Decision on Opposition

Opposition No. 2018-700001

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The case of opposition against the patented invention in Japanese Patent No. 6153560, entitled "Protection Mat for Electromagnetic Cooker", has resulted in the following decision.

Conclusion

The correction of the specification and the scope of claims of Japanese Patent No. 6153560 shall be approved as described in the corrected specification and the scope of claims attached to the written correction request, as for corrected claims [1-3].

The patent according to claims 1-3 of Japanese Patent No. 6153560 is maintained.

Reason

1 History of the procedures

The patent application concerning claims 1-3 of Japanese Patent No. 6153560 is a divisional application filed on Apr. 10, 2015 from Japanese Patent Application No. 2012-174425 filed on Aug. 6, 2012 (Priority Claim, Aug. 12, 2011), the establishment of the patent right was registered on Jun. 9, 2017, and a gazette containing the patent was issued on Jun. 28, 2017. Subsequently, regarding the patent, opposition to a granted patent was filed on Dec. 27, 2017 by the patent opponent, Ami Kawano (hereinafter, referred to as "the Opponent"), and Reasons for Rescission were notified on May 22, 2018 by the body. The patentee submitted a written opinion and a correction request on Jul. 23, 2018, which falls within the designation period therefor, and, with respect to the correction request, the Opponent submitted a written opinion on Aug. 27, 2018.

2 Judgment on Propriety of Correction

(1) Contents of correction

The contents of correction according to the correction request of the case are the following A and B (the underlines indicate corrected portions). Note that the correction request of the case was demanded with respect to a group of claims [1-3], and the correction concerning the specification was requested regarding the group of claims [1-3].

A Correction A

To correct "comprising: (omitted) a first coating layer and a second coating layer (omitted)," of Claim 1 to "comprising: (omitted) a first coating layer and a second coating layer (omitted), wherein an application quantity of the silicone rubber is 100-

110 g/m^2,".

B Correction B

To correct the statement "including: (omitted) a first coating layer and a second coating layer (omitted)," of paragraph [0009] of the detailed description of the invention to "including: (omitted) a first coating layer and a second coating layer (omitted), and an application quantity of the silicone rubber is 100-110 g/m^2,".

(2) Suitability of correction purpose, existence of new matters, and existence of enlargement or alternation of the scope of claims

A Regarding correction A

Since correction A is a correction that adds a limitation that, regarding the first coating layer and the second coating layer made of silicone rubber, the application quantity of the silicone rubber is 100-110 g/m^2, it is for the purpose of restriction of the scope of claims. In addition, it is described in the specification of the patent that "the first coating layer 12 and the second coating layer 13 are formed by two-time repetition of the step of applying silicone rubber having high heat resistance on a surface of the base material 11 and performing drying. An application quantity of silicone rubber in this step is 100-110 g/m^2." ([0018]), and, therefore, it does not fall under addition of new matters. And it is not a correction that substantially enlarges or changes the scope of claims.

B Regarding correction B

Correction B is a correction of the specification that comes with the correction of the scope of claims of the above-mentioned A, and thus it is a correction for the purpose of clarification of ambiguous statements. Therefore, it does not fall under addition of new matters, and it does not enlarge or change the scope of claims substantially.

(3) Summary

As described above, the corrections according to the correction request of the case are aimed at matters prescribed in item (i) and (iii) of the proviso to Article 120-5(2) of the Patent Act, and comply with the provisions of Article 126(5) and (6) of the same Act applied mutatis mutandis pursuant to the provisions of Article 120-5(9) of the same Act.

Therefore, the correction of the specification and the scope of claims shall be approved as described in the corrected specification and the scope of claims attached to the written correction request, as for corrected Claims [1-3].

3 The Invention

The inventions according to Claims 1-3 are specified by the following matters described in Claims 1-3 of the corrected scope of claims.

[Claim 1]

A protection mat for an electromagnetic cooker comprising: a sheet-like base material composed of glass fiber fabric; and a first coating layer and a second coating layer composed of silicone rubber respectively formed on both surfaces of the base material, wherein an application quantity of the silicone rubber is 100-110 g/m^2, and wherein a complex Young's modulus calculated based on a result of measurement by Ultramicro Indentation Hardness Tester (ENT-1100a) made by ELIONIX Co., Ltd. with

respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less.

[Claim 2]

The protection mat for an electromagnetic cooker according to Claim 1, wherein the first coating layer has an average friction coefficient of 0.45 or more.

[Claim 3]

The protection mat for an electromagnetic cooker according to Claim 1 or 2, wherein the second coating layer has a surface irregularity of 0.8 μm or more and 4 μm or less.

4 Regarding the reasons for rescission described in the notice of reasons for revocation

(1) Outline of the Reasons for Rescission

The outline of the reasons for rescission notified to the patentee as of May 22, 2018 from the body with respect to the patents according to Claims 1-3 before the correction is as follows.

In Claims 1-3, regarding the first coating layer and the second coating layer composed of silicone rubber, it is not specified their thickness. Therefore, it cannot be said that a constitution necessary for obtaining predetermined cushioning characteristics is specified.

Accordingly, in the Patent, the statements of the scope of claims do not meet the requirement stipulated in Article 36(6)(i) of the Patent Act, and, thus, the patent regarding the inventions according to Claims 1-3 shall be revoked.

(2) Judgment by the body

By the correction request of the case, the invention according to Claim 1 is specified the matter "comprising a first coating layer and a second coating layer composed of silicone rubber, wherein an application quantity of the silicone rubber is 100-110 g/m^2". Regarding each of the first coating layer and the second coating layer, an application quantity of silicone rubber is specified, and it can be said that specification related to the thickness has been made substantially. Therefore the above-mentioned reasons for rescission has been resolved.

The Opponent alleges, in the written opinion as of Aug. 27, 2018, that it cannot be said that a matter related to the thickness of the first coating layer and the second coating layer is clearly specified, on the ground that, regarding the statement of "an application quantity of the silicone rubber is 100-110 g/m^2" of Claim 1, because it is not clear whether it specifies an application quantity of silicone rubber for each of the first coating layer and the second coating layer, or an application quantity of silicone rubber combining both of the first coating layer and the second coating layer.

However, there is a statement, in Claim 1, of "silicone rubber respectively formed on both surfaces of the base material", and it is understood that "the silicone rubber" indicates silicone rubber formed on each of both surfaces of the base material. Therefore, it is natural to understand that the statement of "an application quantity of the silicone rubber is 100-110 g/m^2" specifies an application quantity of silicone rubber formed on each of both surfaces of the base material. In addition, with reference to the statements of the detailed description of the invention regarding an application quantity of silicone rubber, it is described that "the first coating layer 12 and the second coating

layer 13 are formed by two-time repetition of a step of applying silicone rubber having high heat resistance on a surface of the base material 11 and performing drying. An application quantity of silicone rubber in this step is 100-110 g/m^2." ([0018]). First, regarding the step of applying silicone rubber on a surface of a base material and performing drying, it is described as "two-time repetition", and it is understood that the step is repeated two times for each coating layer of the first coating layer and the second coating layer. Then, "an application quantity of silicone rubber in this step" describes regarding the above-mentioned step repeated two times. Therefore it is understood that it means an application quantity of each coating layer of the first coating layer and the second coating layer. In addition, the description of [Table 1] concerning the examples shows attributes such as a complex Young's modulus for each of the first coating layer (back) and the second coating layer (front). Therefore, there is recognized a significance in specifying attributes of each of the first coating layer and the second coating layer. On the other hand, in the detailed description of the invention, there is no description suggesting that a significance exists in an application quantity of silicone rubber combining both of the first coating layer and the second coating layer. Therefore, the statement that "an application quantity of the silicone rubber is 100-110 g/m^2" of Claim 1 obviously specifies that, for each of the first coating layer and the second coating layer, an application quantity of silicone rubber is 100-110 g/m^2. For this reason, the above-mentioned allegation by the Opponent cannot be adopted.

Accordingly, regarding the patent of the case, it cannot be said that the statements of the scope of claims do not meet the requirement stipulated in Article 36(6)(i) of the Patent Act.

5 Regarding grounds for opposition that was not adopted in the notice of reasons for revocation

(1) Outline of the grounds for opposition

An outline of the grounds for opposition alleged by the Opponent is as follows.

A Reason 1 (Article 36(6)(ii) of the Patent Act)

The inventions according to Claims 1-3 are not clear in the following points, and, therefore, the statements of the scope of claims do not meet the requirement stipulated in Article 36(6)(ii) of the Patent Act.

(a) The statement of Claim 1 is unclear in a point of lacking a statement to the effect that an application quantity of silicone rubber is made to be 100-110 g/m^2.

(b) The statement of Claim 1 is unclear whether the statement of "the first coating layer and the second coating layer" of "a complex Young's modulus calculated based on a result of measurement ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" means a combined state of the first coating layer and the second coating layer, or each of the first coating layer and the second coating layer.

(c) It is unclear that a complex Young's modulus of Claim 1 is a numerical value calculated based on a result of measuring what.

B Reason 2 (Article 36(6)(i) of the Patent Act)

The inventions according to Claims 1-3 are not described in the detailed description of the invention in the following points, and, therefore, the statements of the

scope of claims do not meet the requirement stipulated in Article 36(6)(i) of the Patent Act.

(a) If the statement of "the first coating layer and the second coating layer" of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 indicates a combined state of both of the first coating layer and the second coating layer, the invention according to Claim 1 is not an invention described in the detailed description.

(b) If a complex Young's modulus described in the detailed description of the invention is of an entire protection mat including a base material, the invention according to Claim 1 is not an invention described in the detailed description.

C Reason 3 (Article 36(4)(i) of the Patent Act)

The detailed description of the invention is not description described clearly and sufficiently to the extent to enable to carry out the inventions according to Claims 1-3 for a person skilled in the art in the following points, and, therefore, it does not meet the requirement stipulated in Article 36(4)(i) of the Patent Act.

(a) While it is specified in Claim 1 that "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less", a complex Young's modulus described in the detailed description of the invention can be understood also as one calculated by measuring the whole mat, and, in such a case, the inventions according to Claims 1-3 cannot be carried out.

(b) If the statement of "the first coating layer and the second coating layer" of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 indicates the combined state of both of the first coating layer and the second coating layer, there is no such description in the detailed description of the invention.

D Reason 4 (Article 29(1)(iii) of the Patent Act)

The invention according to Claim 1 is an invention described in any of Evidence A No. 2 to Evidence A No. 4, falls under Article 29(1)(iii) of the Patent Act, and, therefore, should not be granted a patent.

E Reason 5 (Article 29(2) of the Patent Act)

The inventions according to Claims 1-3 could have been invented by a person skilled in the art with ease based on the inventions described in any of Evidence A No. 2 to Evidence A No. 4 and matters described in Evidence A No. 5 to Evidence A No. 14, and should not be granted a patent in accordance with the provisions of Article 29(2) of the Patent Act.

<Evidence A>

Evidence A No. 2: A microfilm of Japanese Utility Model Application No. S58-130783 (Japanese Unexamined Utility Model Application Publication No. 60-38492)

Evidence A No. 3: Japanese Unexamined Patent Application Publication No. 2008-10409

Evidence A No. 4: Japanese Unexamined Patent Application Publication No. 2009-140887
Evidence A No. 5: ISO 14577-1, "Metallic materials - Instrumented indentation test for hardness and materials parameters - Part 1: Test method", 2002
Evidence A No. 6: Partial translation of Evidence A No. 5
Evidence A No. 7: A written opinion dated Apr. 28, 2016 by the patentee in Opposition No. 2015-700294
Evidence A No. 8: "Serial publication: Rubber Science and technology (No. 1), Chapter 1, Rubber Elasticity: Basis Concept and Fundamental Behavior", Journal of Society of Rubber Industry, Japan, 1982, vol. 55, No. 4, pp. 253-263
Evidence A No. 9: Output objects of web pages of The Engineering ToolBox (the pages of "Modulus of Elasticity or Young's Modulus - and Tensile Modulus for common Materials")
Evidence A No. 10: Translation of Evidence A No. 9
Evidence A No. 11: A web page output object of a goo blog (the page of "Engineering ToolBox (SketchUp Plugin Plugin")
Evidence A No. 12: Japanese Unexamined Patent Application Publication No. 2002-75618
Evidence A No. 13: A web page output object of KYOWA INDUSTRIAL CO. LTD. (the page of "Technical Information on Rubber Product, What is Young's modulus?")
Evidence A No. 14: Japanese Unexamined Patent Application Publication No. 2004-207121

(2) Judgment by the body
A Regarding Reason 1 (Article 36(6)(ii) of the Patent Act)

By the correction request of the case, the matter of "comprising a first coating layer and a second coating layer composed of silicone rubber, wherein an application quantity of the silicone rubber is 100-110 g/m^2" was added to Claim 1.

In addition, considering the statements of the detailed description of the invention, [Table 1] indicating measurement results of protection mats for an electromagnetic cooker of examples and comparison examples shows measurement values of complex Young's modulus are described for each of the front (the second coating layer) and the back (the first coating layer) Therefore it is obvious that the gist of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 is to specify a complex Young's modulus for each of the first coating layer and the second coating layer.

For this reason, the statements of Claims 1-3 of the scope of claims have no unclear point, and thus meet the requirement stipulated in Article 36(6)(ii) of the Patent Act.

B Regarding Reason 2 (Article 36(6)(i) of the Patent Act)

As examined in the above-mentioned A, the gist of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 is to specify a complex Young's modulus of each of the first coating layer and the second coating layer, and there is described, also in the detailed description of the

invention, measurement results about a complex Young's modulus of each of the first coating layer and the second coating layer regarding a protection mat for an electromagnetic cooker according to examples and comparison examples. Therefore, it can be said that the inventions according to Claims 1-3 are ones described in the detailed description of the invention.

The allegation by the Opponent are that the statement of "the first coating layer and the second coating layer" of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm2 or less" of Claim 1 indicates combination of both of the first coating layer and the second coating layer, or that a complex Young's modulus described in the detailed description of the invention is of an entire protection mat including a base material. However, these premises cannot be adopted as described above.

Therefore, the inventions according to Claims 1-3 are ones described in the detailed description of the invention, and thus the statements of the scope of claims meet the requirement stipulated in Article 36(6)(i) of the Patent Act.

C Regarding Reason 3 (Article 36(4)(i) of the Patent Act)

As examined in the above A, "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 has a gist to specify a complex Young's modulus of each of the first coating layer and the second coating layer. In addition, in the detailed description of the invention, it is described that, with regard to a protection mat for an electromagnetic cooker of examples, a complex Young's modulus was measured regarding each of the first coating layer and the second coating layer, and all of these were within the above-mentioned range. Therefore, it can be said that the statement of the detailed description of the invention is described clearly and sufficiently to the extent that the inventions according to Claims 1-3 can be carried out by a person skilled in the art.

The allegation of the Opponent assumes a case where a complex Young's modulus described in the detailed description of the invention is interpreted as being one calculated by measuring the entire mat or a case where the statement of "the first coating layer and the second coating layer" of "a complex Young's modulus calculated based on a result of measuring ... with respect to the first coating layer and the second coating layer is 22 N/mm^2 or more and 100 N/mm^2 or less" of Claim 1 indicates combination of both of the first coating layer and the second coating layer. However these premises cannot be adopted as described above.

Therefore, the statement of the detailed description of the invention is a statement described clearly and sufficiently to the extent that the inventions according to Claims 1-3 can be carried out by a person skilled in the art, and meet the requirement stipulated in Article 36(4)(i) of the Patent Act.

D Regarding Reason 4 (Article 29(1)(iii) of the Patent Act), and Reason 5 (Article 29(2) of the Patent Act)

(A) Statement of Evidence A No. 2

In Evidence A No. 2, there are described the following matters along with drawings.

"1. Title of the device

Stabilizing Sheet for Placing Utensils in Electromagnetic Induction Heating Cooking Device" (Specification, page 1, lines 2-4)

"FIG. 4 and FIG. 5 respectively indicate a second and a third example of this device.

A stabilizing sheet for placing utensils (5A) shown in FIG. 4 is one in which silicon rubber sheets (10) are joined on both surfaces of the glass cloth (9). The glass cloth (9) is a sheet made by weaving fiber glass into grating holes, and is provided to increase the strength." (the specification, page 6, lines 2-8)

According to the above-mentioned statements, it is recognized that there is described, in Evidence A No. 2, the following invention (hereinafter, referred to as "Invention A-2").

"A stabilizing sheet for placing utensils in an electromagnetic induction heating cooking device having silicon rubber sheets joined onto both surfaces of glass cloth."

(B) Statement of Evidence A No. 3

In Evidence A No. 3, there are described the following matters together with drawings.

"[Title of the invention] Stain Prevention Mat for Electromagnetic Cooking Device"

"[0041]

With reference to these figures, the stain prevention mat 21 is a mat made by applying water-impermeable silicone coat 24a and 24b (each having thickness of 10 μm) on the whole surfaces of both faces of the woven fabric 23 (the thickness: 0.5 mm) made of glass fiber having permeability of magnetic field lines and cutting the woven fabric 23 into a round shape ..."

According to the above-mentioned statement, it is recognized that there is described, in Evidence A No. 3, the following invention (hereinafter, referred to as "Invention A-3").

"A stain prevention mat for an electromagnetic cooking device, the mat being made by applying silicone coats on the whole surfaces of both faces of a woven fabric made of water-impermeable glass fiber."

(C) Statement of Evidence A No. 4

In Evidence A No. 4, there is described the following matter together with drawings.

"[Title of the invention] Stain Prevention Mat for Electromagnetic Cooking Device"

"[0026]

With reference to these figures, the stain prevention mat 9 is a mat made by applying water-impermeable silicone coats 24a and 24b on the whole surfaces of both faces of the woven fabric 23 made of glass fiber having permeability of magnetic field lines and cutting the woven fabric 23 into a round shape to make a sheet body 11."

According to the above-mentioned statement, it is recognized that there is described, in Evidence A No. 4, the following invention (hereinafter, referred to as "Invention A-4").

"A stain prevention mat for an electromagnetic cooking device, the mat being made by applying silicone coats on the whole surfaces of both faces of a woven fabric made of water-impermeable glass fiber."

(D) Comparison with Invention A-2 / Judgment

When the invention according to Claim 1 (hereinafter, referred to as "Invention 1") and Invention A-2 are compared, the corresponding features and the different feature between the two are as follows.

[Corresponding Features]

A protection mat for an electromagnetic cooker comprising: a sheet-like base material composed of glass fiber fabric; and a first coating layer and a second coating layer composed of silicone rubber respectively formed on both surfaces of the base material

[Different Feature]

A point that, Invention 1 specifies, regarding the first coating layer and the second coating layer made of silicone rubber, the matter that "an application quantity of the silicone rubber is 100-110 g/m^2" and the matter that "a complex Young's modulus calculated based on a result of measurement by Ultramicro Indentation Hardness Tester (ENT-1100a) made by ELIONIX Co., Ltd. is 22 N/mm^2 or more and 100 N/mm^2 or less" , whereas, Invention A-2 does not specify an application quantity and a complex Young's modulus of silicone rubber are specified.

Since there exists the different feature as described above, Invention 1 is not Invention A-2.

The Opponent alleges that: a complex Young's modulus of 22-100 N/mm^2 of Invention 1 is converted into an indentation elastic modulus (Young's modulus) of 16.7-75 N/mm^2; on the other hand, a Young's modulus of common rubber is 10-100 N/mm^2 according to Evidence A No. 9; therefore, a silicon rubber sheet of Invention A-2 also naturally has such Young's modulus of common rubber; and the complex Young's modulus of the two are identical. However, it is not possible to equate silicone rubber with common rubber, and it cannot be said that the Young's modulus of a silicon rubber sheet of Invention A-2 is 16.7-75 N/mm^2, and, as a consequence, the above-mentioned allegation of the Opponent cannot be adopted.

In addition, also in Evidence A No. 5 to Evidence A No. 14, there is no statement or suggestion about the constitution of Invention 1 concerning the aforementioned different feature. Although Evidence A No. 13 illustrates an example of 4-40.3 MPa (4-40.3 N/mm^2) as a "Young's modulus of silicone rubber", there is no motivation to select and use silicone rubber having a complex Young's modulus of 22-100 N/mm^2 out of the silicone rubber illustrated in Evidence A No. 13 as a silicon rubber sheet of Invention A-2. Therefore, it cannot be said that the constitution of Invention 1 concerning the aforementioned different feature could have easily been derived by a person skilled in the art.

Accordingly, it cannot be said that Invention 1 could have been invented by a person skilled in the art with ease based on Invention A-2 and the matters described in Evidence A No. 5 to Evidence A No. 14.

Furthermore, the inventions according to Claims 2 and 3 add further technically restriction on Invention 1, and, in a similar fashion, it cannot be said that these could have been invented by a person skilled in the art with ease based on Invention A-2 and the matters described in Evidence A No. 5 to Evidence A No. 14.

(E) Comparison with Invention A-3 and Invention A-4 / Judgment

When Invention 1 and Invention A-3 or Invention A-4 are compared, the

corresponding features and the different feature between the two are the same as those between the Invention 1 and Invention A-2 examined in the above (D), and, regarding judgment thereof, it is the same.

Therefore, Invention 1 is not Invention A-3, and is not Invention A-4 either.

Furthermore, it cannot be said that the inventions according to Claims 1-3 could have been invented by a person skilled in the art with ease based on Invention A-3 or Invention A-4 and the matters described in Evidence A No. 5 to Evidence A No. 14.

(F) Summary

The invention according to Claim 1 falls under Article 29(1)(iii) of the Patent Act, and it is not an invention that should not be granted a patent.

Also the inventions according to Claims 1-3 are not ones that should not be granted a patent in accordance with the provisions of Article 29(2) of the Patent Act.

6 Closing

As described above, the patent for Claims 1-3 cannot be revoked by the reasons for rescission described in the Notice of Reasons for Revocation and the grounds for opposition described in the opposition to the grant of a patent.

In addition, other reasons for revoking the patent for Claims 1-3 are not discovered.

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

Nov. 26, 2018

Chief administrative judge: TAMURA, Yoshiaki
Administrative judge: KIMOTO, Takashi
Administrative judge: MAKIHARA, Susumu