty."

It can be considered that ... at the time of filing an application for Present Invention 6, the intention of the drafter of the description was from the very beginning to take into consideration only the placement in the steering machine room, and placement in the engine room was out of the intention.

Namely, in the description of the present patent, it can be understood that placement in the steering machine room was considered primarily believing that "it is suitable to place the ballast water treatment device 20 not in the engine room, but in the steering machine room," and there is no error in the trial decision.

Judgment by the Court

Since the "non-explosion proof area" means the "section or zone in which explosive gas mixture that requires special consideration for structure, installation and use of electrical equipment does not exist," it is natural that, if the place is a "non-explosion proof area," it is not necessary to pay particular attention to the structure, installation and use of electrical equipment placed therein, and, as a result, it is obvious that there is

the "advantage that there are fewer constraints in the types of control equipment and electrical equipment." Namely, the "advantage that there are fewer constraints in the types of control equipment and electrical equipment" is the reverse side of the expression of "non-explosion proof area," and states the effect that "non-explosion proof area" has inherently.

Then, even if the intent of the description of the present patent, as a whole, focuses the most of attention on the steering machine room, and statements in [0033] states literally the effect of the steering machine room, it can be acknowledged that a person skilled in the art who read the statements in [0033] does not understand that the "advantage that there are fewer constraints in the types of control equipment and electrical equipment" is the effect specific to the steering machine room, and instantly understands that it is an effect of focusing attention to "non-explosion proof area" in a broad sense in another dimension not limited to the steering machine room. And, under such understanding, it should be acknowledged that "non-explosion proof area" is also understood as a unique constitution kept in mind separately from the steering machine room.

<u>Therefore, a unique technical idea that has an effect that "there are fewer constraints in the types of control</u> equipment and electrical equipment" by placing the ballast water treatment device in the "non-explosion proof area" can be read from the description in [0033], and the "non-explosion proof area" of Present Invention 6 is supported by [0033].

#### (2) Relation with [0028]

The intent of the description of the present patent, as a whole, focuses the most attention on placement of the ballast water treatment device in the steering machine room, and, in particular in [0028], superiority of the steering machine room is stated in comparison with the engine room (one of "non-explosion proof areas").

The technical idea stated in the description of the present patent as a whole to place the ballast water treatment device in the steering machine room focuses attention, as described in [0027], on inherent characteristic of the steering machine room, namely, on the fact that since the steering machine room is located right above the propeller and the helm and, therefore, there is a problem of vibration, it is normally left as a place (space) not suitable for installing equipment.

In contrast, the technical idea to place the ballast water treatment device in a "non-explosion proof area" focuses attention, as described in [0028], on the fact that the "non-explosion proof area" has the "advantage that there are fewer constraints in the types of control equipment and electrical equipment." Therefore, the technical idea to place the ballast water treatment device in the "non-explosion proof area" has a point to focus attention with another dimension different from the technical idea to place the ballast water treatment device in the steering machine room.

As far as the technical idea to place the ballast water treatment device in the "non-explosion proof area" is supported by [0033], even if, in the description of the present patent, as a whole, a technical idea in another dimension is shown and, compared to it, even if there are not so many statements concerning placement of the ballast water treatment device in a "non-explosion proof area," it does not affect the determination on requirement of support in description in Present Invention 6 concerning "non-explosion proof area."

Furthermore, since placing the ballast water treatment device in the steering machine room and placing it

in the "non-explosion proof area" are different technical ideas in different dimensions from each other, even if there is a statement in [0028] that states the superiority of the former with respect to the relation with the latter, the existence of the statement relating to the latter should not be neglected.

## (23)-12

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the support requirement
the Case	
Keyword	Problem to be solved by the invention

## 1. Bibliographic Items

Case	"Stabilized brominated alkane solvent" (Trial for Invalidation)
	Intellectual Property High Court Decision, September 19, 2013 (2012 (Gyo KE) No. 10387)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 9-531832 (JP 2000-506211 A)
No.	
Classification	C11D 7/50
Conclusion	Dismissal
Related	Article 36(6)(i)
Provision	
Judges	IP High Court Second Division, Presiding Judge: Shuhei SHIOZUKI, Judge: Akira IKESHITA,
	Judge: Takaaki SHINYA

## 2. Overview of the Case

## (1) Summary of Claimed Invention

A stabilized solvent composition which is comprised of: a solvent portion which includes at least 90 wt% npropyl bromide; and a 1,4-dioxane-free stabilizer system which includes nitroalkane, 1,2-butylene oxide and 1,3dioxolane. The solvent composition is useful as a degreaser and cleaner in both cold and vapor cleaning systems.

## (2) Disclosure of Detailed description of the invention

This invention relates to a novel, high performance solvent composition based upon a brominated alkane solvent and a 1,4-dioxane-free stabilizer system. ...

Due to the newly discovered attractiveness of brominated solvents, the art is just not vigorously investigating the selection of the best combination of brominated solvent and stabilizing system.

It is, ... an object of this invention to provide a degreasing and cleaning solvent which is highly efficacious and which is friendly to both the user and the environment.

This invention relates to a stabilized degreasing and cleaning solvent composition which is comprised of a solvent portion which includes at least 90 wt% n-propyl bromide; and a 1,4-dioxane-free stabilizer system which includes nitroalkane, 1,2-butylene oxide and 1,3-dioxolane composition.

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#### (3) The Claims (Claim 9 is only described)

[Claim 9] A process for cleaning an article which comprises immersing the article in a solvent composition comprised of a solvent portion which includes at least 90 wt% n-propyl bromide; and a 1,4-dioxane-free stabilizer system portion which includes nitroalkane, 1,2-butylene oxide and 1,3-dioxolane, said solvent composition being at a temperature within the range of from room temperature to 55°C.

## (4) Procedural History

February 22, 2008	:	Registration of establishment of the patent right
July 8, 2011	:	Request for Trial for Invalidation by the Defendant (Muko No. 2011-800120)
July 2, 2012	:	Trial decision that the patent for the inventions according to Claims 1 to 10 is
		invalidated

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial decision

... the inventions of Claims 1 to 8 to be granted a patent provides an effect of "stabilized", due to containing the invention-specifying matter of "stabilized solvent composition", and the inventions of Claims 9 and 10 to be granted a patent includes of specifically lowering the lower limit of the preferable range, except the numerical range stated as the preferable range of the content of the stabilizer. Hence, it is obvious for such a matter which cannot be said that the problem of "delaying the metal corrosion" can be necessarily solved. Further, since Claims 9 and 10 do not recite upon citing the "solvent composition" recited in Claims 1 to 8, it cannot be also said that the inventions of Claims 9 and 10 to be granted a patent is a method invention of the "stabilized solvent composition" in the inventions of Claims 1 to 8 to be granted a patent containing the invention-specifying matter of the "stabilized solvent composition".

Hence, since the aforementioned assertion made by the Defendant cannot be accepted, it cannot be said that the problem of the invention for the present case can be solved in all range of the inventions of Claims 9 and 10 to be granted a patent for the present patent.

Decision	
Allegations by Plaintiff	Allegations by Defendant
The description of the present case consistently	in the description for the present case, Claims 9
states that the invention for the present case relates to	and 10 is to be targeted for a composition having an
stabilize brominated n-propyl in order to inhibit the	extremely low content of, especially, less than 0.045
corrosion of the metal. Therefore, a person skilled	wt% of nitroalkane, and less than 0.045 wt% of 1,2-
in the art can naturally understand that Claims 9 and	butyleneoxide, for the contents of nitroalkane, 1,2-
10 use a stabilized solvent composition in which the	butyleneoxide and 1,3-dioxolane which are recited as

delaying of the metal corrosion can be achieved,	the preferable range of the content of the stabilizer.
similar to those in Claim 1.	In addition, since it cannot be said that the
	problem of "delaying the metal corrosion" can be
	necessarily solved in a case of using such a
	composition, there is no error in the determination of
	the trial decision.

Judgment by the Court

The trial decision determined whether or not a range in which the problem cannot be solved is contained in the Claims, by the presence or absence of the invention-specifying matter of the "stabilized solvent composition" in the Claims, and the present inventions 1 to 10 do not satisfy the support requirement since the present inventions 9 and 10 have a high possibility not to provide the effect of the present invention where the content of the stabilizer stated in the detailed description of the invention is lowered to the lower limit of the preferable range thereof.

However, since the present invention is an invention solving the problem to provide solvents for the degreaser and cleaner being friendly to both the user and the environment and showing the stabilized effect in that they do not create any corrosion to the metal when they are used at a higher temperature, by investigating the best combination between brominated n-propyl solvent and its stabilizer system, it should be said that the invention is complied with the support requirement when a substance for the stabilized of brominated n-propyl used for solving the problem disclosed in the detailed description of the invention is stated in the Claims in just proportion.

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The trial decision determined that the present inventions 9 and 10 do not comply with the support requirement since any lower limit of the stabilizer combined with brominated n-propyl is not stated in the Claims and since an invention in which the stabilizer has an extremely low content not naturally providing such an effect is formally included in the range of the present inventions 9 and 10. However, the present invention has a problem to find out the best combination of brominated n-propyl and the stabilizer stabilizing brominated n-propyl, not a problem of invention to optimize a content ratio of brominated n-propyl and the stabilizer. It shall not be that the present inventions 9 and 10 do not comply with the support requirement based on the reason that there is no statement of specifying a lower limit of the content of the substance selected as the stabilizer system in the Claims.

Relevant portion	Part II, Chapter 2, Section 2
of Examination	
Guidelines	
Classification of	23: Regarding the Support Requirement
the Case	
Keyword	Problem to be Solved by the Invention

## (23)-13

## 1. Bibliographic Items

Case	"Pyrimidine derivative" (Trial for Invalidation)		
	Intellectual Property High Court Decision, April 13, 2018 (2018 (Gyo-Ke) Nos. 10182 and		
	10184)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. H04-164009 (JP H05-178841 A)		
No.			
Classification	C07D 239/42		
Conclusion	Dismissal		
Related	Article 36 (6) (i)		
Provision			
Judges	IP High Court Speciail Division, Chief Judge: Misao SHIMIZU, Judge: Makiko TAKABE,		
	Judge: Yoshiyuki MORI, Judge: Toshihiko TSURUOKA, Judge: Reiko MORIOKA		

## 2. Overview of the Case

(1) Summary of Claimed Invention

The present invention relates to a compound inhibiting HMG-CoA reductase activity represented by a predetermined general formula.

# (2) Disclosure of Detailed Description of the Invention

# [0002]

Hypercholesteremia is a severe risk factor of atherosclerosis, a frequently found cardiovascular disease. Therefore, for the development of novel drug for the treatment of atherosclerosis, it is necessary to investigate the effects on the activity of HMG-CoA reductase, which is a key enzyme for cholesterol synthesis that catalyzes the synthesis of mevalonic acid from 3-hydroxy-3-methyl glutaryl CoA. For such drugs, there are known the first generation HMG-CoA reductase inhibitors, including mevinolin (...), pravastatin (...), and simvastatin (...), which are fungal metabolites or partially modified derivatives thereof. In contrast, recently, synthetic inhibitors of HMG-CoA reductase such as fluvastatin (...) and BMY 22089 (...) have been developed and are expected as the second generation drugs.

[0003]

As seen above, the suppression of cholesterol production is essential for the prevention and treatment of atherosclerosis. Taking this into consideration, there is still a need for the development of useful pharmaceutical products.

## [0004]

The inventors have investigated in view of the aforesaid situation, and found that the compound represented by the following general formula has an excellent HMG-CoA reductase inhibiting activity, to thereby complete the present invention. Specifically, the present invention relates to an HMG-CoA reductase inhibitor represented by the formula (I):

(3) The Claims (after amendment)(Claim 1 is only described)

[Claim 1]

A compound represented by the following formula (I):

[Formula 1]

OH COOR4

(where

R<sup>1</sup> is a lower alkyl;

R<sup>2</sup> is a phenyl substituted with halogen;

R<sup>3</sup> is a lower alkyl;

R<sup>4</sup> is hydrogen or a calcium ion forming a hemicalcium salt;

X is an imino group substituted with an alkylsulfonyl group;

the dashed line represents the presence or absence of a double bond.)

or a ring-closed lactone body thereof.

#### 4) Procedural History

May 16, 1997	:	Registration of establishment of the patent right
June 30, 2014	:	Filing of a request for correction by the defendant (patentee) (See the above-described
		claims)
March 31, 2015	:	Filing of a request for invalidation trial of a patent by the plaintiff (Invalidation Trial
		No. 2015-800095)
July 5, 2016	:	Trial decision to the effect that "the demand for the trial is groundless"

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial decision

... the problem to be solved by the Invention[s] 1 ... lies in the provision of a compound having excellent HMG-CoA reductase inhibiting activity, and the problem ...

Further, the Detailed Description of the Invention discloses that the Invention is directed to a HMG-CoA reductase inhibitor, and for such HMG-CoA reductase inhibitor, there were developed synthesized HMG-CoA reductase inhibitors such as Mevinolin, but it fails to disclose that there is any problem for these HMG-CoA reductase inhibitors that have already been developed. Therefore, the Invention does not require more excellent HMG-CoA reductase inhibiting activity compared to the existing HMG-CoA reductase inhibitors including Mevinolin. It is recognized that a problem to be solved is to provide an HMG-CoA reductase inhibitor including a compound having "excellent HMG-CoA reductase inhibiting activity" or the compound as an active ingredient to the extent that it may become a pharmaceutical product for "suppressing the production of cholesterols."

It can be said that the Detailed Description of the Invention discloses to the extent that allows a person ordinarily skilled in the art to recognize that Invention 1 can solve the problem.

#### Decision

Allegations by Plaintiff

Invention 1 includes the scope of general formula (I) of Exhibit Ko 2. If the compound of Invention 1 should have patentability (in particular inventive step) in such circumstances, it would be the case of a selection invention. If so, the compound of Invention 1 needs to have a significant effect over the other compounds of general formula (I) of Exhibit Ko 2.

These compounds were publicly known as of the filing to have (or assumed to have) an in vitro HMG-CoA reductase inhibiting activity by use of rat liver microsome 2.6 to 8 times higher than that of sodium Mevinolin.

Therefore, in order that the compound of Invention 1 may involve an inventive step in view of the compound of general formula (I) of Exhibit Ko 2, it is contemplated that the compound needs to have an HMG-CoA reductase inhibiting activity 2.6 to 8 times higher than that of sodium Mevinolin.

Exhibit Ko 1 describes the result of an in vivo cholesterol biosynthesis inhibiting test using rat, and shows that Compactin has an in vivo cholesterol biosynthesis inhibiting effect about 8.5 times lower

#### Allegations by Defendant

An active ingredient of a pharmaceutical product requires pharmacological activity to the extent that it may become a pharmaceutical product. Even if the pharmacological activity of a new active ingredient is at the same level as that of an active ingredient that has been commercially available, the new active ingredient has a technical value in that it provides an alternative means for solution.

For example, if two active ingredients show a similar level of pharmacological activity, this might cause a difference between patient groups to be administered from another viewpoint (e.g. difference in pharmacokinetics and adverse events). In this case, two active ingredients both have technical value.

Therefore, a pharmacological activity beyond that of all the conventional active ingredients is not required as a problem of the support requirement.

If the argument by Plaintiffs is correct, the inventor is obliged to conduct comparative tests with any and all of the publicly known compounds for the claimed compounds of an invention and establish its superior activity compared to the publicly known compounds. Such conclusion is not reasonable. than that of Mevinolin ...

Compactin was a publicly known, and authorized HMG-CoA reductase inhibitor, and was known to have a drug efficacy sufficient to lower blood cholesterol in human (Exhibit Ko 14, Ko 26). Therefore, it can be recognized that a problem formulated by the trial decision "to provide a compound having 'excellent HMG-CoA reductase inhibiting activity' to the extent that may become a pharmaceutical product for 'suppressing the biosynthesis of cholesterols" may be solved, even if Compactin had an HMG-CoA reductase inhibiting activity about 8.5 times lower than that of Mevinolin.

Consequently, it can be recognized that a problem formulated by the trial decision may be solved by Compactin that has an HMG-CoA reductase inhibiting activity about 8.5 times lower than that of sodium Mevinolin.

However, in order that the compound of Invention 1 may involve an inventive step as a selection invention in view of the compound of general formula (I) of Exhibit Ko 2, it can be seen that the compound needs to have an HMG-CoA reductase inhibiting activity 2.6 to 8 times or more higher than that of sodium Mevinolin.

Therefore, even if the problem formulated by the trial decision should be solved, it may not involve an inventive step as a selection invention, and thus the invention cannot be granted a patent. As seen above, even if the problem formulated by the trial decision should be solved, it may not involve an inventive step and thus cannot be a patented invention.

This is only because the problem formulated by the trial decision is of a significantly low level relative to the common general technical knowledge at that time, and thus inappropriate. The compounds of Inventions 1 ... are encompassed into the compound represented by the general formula (I) described in paragraph [0004] of the description. Therefore, the problem to be solved by Inventions 1, 2, 5, and 9 to 11 lies in the provision of a compound having an excellent HMG-CoA reductase inhibiting activity, and the problem to be solved by Invention 12 lies in the provision of an HMG-CoA reductase inhibitor including such a compound. This can be seen from the description in paragraphs [0003] and [0004] of the description.

Further, it can be seen from the description of paragraph [0003] that the degree of the HMG-CoA reductase inhibiting activity is sufficient if it is the extent that the compound may become a pharmaceutical product "for suppressing the synthesis of cholesterols."

Consequently, the objective of the Invention is to provide an excellent HMGCoA reductase inhibiting compound, or an HMG-CoA reductase inhibitor comprising the compound. The sufficiency of the support requirement should be determined by whether the compounds of Inventions 1 may be obtained (may be manufactured) and whether the Detailed Description of the Invention is described to the extent that allows a person ordinarily skilled in the art to recognize that the obtained compound has an excellent HMG-CoA reductase inhibiting activity. Judgment by the Court

As in the aforesaid 2(1)B, the specification discloses in paragraph [0002] that there were first generation HMG-CoA reductase inhibitors such as Mevinolin, which were obtained from fungal metabolites or their partial modified compounds, while synthesized HMG-CoA reductase inhibitors such as Pravastatin have been developed and expected as the second generation.

However, the Detailed Description of the Invention of the specification does not disclose any problem of these HMG-CoA reductase inhibitors that have already been developed. ....

According to the evidence (Exhibit Ko 36) and the entire import of the oral argument, although the pharmacological activity of a new active ingredient is at the same level as an active ingredient that has been commercially available in the field of pharmaceutical products, the new active ingredient has a technical value in that it provides an alternative means for solution.

Taking the above into consideration, it cannot be said that a problem to be solved by the Invention is to provide an HMG-CoA reductase inhibitor superior to the above HMG-CoA reductase inhibitors that have already been developed.

Therefore, by the Invention should be to provide a compound having excellent HMG-CoA reductase inhibiting activity to the extent that the compound may become a pharmaceutical product for suppressing the production of cholesterols, and to provide an HMG-CoA reductase inhibitor including the compound as an active ingredient.

... Plaintiffs argue that Invention 1 is encompassed in the scope of general formula (I) of Exhibit Ko 2, and thus the significant effects are necessary in comparison to the other compounds of general formula (I) of Exhibit Ko 2 in order to be affirmed the inventive step, whereas a degree of "to the extent that the compound might become a pharmaceutical product for suppressing the biosynthesis of cholesterols" is inappropriate, since it is such a level lower than the common general technical knowledge as of the filing that could not involve the inventive step as a selection invention.

However, the support requirement is specified as a requirement for the recitation of the scope of claims to prevent the establishment of an exclusive right for an invention not disclosed by reciting an invention not described in the Detailed Description of the Invention in the scope of claims (Article 36, paragraph (5), item (i) of the Patent Act before the revision by Heisei 6 (1994) Act No. 116), whereas the inventive step is specified as a patent requirement to eliminate an invention easily conceivable by a person ordinarily skilled in the art as of the filing on the basis of a publicly known technique from a target of the grant of a patent to prevent a grant of an exclusive right for such an invention (Article 29, paragraph (2) of the Patent Act). Consequently, the determination of whether or not to conform to the support requirement should be made from the above viewpoint, and the determination of the inventive step should not be encompassed into the framework. Therefore, the above argument presented by Plaintiffs is not acceptable.

Plaintiffs argue that the applicant recognized that the compound of Invention 1 and the Exhibit Ko 1 Invention falls within a range of the general formula (I) of Exhibit Ko 2, and thus could not formulate a problem to be solved to provide a HMG-CoA reductase inhibitor including a compound having an excellent HMG-CoA reductase inhibiting activity or the compound as an active ingredient "to the extent that the compound might become a pharmaceutical product for suppressing the biosynthesis of cholesterols."

<u>The determination of the support requirement should be made</u>, however, <u>with respect to the recitation of</u> <u>the scope of claims and the description of the Detailed Description of the Invention in view of the common</u> <u>general technical knowledge as of the filing. It cannot be construed that the determination varies depending on</u> <u>the Applicant's subjective view as of the filing</u>.

Therefore, the above argument presented by Plaintiffs is not acceptable.

Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Expression which may make the scope of an invention ambiguous

## (24)-1

# 1. Bibliographic Items

Case	"Semiconductor device test probe" (Trial for Invalidation)			
	Intellectual Property High Court Decision, October 30, 2007 (2007 (Gyo KE) No. 10024)			
Source	Website of Intellectual Property High Court			
Application	Japanese Patent Application No. H11-241690 (JP 2000-147004 A)			
No.				
Classification	G01R 1/067			
Conclusion	Dismissal			
Related	Article 36(6)(ii), Article 123(1)(iii)			
Provision				
Judges	IP High Court Fourth Division, Presiding judge Nobuyoshi TANAKA, Judge Naoki			
	ISHIHARA, Judge Hiroki MORISHITA			

## 2. Overview of the Case

# (1) Summary of Claimed Invention

The Claimed Invention 3 (the invention according to claim 3) is an invention that, in order to establish sufficient electric conduction between the probe and the electrode pad even in the presence of oxide films attached on the surface of the electrode pad, includes a tip portion of the probe in a spherical shape having a curved surface generating a shear in the electrode pad by urging of the tip portion against the electrode pad and thus bringing the tip portion into contact with the electrode pad and thereby causes the probe to slip on and break the oxide film residing on the surface of the electrode pad, and thereby establishes electric contact with the fresh surface of the electrode pad. Further, the Claimed Invention 3 is configured such that the surface roughness of the probe tip portion is equal to or less than 0.4 micrometer so as to provide a solution for the problem that it becomes difficult to establish sufficient electric conduction between the probe and the electrode pad due to build-up of the aluminum oxide films, and in this manner the Claimed Invention 3 prevents attachment of the aluminum oxides on the tip portion of the probe.

(2) Disclosure of Detailed Explanation of the Invention "Paragraph [0045]. Second Embodiment: FIG. 8 is a graph showing the relationship between the surface roughness of the probe of the second embodiment of the present invention and the number of times of contact at which the contact resistance exceeds 1 ohm, wherein the test was conducted on a DRAM of which electrode pad having a thickness of about 0.8 micrometer with a probe having a radius of curvature of tip portion of 15 micrometers. It is seen from the graph that when the surface roughness is as high as 1 micrometer, the life is about 20,000 times of contacts, whereas in response to the surface roughness being lowered by the electrolytic abrasion for example, the number of the contact times is abruptly increased when it is decreased to or below 0.4 micrometer ... " (extracts taken from the court decision)





#### (3) Common General Knowledge, etc. Considered

Prevention of attachment of aluminum oxides can be improved in proportion to the smoothness of the surface of the tip portion of the probe.

## (4) The Claims (after Correction) (Only claim 3 is cited therefrom.)

[Claim 3] A semiconductor device test probe having a tip portion for being urged against an electrode pad of a semiconductor device and establishing an electrical contact between the tip portion and the electrode pad for testing operation of the semiconductor device, said probe tip portion defining a spherical surface having a curved surface generating a shear in the electrode pad by the contact with the electrode pad by the urging of the tip portion against the electrode pad, wherein the surface roughness of said tip portion of said probe is equal to or less than 0.4 micrometer.

#### (5) Procedural History

July 16, 2004	:	Filing of a request for the first trial for patent invalidation by Plaintiff (Muko No.
		2004-80105)
October 4, 2004	:	Filing of a request for correction by Defendant (Patentee) (See the above-described
		"The Claims.")
April 18, 2005	:	First Trial Decision admitting correction and dismissing the request for invalidation
		trial
May 27, 2005	:	Filing of the first suit against trial decision by Plaintiff (Intellectual Property High
		Court Decision March 1, 2006 (2005 (Gyo KE) No. 10503))

June 20, 2006	:	Dismissal of the claims of first suit against trial decision
June 7, 2005	:	Filing of a request for the second trial for patent invalidation by Plaintiff (Muko No.
		2005-80177)
April 18, 2005	:	Trial Decision dismissing the request for invalidation trial

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

## Appeal Decision (cited from the Court Decision)

(1) Demandant alleges that the recitation of "the surface roughness equal to or less than 0.4 micrometer" found in claim 3 includes a case where the surface roughness is zero micrometer, i.e., a mirror surface, ... and that such a limitation of numerical range that only defines its upper limit renders the scope of the invention unclear, and accordingly it cannot be said that the invention for which a patent is sought is clear.

However, paragraph [0045] of the Description describes as follows: " It is seen from the graph that when the surface roughness is as high as 1 micrometer, the life is about 20,000 times of contacts, whereas in response to the surface roughness being lowered by the electrolytic abrasion for example, the number of the contact times is abruptly increased when it is decreased to or below 0.4 micrometer. Particularly, the number of contacts reached as high as 380,000 times at 0.1 micrometer, which is about 20 times higher than that observed when the surface roughness is 1 micrometer. It is considered that the reason for this is that it becomes difficult for the oxides to attach to the tip of the probe, and similar results were obtained even when the thickness of the electrode pad or the radius of curvature of the probe tip is changed within the range indicated in the above-described first embodiment." Also, the characteristic diagram of FIG. 8 indicates that in the range of surface roughness of about 0.4 micrometer or less, the number of times of contacts increases in response to decrease in the surface roughness approaching zero micrometers, and it cannot be said that the invention is not clear even when the limitation of numerical range is only defined by its upper limit. It is not possible to adopt the above allegation by Demandant.

Decision

Allegations by Plaintiff

... <u>The recitation, "surface roughness equal to or</u> <u>less than 0.4 micrometer," is a limitation of numerical</u> <u>range that is only defined by its upper limit, making</u> <u>the scope of the invention unclear.</u> Specifically, the recitation of "surface roughness equal to or less than 0.4 micrometer includes zero (0) micrometer, but the Detailed Explanation of the Invention of the Description fails to describe that the shear can be generated when the surface roughness is defined to be zero micrometer, and fails to describe that the number

## Allegations by Defendant

... Claim 3 recites the Claimed Invention 3 that is an invention of product, which means that claim 3 deals with a thing that can exist in reality. A thing that can exist in reality always has very small unevenness, and it is not possible that the surface roughness is zero micrometers.

In the first place, the Claimed Invention 3 is constructed on the premise that the surface roughness becomes larger than 0.4 micrometer unless particularly intended, and in general, in the case of an invention that

of times of contacts can be increased in that case.	delimits a thing that normally exists such that it
Accordingly, the recitation of claim 3 renders the	becomes small, so that an invention that only delimits
invention for which a patent is sought unclear	the upper limit is in no way unclear.
	In the case of the surface roughness, making the
	surface roughness small as such has a significance, and
	the recitation of "surface roughness equal to or less than
	0.4 micrometer" is not unclear, and it is easily
	appreciated from the FIG. 8 in the Description that the
	number of times of contacts can be increased within the
	range of the surface roughness equal to or less than 0.4
	micrometer.

## Judgment by the Court

... According to the description of the Detailed Description of the Invention of the Description, it is clear that prevention of adhesion of aluminum oxides can be improved in proportion to the smoothness of the surface of the tip portion of the probe, and ... the Claimed Invention 3 attempts to achieve effects of this sort by adopting the configuration in which the surface roughness is made to be "equal to or less than 0.4 micrometer," and accordingly it is clear that the recitation "equal to or less than 0.4 micrometer" means reducing the surface roughness as much as possible within this range.

Therefore, since it cannot be held that the Claimed Invention 3 is unclear, ...

Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Expression which may make the scope of an invention ambiguous

## (24)-2

# 1. Bibliographic Items

Case	"Method for locking a hinged door at the time of earthquake" (Trial for Invalidation)
	Intellectual Property High Court Decision, December 10, 2009 (2009 (Gyo-KE) No. 10272)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2004-197427 (JP 2004-300919A)
No.	
Classification	E05C 21/02
Conclusion	Dismissal
Related	Article 36(6)(ii)
Provision	
Judges	IP High Court Second Division, Presiding Judge: Tetsuhiro NAKANO, Judge: Hiroaki IMAI,
	Judge: Tomoko MANABE

## 2. Overview of the Case

when an earthquake occurs.

# (1) Summary of Claimed Invention

[Purpose] The purpose of the present invention [Purpose] The purpose of the present invention is to provide a lock device for a hinged door with reliable operation at the time of earthquake [Constitution] In the method of the present invention for locking a hinged door at the time of earthquake, in particular, since the lock device at the time of earthquake is mounted on the lower surface of the top panel of a fitment, hanging cupboard, etc. at the position of the end of the hinged door not on the free end side, movement of the hinged door becomes smaller than that at the free end, thereby ensuring the locking effect



(2) Disclosure of Detailed description of the invention

[0001] The present invention relates to a method for locking a hinged door at the time of earthquake automatically locking the hinged door at the time of earthquake and preventing dropping of stored articles.

[0006] The method of the present invention for locking a hinged door at the time of earthquake is explained in accordance with the working example shown in the drawings.

FIG. 1 shows a lock device which can be used in the method of the present invention, and the lock device comprises a main body (3) of the device fixed to a main body (1) of fitment, hanging cupboard, etc.

The main body (3) of the device supports a locking means (4) movably by the force of the shake of earthquake. The locking means (4) has a locking part (4a) which is stopped by a stopping part (3a) of the main body (3) of the device.

Next, the locking equipment (5) attached to the hinged door (2) has a locking part (5b) that locks the locking part (4a) of the locking means (4) when the locking means (4) is moved by the force of the shake of earthquake. On the other hand, an elastic means (6) is provided on the back track of the locking means (4).

Operation of the lock device at the time of earthquake shown in the above working example for comparison is as explained below. Namely, in the closed status in which the hinged door (2) is closed as shown in FIG. 1, the locking equipment (5) on the hinged door (2) is located adjacent to the main body (3) of the device on the side of the main body (1) of the fitment, the hanging cupboard, etc. If an earthquake occurs in this condition, the locking means (4) moves and contacts the locking equipment (5) as shown in FIG. 2.

Furthermore, if the hinged door (2) opens slightly as shown in FIG. 3 by the force of the shake, the locking part (4a) of the locking means (4) is locked to the locking part (5b) of the locking equipment (5).

In this status, the locking part (4a) of the locking means (4) is stopped by the stopping part (3a) of the main body (3) of the device and the hinged door (2) is locked in that position.

As might be expected, the force of the shake is applied also in the direction to close the hinged door (2), but, the locking means (4) is pushed by the elastic means (6) of the main body (3) of the device at the locked position.

Since the pushing force of the elastic means (6) is set to a value larger than the force of the shake, the locking means (4) stops at that position.

Next, to open the hinged door (2) after the earthquake ends, the user should push the hinged door (2) firmly.

With this, as shown in FIG. 4, the elastic means (6) retracts, and if it retracts more than predetermined degree, pushing by the elastic means (6) is released.

As a result, the locking means (4) returns from the status shown in FIG. 4 to the initial status shown in FIG. 1 by inertia.

#### (3) The Claims (Only Claim 1 is shown.)

[Claim 1] A method for locking a hinged door having no magnetic catch at the time of earthquake, in which a movable locking means is provided not on the hinged door side but on the main body of the device on the body of a fitment, hanging cupboard, etc., and an internal lock device at the time of earthquake that is locked to a locking equipment of the hinged door slightly opened by the locking means moving to a locking position as an obstacle for

the hinged door by the force of the shake of the earthquake, is mounted to the lower surface of the top panel of a fitment, hanging cupboard, etc. at the position of the end of the hinged door not on the free end side, wherein, after the said locking action, the hinged door stays in the said locked position in slightly opened status and does not close until the user pushes toward the direction to close.

## (4) Procedural History

December 22, 2005	:	Registration of establishment of the patent right
September 24, 2008	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2008-800184)
August 6, 2009	:	Trial decision to invalidate the patent for the invention according to Claim 1

#### 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial decision

... while the expressions "(to be) opened slightly" and "slightly opened" are quite abstract expressions, ... a person skilled in the art could understand that the degree expressed by "(to be) opened slightly" or "slightly opened" means the opened position of the hinged door (2) in the status in which the locking part (4a) of the locking means (4) is locked at the locking part (5b) of the locking equipment (5), from the status in which the locking part (4a) of the locking means (4) is stopped by the stopping part (3a) of the main body (3) of the device, to the status in which the locking means (4) is pushed by the elastic means (6) of the main body (3) of the device (namely, opened position of the hinged door (2) by which the locking means (4) can return from the status shown in FIG. 4 to the initial status shown in FIG. 1 if pushing by the elastic means (6) is released when the hinged door (2) is firmly pushed after the earthquake ends), but, with respect to each constitution of the claimed invention 1 having the expressions, "(to be) opened slightly" or "slightly opened," in light of the problem to be solved by the claimed invention to ensure operation, and, taking into consideration statements in the detailed description of the invention in the description of the present patent from paragraphs [0006] to [0009] as a whole and statements in drawings, and other constitution of the claimed invention 1, and also taking into consideration common general technical knowledge of a person skilled in the art, the scope of the claimed invention 1 that is specified not by specific structure or means, but by functional (operational) descriptions is not obvious, and, since no concrete constitution other than the working example can be imagined, it is inevitable to say that the scope of the claimed invention 1 is ambiguous (refer to Japan Patent Office, Examination Guidelines, "Part I, Chapter 1, Requirements for statements in the description and claims, "type of violation of Article 36(6)(ii)," "(6) If the scope of the invention becomes ambiguous as a result of having a matter specifying an article by function, characteristic, etc. ...")

Decision	
Allegations by Plaintiff	Allegations by Defendant
since it is sufficient, namely, if the locked	the trial decision determines that the present
status of "not closed until pushed and slightly opened"	patent does not satisfy the clarity requirement because
is the locked status not closed by the force of the shake	of the reason that the expressions, "(to be) opened

of earthquake, but closed by pushing force (larger than the force of the shake), such locked status may be a locked status maintained with a constant force.

Therefore, since this can be achieved if commonly used art is used, a specific constitution can be conceived. Furthermore, in the working example in FIGS. 10 to 13 in the description originally attached to the original application of the present patent (Exhibit A2-8), a constitution in which a releasing equipment (8) protrudes forward and "not closed until pushed and slightly opened" by the force of the magnet (7) was disclosed. Although the present patent does not include the working example of FIGS. 10 to 13 of the description originally attached to the original application, at least other constitution can be conceived, and it is obvious that a specific constitution other than the working example can be conceived.

slightly" and "slightly opened" in Claims of the claimed invention 1 are quite abstract and functional expressions ... and the scope of the invention specified not by specific structure or means but by functional (operational) expressions is not obvious and no specific constitution other than the working example can be conceivable (Trial decision, page 23, lines 1 to 34), and the determination by the trial decision shown above is quite reasonable.

Judgment by the Court

... the contents of the statements in the detailed description of the invention in the description of the present patent (Exhibit A18) ... this "(to be) opened slightly" is described as "... if the hinged door (2) opens slightly as shown in FIG. 3 by the force of the shake, the locking part (4a) of the locking means (4) is locked to the locking part (5b) of the locking equipment (5). ..." (Paragraph [0006]). Then, since it is understood that the status in which the locking means (4) is locked to the locking equipment (5) as shown in FIG. 3 means that a lock device "locks" the hinged door, it is determined that expressions, "locking means is ... locked to the locking equipment of the hinged door to be opened slightly," "the hinged door in the locking position where it is slightly opened," and "... if the hinged door (2) opens slightly as shown in FIG. 3 by the force of the shake, the locking part (4a) of the locking means (4) is locked to the locking part (5b) of the locking equipment (5). ..." express the status as shown in FIG. 3.

From those statements, it can be understood by and large that the distance between the hinged door (2) and the main body (1) in the status where the locking part (4a) of the locking means (4) and the locking part (5b) of the locking equipment (5) are locked to each other as shown in FIG. 3 is "slightly" in the claimed invention 1.

Taking into consideration the statement of the detailed description of the invention in the description of the present patent and drawings as describe above, even if it is understood that the claimed invention 1 has the constitution in which the locking part of the locking means provided on the main body side contacts the locking part of the locking equipment on the hinged door and prevents the hinged door from further opening when an earthquake occurs, a <u>degree of opening of the hinged door is expressed quite abstract as "slightly" in the Claims</u>

and, even if other descriptions in the Claims are taken into consideration, the content of the degree of opening cannot become obvious.

In addition, in the detailed description of the invention in the description of the present patent, <u>there is no</u> specific description that explains or suggests the degree expressed by this "slightly."

Then, for <u>a person skilled in the art</u>, even if the common general technical knowledge is taken into consideration, it is difficult to understand the degree that is described as "slightly" in the claimed invention 1 and it is inevitable to say that the description of Claims is ambiguous.

(24)-3	
Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Expression which may make the scope of an invention ambiguous

## 1. Bibliographic Items

Case	"A method for stirring and defoaming solvent, etc. and equipment therefor" (Trial for
	Invalidation)
	Intellectual Property High Court Decision, July 28, 2010 (2009 (Gyo-KE) No. 10329)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2003-406507 (JP 2005-131622A)
No.	
Classification	B01D 19/00
Conclusion	Dismissal
Related	Article 36(6)(ii)
Provision	
Judges	IP High Court Second Division, Presiding Judge: Tetsuhiro NAKANO, Judge: Takashi
	SHIMIZU, Judge: Kenjiro FURUYA

## 2. Overview of the Case

## (1) Summary of Claimed Invention

[Problem to be solved] Provision of a method for stirring and defoaming a solvent, etc. and equipment therefor that can stir and defoam all kinds of solvent, etc. to the optimum condition by controlling rotations and revolutions of a container in vacuum state.

[Means for solving the problem] A method for stirring and defoaming a solvent, etc. stored in a container 5 by rotating the container containing the solvent, etc., and rotating an



arm body 4 on which the container is mounted, in which the number of rotations of the container and the number of revolutions of the container are each controlled in the state in which at least the inside of the container is made vacuum. On this occasion, the temperature of the solvent, etc. in the container is detected and the number of rotations of the container and the number of revolutions of the container are each controlled according to the rise in temperature.

(2) Disclosure of Detailed description of the invention

[0012] ... the claimed invention has a problem to be solved to provide a method for stirring and defoaming a solvent, etc. and equipment therefor that can stir and defoam all kinds of solvent, etc. to the optimum condition by controlling rotations and revolutions of the container in vacuum state.

[Means for solving the problem]

[0013] Namely, in order to solve the above problem, the claimed invention relates to a method for stirring and defoaming a solvent, etc. stored in the container by rotating the container containing a solvent, etc., and rotating the arm body on which the container is mounted, characterized in that the number of rotations of the container or/and the number of revolutions of the container are each controlled in the state in which at least the inside of the container is made vacuum.

[0014] In addition, to be more precise, in a state in which at least the inside of the container is made vacuum, the temperature of solvent, etc. stored in the container is detected, and the number of rotations of the container and the number of revolutions of the container are controlled according to the rise in the temperature, and the number of rotations of the container or the number of revolutions of the container is controlled while being detected.

[0015] As equipment, a stirring and defoaming equipment comprising a container for storing solvent, etc., an arm body on which the container is mounted and a driving source for rotating the container through a conveying means, and rotating the arm body through a conveying means, is characterized in that the main unit of the equipment comprises a vacuum means to bring at least the inside of the container into a vacuum state, and a detection means for detecting the temperature of solvent, etc. stored in the container.

[0016] In addition, the main unit of the equipment comprises a detection means for detecting each of the number of rotations of the container and the number of revolutions of the container, and furthermore, it is constituted to control rotations and revolutions of the container independently.

[Operation and effects of the invention]

[0017] Next, the operation of the stirring and defoaming equipment of the present invention is described. At first, a predetermined amount of desired solvent is stored in the container provided on the arm body, and rotary drive of the driving source is conveyed to the arm body on which the container is mounted through a motion transmitting means to rotate the arm body (revolving the container), and at the same time rotating the container with another motion transmitting means.

On this occasion, since the number of rotations of the arm body (the number of revolutions of the container) and the number of rotations of the container can be directly or indirectly adjusted at will in accordance with the number of rotations of the driving source, etc., optimum stirring and defoaming of solvent can be carried out in accordance with the type of solvent.

[0018] After that, by making at least the inside of the container vacuum, and detecting the temperature of solvent etc. in the container through a detection means, the number of rotations of the container is independently controlled in accordance with the rise in the temperature of the solvent etc., or the number of revolutions and the number of rotations of the container are each controlled independently. Through this, blowoff, etc. of solvent in the container due to rise in the temperature by vacuum, and inflation of bubbles contained in the solvent can be appropriately

controlled and stirring of solvent can be carried out in the optimum state and further precise defoaming becomes possible.

[0019] Then, solvent can be obtained by releasing the vacuum inside the container and taking out the container.

[0029] In the vacuum chamber 6, in the vicinity ("kinbo" in Japanese language) of the container 5, as a detection means for detecting temperature of solvent stored in the container 5, for example, an electronic temperature sensor 20 is provided without grounding to the above-mentioned solvent. The electronic temperature sensor 20 may be grounded in the container 5.

## (3) The Claims (after correction) (Only Claim 2 is shown.) (Corrected Invention)

[Claim 2] A stirring and defoaming equipment for solvent, etc., comprising a container for storing solvent, etc., an arm body supporting the container at the end so that the upper end of the container tilts toward the center of revolutions, and a driving source for rotating the container and the arm body through a conveying means, characterized in that the main unit of the equipment comprises a vacuum means for making at least the inside of the container vacuum, and a detection means mounted in the vicinity ("kinbo" in Japanese language) of the top end of the container for detecting the temperature of solvent, etc. stored in the container.

## (4) Procedural History

...

December 17, 2004	:	Registration of establishment of the patent right
September 9, 2008	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2008-800174)
January 30, 2009	:	Demand for correction by Defendant (Patentee)
September 28, 2009	:	The correction accepted; trial decision to the effect that "The demand for a trial in this
		case does not hold good"

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

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Trial decision
Although Corrected Description does not have any statement to define the range of the "vicinity" ("kinbo"
in Japanese language) definitely with a numerical value, etc., judging from the fact that, in general, the "vicinity"
means "kinpen, close to" (refer to Kojien, 5th version, Iwanami Shoten, November 11, 1998, page 737, columns
for "kinbo (vicinity)" and "kinpen (close to)"), it is obvious that "the vicinity of the top end of the container"
means, out of the vicinity of "the top end of the container", the distance within the range in which the "detection
means" can detect the "temperature of solvent, etc. stored in the container."

Then, a person skilled in the art can understand what extent of range "the vicinity of the top end of the container" means, and it cannot immediately deemed to be ambiguous even if the range of the "vicinity" is not concretely defined with a numerical value, etc.

Decision	
Allegations by Plaintiff	Allegations by Defendant
since it is still not obvious for a person skilled	As it could be understood from the fact that, in
in the art to what extent of distance from the top end	Corrected Invention 2, the "vicinity" is defined as "the
of the container the "vicinity" means, the finding and	vicinity of the top end of the container," even if its
determination by the trial decision is not correct.	range is not concretely defined with a numerical value,
	etc., if the shape, size, etc. of the container is known, it
	can be automatically understood with relation to such
	information.

## Judgment by the Court

... while ... Corrected Inventions 1 and 2 ..., ... have a technical problem to be solved to prevent a solvent from blowing off, or overflowing from the container because of the rise in temperature of the solvent inducing inflation of bubbles contained in the solvent by stirring and defoaming work for solvent, etc. in a vacuum state, a detection means for detecting the temperature of Corrected Invention 2 is a means provided to measure the temperature of the container from the viewpoint of solving this problem, and <u>it is acknowledged if it is installed in a position where the temperature of solvent, etc. in the container can be measured, it can perform its role.</u> And, then, in Corrected Invention 2, the installed position is defined to be "the vicinity of the top end of the container". Taking into consideration that <u>the term of vicinity ("kinbo" in Japanese language) itself is, in general, understood as "kinjo (neighborhood), kinpen (close to)" (Iwanami Shoten's Kojien, 6<sup>th</sup> edition), and, it is a <u>technical term of the vicinity" ("kinbo" in Japanese language) is concretely specified further limiting with a numerical value, in the relation with the above technical significance of Corrected Invention 2, constitution for <u>solving the problem becomes ambiguous.</u></u></u>

Therefore, <u>with respect to "the vicinity of the top end of the container" in Corrected Invention 2, since a</u> person skilled in the art (a person of ordinary skill in the technical field to which the invention belongs) would recognize it as "close to" the "top end of the container," and understand that it indicates the range the "detection means" could detect the "temperature of solvent, etc. stored in the container," the determination by the trial decision having the same intent does not contain any error and Plaintiff's argument cannot be accepted.

(24)-4	
Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Expression which may make the scope of an invention ambiguous

## 1. Bibliographic Items

Case	"Socks" (Trial for Invalidation)			
	Intellectual Property High Court Decision, September 15, 2011 (2010 (Gyo KE) No. 10265)			
Source	Website of Intellectual Property High Court			
Application	Japanese Patent Application No. H10-320874 (JP H11-217703A)			
No.				
Classification	A41B 11/00			
Conclusion	Dismissal			
Related	Article 36(6)(ii)			
Provision				
Judges	IP High Court Fourth Division, Presiding judge Takaomi TAKIZAWA, Judge Makiko			
	TAKABE, Judge Iwao SAITO			

## 2. Overview of the Case

## (1) Summary of Claimed Invention

The claimed invention is directed to socks having an asymmetric shape with a forefront position G of a toe part (a) 12 of the socks positioned deviated toward a big toe side 16, in which thickness increasing knitting parts 20a, 20b that increase the thickness of the socks from the little toe side 18 of the toe part 12 to the big toe side 16 of the toe part 12 are knitted so as to be provided at the tip portion of the toe part 12 and deviated toward the big toe side 16 such that the shape of the toe part 12 of the socks resembles the shape of a human foot whose big toe is thicker than the other toes, and the front end edges HJ, HM of the thickness increasing knitting parts 20a, 20b are formed in a V shape when the thickness increasing knitting parts 20a, 20b are viewed from the side surface



of the big toe side 16 of the toe part 12 with the tip G of the toe part 12 directed upward, such that the area of the big toe side 16 of the thickness increasing knitting parts 20a, 20b is enlarged, as a result of which it is made possible to form the big toe portion and the like of the socks so as to resemble the shape of the big toe and the like of the human feet to the extent possible, as a result of which it is possible to reduce the feeling of pressure from the socks upon the big toe or the like when the socks are worn.

#### (2) Disclosure of Detailed Explanation of the Invention

[0006] However, in general, a human foot has an asymmetrical shape in which a big toe of the human foot is thicker than the other toes and the position of the forefront of the foot is positioned on the big toe side. ... Also, in normal cases, the sewn part 14 is positioned relatively near the tiptoe, and when the socks are worn, the sewn part 14 is positioned between the tiptoe part and the bases of the toes, and the surface of the instep of the toe of the foot is rubbed by the sewn part 14, which tends to cause blisters, so that there is a need for improvement in terms of their appearance. In view of this, the problem to be solved by the invention is to provide <u>socks that are allowed to resemble the shapes of human feet to the extent possible and prevent imparting a feeling of pressure or the like upon the big toe side when the socks are worn.</u>

## [0011]

[Description of Embodiments] An example of the socks according to the present invention is, ... FIG. 1(a) is a view of socks 10 viewed from the instep side 10b of the socks 10, ... In the toe part 12 of the socks 10 illustrated in FIG. 1, the left side of the toe part 12 illustrated in the figure is the big toe side 16 into which a big toe is inserted, and the right side of the toe part 12 illustrated in the figure is the little toe side 18 into which a little toe is inserted. As illustrated in FIG. 1(a)(c), the socks 10 illustrated in FIG. 1 is the socks 10 having an asymmetrical shape with the forefront position G of the toe part 12 positioned to be deviated from the central line X toward the big toe side 16. This shape is defined to follow the shape of a human foot.

#### (3) The Claims (after Correction) (Only claim 1 is cited therefrom.) (the Corrected Invention)

[Claim 1] Socks obtained by tube-knitting using a circular knitting machine, having an asymmetric shape with a forefront position of a toe part positioned deviated toward a big toe side, a thickness increasing knitting part that increases the thickness of the sock from the little toe side of the toe part to the big toe side of the toe part is knitted so as to be provided at the tip portion of the toe part and deviated toward the big toe side such that the <u>shape of the toe part of the socks resembles the shape of a human foot whose big toe is thicker than the other toes</u>, and the front end edge of the thickness increasing knitting part is formed in a V shape when the thickness increasing knitting part is viewed from the side surface of the big toe side of the toe part with the tip of the toe part directed upward, such that the area of the big toe side of the thickness increasing knitting part is enlarged.

## (4) Procedural History

November 14, 2008	:	Filing of a request for a trial for patent invalidation by Plaintiff (Muko No. 2008-
		800254)
January 30, 2009	:	Filing of a request for correction by Defendant (Patentee)

September 28, 2009	:	Trial Decision admitting correction and invalidating the patent
-	:	Filing of a suit against trial decision by Defendant (2009 (Gyo KE) No. 10356)
January 29, 2010	:	Decision rescinding the above trial decision
February 22, 2010	:	Filing of a request for correction by Defendant (the Correction) in the course of the
		filing of the request for trial for patent invalidation (Muko No. 2008-800254) after the
		above decision of rescission became final and bound (See the above-described "The
		Claims.")
July 7, 2010	:	Trial Decision upholding the request for correction and dismissing the request for
		trial

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

Trial Decision				
the recitation, "the shape of the toe part of the socks resemble the shape of human feet whose				
thicker than the other toes big toe," means that the shape of the toe part of the socks is a shape the				
resemble the shape of a common human foot, and it ca	in be said that the recitation in question corresponds to a			
case where the extent to which the shape resembles the	e shape of the common human feet is such an extent that			
a person skilled in the art can recognize that the shape	es do resemble each other, and accordingly it cannot be			
said that the extent of "resemblance" in the above recit	ation is unclear.			
Decision				
Allegations by Plaintiff	Allegations by Defendant			
(1) Claims 1 and 4 of the Corrected Invention both	However, the <u>"resemblance" in this context is not</u>			
include the following feature of "resembles the shape	a matter of degree of resemblance, but the term is used			
of a human foot." Also, the Detailed Explanation of	to convey a meaning of such an extent that "the shape			
the Invention of the Corrected Description states that	resembles the shape of a human foot" (paragraph			
"resemble the shape of the human feet to the extent	[0011] of the Corrected Description). Accordingly, a			
possible" (paragraph [0006]), but it fails to describe	person ordinarily skilled in the art would readily			
the extent of "resemblance."	understand the meaning.			
(2) The trial decision holds that it cannot be said that	(2) Therefore, the trial decision in no way erred in			
the above term "resemblance" lacks clarity.	determining that it cannot be said that the recitation			
However, in common socks, the toes of the socks	expressed as "resembles the shape of a human foot" as			
are formed such that the human toes can be	such is unclear.			
accommodated therein, respectively. Also, socks as				
such having an asymmetric shape similar to the shape				
of a foot is known, Accordingly, the feature of				
"resemblance" in the Corrected Description in no way				
clarifies the extent (to the extent possible) of				
resemblance to which the socks according to the				

Corrected	Invention	is	distinguished	over	the	
conventional known socks.						

Judgment by the Court

... It is a well-known fact that "in general, a foot of a person has a big toe larger than the other toes and has an asymmetric shape with the position of the forefront of the foot residing on the side of the big toe" (paragraph [0006] of the Corrected Description), a person skilled in the art would <u>sufficiently recognize</u> the fact that the shape of the toe part recited in the Corrected Invention <u>is similar to such a general shape of the human foot or is made followed by the general shape of the human foot, and <u>even when the degree of resemblance is not concretely illustrated in detail, it does not follow that this invention cannot be identified.</u></u>

(24)-5				
Relevant portion	Part II, Chapter 2, Section 3			
of Examination				
Guidelines				
Classification of	24: Regarding the clarity requirement			
the Case				
Keyword	Expression which may make the scope of an invention ambiguous			

# 1. Bibliographic Items

Case	"Apparatus and method for in-situ monitoring of chemical mechanical polishing operation		
	(Trial for Invalidation)		
	Intellectual Property High Court Decision, December 20, 2012 (2012 (Gyo KE) No. 10117)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. H8-74976 (JP H9-7985)		
No.			
Classification	H01L 21/304		
Conclusion	Dismissal		
Related	Article 36(6)(ii)		
Provision			
Judges	IP High Court Third Division, Presiding judge: Toshifumi SHIBATA, Judge: Takeshi		
	OKAMOTO, Judge: Eiko TAKEMIYA		

#### 2. Overview of the Case

(1) Summary of Claimed Invention

[Problem to be solved] To provide an endpoint detector and methods for using it to provide improved accuracy and further useful information about the polishing process.

[Solution] The invention is an in-situ method of measuring uniformity of a layer on a substrate during polishing of said layer. The method includes the steps of directing a laser beam toward the layer during polishing; monitoring an interference signal produced by the light beam reflecting off of the substrate; and computing a measure of uniformity from the interference signal.



[FIG. 3]

(2) Disclosure of Detailed Explanation of the Invention

[0027] A detailed view of the platen hole 30 and wafer 14 (at a time when the wafer overlies the platen hole 30) are shown in

FIGS. 3(a)-(c). As can be seen in FIG. 3(a), the platen hole 30 has a stepped diameter, thus forming a shoulder 36. The shoulder 36 is used to contain and hold a quartz insert 38 which functions as a window for the laser beam 34. The interface between the platen 16 and the insert 38 is sealed, so that the portion of the chemical slurry 40 finding its way between the wafer 14 and insert 38 cannot leak through from the bottom of the platen 16. The quartz insert 38 protrudes above the top surface of the platen 16 and partially into the platen pad 18. This protrusion of the insert 38 is intended to minimize the gap between the top surface of the insert 38 and the surface of the wafer 14. By minimizing this gap, the amount of slurry 40 trapped in the gap is minimized. ... The thinner the layer of slurry 40 between the insert 38 and the wafer 14, the less the laser beam 34 and light reflected from the wafer, is attenuated. ... It is preferable to make this gap even smaller. The gap should be made as small as possible while still ensuring the insert 38 does not touch the wafer 14 at any time during the CMP process. ...

[0028] FIG. 3(b) shows an alternate embodiment of the platen 16 and pad 18. In this embodiment, the quartz insert has been eliminated and no through-hole exists in the pad 18. ... This leaves only the polyurethane covering layer 22 of the pad 18 between the wafer 14 and the bottom of the platen 16. ... Thus, the portion of the covering layer 22 which overlies the platen hole 30 functions as a window for the laser beam 34. This alternate arrangement has significant advantages. First, because the pad 18 itself is used as the window, there is no appreciable size gap. Therefore, very little of the slurry 40 is present to cause the detrimental scattering of the laser beam. ...

[0029] Although the polyurethane material used in the covering layer of the pad is substantially transmissive to the laser beam, it does contain certain additives which inhibit its transmissiveness. This problem is eliminated in the embodiment of the invention depicted in FIG. 3(c). In this embodiment, the typical pad material in the region overlying the platen hole 30 has been replaced with a solid (not hollow) polyurethane plug 42. This plug 42, which

functions as the window for the laser beam, is made of a polyurethane material which lacks the grooving (or opencell structure) of the surrounding pad material, and is devoid of the additives which inhibit transmissiveness. Accordingly, the attenuation of the laser beam through the plug 42 is minimized. Preferably, the plug 42 is integrally molded into the pad 18.

## (3) The Claims (after correction) (Only Claim 1 is shown.) (Corrected Invention)

[Claim 1] An apparatus for chemical mechanical polishing (CMP) for a wafer comprising: a) a rotatable polishing platen mounted rotatably to a chassis and having a hole (passage) itself; b) a polishing pad mounted on the platen, wetted with a polishing slurry, and having a window aligned with the hole of the platen, wherein the polishing pad has a surface made of a foamed material, wherein the window comprises a plug formed in the pad and made of a solid material, and being transmissive to a laser beam, wherein the plug has a top surface <u>almost coplanar</u> with the surface of the polishing pad; c) a rotatable polishing head for holding the wafer against the polishing pad, wherein the wafer comprises a semiconductor substrate underlying an oxide layer; and d) an endpoint detector having a laser interferometer capable of generating a laser beam directed towards the wafer and detecting light reflected from the wafer and the hole (passage), wherein the window provides a pathway for the laser beam to impinge on the wafer, at least during the time that the wafer overlies the window during at least a part of cycle period.

#### (4) Procedural History

May 23, 2003	:	Registration of establishment of the patent right
August 24, 2007	:	Demand for a trial for invalidation of the patent by Plaintiff (Muko No. 2007-800172)
December 8, 2011	:	Demand for correction by Defendant (Patentee)
February 21, 2012	:	The correction accepted; trial decision to the effect that "The demand for a trial in this
		case does not hold good for claim 1

## 3. Portions of Appeal/Trial Decisions relevant to the Holding

Trial decision
As seen from the description "because the pad 18 itself is used as the window, there is no appreciable size
gap." in paragraph 0028 in the original specifications, the term "almost coplanar" recited in claim 1 is recognized

to means that "there is no gap". Therefore, since the term "almost coplanar" is not described in the original specifications, it cannot determined not to comply with the requirement under Article 36(6)(i). In addition, since that term is unclear, it cannot determined not to comply with the requirement under Article 36(6)(i).

The term "almost coplanar" is, as stated above, not recognized to means that "the gap is small", rather it is recognized to means that "there is no gap". In particular, it is recognized to intend the state as shown in FIGS. 3(b) and (c) of this patent. The description "the gap is less than or equal to 250  $\mu$ m in dimension" is recognized to intend the state as shown in FIG. 3(a) of this patent, but is not recognized to intend "almost coplanar". As seen from the description "the glass plate 4 is fit into the mounting hole 6b formed in the appropriate part of the turn table 6 such that the almost coplanar surface is formed with slightly receding from the surface of polishing

cloth 5 stretched on the turn table 6, and this surface is exposed without stretching the polishing cloth 5." (see page 3, lower left column, lines 14 to 19) in JP H3-234467, which is mentioned in the evidence of requester, it is recognized to described that "the gap is small", but it is not recognized to described that "there is no gap".

#### Decision

## Allegations by Plaintiff

... The term "almost coplanar" is recognized to means "nearly coplanar", "approximately coplanar" or "roughly coplanar", but it is not recognized to means "completely coplanar". Thus it is not recognized to means that "there is no gap", rather it is recognized to means that "the gap is small" in a literal sense. In addition, since the term "almost coplanar" is not described at all in paragraph 0028 and other of the original specifications, it cannot be said to mean that "there is no gap" with reference to that paragraph. The trial decision does not state clearly whether the term "almost coplanar" means that there is no gap or seam between the top surface of plug and the top surface of pad, or two surfaces overlie the same surface. The trial decision is groundless in stating that the term "almost coplanar" is recognized to intend the state as shown in FIGS. 3(b) and (c) of the original specifications, and the description "the gap is less than or equal to 250 µm in dimension" in the original specifications is recognized to intend the state as shown in FIG. 3(a), but is not recognized to intend "almost coplanar".

## Allegations by Defendant

... As seen from the description "because the pad 18 itself is used as the window, there is no appreciable size gap." in paragraph 0028 of the original specifications, the term "almost coplanar" recited in claims 1, 40 and 42 is recognized to means that "there is no gap".

Therefore, it is not in error in determining that since the term "almost coplanar" is not described in the original specifications, it cannot determined not to comply with the requirement under Article 36(6)(i), and since that term is unclear, it cannot determined not to comply with the requirement under Article 36(6)(ii).

Judgment by the Court

... The original specification describes that <u>the present invention has the configuration in which a top</u> <u>surface of "(solid) polyurethane plug 42" and a surface of "covering layer 22" in a "pad 18" are almost coplanar,</u> thereby very little of the slurry is present to cause the detrimental scattering of the laser beam. Thus, it is apparent the term "almost coplanar" in the claim after correction means that "there is no gap" between the top surface of "plug" and a surface of "polishing pad" from the original specification (including the drawings).

(2	(24)-6				
Relevant portion Part II, Chapter 2, Section 3					
	of Examination				
	Guidelines				
	Classification of	24: Regarding the clarity requirement			
	the Case				
	Keyword	Expression which may make the scope of an invention ambiguous			

# 1. Bibliographic Items

Case	"Dehydrating tub for washing machine" (Trial for Invalidation)			
	Intellectual Property High Court Decision, November 28, 2013 (2013 (Gyo KE) No. 10121)			
Source	Website of Intellectual Property High Court			
Application	Japanese Patent Application No. H07-184351 (JP H09-028977A)			
No.				
Classification	D06F 37/12			
Conclusion	Dismissal			
Related	Article 36(6)(ii)			
Provision				
Judges	IP High Court Fourth Division, Presiding judge Yoshinori TOMITA, Judge Yoshiki TANAKA,			
	Judge Akimitsu ARAI			

#### 2. Overview of the Case

[FIG. 1]

(1) Summary of Claimed Invention

The claimed invention includes a body part 13 formed by bending a metal plate into a cylindrical shape and joining the both ends thereof and a bottom plate 14 and a balance ring 17 attached to the body part 13. It further includes a filter member 8 adapted to cover a joint part 12 of the body part 13 from inside while the filter member 8 remains in the non-contact state with respect to the balance ring 17 and the bottom plate 14. By virtue of this construction, it is made possible that the joint part 12 of the body part 13 is made to be not directly visible in presence of the filter member 8, the balance ring 17, and the bottom plate 14, and that the joint part 12 can be separated from the laundry. In addition, even when the filter member 8 is thermally shrunk, a gap originally exists between the filter member 8 and the balance ring 17 or the bottom plate 14, so that only the gap is enlarged while the laundry is not caught between them.



#### (2) Disclosure of Detailed Explanation of the Invention

"... an object of the present invention is to provide a dehydrating tub

of a washing machine that can make <u>the joint part of the body part invisible</u>, <u>keep the laundry out of contact with</u> <u>the joint part, and in addition</u>, and <u>keep the laundry from being caught therebetween</u>, <u>the tub being configured to be</u> <u>incorporated in the washing machine without degradation of the assembling efficiency</u> (paragraph [0007])."(extracts taken from the court decision)

"By virtue of this configuration, the joint part of the body part is made to be not directly visible in the presence of the filter member, and the joint part can be separated from the laundry. In addition to this, in the region extending from the balance ring to the filter member, the joint part is not visible as it is behind the balance ring, and in the region extending from the filter member to the bottom plate, the joint part in this place becomes invisible behind the filter member. Also, it is ensured that the laundry is not trapped by or brought into contact with the joint part between these elements, i.e., between the balance ring and the filter member as well as between the filter member and the bottom plate ([0009]).

Further, even when the filter member is thermally shrunk, a gap originally exists between the filter member and the balance ring or the bottom plate, so that only the gap is enlarged while the laundry is not caught therebetween. Furthermore, the filter member can be incorporated regardless of whether it is attached to the balance ring or the bottom plate (paragraph [0010])." (extracts taken from the court decision)

## (3) The Claims (Only claim 1 is cited therefrom.)

[Claim 1] A dehydrating tub of a washing machine comprising: a body part formed by bending a metal plate into a cylindrical shape and joining the both ends thereof; a bottom plate connected to the lower end of the body part; and a balance ring attached to the upper edge of the body part, characterized by the fact that it comprises a filter member,
the filter member being adapted to cover the joint part of the body part from inside over the entire length thereof in the vertical direction, <u>a gap having dimensions sufficiently small relative to the entire length in the vertical direction</u> is maintained with respect to the balance ring or the bottom plate.

(4) Procedural History

March 22, 2002	:	Registration of establishment of the patent right (See the above-described "The
		Claims.")
August 21, 2012	:	Filing of a request for a trial for patent invalidation by Plaintiff (Muko No. 2012-
		800126)
March 19, 2013	:	Trial Decision dismissing the appeal

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Trial Decision

2. Claim 1 includes the following recitation: "a gap having dimensions sufficiently small relative to the entire length in the vertical direction is maintained with respect to the balance ring or the bottom plate." Although the term "gap" as such is clear, the above recitation defines the dimensions of the "gap" in a relative manner with respect to the filter member, and also defines its position in a relative manner with respect to the balance ring, the bottom plate, and the filter member. As a result, the technical significance of the "gap" in the patented invention cannot unambiguously understood solely relying upon what is recited in the claims, and the technical significance cannot be understood without taking the detailed description of the Description and the drawings into consideration. In response to this, the technical significance of the "gap" is examined in view of the detailed description of the Description and the drawings as well as the problems, the solution therefor and the working effects of the invention according to claim 1 (hereinafter referred to as "the patented invention").

When the premise of the patented invention is taken into consideration, it can be said that "the joint part of the body part can be separated from the laundry "directly" by the filter member" and the gap, which cannot be directly separated from the laundry, can also be separated from the laundry by creating "the gap having sufficiently small dimensions relative to the entire length in the vertical direction." In this manner, the working effects of the invention are obtained such as: the laundry not being trapped by the projecting shapes of the balance ring 17, filter seat 19, and the bottom plate 14; the laundry being kept out of contact with the joint part appearing in the gap, in other words, mitigating the disadvantage of the presence of the gap; and reducing the frequency of the laundry being brought into this undesirable state of contact with these components or portions.

Therefore, it can be concluded that <u>it is possible for a person skilled in the art to contemplate a "gap having sufficiently small dimensions relative to the entire length in the vertical direction" to such an extent that the working effects are obtained, and that the technical idea is clear.</u>

Decision

# Allegations by Plaintiff

(A) Since no description that defines the meaning of "sufficiently small dimensions" is found in the Description, there is no room for the description of the claims to fulfil the requirement of clarity even when the description of the Description is taken into consideration.

The trial decision attempts to clarify the technical significance of the "gap having sufficiently small dimensions relative to the entire length (of the filter member)" on the basis of the problem to be solved by the invention and the effects described in the Description, but such an approach is incompatible with the purpose of the provision of Article 36(6)(ii) of the Patent Act.

(B) No explanation of the configuration of ... is found in the Description. Arriving at the feature of the claimed invention on the basis of the description of the effects of the invention in the Description is tantamount to arriving at the technical problem to be solved by the invention on the basis of the very technical problem, and this is incompatible with the underlying logic of the Patent Act that a patent is granted in return for disclosure of the solution to the problem. Allegations by Defendant

It is possible to unambiguously interpret the description of the claims of the claimed invention by taking the description of the Description into consideration as stated in the trial decision.

Taking the description of the Detailed Explanation of the Invention of the Description into consideration does not mean taking only the expression(s) written in the form of a definition into consideration, but it refers to understanding the technical significance of the language in the context of the technical problem, the solution therefor, and the working effects thereof. The approach in question is practically established methodology, which the Patent Act endorses.

Therefore, <u>it is permissible to conceive the</u> <u>features of the claimed invention from the description</u> <u>of the working effects of the invention in the</u> <u>Description. Further, although the description that</u> <u>defines the meaning of the "sufficiently small</u> <u>dimensions" is not found in the Description, it would</u> <u>be an erroneously extravagant contention to conclude</u> <u>that there is no room for the description of the claims</u> <u>to meet the requirement of the clarity of the description.</u>

Judgment by the Court

(A) One of the matters specifying the Invention is that "a gap having sufficiently small dimensions is maintained with respect to the balance ring or the bottom plate" relative to "the entire length of the filter member in its vertical direction." The Description (paragraphs [0007], [0009], and [0010]) discloses that, by virtue of this, the invention provides a dehydrating tub of a washing machine achieving the following working effects: "the joint part of the body part is concealed", "so that the laundry does not contact with the joint part, and moreover," "the laundry is not caught between the joint part," and "the dehydrating tub of a washing machine can be achieved those effects without degrading the assembling efficiency."

Accordingly, <u>it can be said that the feature of the Invention of "gap having sufficiently small dimensions"</u> relative to "the entire length of the filter member in its vertical direction" corresponds to a "gap" having a <u>technical significance that the above working effects are achieved.</u>

(B) Plaintiff alleges that supposing the constitution of the claimed invention from the description of the effects

of the invention in the Description is tantamount to supposing a means for solving the problem from the technical problem to be solved by the invention, and this is incompatible with the underlying logic of the Patent Act that a patent is granted in response to disclosure a means for solving the problem.

However, the technical significance of the invention is identified not only by its constitution as such but also by taking the working effects and the like into consideration, and it is obviously permissible to take into consideration not only the constitution described in the Detailed Description of the Invention of the Description but also the object(s), problem(s), and effect(s) of the invention when the technical significance of the invention and the matters specifying the invention described in the claims are to be examined, and there is no reasonable grounds for limiting the range of reference and consideration to the description of the constitution of the invention.

E ... With regard to the constitution of the claimed invention of providing a "gap having sufficiently small dimensions" for "the entire length of the filter member in its vertical direction," it can be said that a person skilled in the art can properly establish such constituion on the assumption that (1) the technical significance of providing a blind area for making the joint part of the body part invisible from a user, (2) the technical significance of keeping the laundry out of contact with the joint part, and (3) the technical significance of keeping the laundry from being caught by the gap in spite of the existence of differences among the coefficients of thermal expansion of respective component members. As such, the constitution of the claimed invention is clear.

... <u>the recitations of the claims</u> of the Invention <u>satisfy the clarity requirement not only upon reading of the</u> <u>claims but also in light of the description of the Description, and the findings and determinations of the trial</u> <u>decision is reasonable and has no illegality that may cause rescission of the trial decision.</u>

Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Product-by-process Claims

#### (24)-7

# 1. Bibliographic Items

Case	"Anti-perspiration antigen monoclonal antibody" (appeal against an examiner's decision of
	refusal)
	Appeal Decision dated March 2, 2016 (Fufuku No. 2014-17732)
Source	Published Appeal and Trial Decisions
Application	Japanese Patent Application No.2010-510175 (WO 2009/133951A)
No.	
Classification	C07K 16/18
Conclusion	Acceptance
Related	Article 36(6)(ii)
Provision	
Judges	Chief Administrative Judge: Akiteru TAMURA, Administrative Judge: Yoko NAKAJIMA,
	Administrative Judge: Miyoko TAKA,

# 2. Overview of the Case

(1) Summary of Claimed Invention

Antibody or antigen-binding fragment produced from a specific hybridoma cells. A sweat antigen-associated disease or a risk of development thereof can be determined by detecting a sweat antigen and/or a sweat antigen-specific IgE antibody in a test sample using the antibody according to the present invention.

# (2) The Claims (The claimed invention)

[Claim 2] An antibody or an antigen-binding fragment thereof which is produced from a hybridoma deposited under accession No. FERM BP-11110 or No. FERM BP-11111.

# (3) Procedural History

May 29, 2014	:	Decision of Refusal
September 5, 2014	:	Request for Appeal against an Examiner's Decision of Refusal (Fufuku No. 2014-
		17732)
November 9, 2015	:	Notification of Reasons for Refusal

# January 5, 2016 : Filing of Written Amendment and Written Opinion (See the above-described "The Claims.")

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

Appeal Decision		

No. 3 Judgment by the body

...

Since claim 2 describes "An antibody or an antigen-binding fragment thereof which is produced from a hybridoma deposited under accession No. FERM BP-11110 or No. FERM BP-11111", and claim 2 concerning an invention of a product of an antibody includes a manufacturing method for the product where it "is produced from a hybridoma". Thus, it is recognized that claim 2 pertaining to an invention of a product includes a manufacturing method of the product includes a manufacturing method of the product.

However, according to the Judgment of the Supreme Court (June 5, 2015, 2012 (Ju) 1204 and 2012 (Ju) 2658), in cases where a claim concerning an invention of a product includes a manufacturing method of the product, it is reasonable to interpret that a description of a claim complies with the requirement under the provision of the Patent Act, Article 36 (6)(ii) stipulated "the invention for which a patent is sought is clear" only when there exist any circumstances in which it is impossible or impractical to directly define the product by its structure or its property at the time of filing of application ("impossible or impractical circumstances"). Then, whether or not the invention pertaining to claim 2 falls under the aforementioned circumstances will be examined below.

A "hybridoma" described in claim 2 is a typical "hybridoma" obtained by the fusion between "lymphocytes obtained by immunization with a sweat antigen composition" and "myeloma cells" as described in the paragraphs [0127] and [0153] in the detailed description of the invention of the specification. Thus, it is apparent to a person skilled in the art from the common general knowledge that an "antibody" (a monoclonal antibody) produced from the specific "hybridoma" is only one antibody (see "Genetic Engineering Keywords Book", Yodosha, April 25, 1996, p299, "hybridoma"; and "Dictionary of Biochemistry (second edition)", Tokyo Kagaku Doujin, November 22, 1990, p993, "hybridoma", if necessary).

The hybridoma described in claim 2 is one "deposited under accession No. FERM BP-11110 or No. FERM BP-11111", thereby, if the each hybridoma under those accession numbers is obtained from a depositary institution and produces an antibody, "an antibody" of claim 2 (" 'antibody' produced from a hybridoma") can be obtained and used. In other words, even if claim 2 does not describe a chemical structure (such as an amino acid sequence) of an "antibody" but specifies an antibody as an " 'antibody' produced from a hybridoma", it is always produced only one antibody (a monoclonal antibody), and therefore it is recognized that such "antibody" can be produced and used. Concerning this point of view, the appellant states in the written opinion submitted on January 5, 2016 that "one hybridoma can produce one specific antibody, therefore, if a hybridoma is specified, then an antibody produced from such hybridoma is uniquely specified".

On the other hand, when an attempt is made to further specify a chemical structure of an " 'antibody' produced from a hybridoma", it is considered that identification of the chemical structure of the antibody takes substantial amount of time, effort and cost as the appellant has asserted in the written opinion of January 5, 2016 because the "antibody" is not a low molecular weight compound, but a high molecular weight protein having a three dimensional structure.

Therefore, it can be said that it is "impractical" to take substantial amount of time, effort and cost for only the purpose of identification of a chemical structure of an "antibody" ... under the common general knowledge as described above. Further, it can be said that it is also impractical in view of the first-to-file system because a filing date of an application might be delayed for that reason. In addition, in the field of biotechnology to which the invention pertaining to the present application belongs, the technology thereof has rapidly developed and the global competitiveness has become intense. It is therefore quite important to file a patent application promptly, so that the circumstances being "impractical" exist still more.

And, the Judgment of the Supreme Court described above provides the supplementary opinion as below: the wording "not practical at all (impractical) " assumes cases where identification of a chemical structure requires substantial amount of time, effort and cost and thus is impractical to perform such identification in terms of profitability, rather than a technical view point, and therefore, it is so server for a person skilled in the art when filing of application that such identification is required under the conditions that the technology has rapidly developed and the global competitiveness has been keen in obtaining a patent. It is recognized that the circumstances described above fall under "impractical" circumstances explained in the supplementary opinion.

Then, it is recognized that the description of claim 2 falls under the case where there exist any circumstances in which it is impossible or impractical to directly define the product by its structure or its property ("impossible or impractical circumstances"). Therefore, it can be said that claim 2 complies with the requirement that "the invention for which a patent is sought is clear" stipulated under Patent Act, Article 36 (6) (ii).

(24)-8	
Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Product-by-process Claims

# 1. Bibliographic Items

Case	"Method for breeding Daucus plant, and the resultant Daucus plant" (appeal against an examiner's					
	decision of refusal)					
	Appeal Decision dated June 20, 2016 (Fufuku No. 2014-10863)					
Source	Published Appeal and Trial Decisions					
Application	Japanese Patent Application No.2009-163308 (JP2011-015648 A)					
No.						
Classification	A01H 1/02					
Conclusion	Acceptance					
Related	Article 36(6)(ii)					
Provision						
Judges	Chief Administrative Judge: Akiteru TAMURA, Administrative Judge: Keiko NAGAI,					
	Administrative Judge: Toshinao YAMAZAKI,					

# 2. Overview of the Case

(1) Summary of Claimed Invention

To obtain a Daucus plant of which the exposed part is resistant to discoloration even if the shoulder part of its root is exposed onto the ground during cultivation, in such a manner that cross-fertilization, self-propagation and selection are repeatedly conducted.

# (2) The Claims (The claimed invention)

[Claim 4] A Daucus plant which can be obtained by cross-fertilization of a Daucus plant specified by Accession No. FERM P-21824 and another Daucus plant of Daucus carota L (Kuroda Gosun), and the exposed part of which is resistant to discoloration even if the shoulder part of its root is exposed onto the ground during cultivation.

# (3) Procedural History

March 5, 2014	:	Decision of Refusal
June 10, 2014	:	Request for Appeal against an Examiner's Decision of Refusal (Fufuku No. 2014-
		10863)

September 3, 2015	:	Notification of Reasons for Refusal
January 5, 2016	:	Filing of Written Amendment and Written Opinion (See the above-described "The
		Claims.")

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Appeal Decision

# No. 3 Judgment by the body

... Claim 4 is examined as follows.

... The demandant of appeal makes assertion that it takes an enormous amount of time and effort to analyze genes of plant crossing species, and even after such analysis is successfully done, it is assumed that the genes of several species are affected on the characteristics that "the exposed part is resistant to discoloration even if the shoulder part of its root is exposed onto the ground during cultivation", and thereby, it make extremely difficult to define the genes at the time of filing. The demandant alleges that, therefore, there exist any circumstances in which it is impossible or utterly impractical to define "a Daucus plant" of claim 4 based on its structure or characteristics.

In examining the demandant's allegation, it is a usual practice in the technical field of plant crossing species that an individual exhibiting a specific character is selected from the next generation plants obtained by crossing the parent lines thereof, and then the individual is further crossed to genetically fix its character. It is recognized that an enormous time and effort is necessary to define the gene underlying such a character by analyzing each gene of various crossing species. In addition, the characteristics of plants normally involve a plurality of different types of genes, and in a case where both parental lines of two plants do not have a predetermined character, such as the invention concerned, it is predicted that there would be a great difficulty for the analysis each gene due to expected complexity of the interrelationships among the multiple genes. Therefore, it is recognized that the above circumstances alleged by the demandant fall under the case where it is technically impossible to analyze the product by its structure at the time of filing and where there exist "impossible and utterly impractical circumstances" which was hold by the Judgement of the Supreme Court (June 5, 2015, 2012(Ju) 1204 and 2012 (Ju) 2658). In conclusion, it can be said that the claimed invention 4 complies with the requirement of the provision of Patent Act, Article 36(6) (ii) stipulating "the invention for which a patent is sought is clear".

(24)-9	
Relevant portion	Part II, Chapter 2, Section 3
of Examination	
Guidelines	
Classification of	24: Regarding the clarity requirement
the Case	
Keyword	Product-by-process Claims

# 1. Bibliographic Items

(24) 0

Case	"Double Eyelid Forming Tape or String and Method of Manufacturing the Same" (Trial for
	Invalidation)
	Intellectual Property High Court Decision, September 20, 2016 (2015 (Gyo KE) No. 10242)
Source	Website of Intellectual Property High Court
Application	Japanese Patent Application No. 2001-160951 (JP 2002-177316 A)
No.	
Classification	A61F 9/00
Conclusion	Dismissal
Related	Article 36(6)(ii)
Provision	
Judges	IP High Court Third Division, Presiding judge: Toshihiko TSURUOKA, Judge: Masaki
	SUGIURA, Judge: Toshihiko TERADA

# 2. Overview of the Case

# (1) Summary of Claimed Invention

The present invention provides a double eyelid forming tape. It is constructed by applying an adhesive on a narrow tape member being resiliently elastic, or being stretchable and exhibiting resilient elasticity after being stretched, and providing holding portions having no adhering property on the surfaces at both ends thereof for holding by fingertips. A fold of the double eyelid is formed by pressing the tape member on the position of the eyelid where the user wants to form a fold in a state where both ends thereof are held and stretched, adhering the tape member thereon with the adhesive, and releasing the same. Therefore, when the tape member under a tension resiliently contracts, it breaks into the eyelid and forms an eyelid with a clear fold easily and safely in a simple manner.

# (2) The Claims (the invention concerned)

[Claim 1] A double eyelid forming tape comprising a narrow tape member formed of synthetic resin that is stretchable and exhibits resilient elasticity after being stretched, and which is applied with an adhesive thereon.

# (3) Procedural History

February 8, 2002	:	Registration of establishment of the patent right (see the above "The Claims")
April 1, 2015	:	Request for trial for patent invalidation by plaintiff (Muko No. 2015-800103)
November 4, 2015	:	The decision that "the trial for a patent invalidation is to be dismissed"

# 3. Portions of Appeal/Trial Decisions relevant to the Holding

#### Appeal Decision

Invention 1 includes the matter defining the invention, i.e., "applying". Invention 1 can form a double eyelid so long as the "tape member" in use is the state where the "adhesive" is "applied" thereon. The "action" of "applying" does not have a technical significance in the double eyelid formation. Therefore, Invention 1 does not fall under a "product-by-process" claim.

#### Decision

# Allegations by Plaintiff

The statement of Invention 1 "applied with an adhesive thereon" should be considered to fall under a product-by-process claim since it states a chronological element accompanied with an action of "applying". However, Invention 1 does not involve "the existence of impossible or utterly impractical circumstances to define the product directly based on its structure or characteristics at the time the subject application for such product was filed". Then, according to the judgment of the Supreme Court, 2nd Petty Bench, June 5, 2015 (69-4 Saikosaibansho Minji Hanreishu ("Minshu") 700), Invention 1 does not comply with the requirement "the invention should be clear".

# Allegations by Defendant

Even in the case of determining whether or not Invention 1 as an invention of product falls under a product-by-process claim, it should be determined whether or not Invention 1 is substantially defined by a manufacturing process by taking into account of the descriptions both in the detailed description of the invention and the drawings as well as the common technical knowledge. Thus, when the meaning of the matter defining the invention, which "comprising a narrow tape member ... is applied with an adhesive thereon" is literally understood, it would be obvious to a person skilled in the art that the matter defining the invention defines the state where the "adhesive" is "applied" on the "tape member", but not define Invention 1 by a manufacturing method substantially.

# Judgment by the Court

When a claim concerning an invention of a product recites a manufacturing method of the product (i.e. in a case of a product-by-process claim), it should be understood that the statement of the claim complies with the requirement of "the invention is clear" (Article 36 (6)(ii), Patent Act) provided that there exists any circumstances in which it is impossible or utterly impractical to define the product based on its structure or characteristics at the time the subject application for such product was filed (the judgment of the Supreme Court, 2nd Petty Bench, June 5, 2015 (69-4 Saikosaibansho Minji Hanreishu ("Minshu") 700). The statement of Invention 1 described above can be considered to involve a chronological element if it is seen from a formal aspect, thus it cannot be said that there is no room to consider that the statement of Invention 1 corresponds to

a product-by-process claim.

However, a product-by-process claim is considered to be an issue in relation to the clarity of the invention under the following situation and which could be unduly harmful to the interest of the third party. In all cases where a claim concerning an invention of a product recites a manufacturing process of the product, if the technical scope of the patent invention is determined by extending the effect of the patent right to those which are identical in a structure or characteristics with the product manufactured by the manufacturing process, it will not be clear what structure or characteristics of the product are shown by such a manufacturing process. In view of the above, if it could be said that Invention 1 involves a manufacturing process of a product since the statement of the claims involves a chronological element if it is seen from a formal aspect. However, when a structure or characteristics, etc. of a product manufactured by such a manufacturing process is unambiguously apparent considering with the statement of the description and the technical common sense, it can be said the issue mentioned in the above does not occur. Then, in such a case, Invention 1 is not considered to be a productby-process claim which is considered to be an issue in relation to Article 36 (6) (ii) of Patent Act.

Considering the statement of the description of the invention concerned, the description discloses the following aspect that "The double eyelid forming tape can be manufactured with extreme ease, as shown in FIG. 2, by applying an adhesive 12 on the whole area of the front and back surfaces of the resiliently elastic sheet member 11 and has a given length in the direction X, ... and cutting it along a number of cutting lines L into narrow strips (paragraph [0013], Exhibit 1). Namely, the description includes the aspect of forming narrow strips after applying an adhesive thereon and discloses that "In the embodiment shown in FIG. 1 and FIG. 2, the adhesive 2 is applied on both of the front and back surfaces of the resiliently elastic narrow tape member" (paragraph [0014], Exhibit 1). It is apparent that Invention 1 can form a double eyelid so long as the "tape member" in use is the state where the "adhesive" is "applied" thereon, regardless of the order which happened first, forming the tape member or applying the adhesive, that is, Invention 1 can achieve an operational advantage.

Then, it is reasonable to understand that the statement of the description "applied with an adhesive thereon" does not express a chronological element, i.e., applying adhesive after forming a narrow tape member, but it merely identifies a structure or characteristics of Invention 1 by just showing the state where adhesive is applied on the tape member. Therefore, Invention 1 should be considered not to correspond to a manufacturing process of the product.

Hence, Invention 1 does not fall under a product-by-process claim which should be an issue in relation to Article 36 (6) (ii) of Patent Act.

Relevant portion	Part II, Chapter 2, Section 3		
of Examination			
Guidelines			
Classification of	24: Regarding the clarity requirement		
the Case			
Keyword	Product-by-process Claims		

#### (24)-10

# 1. Bibliographic Items

Case	"Wash-free Rice Retaining Tasty Component and Nutrient Component" (Trial for Invalidation)		
	Intellectual Property High Court Decision, December 21, 2017 (2017 (Gyo KE) No. 10083)		
Source	Website of Intellectual Property High Court		
Application	Japanese Patent Application No. 2005-093152 (JP 2006-271229 A)		
No.			
Classification	A23L 1/10		
Conclusion	Acceptance		
Related	Article 36(6)(ii)		
Provision			
Judges	IP High Court Fourth Division, Presiding Judge: Makiko TAKABE, Judge: Suguru SANMON,		
	Judge: Ryo KATASE		

# 2. Overview of the Case

(1) Summary of Claimed Invention

The invention relates to wash-free rice retaining tasty component and nutrient component that is characterized by its brown rice kernel (a) whose semi-aleurone cell layer is exposed to the surface of each rice grain after the removal of up to the aleurone cell layer from the surface, (b) retaining "germ after the removal of its surface part" or "germinal disks" on more than 50% of its rice grains, and (c) from which only the sticky rice bran on the rice grain surface is removed, while the aleurone granules in the aleurone cell layer are stuck to the rice surface.



# (2) The Claims (after correction) (Invention)

[Claim 1] Wash-free rice retaining tasty component and nutrient component,

wherein surface layer part of brown rice grains is constituted by an epidermis (1), a pericarp (2), a seed coat (3), an aleurone cellular layer (4), and a layer consisting of yellow-browned substance not containing starch and not delicious, and layers inside the surface layer part are constituted by a pale-yellow subaleurone cellular layer (5) under the aleurone cellular layer (4) and a pure white starch cell layer (6) under the subaleurone cellular layer (5),

wherein, among the aleurone cellular layer (4), the subaleurone cellular layer (5), and the starch cell layer (6) constituting the brown rice grains, the surface layer part to the aleurone cellular layer (4) are removed by milling using a <u>friction-type rice-milling machine</u>, and the subaleurone cellular layer (5) containing maltooligosaccharide, dietary fiber, and protein is exposed on the surface of a grain, and 50% or more of grains keep an "embryo (8) which is an embryo (7) without a surface part" or a "scutellum (9) which is a base part of the embryo (7) without a surface part and a protruding part unpleasant to the palate", and

wherein a wash-free rice machine (21) breaks a cell wall (4') of the aleurone cellular layer (4), and removes "surface bran" consisting of aleurone granules in the aleurone cellular layer adhered to the surface of a grain.

#### (3) Procedural History

March 25, 2011	:	Registration of establishment of the patent right
September 4, 2015		Request for trial for patent invalidation by plaintiff (Muko No. 2015-800173)
		Request for correction by defendant
March 24, 2017	:	Trial decision to accept correction and invalidate the patent for the invention of claim

#### 3. Portions of Appeal/Trial Decision relevant to the Holding

#### Trial Decision (Cited from the Court Decision)

The patent for the Invention should be invalidated because the Invention is not clear and the statement of the claims does not satisfy the requirement provided for by Article 36(6)(ii) of the Patent Act (hereinafter referred to as the "Clarity Requirement").

#### Decision

Allegations by Plaintiff

Even if the finding of the trial decision that statements "by milling using a <u>friction-type rice-milling</u> <u>machine</u>" and "a wash-free rice machine (21)" are statements of a manufacturing method of a product is not an error, the Invention satisfies the clarity requirement.

(2) Wash-free rice of the Invention is produced by "maximally leaving a "scutellum (9) and a subaleurone cellular layer (5) which contain much of nutrient component and tasty component of a grain and maximally removing an aleurone cellular layer (4), substance constituting more external layers, namely a bran layer component, and a surface part of an embryo (7), which negatively affect a flavor" ([0023]), that is, by "preventing spotty detachment and maximally leaving the subaleurone cellular layer (5) and the scutellum (9)

#### Allegations by Defendant

Claim 1 after correction specifies wash-free rice by statement of brown rice grains, polished white rice, and wash-free rice produced by a wash-free rice producing machine, that is, statement including a manufacturing process that is achieved over time, which means claim 1 is a product-by-process claim.

Moreover, if the plaintiff desires to obtain a patent for the invention of a product "wash-free rice", he must specify the invention by describing a "present structure (constitution) of wash-free rice" washed by a wash-free rice producing machine. However, the claim includes little description of the structure of wash-free rice after the washing process by the wash-free rice producing machine, which should normally be described in a most detailed and precise manner, and fails to specify the invention of wash-

high in nutrition and providing a good flavor or an	free rice.
embryo (8) which is an embryo (7) without a surface part	Therefore, the Invention does not satisfy the clarity
uncomfortable to the palate" such that "the subaleurone	requirement.
cellular layer (5) is exposed on a surface" ([0028]), and	
by "removing surface bran without removing the	
subaleurone cellular layer (5)such that $50\%$ or more	
of all grains keep the scutellum (9) or the embryo (8)	
which is an embryo without a surface part" ([0041]).	
From the above, it is clear that the structure and	
characteristics of the wash-free rice relating to the	
Invention are "a subaleurone cellular layer is exposed on	
the surface of a grain, 50% or more of all grains keep 'an	
embryo which is an embryo without a surface part' and	
'a scutellum which is a base part of an embryo without a	
surface part and a protruding part unpleasant to the	
palate', and "a cell wall of an aleurone cellular layer is	
broken and 'surface bran' consisting of aleurone	
granules in the aleurone cellular layer adhered to the	
surface of a grain is removed". Thus, the statement of	
claim 1 after correction does not eliminate the	
predictability of the scope of the invention or unduly	
prejudice the interest of a third party.	
Therefore, the trial decision that the Invention does	
not satisfy the clarity requirement is an error.	

Judgment by the Court

2 Reason for Cancellation (Error in the Judgment Relating to the Clarity Requirement)

...(2) Invention

...C If a Manufacturing Method is Described or Not

... According to the statement of the claims and the statement of the description, it is considered that claim 1 as a whole describes a manufacturing method as a part of matters specifying the invention of a product "wash-free rice".(3) Clarity of Invention

A When a claim concerning the invention of a product recites a manufacturing method of the product (i.e. in case of a product-by-process claim), it should be understood that the statement of the claim complies with the requirement of "the invention is clear" (Article 36 (6)(ii), Patent Act) provided that there exists any circumstance in which it is impossible or utterly impractical to define the product based on its structure or characteristics at the time the subject application for such product is filed (Judgment of the Supreme Court, 2nd Petty Bench, 2012 (Ju) 1204 dated June 5, 2015 (69-4 Saikosaibansho Minji Hanreishu ("Minshu") 700). ...

B On the other hand, the purport of the above judgment of the Supreme Court, that when a claim concerning the invention of a product recites a manufacturing method of the product it should be understood that the statement of the claim complies with the clarity requirement provided that there exists any circumstance in which it is impossible or utterly impractical to define the product based on its structure or characteristics at the time the subject application for such product is filed, is to approve a claim concerning the invention of a product which recites a manufacturing method of the product only when the specified circumstance exists instead of approving such a claim unconditionally, because while the technical scope of such a claim is determined as a product which has the same structure and characteristics as that manufacturing method, the statement of the claims does not normally provide a clear description of the structure and characteristics of the product attributable to the manufacturing method and thus eliminates the predictability of the scope of the invention. Therefore, even if the manufacturing process is stated in the claims, as long as it is unambiguously clear, from the claims, description, drawings, and general technical knowledge, what structure or property of the product is described by the manufacturing process, the clarity requirement can be considered to be satisfied because the interests of a third party would not be unfairly damaged.

C When considering the Invention based on the above, claim 1 after correction states the Invention is an invention of wash-free rice retaining tasty component and nutrient component that is characterized by its brown rice kernel (a) whose semi-aleurone cell layer is exposed to the surface of each rice grain after the removal of up to the aleurone cell layer from the surface, (b) retaining "germ after the removal of its surface part" or "germinal disks" on more than 50% of its rice grains, and (c) from which only the sticky rice bran on the rice grain surface is removed, while the aleurone granules in the aleurone cell layer are stuck to the rice surface.

D ... The description states that the rice in the state of C(a) and (b) above and in a pre-state of wash-free rice relating to the Invention can be manufactured by using a <u>friction-type rice-milling machine</u> whose operation conditions (milling conditions) are adjusted, ... and the wash-free rice of the Invention in the state of C(c) can be manufactured from the rice in the pre-state of wash-free rice by using a wash-free rice producing machine which applies a specific method of wash-free rice production and whose operation conditions are adjusted.

However, the description only states that the rice is polished with a friction-type rice-milling machine to produce the rice described in C(a) and (b) above, which is a preliminary form of the wash-free rice embodying the Invention and that, for the process of turning this rice into the wash-free rice embodying the Invention as described in C(c), a wash-free rice machine is used. The description contains no statements that suggest that the rice polished with a friction-type rice-milling machine has any structure or property other than those described in C(a) and (b) above or that the wash-free rice produced from said rice by using a wash-free rice machine has any structure or property other than that described in C(c) above.

E According to the claims and the description as stated above, it is reasonable to interpret that the statement "polished with a friction-type rice-milling machine" in Claim 1 means that a friction-type rice-milling machine is used to produce polished white rice that has the structure or property described in C(a) and (b), which is a preliminary form of the wash-free rice embodying the Invention, and that the statement "with wash-free rice machine (21)" in Claim 1 means that a wash-free rice machine is used to produce, from said polished white rice, wash-free rice that has the structure or property described in C(c), and that these statements do not suggest that the wash-free rice embodying the Invention

has any structure or property other than those described in C(a) to (c).

The wash-free rice relating to the Invention is ...

Therefore, <u>even if the manufacturing process</u>, i.e., "polished with a friction-type rice-milling machine" and "with wash-free rice machine (21)," is stated in Claim 1, it is unambiguously clear, from the statements in the claims and the description, what structure or property of the wash-free rice embodying the Invention is described by the manufacturing process.