Trial decision

Invalidation No. 2016-800061

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The case of trial regarding the invalidation of Japanese Patent No. 4839108, entitled "Modification Method for Sliding Door Device and Modified Sliding Door Device" between the parties above has resulted in the following trial decision:

Conclusion

The trial of the case was groundless.

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

Reason

No. 1 Outline of the case

The present case is to request that the patent for the invention according to Claim 1 to Claim 6 of Japanese Patent No. 4839108 (hereinafter referred to as "the Patent") of which patentee is the Demandee, should be invalidated.

No. 2 History of the procedures

The Patent relates to Japanese Patent Application No. 2006-74123 (hereinafter referred to as "the Patent Application"), which is an additional application for a part of Japanese Patent Application No. 2003-62183 (hereinafter referred to as "the Original Application") in accordance with the provisions of Article 44(1) of the Patent Act, which was filed while claiming priority on the basis of Japanese Patent Application No. 2002-64460 under the provisions of Article 41 of the Patent Act, and the outline of history of the procedures is as follows.

March 8, 2002	Basic application of Priority (Japanese Patent Application No. 2002-64460)
March 7, 2003	Original application (Japanese Patent Application No. 2003-62183)
March 17, 2006	Application for the Patent (Japanese Patent Application No. 2006-74123)
October 7, 2011	Registration of establishment
May 27, 2016	Request for trial of the case
August 5, 2016	Written reply of trial case
October 11, 2016	Notification of matters to be examined
November 9, 2016	Oral proceedings statement brief, description of evidence (Demandant)
November 25, 2016	Oral proceedings statement brief (Demandee)
December 7, 2016	Written statement, description of evidence (2) (Demandant)
December 8, 2016	Description of evidence (Demandee)
December 8, 2016	Oral proceeding
December 22, 2016	Written statement (Demandee)
January 12, 2017	Written statement, description of evidence (3)

(Demandant)

No. 3 The Patent Invention

The inventions relating to Claims 1 to 6 of the Patent (hereinafter, referred to as "Patent Invention 1" to "Patent Invention 6") are specified by the matters described in Claims 1 to 6 of the Scope of Claims, as follows.

"[Claim 1]

A modification method for a sliding door device, comprising:

leaving an existing sliding door frame which has an existing upper frame made of extruded aluminum alloy profiles attached to an opening portion of a building, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles;

cutting and removing the outdoor side guide rail of the existing lower frame from the vicinity of a root, and providing a mounting auxiliary member on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

then, inserting a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, in the existing sliding door frame from the outdoor side, supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member.

[Claim 2]

A modification method for a sliding door device, comprising:

leaving an existing sliding door frame which has an existing upper frame made of extruded aluminum alloy profiles attached to an opening portion of a building, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles;

cutting and removing the outdoor side guide rail of the existing lower frame from the vicinity of a root, and providing a mounting auxiliary member on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

then, inserting a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, is installed with an outdoor side upper frame sealing material on an outdoor side portion of the upper frame for modification, and is installed with an outdoor side vertical frame sealing material on an outdoor side portion of the vertical frame for modification of the sliding door frame for modification, in the existing sliding door frame from the outdoor side, making the outdoor side upper frame sealing material contact with an upper edge portion of the opening portion of the building and making the outdoor side vertical frame sealing material contact with a vertical edge portion of the opening portion of the building, supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member.

[Claim 3]

A modification method for a sliding door device, comprising:

leaving an existing sliding door frame which has an existing upper frame made of extruded aluminum alloy profiles attached to an opening portion of a building, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side

guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles;

cutting and removing the outdoor side guide rail of the existing lower frame from the vicinity of a root, cutting and removing the indoor side guide rail, and providing a mounting auxiliary member on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

then, inserting a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, in the existing sliding door frame from the outdoor side, supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member.

[Claim 4]

A modified sliding door device,

wherein an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of extruded aluminum alloy profiles, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, an existing vertical frame made of extruded aluminum alloy profiles, the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, and a mounting auxiliary member is provided on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

wherein a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification

made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing sliding door frame;

wherein an outdoor side portion of the lower frame for modification of the sliding door frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

wherein a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws.

[Claim 5]

A modified sliding door device,

wherein an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of extruded aluminum alloy profiles, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, an existing vertical frame made of extruded aluminum alloy profiles, and the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, and a mounting auxiliary member is provided on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

wherein a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing sliding door frame;

wherein an outdoor side portion of the lower frame for modification of the sliding door frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the

same height;

wherein an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification and the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building,

wherein an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification, and the outdoor side vertical frame sealing material is contacted with a vertical edge portion of the opening portion of the building; and

wherein a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws.

[Claim 6]

A modified sliding door device,

wherein an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of extruded aluminum alloy profiles, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles, the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, the indoor side guide rail is cut and removed, and a mounting auxiliary member is provided on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame;

wherein a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing sliding door frame;

wherein an outdoor side portion of the lower frame for modification of the sliding door frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

wherein a front wall of the lower frame for modification is fixed to a front wall of

the existing lower frame with screws."

No. 4 The Demandant's allegation and means of proof

1. Outline of the Demandant's allegation

The Demandant demands the trial decision, "The patent for the inventions according to Claim 1 to Claim 6 shall be invalidated. The costs in connection with the trial shall be borne by the Demandee," summarized grounds for the demand as follows (see, a written demand for trial, an oral proceedings statement brief dated November 9, 2016, a written statement dated December 7, 2016, a written statement dated January 12, 2017, and 1st oral proceeding record) and submitted Evidence A No. 1 to Evidence A No. 45-7 as means of evidence.

(1) Reason for invalidation 1 (violation of requirements for clarity)

Since Patent Invention 1 to Patent Invention 6 are not clear, the patent was granted against a patent application which does not satisfy the requirement stipulated in Article 36(6)(ii) of the Patent Act, falls under Article 123(1)(iv) of the Patent Act, and should be invalidated.

(2) Reason for invalidation 2 (violation of requirements for support)

Since Patent Invention 1 to Patent Invention 6 are not described in the Detailed Description of the Invention of the specification, the patent was granted against a patent application which does not satisfy the requirement stipulated in Article 36(6)(i) of the Patent Act, falls under Article 123(1)(iv) of the Patent Act, and should be invalidated.

(3) Reason for invalidation 3 (violation of enablement requirement)

Since in the Detailed Description of the Invention of the specification, Patent Invention 1 to Patent Invention 6 are described clearly and sufficiently to the extent that a person ordinarily skilled in the art can implement the inventions, the patent was granted against a patent application which does not satisfy the requirement stipulated in Article 36(4)(i) of the Patent Act, falls under Article 123(1)(iv) of the Patent Act, and should be invalidated.

(4) Reason for invalidation 4 (lack of inventive step)

Since Patent Invention 1 to Patent Invention 6 could have been easily made by a person ordinarily skilled in the art, on the basis of inventions publicly known or inventions publicly implemented before the original filing date of the Patent Invention (Evidence A

No. 5-1 to 5-5), the patent violates the provisions of Article 29(2) of the Patent Act, falls under Article 123(1)(ii) of the Patent Act, and should be invalidated.

(5) Reason for invalidation 5 (lack of inventive step)

Since Patent Invention 1 to Patent Invention 6 could have been easily made by a person ordinarily skilled in the art, on the basis of the invention described in Evidence A No. 6, the invention described in Evidence A No. 23, the well-known arts and the like, the patent violates the provisions of Article 29(2) of the Patent Act, falls under Article 123(1)(ii) of the Patent Act, and should be invalidated.

2 Means of proof

The submitted evidences are as follows.

Evidence A No. 1: Japanese Patent No. 4839108 (Patent publication of the case)

Evidence A No. 2: Notification of reasons for refusal dated June 21, 2011 in a procedure of appeal against the examiner's decision of refusal of the Patent Invention

Evidence A No. 3: Notification of reasons for refusal dated July 8, 2011 in a procedure of appeal against the examiner's decision of refusal of the Patent Invention

Evidence A No. 4: "Kojien 6th edition, Iwanami Shoten, section of 'Almost'"

Evidence A No. 5-1: Design Drawings, etc. of Construction Name "Hiroden Koi Dormitory Bathroom Modification Construction"

Evidence A No. 5-2: Vertical sectional view of modified sash described on page 4/4 of Evidence A No. 5-1

Evidence A No. 5-3: Cross sectional view of modified sash described on page 4/4 of Evidence A No. 5-1

Evidence A No. 5-4: Certificate dated July 24, 2015 by Masaki UBUKI, the president of SHINWA Co., Ltd.

Evidence A No. 5-5: Certificate dated February 1, 2016 by Masaki UBUKI, the president of SHINWA Co., Ltd.

Evidence A No. 6: Japanese Utility Model Publication No. S58-45431

Evidence A No. 7: Microfilm of Japanese Utility Model Application No. S62-39866 (Japanese Unexamined Utility Model Application Publication No. S63-146085)

Evidence A No. 8: Microfilm of Japanese Utility Model Application No. S57-63927 (Japanese Unexamined Utility Model Application Publication No. S58-167191)

Evidence A No. 9: Japanese Patent No. 3223993

Evidence A No. 10: Japanese Unexamined Patent Application Publication No. S61-229086

Evidence A No. 11: Japanese Unexamined Patent Application Publication No. H07-286439

Evidence A No. 12: Japanese Unexamined Patent Application Publication No. H09-287355

Evidence A No. 13: Japanese Unexamined Patent Application Publication No. H08-114057

Evidence A No. 14: Japanese Unexamined Patent Application Publication No. H07-173945

Evidence A No. 15: Japanese Unexamined Patent Application Publication No. H10-30377

Evidence A No. 16: Japanese Patent Publication No. S62-45948

Evidence A No. 17: Japanese Unexamined Patent Application Publication No. 2002-285757

Evidence A No. 18: Japanese Unexamined Patent Application Publication No. H08-209262

Evidence A No. 19: Japanese Unexamined Patent Application Publication No. H10-88906

Evidence A No. 20: "Al" Vol. 76, KEIKINZOKU TSUSHIN AL CO.,LTD., issued on May 19, 1972, the front cover, page 14, page 15, and the back cover

Evidence A No. 21: Japanese Unexamined Patent Application Publication No. H09-177437

Evidence A No. 22: Japanese Unexamined Patent Application Publication No. H08-93325

Evidence A No. 23: Japanese Unexamined Pant Application Publication No. 2001-227244

Evidence A No. 24: Notice of Reason for Refusal dated July 10, 2009 in the examination procedure of the Patent Invention

Evidence A No. 25: Written Amendment dated September 14, 2009 in the examination procedure of the Patent Invention

Evidence A No. 26: Trial decision dated September 2, 2011 of appeal against the examiner's decision of refusal relating to the Patent Invention

Evidence A No. 27: "Fitting replacing construction by a covering construction method, standard specification and guideline for construction (2002)," Kenchiku Kaisou Kyoukai Corporation, 2002, the cover, the table of contents, page 8, page 9, page 12, page 13, and the back cover

Evidence A No. 28-1: Delivery Note of Construction Name "Sash Modification

Construction of Hiroden Koi Dormitory Bathroom Door"

Evidence A No. 28-2: Certificate dated January 7, 2016 by Masaki UBUKI, the president of SHINWA Co., Ltd.

Evidence A No. 29: Photographing report dated October 31, 2016 by Yuichi OGURI, the manager of Legal and Intellectual Property Department of Sankyo Tateyama, Inc.

Evidence A No. 30: Certificate dated November 7, 2016 by Masaki UBUKI, the president of SHINWA Co., Ltd. and one another

Evidence A No. 31: Plaintiff's third brief of Judgment of Tokyo District Court 2012 (Wa) 7643

Evidence A No. 32: Japanese Unexamined Patent Application Publication No. S50-47434

Evidence A No. 33-1: Application form for changing excellent housing parts submitted on April 15, 2002 from Sankyo Aluminum Industry Co., Ltd. to Better Living (general foundational juridical person)

Evidence A No. 33-2: Change evaluation report dated August 2, 2002 by Better Living (general foundational juridical person)

Evidence A No. 33-3: Document titled "Regarding partial changes in specifications and the like of excellent housing parts" from Better Living (general foundational juridical person) to Sankyo Aluminum Industry Co., Ltd.

Evidence A No. 34: Drawing attached to Application for BL parts certification submitted by YKK AP Inc.

Evidence A No. 35: Drawing attached to Application for BL parts certification submitted by Nihonkentetsu Co., Ltd.

Evidence A No. 36: Drawing attached to Application for BL parts certification submitted by Shin Nikkei Company, Ltd.

Evidence A No. 37: "History of architectural renovation II 30th Anniversary Magazine of the Association," Kenchiku Kaisou Kyoukai Corporation, September, 2019, the front cover, the table of contents, pages 25 to 27, 90 to 95, and 103

Evidence A No. 38: "Light Metal Digest," No. 1621 (issued on February 3, 2003), URL: http://www.kallos.co.jp/member/today1621.html

Evidence A No. 39: Catalog of Shin Nikkei Company, Ltd. "Building material renovation series," 2nd edition, October, 2003, the front cover, page 23, and the back cover

Evidence A No. 40: Written opinion dated September 14, 2009 in the examination procedure of the Patent Invention

Evidence A No. 41: Intellectual Property High Court Decision 2009 (Ne) No. 10040

Evidence A No. 42: Examiner's decision of refusal dated January 14, 2010 in the examination procedure of the Patent Invention

Evidence A No. 43: Notice of reasons for refusal dated March 1, 2011 in the appeal against the examiner's decision of refusal of the Patent Invention

Evidence A No. 44-1: Written request for inquiry dated December 16, 2016 by the Demandant's representative Yui OMOTEYAMA

Evidence A No. 44-2: Reasons for inquiry (replacement version)

Evidence A No. 44-3: Written reply dated January 6, 2017 by LIXIL Corporation, Japan Legal Headquarters, Commercial Legal Office

Evidence A No. 45-1: Minutes of 1st Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-2: Minutes of 3rd Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-3: Minutes of 4th Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-4: Minutes of 5th Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-5: Minutes of 6th Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-6: Minutes of 7th Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

Evidence A No. 45-7: Minutes of 11th Meeting of Fitting Hardware Department of Technical Construction Committee in 2001

3 The Demandant's specific allegation

(1) Reason for invalidation 1 (Violation of requirements for clarity)

A According to Kojien 6th edition, edited by Izuru SHINMURA, Iwanami Shoten, 2008), "almost" of "almost the same height" merely means "mostly or approximately" (Evidence A No. 4), only with the matters specifying the inventions recited in the Scope of Claims of the patents of the case, it is not clear what is the specific range of the difference in height between the upper end of the back wall and the upper end of the lower frame for modification for corresponding to "almost the same height". Then, there is no common general technical knowledge about what is the specific range of the difference in height between the upper end of the back wall and the upper end of

the lower frame for modification for corresponding to "almost the same height".

(Written demand for trial, page 12, line 3 from the bottom to page 13, line 4)

B As examples of the inventions of the case, various things are listed from those with the same difference between the upper end of the back wall and the upper end of the lower frame for modification (FIG. 1) to those with a considerable difference (FIG. 10 and FIG. 11). Moreover, in FIG. 10 and the like, the upper end of the lower frame for modification is positioned further above the support wall 89 described as "projecting slightly upward" from the back wall in Paragraph [0092] of the specification.

According to such a description of the column of "Detailed Description of the Invention" of the specification, even considering the description, it is not clear at all what is the specific range of the difference in height between the upper end of the back wall and the upper end of the lower frame for modification for corresponding to "almost the same height".

(Written request for trial, page 17, lines 1 to 9)

C There is no common general technical knowledge that can keep the relationship between the configuration of "an upper end of the back wall and an upper end of the lower frame for modification are at almost the same height" and the effect of "a wide opening area is ensured without decreasing the effective opening area" in existing fittings of various dimensions, so that eventually, it is not clear how much the difference in height between the upper end of the back wall and the upper end of the lower frame for modification should be so as to correspond to "almost the same height" that exerts the effect of "without decreasing the opening area".

(Oral proceedings statement brief, page 14, lines 20 to the last line)

(2) Reasons for invalidation 2 (violation of requirements for support)

In the Detailed Description of the Invention of the specification, the embodiment equipped with all constitutions of Invention 4 is not described, and further, associations of the constitutions in Invention 4 are not described. That is, the Detailed Description of the Invention of the specification merely discloses each constitution, and does not disclose that any action and effect is organically produced by providing all configurations together.

Therefore, the Detailed Description of the Invention of the specification does not disclose the technical concept that by providing all constitutions of Invention 4, those are organically connected and exert some actions and effects comprehensively, and

eventually, does not disclose Invention 4. Then, the point mentioned about Invention 4 applies to Inventions 1 to 3 and Inventions 5 and 6, and thus Invention 4, Inventions 1 to 3, and Inventions 5 and 6 are not described in the Detailed Description of the Invention of the specification.

(Oral proceedings statement brief, page 8, lines 10 to 20)

(3) Reason for invalidation 3 (violation of enablement requirement)

As alleged in Reason for invalidation 1, in the first place, for the invention, it cannot be clearly grasped from the description of the specification, even if a person skilled in the art tries to carry out the inventions of the case, so that he/she cannot understand how to carry out the inventions. That is, the Detailed Description of the Invention is not clear and sufficient to enable a person skill in the art to carry out the inventions of the case.

(Written request for trial, page 19, line 3 from the bottom to page 20, line 2)

(4) Reason for invalidation 4 (lack of inventive step)

A Regarding Primary Cited Documents 1 and 2

A modified sliding door device installed by a bathroom door modification construction carried out in the bathroom of the Koi Dormitory on November 24, 2000 and a modification method of the sliding door device (hereinafter, the modified sliding door device is referred to as "Primary Cited Document 1" and a modification method of the sliding door device is referred to as "Primary Cited Document 2") include the following constitutions.

[Primary Cited Document 1]

A modified sliding door device,

wherein an existing sash of aluminum alloys remaining at an opening portion between a bathroom and a dressing room in a building has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys and provided with a dressing room side guide rail and a bathroom side guide rail, and an existing vertical frame made of aluminum alloys;

wherein an inverted L-shaped member s is provided on the dressing room side portion of the existing lower frame, the inverted L-shaped member s being fixedly mounted with screws to a bathroom side surface of a wall portion m5 ranging to an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame, and a sash for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification made of extruded

aluminum alloy profiles, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing sash;

wherein the bathroom side portion of the lower frame for modification of the sash for modification is supported on the bathroom side portion of the existing lower frame via a member t with an inverted L-shaped cross section;

wherein the dressing room side portion of the lower frame for modification abuts on an upper surface of a lateral piece part m6 of the existing lower frame, and is fixed to an upper wall s1 of the inverted L-shaped member s with screws; and

wherein an upper end of the wall portion m5 and an upper end of the lower frame for modification are at almost the same height.

[Primary Cited Document 2] (the one specifying Primary Cited Document 1 as an invention of a method)

A modification method of a sliding door device comprising:

leaving an existing sliding door frame which has an existing upper frame made of aluminum alloys remaining at an opening portion between a bathroom and a dressing room in a building, an existing lower frame made of aluminum alloys and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of aluminum alloys;

providing an inverted L-shaped member s on the dressing room side portion of the existing lower frame, the inverted L-shaped member being fixedly mounted with screws to a bathroom side surface of a wall portion m5 ranging to an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame,

after that, inserting a sash for modification which has an upper frame for modification made of aluminum alloys, a vertical frame for modification made of aluminum alloys, and a lower frame for modification made of aluminum alloys in the existing sash from the bathroom side; and

supporting the bathroom side portion of the lower frame for modification on the bathroom side of the existing lower frame via a member t with an inverted L-shaped cross section, making the dressing room side portion of the lower frame for modification abut on an upper surface of a lateral piece part m6 of the existing lower frame, and fixed that to an upper wall s1 of the inverted L-shaped member s with screws,

wherein an upper end of the wall portion m5 and an upper end of the lower frame for modification are at almost the same height,

wherein the sash for modification is mounted with reference to the inverted L-shaped members.

(Written request for trial, page 22, line 3 from the bottom to page 24, line 12)

B Regarding publicly known and public use

As described in Evidence A No. 5-4, the modified sliding door device installed by the bathroom door modification construction of the bathroom in the Koi Dormitory, on the basis of the designs drawings etc. of Evidence A No. 5-1, was constructed as the design drawings by Shinwa-Kenso Co., Ltd. that was an agent of Sankyo Aluminum Industry Co., Ltd. at that time, and was completed on November 24, 2000, before the original filing date of the patents of the case. Although a modified sliding door device (Primary Cited Document 1) installed by the modification construction of the bathroom in the Koi Dormitory and a modification method of the sliding door device (Primary Cited Document 2) are described in the design drawings etc., the company has never treated the contents of the design drawings, etc. in secret, and the company employee who was in charge of designing the construction drawings, etc. was not obliged to maintain confidentiality. In addition to these, the Koi Dormitory was used as a company single dormitory, and considering that it was used by a large number of single employees, it is obvious that Primary Cited Documents 1 and 2 fall under an invention publicly known in Japan before the original filing date of the patents of the case (Article 29(1)(i) of the Patent Act) or an invention publicly worked in Japan before the original filing date of the patents of the case (Article 29(1)(ii) of the Patent Act).

(Written request for trial, page 24, line 13 to page 25, line 1)

C Regarding Invention 4

(A) The different features of Invention 4 and Primary Cited Document 1

a (Different Feature 1-1)

In Invention 4, the opening portion of the building where the existing sliding door frame remains is an opening portion communicating the inside and outside of the room, and one side thereof is an indoor side, and the other side is an outdoor side, whereas, in Primary Cited Document 1, the opening portion of the building where the existing sliding door frame remains is an opening portion communicating the bathroom and the dressing room in the building, and one side thereof is the dressing room side and the other side is the dressing room side.

(Different Feature 1-2)

In Invention 4, the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, whereas, in Primary Cited Document 1, the bathroom side guide rail that is a rail disposed outside the existing lower frame is not cut and remains.

(Different Feature 1-3)

In Invention 4, a lower frame for modification is inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, whereas, in Primary Cited Document 1, it is a lower frame for modification provided with a flat bottom wall.

(Different Feature 1-4)

In Invention 4, an outdoor side portion of the lower frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, whereas, in Primary Cited Document 1, the bathroom side portion of the lower frame for modification is supported on the bathroom side portion of the existing lower frame via a member t with an inverted L-shaped cross section.

(Different Feature 1-5)

In Invention 4, a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws, whereas, in Primary Cited Document 1, a front wall of the lower frame for modification is not fixed to a front wall of the existing lower frame.

(Different Feature 1-6)

In Invention 4, the existing sliding door frame is made of extruded aluminum alloy profiles, whereas in Primary Cited Document 1, the existing sliding door frame is made of extruded aluminum alloy, but it is unclear whether or not it is extruded aluminum alloy profiles.

(Written request for trial, page 33, line 15 to page 34, line 19)

b A "mounting auxiliary member" of Invention 4 is merely a member that assists when mounting the lower frame for modification, and there is no difference between the "mounting auxiliary member" of Invention 4 and the inverted L-shaped member s of Primary Cited Document 1 that has the constitution of "the inverted L-shaped member s being fixedly mounted with screws to a bathroom side surface of a wall portion m5 ranging to an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame " and the constitution of "the dressing room side portion of the lower frame for modification...is fixed to an upper wall s1 of the inverted L-shaped member s with screws".

(Oral proceedings statement brief, page 26, lines 5 to 13)

(B) Examination on Different Feature 1-3

Sub Cited Document 1 (Evidence A No. 6) discloses that a new window frame 5 that is a lower frame for modification has a staircase shape and forms a downward slope toward the outside. Primary Cited Document 1 is a technique relating to the modification of a bathroom door, and although it is natural for a person ordinarily skilled in the art that there is a request for forming in a downward slope toward a bathroom side when modifying a bathroom door from the viewpoint of drainage and stumbling prevention, since Sub Cited Document 1 is a technique relating to sash modification that modifies the lower frame for modification so as to have a staircase shape form a downward slope toward the outside, there is a motivation to apply Sub Cited Document 1 to Primary Cited Document 1.

Further, a microfilm photographing the contents of the specification and drawings attached to the application of Japanese Utility Model Application No. S62-39866 (Japanese Unexamined Utility Model Application Publication No. S63-146085) and a microfilm of Japanese Utility Model Application No. S57-63927 (Japanese Unexamined Utility Model Application Publication No. S58-167191) also disclose a lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and as a lower frame, a sash that has a downward slope toward the outside is the most common and well-known sash, and it is quite common to use such a commonly known sash as a sash for modification in the modification technique of a fitting.

(Written request for trial, page 35, line 10 to page 36, line 1)

(C) Examination on Different Feature 1-4

a Although it could have been easily achieved by a person ordinarily skilled in the art to use a lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, which is disclosed in Sub Cited Document 1 (Evidence A No. 6), instead of the lower frame for modification provided with a flat bottom wall adopted in Primary Cited Document 1, along with this, it should be naturally considered by a person ordinarily skilled in the art that the outdoor side of the lower frame for modification is supported by the existing lower frame in some way, so as to support the lower frame for modification of Sub Cited Document 1 on the outdoor side of the existing lower frame.

(Written request for trial, page 36, lines 11 to 17)

b In the technical field of Invention 4, considering that supporting members via a spacer so as to absorb an assembly error and the like of the members and fill a gap between the members to join the members without rattling, as also described in Japanese Patent No. 3223993 (Evidence A No. 9), Japanese Unexamined Patent Application Publication No. S61-229086 (Evidence A No. 10), and Japanese Unexamined Patent Application Publication No. H07-286439 (Evidence A No. 11), is well known in the technical field of sashes, it can be appropriately achieved by a person ordinarily skilled in the art to adopt the configuration in which an outdoor side portion of the lower frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, by applying the lower frame for modification of Sub Cited Document 1 to Primary Cited Document 1.

(Written request for trial, page 36, the last line to page 37, line 9)

(D) Examination on Different Feature 1-1

The difference in the location of the opening portion does not necessarily cause difference in the configuration of the sliding door frame for modification itself, and there is no reason why the modification technique of the existing sliding door frame placed in the opening portion on the wall surface that partitions the rooms in the building cannot be used for modifying the existing sliding door frame placed in the opening that communicates the inside and outside of the building. In fact, in Paragraph [0014] of Japanese Unexamined Patent Application Publication No. H09-287355 (Evidence A No. 12) of the invention coupling a rail member to a lower frame of a sliding door, Paragraph [0018] of Japanese Unexamined Patent Application Publication No. H08-114057 (Evidence A No. 13) of the invention relating to a sliding door, Paragraph [0041] of Japanese Unexamined Patent Application Publication No. H07-173945 (Evidence A No. 14) of the invention relating to a lower frame structure of a sliding door aiming to facilitate the assembling work of a sliding door and the like, there are descriptions suggesting that the invention can be used not only for a sliding door in a bathroom but also for a sliding door facing outdoors.

Therefore, it is not special for a person ordinarily skilled in the art to consider applying Primary Cited Document 1 to the modification of the existing sliding door frame placed in the opening that communicates the inside and outside.

(Written request for trial, page 37, line 3 from the bottom to page 38, line 10)

(E) Examination on Different Feature 1-2

As it is disclosed that the rail of the existing lower frame is removed when

modifying the sliding door frame also in the specification, pages 14 to 15 of a microfilm of Japanese Utility Model Application No. S62-39866 (Japanese Unexamined Utility Model Application Publication No. S63-146085) (Evidence A No. 7), Paragraph [0019] of Japanese Unexamined Patent Application Publication No. H10-30377 (Evidence A No. 15), column 7, lines 8 to 22 of Japanese Patent Publication No. S62-45948 (Evidence A No. 16), and Japanese Unexamined Patent Application Publication No. 2002-285757 (Evidence A No. 17), it is a well-known technique to remove the rail of the existing lower frame in the technical field of sash modification, and by applying a lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion as disclosed in Sub Cited Document 1 (Evidence A No. 6) to Primary Cited Document 1, if the outdoor side guide rail of the existing lower frame gets in the way, it is merely natural for a person ordinarily skilled in the art to use the above-mentioned well-known technique to remove it.

(Written request for trial, page 38, the last line to page 39, line 10)

(F) Examination on Different Feature 1-5

Sub Cited Document 1 (Evidence A No. 6) discloses that the outside flange 5a (front wall of the lower frame for modification) of the new window frame 5 is fixed to a suspension flange 1b (front wall of the existing lower frame) of the old lower frame with screws. Then, as disclosed also in a microfilm of Japanese Utility Model Application No. S57-63927 (Japanese Unexamined Utility Model Application Publication No. S58-167191) (Evidence A No. 8), it is a well-known technique in the technical field of sash modification.

(Written request for trial, page 39, line 4 from the bottom to page 40, line 2)

(G) Examination on Different Feature 1-6

As described in Japanese Unexamined Patent Application Publication No. H08-209262 (Evidence A No. 18) and Japanese Unexamined Patent Application Publication No. H10-88906 (Evidence A No. 19), it is a well-known technique for a person ordinarily skilled in the art to use extruded aluminum alloy profiles for sashes, and as described in Evidence A No. 20, it is a well-known technique for a person ordinarily skilled in the art to use extruded aluminum profiles in the sash of the bathroom. Then, those are merely optionally selected matters.

(Written request for trial, page 10, lines 10 to 14)

D Regarding Invention 5

(A) The different feature between Invention 5 and Primary Cited Document 1

In comparison of Invention 5 and Primary Cited Document 1, the two are in correspondence in the same point as the corresponding feature of Invention 4 and Primary Cited Document 1, are different in the same points as the different features of Invention 4 and Primary Cited Document 1, and further are different in the following point.

(Different Feature 1-7)

In Invention 5, an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification of the sliding door frame for modification, and an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification of the sliding door frame for modification, and when inserted in the existing sliding door frame from the outdoor side, the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building, and the outdoor side vertical frame sealing material is contacted with a vertical edge portion of the opening portion of the building, whereas Primacy Cited Document 1 does not have such a sealing material.

(Written request for trial, page 41, lines 10 to 19)

(B) Examination on Different Feature 1-7

It is a well-known technique that "an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification of the sliding door frame for modification, and an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification of the sliding door frame for modification, and when inserted in the existing sliding door frame from the outdoor side, the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building," as disclosed in Japanese Unexamined Patent Application Publication No. H09-177437 (Evidence A No. 21) or Japanese Unexamined Patent Application Publication No. H08-93325 (Evidence A No. 22).

(Written request for trial, page 42, lines 2 to 7)

E Regarding Invention 6

(A) The different feature between Invention 6 and Primary Cited Document 1

In comparison of Invention 6 and Primary Cited Document 1, the two are in correspondence in the same point as the corresponding feature of Invention 4 and Primary Cited Document 1, are different in the same points as the different features of Invention 4 and Primary Cited Document 1, and further are different in the following point.

(Different Feature 1-8)

In Invention 6, the indoor side guide rail of the existing lower frame is cut and removed, whereas it is not so in Primary Cited Document 1.

(Written request for trial, page 42, lines 15 to the last line)

(B) Examination on Different Feature 1-8

It is a well-known technique to remove the rail of the existing lower frame in the technical field of sash modification, and by applying a lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion as disclosed in Sub Cited Document 1 (Evidence A No. 6) to Primary Cited Document 1, if the indoor side guide rail gets in the way together with the outdoor side guide rail of the existing lower frame, it is merely natural for a person ordinarily skilled in the art to use the above-mentioned well-known technique to remove it.

(Written request for trial, page 43, lines 6 to 12)

F Regarding Inventions 1 to 3

Inventions 1 to 3 are respectively specified as modification method of a sliding door device for respective modified sliding door devices of Inventions 4 to 6, and are not substantially different from Inventions 4 to 6.

Then, the corresponding feature and different features of Inventions 1 to 3 and Primary Cited Document 2 specifying Primary Cited Document 1 as an invention of a method are substantially the same as the corresponding feature and different features of Inventions 4 to 6 and Primary Cited Document 1, and what is mentioned about each different feature does not change with different categories.

(Written request for trial, page 43, line 3 from the bottom to page 44, line 4)

(5) Reasons for invalidation 5 (Lack of inventive step)

A Regarding Primary Cited Documents 3 and 4

A sash and a modification method of the sash described in Evidence A No. 6 (hereinafter, the sash is referred to as "Primary Cited Document 3" and the modification method of the sash is referred to as "Primary Cited Document 4") include the following constitutions.

[Primary Cited Document 3]

A modified sash,

wherein a new window frame which has a lower frame made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and is assembled in a rectangular shape, is inserted in an existing old window frame made of steel;

wherein the outdoor side of the lower frame of the new window frame is supported while being contacted with the outdoor side of the lower frame of the old window frame via an electrolytic corrosion preventive tape 12, and the indoor side of the lower frame of the new window frame is supported with an anchor 6, the anchor 6 being screwed to the lower frame of the old window frame; and

wherein an outside flange 5a of the lower frame of the new window frame is fixed to a suspension flange 1b of the lower frame of the old lower frame with screws.

[Primary Cited Document 4] (the one specifying Primary Cited Document 3 as an invention of a method)

A modification method of a sash comprising:

leaving an old window frame made of steel which is mounted to an opening portion of a building;

after that, inserting in the old window frame a new window frame which has a lower frame for modification made of extruded aluminum alloy profiles and inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and is assembled in a rectangular shape,;

supporting an outdoor side portion of the lower frame for modification while making it contact with the outdoor side of the lower frame of the old window frame, and supporting the indoor side of the lower frame of the new window frame with an anchor 6, the anchor 6 being screwed to the lower frame of the old window frame;

fixing an outside flange 5a of the lower frame of the new window frame to a suspension flange 1b of the lower frame of the old window frame with screws; and

mounting the new window frame with reference to the anchor 6.

(Written request for trial, page 46, line 11 to page 47, line 12)

B Regarding Invention 4

(A) The different features of Invention 4 and Primary Cited Document 3

(Different Feature 2-1)

In Invention 4, an existing window frame is a sliding door frame made of extruded aluminum ally profiles, whereas, in Primary Cited Document 3, an existing window is

made of steel and it is unclear whether or not it is a sliding door frame.

(Different Feature 2-2)

In Invention 4, an existing lower is provided with an outdoor side guide rail and an indoor side guide rail, and the outdoor side guide rail is cut and removed from the vicinity of a root, whereas, in Primary Cited Document 3, it is unclear whether or not an existing lower frame is provided with an outdoor side guide rail and an indoor side guide rail or whether or not the outdoor side guide rail is cut and removed from the vicinity of a root.

(Different Feature 2-3)

In Invention 4, a mounting auxiliary member is mounted with screws to a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, whereas, in Primary Cited Document 3, a mounting auxiliary member is fixed to the indoor side of the lower frame for modification, the mounting auxiliary member being screwed to the existing lower frame.

(Different Feature 2-4)

In Invention 4, an outdoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame via a spacer, whereas, in Primary Cited Document 3, it is supported while being contacted with the outdoor side of the lower frame via an electrolytic corrosion preventive tape.

(Different Feature 2-5)

In Invention 4, the upper end of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame and an upper end of the lower frame for modification are almost the same height, whereas, in Primary Cited Document 3, an upper end of the lower frame for modification is positioned above an upper end of the back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame.

(Written request for trial, page 49, line 2 from the bottom to page 51, line 1)

(B) Examination on Different Feature 2-3

a It is a well-known technique for a person ordinarily skilled in the art to support a lower frame for modification with an existing lower frame via a mounting auxiliary member, as described, for example, in a microfilm of Japanese Utility Model Application No. S57-63927 (Japanese Unexamined Utility Model Application Publication No. S58-167191) (Evidence A No. 8), Japanese Patent No. 3223993 (Evidence A No. 9), and Japanese Unexamined Patent Application Publication No. 2002-285757 (Evidence A No.

17), and for the configuration of the mounting auxiliary member, various shapes and structures were known before the original filing date of the patents of the case, according to the existing lower frame and the lower frame for modification. As one of them, a mounting auxiliary member is disclosed in Sub Cited Document 2 (Evidence A No. 23), which is mounted with screws to a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame and supports an indoor side portion of the lower frame for modification.

(Written request for trial, page 51, line 19 to page 52, line 3)

b In Primary Cited Document 3, there is no inevitable circumstance that the constitution of the mounting auxiliary member that supports the indoor side of the lower frame for modification must be an anchor. Further, since it is a well-known technique in a technical field of sash modification that a part of an existing lower frame getting in the way of mounting a sliding door frame for modification during modification is cut and removed, as disclosed also in a microfilm of Japanese Utility Model Application No. S62-39866 (Japanese Unexamined Utility Model Application Publication No. S63-146085) (Evidence A No. 7), Paragraph [0019] of Japanese Unexamined Patent Application Publication No. H10-30377 (Evidence A No. 15), Japanese Patent Publication No. S62-45948 (Evidence A No. 16), and Japanese Unexamined Patent Application Publication No. 2002-285757 (Evidence A No. 17), it is not difficult for a person ordinarily skilled in the art to, if there is a part getting in the way (an upper surface 1a of the existing lower frame) on the existing lower frame of Primary Cited Document 3, cut and remove it, when applying the mounting auxiliary member of Sub Cited Document 2 to Primary Cited Document 3, as an example in which the similar member is cut and removed is disclosed also in FIG. 12 of Evidence A No. 16.

(Written request for trial, page 52, lines 7 to 18)

(C) Examination on Different Feature 2-5

Sub Cited Document 2 discloses that an upper end of the back wall ranging to an end portion on the furthest indoor side of the existing lower frame and an upper end of the lower frame for modification are almost the same height. Although it is a well-known technique to insert and modify a sliding door frame for modification while an existing sliding door frame remains, when carrying out such modification, it is naturally considered by a person ordinarily skilled in the art to prevent reduction in an opening area as much as possible, as described in the specification, page 5, lines 5 to 16 of Primary Cited Document 3.

Then, in Primary Cited Document 3, there is no reason why the upper end of the lower frame for modification must be above the upper end of the back wall of the existing lower frame, and therefore it could have been easily achieved by a person ordinarily skilled in the art to make the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification almost the same height, by applying (the mounting auxiliary member of) Sub Cited Document 2 to Primary Cited Document 3.

(Written request for trial, page 52, line 4 from the bottom to page 53, line 12)

(D) Examination on Different Feature 2-1

Forming each frame material configuring a window frame by extruded aluminum alloy profiles, as disclosed in Japanese Unexamined Patent Application Publication No. H08-209262 (Evidence No. 18), Japanese Unexamined Patent Application Publication No. H10-88906 (Evidence A No. 19), page 15 of Evidence A No. 20, is a well-known technique, and it is also a well-known technique that the window frame is made to be a sliding door frame, so that there is no technical difference in using Primary Cited Document 3 in the modification construction of the existing sliding door frame equipped with the well-known configuration, and it is merely a design change that can be appropriately made by a person ordinarily skilled in the art.

(Written request for trial, page 52, lines 19 to the last line)

(E) Examination on Different Feature 2-2

Although it is not clear what kind of configuration the existing window frame is targeted for modification in Main Cited Example 3, if the existing window frame can be modified by the window frame for modification of Primary Cited Document 3 in which the outdoor side is supported by the existing lower frame as a whole and the indoor side is supported by the existing lower frame via the mounting auxiliary member, it is a matter for a person ordinarily skilled in the art to appropriately decide what kind of configuration the existing window frame should be modified.

Here, if trying to modify an existing sliding door frame of a normal type that has an outdoor side guide rail and an indoor side guide rail in a lower frame by the sliding door frame for modification of Primary Cited Document 3, it can be easily inferred by a person ordinarily skilled in the art that the rail portion of the existing lower frame becomes an obstacle. However, it is a matter of course for a person ordinarily skilled in the art to change the configuration in order to remove the obstacle caused by the above application, and as disclosed in a microfilm of Japanese Utility Model Application No. S62-39866

(Japanese Unexamined Utility Model Application Publication No. S63-146085) (Evidence A No. 7), Paragraph [0019] of Japanese Unexamined Patent Application Publication No. H10-30377 (Evidence A No. 15), Japanese Patent Publication No. S62-45948 (Evidence A No. 16), and Japanese Unexamined Patent Application Publication No. 2002-285757 (Evidence A No. 17), it is a well-known technique in the technical field of sash modification to remove the rail of the existing lower frame.

(Written request for trial, page 54, lines 9 to 23)

(F) Examination on Different Feature 2-4

In the technical field of the invention, as disclosed in Japanese Patent No. 3223993 (Evidence A No. 9), Japanese Unexamined Patent Application Publication No. S61-229086 (Evidence A No. 10), Japanese Unexamined Patent Application Publication No. H07-286439 (Evidence A No. 11), it is well known in the technical field of sash modification that members are supported via spacers to absorb assembly errors and the like of the members, fill gaps between the members, and join the members without rattling.

Then, since actions and effects generated by abutting and supporting via the spacer are effective for Primary Cited Document 3, it could have been easily conceived by a person ordinarily skilled in the art to adopt the well-known technique abutting and supporting via the spacer.

(Written request for trial, page 55, lines 13 to 24)

C Regarding Invention 5

(A) The different features of Invention 5 and Primary Cited Document 3

In comparison of Invention 5 and Primary Cited Document 3, the two are in correspondence in the same point as the corresponding feature of Invention 4 and Primary Cited Document 3, are different in the same points as the different features of Invention 4 and Primary Cited Document 3, and further are different in the following point.

(Different Feature 2-6)

In Invention 5, an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification of the sliding door frame for modification, and an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification of the sliding door frame for modification, and when inserted in the existing sliding door frame from the outdoor side, the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building, and the outdoor side vertical frame sealing material is contacted with a vertical edge portion of the opening portion of the building, whereas

Primacy Cited Document 3 does not have such a sealing material.

(Written request for trial, page 56, lines 14 to the last line)

(B) Examination on Different Feature 2-6

It is a well-known technique that an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification of the sliding door frame for modification, and an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification of the sliding door frame for modification, and when inserted in the existing sliding door frame from the outdoor side, the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building, as disclosed in Japanese Unexamined Patent Application Publication No. H09-177437 (Evidence A No. 21) and Japanese Unexamined Patent Application Publication No. H08-93325 (Evidence A No. 22).

(Written request for trial, page 57, lines 6 to 11)

D Regarding Invention 6

(A) The different features of Invention 6 and Primary Cited Document 3

In comparison of Invention 6 and Primary Cited Document 3, the two are in correspondence in the same point as the corresponding feature of Invention 4 and Primary Cited Document 3, are different in the same points as the different features of Invention 4 and Primary Cited Document 3, and further are different in the following point.

(Different Feature 2-7)

In Invention 6, the indoor side guide rail of the existing lower frame is cut and removed, whereas it is not so in Primary Cited Document 3.

(Written request for trial, page 57, line 3 from the bottom to page 58, line 3)

(B) Examination on Different Feature 2-7

It is a well-known technique to remove the rail of the existing lower frame in the technical field of sash modification, and by applying a lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion as disclosed in Sub Cited Document 2 to Primary Cited Document 1, if the indoor side guide rail gets in the way together with the outdoor side guide rail of the existing lower frame, it is merely natural for a person skilled in the art to use the above-mentioned well-known technique to remove it.

(Written request for trial, page 58, lines 9 to 15)

E Regarding Inventions 1 to 3

Inventions 1 to 3 are respectively specified as modification methods of a sliding door device for respective modified sliding door devices of Inventions 4 to 6, and are not substantially different from Inventions 4 to 6.

Then, the corresponding feature and different features of Inventions 1 to 3 and Primary Cited Document 4 specifying Primary Cited Document 3 as an invention of a method are substantially the same as the corresponding feature and different features of Inventions 4 to 6 and Primary Cited Document 3, and what is mentioned about each different feature does not change with different categories.

(Written request for trial, page 59 lines 4 to 10)

(6) Supplemental regarding Reasons for invalidation 4 and 5 (common general technical knowledge)

In the inventions of the case, the configuration, which is merely an application of a well-known technique, is not limited to "cutting and removing the outdoor guide rail," and it is obvious that almost all constituent components, such as providing a mounting auxiliary member on the indoor side portion of the existing lower frame and fixing this mounting auxiliary member to a rising surface of the back wall with screws, were nothing more than those of the ordinary technical level of those ordinarily skilled in the art at the time of the original application.

First, from the descriptions of an application form and the like of BL parts submitted from each company of fittings mentioned in Evidence A No. 33 to Evidence A No. 36 to Better Living Foundation (currently: general foundational juridical person Better Living), it can be seen that the above constituent components were only those of the ordinary technical level of those ordinarily skilled in the art.

(Oral proceedings statement brief, page 37, lines 10 to 18)

No. 5 The Demandee's allegation

1 Outline of the Demandee's allegation

The Demandee demanded the trial decision, "The request for trial of the case is groundless. The costs in connection with the trial shall be borne by the Demandant," made the following arguments against the Demandant's allegation (see the written reply of trial case dated August 5, 2016, the oral proceedings statement brief dated November 25, 2016, and the written statement dated December 22, 2016), and submitted Evidence B No. 1 to Evidence B No. 4 as means of proof.

2 Means of proof

The submitted evidences are as follows.

Evidence B No. 1: Intellectual Property High Court Decision 2013 (Gyo-Ke) No. 10321

Evidence B No. 2: Intellectual Property High Court Decision 2012 (Gyo-Ke) No. 10418

Evidence B No. 3: Examination Guidelines for Patent and Utility Model, Part II, Chapter 2, Section 2 Requirements for support, 2.2 Violation type of requirements for support, and Part III, Chapter 2, Section 2 Inventive step, 3.3 Notes in judgment on inventive step

Evidence B No. 4: Intellectual Property High Court Decision 2014 (Gyo-Ke) No. 10243

3 The specific allegation of the Demandee

(1) Regarding Reasons for invalidation 1 (violation of requirements for clarity)

A "Almost the same" means that the height of the upper end of the back wall and the upper end of the lower frame for modification are the same at the average technical level in the relevant technical field, and means that they are mostly the same, or generally the same and that they do not have to be exactly the same. The use of the term "almost" does not immediately obscure its technical significance or its scope.

(Written reply, page 8, lines 9 to 13)

B It can be clearly grasped that "almost the same height" means the similarity of the height of the upper end of the lower frame for modification and the upper end of the back wall to the extent that it can be obtained by cutting and removing the outdoor side guide rail of the existing lower frame and supporting the indoor side portion of the lower frame for modification with the mounting auxiliary member.

(Written reply, page 9, lines 16 to 19)

C In the patent inventions of the case, since the effect of the patent inventions of the case cannot be obtained unless the difference in height between the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification in this case is smaller than the cutting length of the outdoor side guide rail as described above, the height within the cutting length range of the outdoor side guide

rail was called "almost the same height".

(Oral proceedings statement brief, page 10, lines 20 to 24)

(2) Regarding Reason for invalidation 2 (violation of requirements for support)

A According to the Detailed Description of the Invention of the specification, in the Patent Invention, there were a problems that (A) since the lower frame for modification is fixed to the existing lower frame while being placed on the existing lower frame, the width in the height direction of the space between the lower frame for modification and the upper frame for modification becomes smaller, and the effective opening area decreases, and a problem (subject) that (B) since the lower frame base material of the lower frame for modification is directly placed on the guide rail of the existing lower frame and fixed with reference to the guide rail, the width in the height direction of the space between the lower frame for modification and the upper frame for modification becomes smaller and the effective opening area decreases. Therefore, these problems (subjects) are solved by (1) cutting and removing the outdoor side guide rail of the existing lower frame (Configuration 1), and (2) providing an auxiliary mounting member on the indoor side portion of the existing lower frame, fixedly mounting the mounting auxiliary member with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame, supporting the indoor side portion of the lower frame for modification with the mounting auxiliary member, and mounting the sliding door frame for modification to the existing sliding door frame with reference to the mounting auxiliary member (Configuration 2). By exploring Configurations 1 and 2, the width in the height direction of the space between the lower frame for modification and the upper frame for modification is large, and a wide opening area can be ensured, and by using Constitution 2, it is recognized that an effect (effect of the case) is shown, which can mount the same sliding door frame for modification on the existing sliding door frames having different shapes and dimensions using the mounting auxiliary member of the shape and dimensions according to the shape and dimensions of the existing sliding door frame.

Then, as a specific configuration of "supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member" (Claims 1 to 3) or "an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member" (Claims 4 to 6) of the Patent Invention, the specific configurations (embodiments) of Configurations 1 and 2 in the case where the upper wall portion 109 of the mounting auxiliary member 106 supports the indoor side leg portion 91 and the support wall 89 of the lower frame 69 for modification are described in Paragraph [0070]

(however, of Configuration 2, the configuration part in which the mounting auxiliary member is fixed with screws to the rising surface of the back wall ranging to the indoor side end portion of the existing lower frame is described in [0100]) of the specification.

As described above, to a person ordinarily skilled in the art, it can be said that the Detailed Description of the Invention of the specification describes the problems of the Patent Invention described in the Scope of Claims and the Means for Solving the Problems, and other technical matters necessary for a person ordinarily skilled in the art to understand the Invention.

(Written reply, page 18, line 5 to page 19, line 7)

B Looking at the patent inventions of the case, all of the components are described in the Detailed Description of the Invention of the specification, and moreover, a plurality of embodiments having different combinations of the components are described, so that considering these descriptions, it is obvious that a sliding door frame and the like capable of realizing the actions and effects of the sliding door frame for modification of the patent inventions of the case can be implemented.

(Written reply, page 21, line 5 from the bottom to the last line)

(3) Regarding Reason for invalidation 3 (violation of enablement requirement)

A premise (Reason for invalidation 1) of the Demandant's allegation about Reason for invalidation 3 is wrong in the first place, and the Detailed Description of the Invention of the specification is clear and sufficient to enable a person ordinarily skilled in the art to carry out the inventions of the case, so that the Demandant's allegation is wrong.

(Written reply, page 22, lines 17 to 20)

(4) Regarding reason for invalidation 4 (lack of inventive step)

A Regarding the drawing of Evidence A No. 5-1 which the Demandant calls Primary Cited Document 1, the proof that it has been publicly known or publicly implemented is only the certificates of Evidence A No. 5-4 and Evidence A No. 5-5. Both of the certificates are related to the creation of a private person, and it is not clear whether the certifier himself/herself actually participated in the construction, and there is no proof of the authenticity of the contents, so it is completely unreliable.

In addition, not only is the specific configuration of the sliding door frame for modification unclear with the drawing of Exhibit A No. 5-1, but the technical explanation is also completely insufficient.

Therefore, these are of no value as evidence of the invalidation trial of the case

and are, of course, unworthy of adoption.

(Written reply, page 23, lines 8 to 16)

B It is not clear from this delivery note whether or not Evidence A No. 28-1 (delivery note) belongs to the modified sliding door device according to Evidence A No. 5-1 and Evidence A No. 5-2. Further, Evidence A No. 29 (photographing report) only shows the appearance of the entire sliding door and its parts, and from the photograph, it cannot be identified that they are the modified sliding door devices having the internal configuration according to Evidence A No. 5-1 and Evidence A No. 5-2 or in which the modification method of the sliding door device has been carried out. Further, the certificate of Evidence A No. 30 is created by a private person and cannot be trusted as it is.

(Oral proceedings statement brief, page 11, lines 19 to 25)

C Since "the inverted L-shaped member s" serves as a reference when a part m6 of the lateral piece of the existing lower frame mounts the lower frame for modification when it is mounted, if viewed from Evidence A No. 5-1 (Evidence A No. 5-2), the "inverted L-shaped member s" cannot serve as a reference for mounting the lower frame for modification.

In other words, in the bathroom sash of the Koi Dormitory bathroom, when the sliding door frame for modification is mounted in the existing sliding door frame, even if the sliding door frame for modification is inserted from the bathroom side, at the time of its insertion, it is impossible that "the inverted L-shaped member s" was used as the reference for mounting to the existing sliding door frame of the sliding door frame for modification, and in the first place, since the sliding door frame for modification is not mounted to "the inverted L-shaped member s," it is impossible to fulfill the mounting function.

Furthermore, since "the inverted L-shaped member s" does not serve as the reference for mounting, as described above, and merely abuts on a lower surface of an extension part m7 of the existing lower frame, it is obvious that there is no effect that "the same sliding door frame for modification can be mounted on the existing sliding door frames having different shapes and dimensions using the mounting auxiliary member of the shape and dimensions according to the shape and dimensions of the existing sliding door frame".

Therefore, it is an error to regard "the inverted L-shaped member s" of Evidence A No. 5-1 (Evidence A No. 5-2) as "the mounting auxiliary member" of Invention 4, and

it does not correspond to "the mounting auxiliary member" of Invention 4 as alleged by the Demandant.

(Written reply, page 25, lines 12 to the last line)

D The meaning of "as a reference" is that when the lower frame for modification is mounted to the existing lower frame, the mounting auxiliary member serves as the reference for positioning that, and the meaning is completely different from simply supporting the lower frame for modification via the mounting auxiliary member with respect to the existing lower frame as the Demandant states.

(Oral proceedings statement brief, page 24, lines 7 to 10)

E If the lack of inventive step is alleged based on a publicly worked product, it is necessary to clarify what kind of invention Primary Cited Document 1 is. However, the Demandant has not clarified what kind of invention Primary Cited Document 1 is, and this does not generate a motivation to combine the invention embodied in Primary Cited Document 1 with Sub Cited Document 1. Furthermore, in Primary Cited Document 1, since each member exists as a group configuration as a concrete embodiment, it is impossible to take out one member from the embodiment forming the group configuration, and replace that with a member indicated by another cited document.

(Written reply, page 28, lines 8 to 15)

F Applying Sub Cited Document 1 to Primary Cited Document 1 has no motivation in itself, and it is merely knowledge of the invention; that is, hindsight. Further, even if this point is taken, applying Sub Cited Document 1 to Primary Cited Document 1 does not immediately mean that "the outdoor side guide rail of the existing lower frame gets in the way," and of course it will not get in the way. Therefore, even if Sub Cited Document 1 can be applied to Primary Cited Document 1, it is not easy to conceive the configuration relating to Different Feature 1-2 regardless of the well-known technique pointed out by the Demandant.

(Written reply, page 28, line 2 from the bottom to page 29, line 5)

(5) Regarding reason for invalidation 5 (lack of inventive step)

A Since the mounting auxiliary member of Invention 4 is not simply mounted on the back wall with screws, but is fixedly mounted on the rising of the back wall with screws, and on the other hand, the anchor 6 of Primary Cited Document 3 (Evidence A No. 6) has the anchor flange 6b screwed on the plane of the upper surface 1a of the

existing steel lower frame in which the tip end extending from the indoor side rising wall is bent to form an inverted U shape (Column 2, lines 8 to 10, and Column 3, pages 14 to 16), the different features alleged by the Demandant are incorrect.

(Written reply, page 33, lines 14 to 20)

B The mounting auxiliary member of Invention 4, as described in the specification, serves as a reference for mounting when inserting and mounting the sliding door frame for modification in the existing sliding door frame, and requires to show the effect that "the same sliding door frame for modification can be mounted on the existing sliding door frames having different shapes and dimensions using the mounting auxiliary member of the shape and dimensions according to the shape and dimensions of the existing sliding door frame," and it cannot be said that such a mounting auxiliary member is well known. Further, although the Demandant alleges that "for the configuration of the mounting auxiliary member, various shapes and structures were known before the original filing date of the patents of the case, according to the existing lower frame and the lower frame for modification," it is wrong.

(Written reply, page 34, lines 18 to 26)

C Even on the premise of the well-known technique that the Demandant states, it cannot be determined that Evidence A No. 6 represents the outdoor side guide rail cut and removed from the vicinity of the root.

(Written reply, page 41, lines 6 to 8)

No. 6 Judgment by the body

1 Regarding the reference date for judgment on inventive step of the patent invention

The matter of "the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame" recited in Claims 1 to 3 of the Scope of Claims of the invention, and the matter of "the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame" recited in Claims 4 to 6 are described in the specification of the original application initially filed, but are not described in the specification of the basic application for priority initially filed.

Therefore, the application for the patent cannot be deemed to have been filed at the time of the basic application for priority, but at the time of filing the original application, in applying the provisions of Article 29 (2) of the Patent Act to Inventions 1

to 6.

2 Descriptions in Evidences A

(1) Evidence A No. 5-1 to A No. 5-5, Evidence A No. 28-1 and A No. 28-2, Evidence A No. 29, and Evidence A No. 30

A Regarding publicly known and publicly use

Although Evidence A No. 5-1 is recognized as a design drawing, etc. related to the "Hiroden Koi Dormitory Bathroom Modification Construction" completed on November 24, 2000, as viewed from the contents of the description, according to the descriptions of the certificate of Evidence A No. 5-4, the delivery note of Evidence A No. 28-1, the certificate of Evidence A No. 28-2, and the photographing report of Evidence A No. 29, it can be inferred that the "Hiroden Koi Dormitory Bathroom Modification Construction" was completed on November 24, 2000, before the original filing date of the patent, as described in the design drawings, etc.

Then, the certificate of Evidence A No. 5-4 describes that in Shinwa-Kenso Co., Ltd. that carried out the above "Hiroden Koi Dormitory Bathroom Modification Construction," the company has never treated the contents of the modification construction and the contents of the design drawings, etc. in secret, and the employees in charge were not subject to confidentiality. Further, if there was an inquiry for construction from the owner, Hiroshima Electric Railway Co., Ltd., it is recognized that Shinwa-Kenso Co., Ltd. would have explained the contents of the modification construction, including the matters described in the design drawings, etc., and Hiroshima Electric Railway Co., Ltd. can investigate the modified sash and find out its structure and mounting condition.

In view of the above, it can be inferred that Evidence A No. 5-1 and Evidence A No. 5-2 of B(E) related to "Hiroden Koi Dormitory Bathroom Modification Construction" grasped from the descriptions of Evidence A No. 5-1 and the like are inventions publicly known or publicly implemented before the original filing date of the patent.

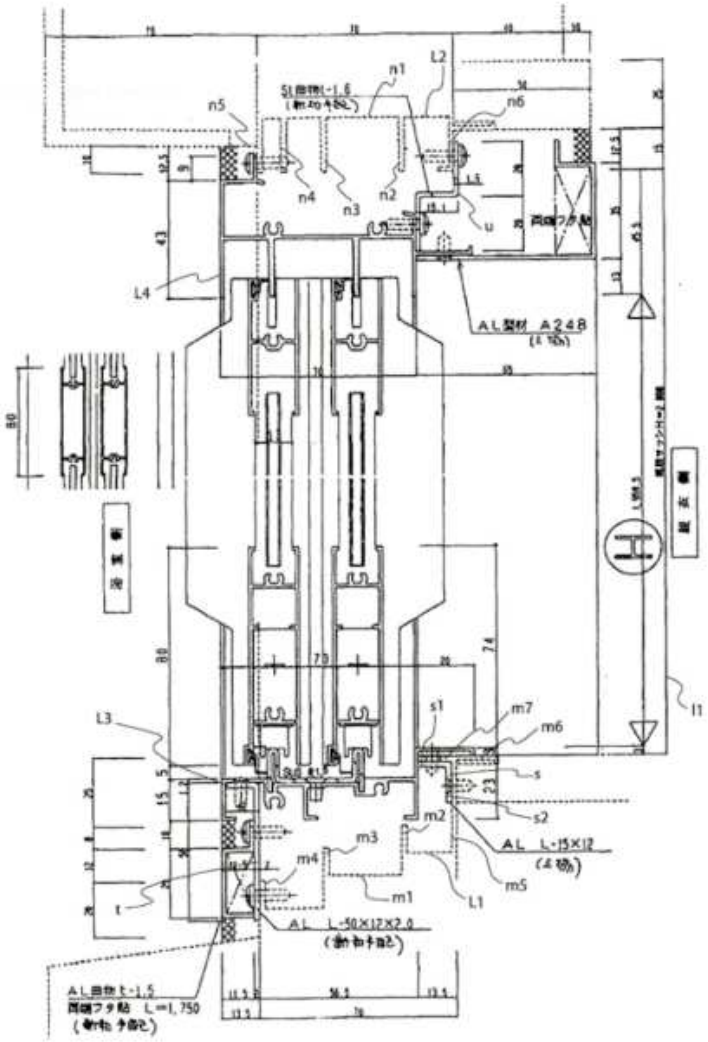
B The descriptions of Evidence A No. 5-1 (Evidence A No. 5-2, and Evidence A No. 5-3), Evidence A No. 5-5, Evidence A No. 29, and Evidence A No. 30

(A) Evidence A No. 5-1 (Evidence A No. 5-2, and Evidence A No. 5-3)

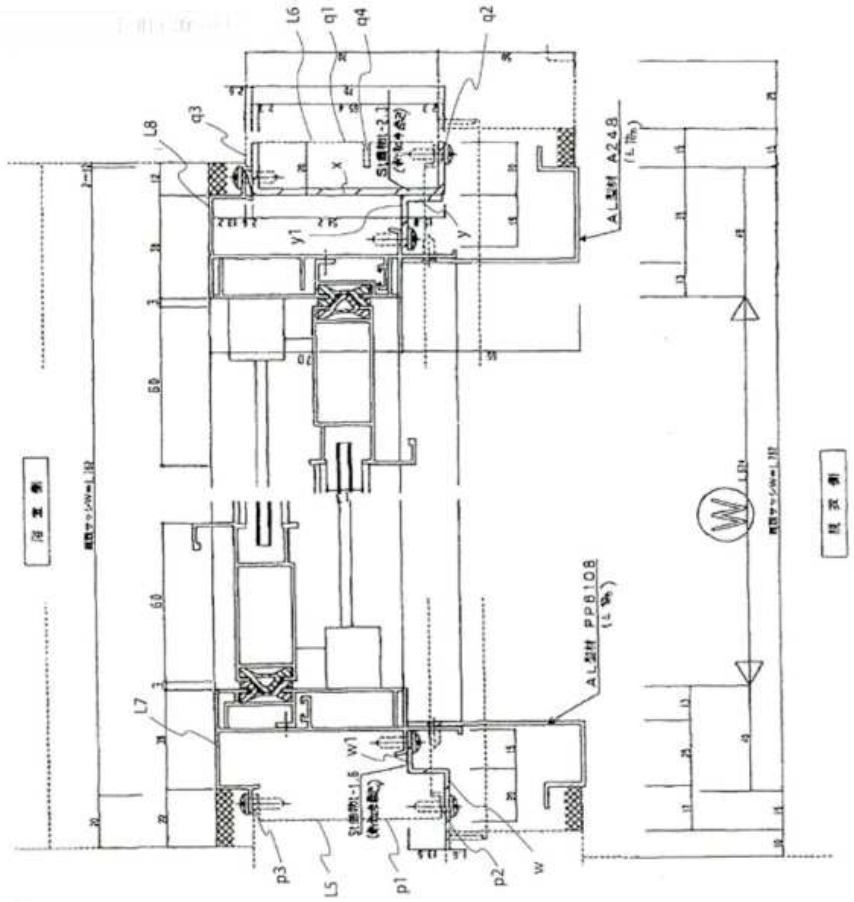
Evidence A No. 5-1 in which the design drawings, etc. of the construction name "Hiroden Koi Dormitory Bathroom Modification Construction" are described, describes the following matters. For convenience, it is described by using the symbols attached to Evidence A No. 5-2, which is an enlargement of the left drawing (hereinafter, referred

to as "the vertical sectional view") and Evidence A No. 5-3, which is also an enlargement of the right drawing (hereinafter, referred to as "the horizontal sectional view) on page 4/4 of Evidence A No. 5-4.

a Evidence A No. 5-2 (the vertical sectional view) is as follows.



b Evidence A No. 5-3 (the horizontal sectional view) is as follows.



c Referring to the vertical sectional view, in a lower part, an existing lower frame is shown by a dotted line L1. It can be seen that on the existing lower frame, a bottom wall part m1 that gradually decreases its height from the dressing room side toward the bathroom side, a dressing room side rail m2 extending upward from the bottom wall part m1, and a bathroom side rail m3 are formed, a wall part m4 extending upward from an end portion of the most bathroom side of the bottom wall part m1 is formed, a wall portion m5 rising from an end portion of the most dressing room side of the bottom wall part m1 and becoming a side surface of the bathroom is formed, a lateral piece part m6 is formed by bending toward the dressing room side, at an upper end portion of the wall portion m5, and an extension part m7 extending toward the bathroom side is formed on the bathroom side of the lateral piece part m6.

d Referring to the vertical sectional view, in an upper part, an existing upper frame is shown by a dotted line L2. A dressing room side rail n2 and a bathroom side rail n3 are formed on the existing upper frame. Further, it can be seen that an upper

frame for modification is shown by a solid line L4, and the upper frame for modification abuts on a crank-shaped member u fixed to the existing upper frame with screws, and is fixed to the crank-shaped member u with screws.

e Referring to the vertical sectional view, it can be seen that on the right side, "existing sash H = 2,000" is written along with a dimension line l1, a lower end position of the dimension line l1 is at the same height position as an upper surface of the lateral piece part m6 shown by the dotted line L1 in the lower part of the vertical sectional view, and an upper end position of the dimension line l1 is almost the same height position as the lower end position of the existing upper frame shown by the dotted line L2 in the upper part of the vertical sectional view.

f Referring to the vertical sectional view, it can be seen that an inverted L-shaped member s that extends an upper wall s1 to a bathroom side makes the upper wall s1 abut on a lower surface of the extension part m7, and fixes a vertical wall s2 to a bathroom side surface of the wall portion m5 with screws, and the L-shaped member s is marked with "AL L-15 x 12 (Sankyo)".

g Referring to the vertical sectional view, it can be seen that an inverted L-shaped member t is fixed with screws to the wall part m4 shown by the dotted line L1, and the inverted L-shaped member t is marked with "AL L-50 x 12 x 2.0 (Shinwa arrangement)".

h Referring to the vertical sectional view, a lower frame for modification is shown by the solid line L3. It can be seen that the bottom wall of the lower frame for modification shown by the solid line L3 is flat, and the heights of the bathroom side and the dressing room side are the same. Further, it can be seen that in the lower frame for modification shown by the solid line L3, an upper surface of a horizontal portion of the dressing room side, the bathroom side rail, and the upper end of the dressing room side rail are at the same height, and a difference in height from an upper end (upper surface of the lateral piece part m6) of the wall portion m5 shown by the dotted line L1, which is an upper end of the existing lower frame is "3" (mm).

i Referring to the vertical sectional view, it can be seen that in the lower frame for modification shown by the solid line L3, the dressing room side end thereof bends downward to abut on the upper surface of the lateral piece part m6 shown by the dotted

line L1, and is fixed with screws to the upper wall s1 of the inverted L-shaped member s on the further bathroom side of the extension part m7. Further, it can be seen that on the bathroom side, the lower frame for modification shown by the solid line L3 is fixed to an upper portion of the inverted L-shaped member t on the bottom wall with screws.

j Referring to the horizontal sectional view, an existing vertical frame is shown by dotted lines L5 and L6. A bathroom side and a dressing room side of a vertical frame for modification shown by solid lines L7 and L8 abut on a wall portion p3 shown by the dotted line L5, a wall portion q3 shown by the dotted line L6, and an inner peripheral piece w1 of a crank-shaped member w and an inner peripheral piece y1 of a member y with an L-shaped cross section, from the bathroom side, and are respectively fixed by screws.

k Referring to the vertical sectional view, it can be seen that a sliding door is installed between the rails of the upper frame for modification and the lower frame for modification, and the upper frame for modification, the lower frame for modification, and the vertical frame for modification are sliding door frames. Further, it can be seen that the dressing room side rail n2 and the bathroom side rail n3 of the existing upper frame and the dressing room side rail m2 and the bathroom side rail m3 of the existing lower frame are oppositely provided, and the existing upper frame, the existing lower frame, and the existing vertical frame are sliding frames.

(B) Evidence A No. 5-5

Evidence A No. 5-5 is a certificate dated February 1, 2016 by Masaki UBUKI, the president of SHINWA Co., Ltd. to the Demandant, and describes the following matter (underlines are added in the trial decision, the same shall apply hereinafter.).

"Our company will prove as follows, about a bathroom door modification construction completed on November 24, 2000 at the Hiroshima Electric Railway Koi Dormitory of Hiroshima Electric Railway Co., Ltd., ... based on the design drawings, etc. attached to the certificate dated July 24, 2015.

...

1. The existing sash in the above-mentioned modification construction is made of aluminum alloys,

...

2. When mounting the sliding door frame for modification in the existing sliding door

frame, it is inserted from the bathroom side.
3. In the above-mentioned modification construction, there was a request from Hiroshima Electric Railway Co., Ltd. that the opening area should not be as small as possible, and the design was made with this in mind."

(C) Evidence A No. 29

Evidence A No. 29 is a photographing report produced by Yuichi OGURI who is the manager of Legal and Intellectual Property Department of Sankyo Tateyama, Inc., and it is recognized that the sliding door that separates the dressing room side and the bathroom side in the bathroom of Hiroshima Electric Railway Co., Ltd. Koi Dormitory was photographed on June 5, 2015. Looking at the photographs on pages 5 to 8, it is recognized that the sash for modification is made of aluminum alloys.

(D) Evidence A No. 30

Evidence A No. 30 is a certificate dated November 7, 2016 by Masaki UBUKI, the president of SHINWA Co., Ltd. to the Demandant, and describes the following matters.

"Our company will prove as follows, about a bathroom door modification construction completed on November 24, 2000 at the Hiroshima Electric Railway Koi Dormitory of Hiroshima Electric Railway Co., Ltd., ... based on the design drawings, etc. attached to the certificate dated July 24, 2015."

...

FIG. 1 of the appendix is a figure obtained by adding symbols for convenience, to an enlarged vertical sectional view... of the sash for modification related to the bathroom door modification construction, and FIG. 2 of the appendix is an enlarged view of the dressing room side part of the lower frame in FIG. 1.

As it can be seen from FIG. 2, on the left side of the lateral piece part m6; that is, the part surrounded by the lateral piece portion m6, the lower frame for modification, the lateral piece part m7, and the upper wall s1 of the inverted L-shaped member s, no member exists. Further, since the lower frame for modification and the upper wall s1 of the inverted L-shaped member s are directly connected by screws, the lower frame for modification does not shift vertically and horizontally with respect to the inverted L-shaped member s, and the lower frame for modification is supported by the upper wall s1 of the inverted L-shaped member s via screws."

(E) The invention related to "Hiroden Koi Dormitory Bathroom Modification Construction"

According to (A) to (D) above, the following inventions can be recognized for the construction method and structure of a sliding door frame of a bathroom related to "Hiroden Koi Dormitory Bathroom Modification Construction".

a A5 Invention 1

"A modification method for a sliding door device, comprising:

leaving an existing sliding door frame which has an existing upper frame made of aluminum alloys remaining at an opening portion between a bathroom and a dressing room in a building, an existing lower frame made of aluminum alloys and provided with a dressing room side rail m2 and a bathroom side rail m3, and an existing vertical frame made of aluminum alloys;

forming a wall portion m5 rising to be a bathroom side surface at an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame, forming a lateral piece part m6 bending to the dressing room side at an upper end of the wall portion m5, and forming an extension part m7 extending to the bathroom side on the bathroom side of the lateral piece part m6;

making an inverted L-shaped member s that extends an upper wall s1 to the bathroom side abut on a lower surface of the extension part m7, and fixing a vertical wall s2 thereof on the bathroom side surface of the wall portion m5 with screws;

fixing an inverted L-shaped member t to a wall portion m4 on the bathroom side of the existing lower frame with screws;

then, inserting a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a vertical frame for modification made of aluminum alloys, and a lower frame for modification made of aluminum alloys, flat, and provided with a bottom wall where the height of the bathroom side and the dressing room side are the same, into the existing sliding door frame from the bathroom side; and

fixing a bathroom side portion of the lower frame for modification to an upper portion of the inverted L-shaped member t with screws, and making a dressing room side portion of the lower frame for modification abut on an upper surface of the lateral piece part m6 of the existing lower frame and fixing that to an upper wall s1 of the inverted L-shaped member s with screws,

wherein a difference in height between an upper end of the wall portion m5 of the existing lower frame and an upper end of the lower frame for modification is 3 mm."

b A5 Invention 2

"A modified sliding door device,

wherein an existing sliding door frame remaining at an opening portion between a bathroom and a dressing room in a building, has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys and provided with a dressing room side rail m2 and a bathroom side rail m3, and an existing vertical frame made of aluminum alloys;

wherein a wall portion m5 rising to be a bathroom side surface at an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame is formed, a lateral piece part m6 bending to the dressing room side is formed at an upper end of the wall portion m5, and an extension part m7 extending to the bathroom side is formed on the bathroom side of the lateral piece part m6;

wherein an inverted L-shaped member s that extends an upper wall s1 to the bathroom side is made to abut on a lower surface of the extension part m7, and a vertical wall s2 thereof is fixed on the bathroom side surface of the wall portion m5 with screws;

wherein an inverted L-shaped member t is fixed to a wall portion m4 on the bathroom side of the existing lower frame with screws;

wherein a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a lower frame for modification made of aluminum alloys, flat, and provided with a bottom wall where the height of the bathroom side and the dressing room side are the same, and a vertical frame for modification made of aluminum alloys, is inserted into the existing sliding door frame;

wherein a bathroom side portion of the lower frame for modification of the sliding door frame for modification is fixed to an upper portion of the inverted L-shaped member t with screws, and a dressing room side portion of the lower frame for modification is made abut on an upper surface of the lateral piece part m6 of the existing lower frame and is fixed to an upper wall s1 of the inverted L-shaped member s with screws, and

wherein a difference in height between an upper end of the wall portion m5 of the existing lower frame and an upper end of the lower frame for modification is 3 mm."

(2) Evidence A No. 6

Evidence A No, 6 that is a publication distributed before the original filing date of the patent invention describes the following matter.

A "(1) A mounting structure of a new window frame, wherein in a modified sash mounting the new window frame to an old window frame, an outside flange of the new

window frame is screwed with the old window frame, a base plate of a new anchor piece is locked to a C-shaped groove formed in a longitudinal direction on an inside surface, and a flange extended from the base plate is screwed with the old window frame." (claim of utility model)

B "The present device relates to a mounting structure in the case where expected dimensions of the new window frame is smaller than that of an old window frame, when mounting the new window frame to the old window frame.

Conventionally, in a modified sash, an extremely complicated method has been adopted, in which a new window frame, which has smaller expected dimensions than the old window frame, is not easily installed by using it as it is. The present device provides a new window frame mounting structure that can be adapted to an old window frame with different expected dimensions by adding an anchor piece with a simple shape, and is particularly applied to a lower frame of a modified window frame to be effective." (page 1, column 1, line 31 to page 1, column 2, line 4)

C "In the figure, reference numeral 1 denotes an existing steel lower frame, a tip extending from an indoor side rising wall is bent to form an inverted U-shape, and an upper surface 1a is flat. Reference numeral 2 denotes an existing steel drain plate, a drain portion at a tip is omitted from the drawing, and an indoor side rising wall 2a is housed in a suspension flange 1b of the old lower frame. Reference numeral 3 denotes a building wall, which is usually concrete. Reference numeral 4 denotes a sill material for inner paper screens. The above is the state of the old window frame with the existing steel sash paper screen removed. Reference numeral 5 denotes a new window frame, and its side surface shape is stepped to form a downward slope toward the outdoor side and form an outside flange 5a suspended from a position proximal to its side end, and to form a vertical C-shaped groove 5b on the inside surface and form a horizontal flange 5c from its upper end to the indoor side. Reference numeral 6 denotes an anchor piece, 6a denotes a base plate thereof, and 6b denotes a flange orthogonal to the base plate. (page 1, column 2, lines 7 to 23)

D "Reference numeral 7 denotes a frame, which substantially functions as a set plate, and is a decorative plate that covers the anchor piece 6 and the existing lower frame 1 with dimensions that match the existing configuration, and generally may use profiles of the same material as the window frame. In this embodiment, a material obtained by subjecting aluminum alloy profiles to a surface treatment is used as the profiles." (page 3,

column 3, lines 6 to 11)

E "Next, an example of the mounting method is outlined. The anchor 6 is inserted into the C-shaped groove 5b, the new window frame assembled in a rectangular shape is transported to the site, and the outside flange 5a of the new window frame is screwed with the old window frame by a plurality of screws 8 via a new drain plate 2'. In this case, the state of being screwed to an inner wall surface of the outside flange 5a via a packing installed in the longitudinal direction is shown. On the other hand, the flange 6b of the anchor is screwed with the old window frame by a plurality of screws 8. ... Reference numeral 12 shown in the figure denotes an electrolytic corrosion preventive tape which is a cure for preventing the occurrence of corrosion between the aluminum profiles and the old steel frame." (page 2, column 3, line 12 to page 2, column 4, line 7)

F "As described above, according to the present device, when the expected dimensions of the old window frame and the new window frame are different, the C-shaped groove is provided in the longitudinal direction of the inner surface of the new window frame, and if only the anchor and the new frame are prepared, since the new window frame can be easily attached to the existing window frame with different dimensions or the C-shaped groove is used, the labor of drilling screw holes at the site can be saved. It has high practical value from an economical point of view. (page 2, right column 8, lines 8 to 14)

G Looking at FIG. 1, it can be seen that the outside flange 5a of the lower frame of the new window frame 5 is screwed to the suspension flange 1b of the existing steel lower frame 1. Further, from the shape of the new window frame 5 and the existing steel lower frame 1 shown in FIG. 1 and the mounting aspect of the new window frame 5, it can be understood that the new window frame 5 assembled in a rectangular shape is inserted into the old window frame 1 from the outdoor side.

H According to A to G above, it is recognized that Evidence A No. 6 describes the following invention.

(A) A6 Invention 1

"A sash modifying method for mounting a new window frame 5 made of aluminum alloy profiles to an old window frame 1,

wherein in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side and form an outside flange 5a suspended from a position proximal to its side end, and to form a vertical C-shaped groove 5b on the inside surface and form a horizontal flange 5C from its upper end to the indoor side;

wherein an anchor 6 is inserted in the C-shaped groove 5b, and the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side; and

wherein the outside flange 5a of the lower frame of the new window frame 5 is screwed to a suspension flange 1b of an existing steel lower frame, and a flange 6b of the anchor 6 is screwed to the existing steel lower frame."

(B) A6 Invention 2

"A modified sash mounting a new window frame 5 made of aluminum profiles to an old window frame 1,

wherein in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side and form an outside flange 5a suspended from a position proximal to its side end, and to form a vertical C-shaped groove 5b on the inside surface and form a horizontal flange 5C from its upper end to the indoor side;

wherein the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side, the outside flange 5a of the lower frame of the new window frame 5 is screwed with a suspension flange 1b of an existing steel lower frame, and a flange 6b of an anchor 6 locked to the C-shaped groove 5b is screwed with the existing steel lower frame."

(3) Evidence A No. 7

Evidence A No. 7 that is a publication distributed before the original filing date of the patent invention describes the following matter.

A "A sash mounting member interposed between lower side sash parts (1) and (2) of sash mounting members (3) and (6) interposed between the two sashes, for mounting a new sash to a window center side of an existing sash, comprising a band-shaped portion (3a) that has width corresponding to the entire width in an in-and-out direction of a lower side rail portion (2a) of the existing sash, and an edge portion (3b) suspended downward from an end portion that should be the outdoor side of the band-

shaped portion (3a), wherein a cross-sectional shape thereof is formed in a generally L-shape, the edge portion (3b) abuts on an outdoor side vertical portion (2c) of the lower side rail portion (2a) outer edge and is fixed to the existing sash via an L-shaped mounting discard frame stand (7), and the band-shaped portion (3a) is supported by the lower side rail (2a)." (claim of utility model)

B "FIG. 3 shows a structure in which the lower sash part (1) of the new sash is mounted on the rail portion (2a) from which the projective rail in the lower side sash part (2) of the existing sash is cut off via the mounting member (3)....In the case of the structure of FIG. 3, since the projective rail of the rail portion (2a) of the existing sash is cut off, the window frame of the new sash can be formed larger by that amount." (Specification, page 14, line 8 to page 15, line 8)

C Looking at FIG. 3, it can be seen that the lower sash part (1) of the new sash is stepped and inclined upward from the outdoor side to the indoor side, and is provided with the bottom wall in which an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion.

(4) Evidence A No. 8

Evidence A No. 8 that is a publication distributed before the original filing date of the patent invention describes the following matter.

A "In FIG. 1 and FIG. 2, (A) depicts an aged aluminum sash frame (hereinafter, simply referred to as an old sash frame), which is made by coupling an upper frame material (1), a lower frame material (2), a left vertical frame material (3), and a right vertical frame material (not shown).

(B) depicts a sash frame for modification to be newly mounted, which is made by coupling an upper frame material (4), a lower frame material (5), a left vertical frame material (6), and a right vertical frame material (not shown).

Although support pieces (7), (8), and (9) abutting on each frame material chamber outside surface of the old sash frame (1) are provided on each frame material chamber outside of the sash frame (B) for modification, since the support piece (8) of the lower frame material (5) is fixed to a window base (10) forming a building frame, a lower end thereof bents to the indoor side so as to abut on a fixing piece (11) of the old sash lower frame material (2).

Further, on the indoor side of the sash lower frame material (5) for modification,

a mounting piece (13) placed and fixed on a wooden portion (12) attached to the indoor side of the old sash lower frame material (2) is protrusively provided.

When the sash frame (5) for modification is fitted in from the outdoor side to the indoor side, so as not to collide with an indoor side rising piece (14) of the old sash lower frame material (2), since the mounting piece (13) is protrusively provided on a position above that, the wooden portion (12) is needed to fill a space between the mounting piece (13) and the window base (10) and to conceal the old sash lower frame material (2).

...

The support member (C) interposed between the new and old sash frames (A) (B) is used to improve the stability of the sash frame materials (4), (5), and (6) for modification during mounting, ... is made of steel material. The support member (C) may be interposed over the entire length of each frame member, or may be interposed in some places.... As for the support member (C) for the lower frame, since a fixing member penetrating the lower frame is not used from the viewpoint of preventing water ingress, it is screwed by using a rail (16) of the old sash lower frame (2) as shown in FIG. 1.

Then, the sash frame (B) for modification coupled to the frame is fitted into a window opening portion with the old sash frame (A) attached, the sash lower frame material (5) for modification is placed on the support member (C), the mounting piece (13) thereof is placed on the wooden portion (12), and the outdoor side abutting support pieces (7), (8), and (9) of the respective frame materials (4), (5), and (6) are made to abut on outdoor surfaces of the corresponding old sash frame materials (1), (2), and (3).

Then, regarding the lower frame material (5) for modification, the mounting piece (13) is screwed to the wooden part (12), and a lower end of the abutting support piece (8) is nailed and fixed to the window base (10) that forms the building frame in a state of being overlapped with the old sash lower frame (2)." (Specification, page 4, line 7 to page 6, line 17)

B Looking at FIG. 1, the lower frame material (5) for modification is stepped and inclined upward from the outdoor side to the indoor side, and is provided with the bottom wall in which an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion.

(5) Evidence A No. 9

Evidence A No. 9 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[0002]

[Prior Art] Conventionally, when a refurbished sash is attached to this window frame by using an old window frame, an mounting auxiliary frame 58A is fixed to the old window frame 1A via a mounting screw 11A as shown in FIG. 10. Several conventional spacers 13 having the shape shown in FIG. 6 are stacked and inserted in a gap between a new window frame 21A and the mounting auxiliary frame 58A of the refurbished sash, and the spacer 13, the new window frame 21A, and the mounting auxiliary frame 58A are integrally fixed to the old window frame 1A with a mounting screw 100A."

B "[0006]

[Example] Next, an embodiment of the present application will be described with reference to the drawings. In FIGS. 2 and 3, the old window frame 1 is attached to the inner surface of the opening member 3 of the building as is well known, and is configured by framing the upper frame 4, the lower frame 5, and the left and right vertical frames 6 and 7....Between the lower frame 5 and the mounting auxiliary frame 59, a plurality of lower frame spacers 13 are inserted. As shown in FIG. 6, the lower frame spacer 13 is formed in the shape of a rectangular plate, and a notch for a screw 14 is formed in front of the spacer 13. The lower frame spacer 13, the lower frame 5, and the mounting auxiliary frame 59 are integrally fixed to the old lower frame 5 by the mounting screws 11 via the screw notch portion 14."

C "[0009] Next, the work procedure for mounting the new window frame 21 to the old window frame 1 will be described....Further, an appropriate number of lower frame spacers 13 are inserted into the lower frame 5 of the old window frame 1, and the lower frame mounting auxiliary frame 59 is screwed with the mounting screws 11. Then, the new window frame 21 is fitted into the old window frame 1 from the outdoor side, and the screwing pieces 34 and 36 of the new window frame 21 are made to abut on the mounting piece 15 and the locking projection piece 18 of the old window frame 1."

(6) Evidence A No. 10

Evidence A No. 10 that is a publication distributed before the original filing date of the patent invention describes the following matters.

"In order to solve the above problems, the present invention, in the window remodeling method in which a new window frame 3 is attached to an old window frame 2 that remains without being removed from a structure body 1, adopts a window

remodeling method, which fixes a lower frame mounting hardware 4b to a lower frame 2b of the old window frame 2 to provide mounting reference piece 6 and 7 in depth and face directions on the lower frame mounting hardware 4b, fixes the mounting hardware 4a, 4c, and 4d for an upper frame and left and right vertical frames to an upper frame 3a and left and right vertical frames 3c, excluding a lower frame 3b, among the new window frames 3 framed in the four-circumferential frame, as an integrated piece 5, fits the integrated piece 5 into the old window frame 2 from the indoor side and making the lower frame 3b of the new window frame hit on the mounting reference pieces 6 and 7 of the lower frame mounting hardware 4b directly or indirectly via an adjusting tool 8 such as a liner to center a mounting surface in the depth and face directions of the new window frame 3, fixes the mounting hardware 4a, 4c, 4d for the upper frame and the left and right vertical frames to the upper frame 2a and the left and right vertical frames 2c, 2d of the old window frame 2, and fixes the lower frame 3b of the new window frame 3 to the lower frame mounting hardware 4b." (page 2, line 15 of the upper left column to page 2, line 13 of the upper right column)

(7) Evidence A No. 11

Evidence A No. 11 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[0011]

[Examples] FIGS. 1 and 2 show a portion of a window in a concrete building, and an opening 1 is formed in a skeleton 2 such as an outer wall. Further, an upper discard frame 3a, a lower discard frame 3b, and left and right discard frames 3c for attaching an opening frame 4 (window frame 4) are arranged along the inner peripheral surface of the opening 1. These discard frames 3a, 3b, and 3c are extruded profiles made of synthetic resin, are embedded in the concrete skeleton 2, and the inner peripheral surfaces thereof are exposed on the surface of the skeleton 2 so as to surround the opening 1.

[0012] The window frame 4 is formed in a rectangular shape by the upper frame 4a, the lower frame 4b, and the left and right vertical portions 4c. An upper frame 4a and an upper auxiliary member 6a are attached to the lower surface of the upper discard frame 3a with screws 18a via a spacer 5. The upper discard frame 3a is provided with a hollow portion 7 whose upper and lower surfaces are horizontal along the left-right width direction of the opening 1, and concrete fixing pieces 8a and 8a having an L-shaped cross section whose tip ends are bent inward from each other are formed at the indoor side portion and the outdoor side portion on the upper surface of the hollow portion 7.

Further, recessed grooves 17, 17 are formed on the indoor side surface and the outdoor side surface of the hollow portion 7 in order to increase the fixability to the skeleton 2."

B "[0015] The lower frame 4b and a lower auxiliary member 6b are attached to the upper surface of the lower discard frame 3b via a spacer 5 and a fixing bracket 20. Since a drainage member 14 that is inclined downward on the outdoor side for discharging rainwater is mounted above the lower discard frame 3b, the lower discard frame 3b is provided with a first rectangular hollow portion 16 that is the highest at the indoor side portion on the upper surface of the horizontal plane 15, is provided with a second rectangular hollow portion 16' that is lower than the middle portion in indoor and outdoor directions, and is formed in a substantially stepped shape in which the indoor side is high."

(8) Evidence A No. 12

Evidence A No. 12 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[Claim 1] A lower frame of a sliding door, consisting of a lower frame body that has a depth piece, and face pieces rising from respective sides of the depth piece, and a rail member that has a plurality of rails formed on the depth piece and has a depth width smaller than a distance between the face pieces of the lower frame body, wherein the rail member is placed on the depth piece of the lower frame body while abutting on one of the face pieces of the lower frame body, between the finding piece on the opposite side of the depth piece on which the rail member abuts and the rail member, a restraint member sandwiched between the two and straddling the rail member and the lower frame body is arranged, and the rail member is restrained by the restraint member on the lower frame body."

B "[0014]

[Embodiments of the Invention] As shown in FIGS. 1 and 2, the present invention is a lower frame 1 that is divided into a lower frame body 2 and a rail member 3 on which a plurality of rails 32 are formed, which are used while being coupled to each other by a restraint member 4. Although FIG. 6 shows a case where the lower frame 1 is used as a sliding door in a bathroom, the lower frame 1 can be used as a lower frame of a sliding door facing outdoors such as an entrance sliding door and a terrace door or a sliding door installed at a wet area, regardless of the object of use, as long as it is an opening that uses a sliding door.

(9) Evidence A No. 13

Evidence A No. 13 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[Claim 1] A sliding door comprising: a square frame body having an upper frame opening at a lower part; at least three paper screens provided in parallel in the frame body in a sliding manner; hanging rollers provided on both upper ends of each paper screen; a guide rail provided inside the upper frame for guiding the hanging rollers; and a separation rail that separates a part of the guide rail by an outer margin size between at least a pair of the hanging rollers and is removably attached inside the upper frame."

B "[0018]... Further, the number of paper screens may be 4 or more. The sliding door according to the present invention can be applied not only to bathrooms but also to windows and the like."

(10) Evidence A No. 14

Evidence A No. 14 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[Claim 1] A lower frame structure of a sliding door wherein a first chamber and a second chamber extend substantially along one plane, a paper screen and a frame body holding the paper screen so as to freely open/close between the first chamber and the second chamber, and a lower frame of the frame body is disposed between floor surfaces,

the lower frame having a lower frame body, and at least one lower frame auxiliary member coupled detachably to the lower frame body,

the lower frame body having a base portion whose upper portion is provided below the one plane, and a rising portion bending and ranging upward from one side of the base portion near the first chamber, and having an uppermost surface formed on substantially the same plane,

the lower frame auxiliary member having a lower flange coupled to an upper portion of the base portion of the lower frame body on the first chamber side, a web ranging to the lower flange at a substantially right angle and formed with a drainage hole, and an upper flange ranging to the web at a substantially right angle and having an uppermost surface formed on substantially the same plane as the one plane."

B "[0041] Further, in the above-described embodiment, the bathroom 4 and the changing room 5 are separated by the interlocking sliding door 1, but as another embodiment of the present invention, the present invention can also be advantageously practiced to block the environment where water splashes from the first chamber to the second chamber; for example, the balcony and the indoor side."

(11) Evidence A No. 15

Evidence A No. 15 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[Claim 1] A method of remodeling a window frame, comprising: leaving an existing aluminum window frame (hereinafter, referred to as the existing window frame) without being removed from a base of a building, removing an unnecessary protruding part of the existing window frame to form a window frame inner peripheral surface as a flat surface, screwing a new metal window frame (hereinafter, referred to as a new window frame) directly to the window frame inner peripheral flat surface, and integrating or integrally attaching a drainage frame covering an exposed portion of an indoor/outdoor side portion of the existing window frame and an indoor/outdoor auxiliary frame to the new window frame or the existing window frame."

B "[0017]

[Embodiments of the Invention] Hereinafter, embodiments of the present invention will be described with reference to the drawings. FIG. 6 is a side view showing the mounting state of the existing aluminum window frame 2 before remodeling with respect to the building base 1, and FIG. 7 is a top view.

[0018] The existing window frame 2 before remodeling is provided with indoor and outdoor sliding door paper screens 17, 17 made of ordinary single plate glass, and as shown in FIG. 6, on the inner peripheral surfaces of the upper and lower frames 2a and 2b, rails 18 and 19 for guiding the sliding door paper screens 17, 17 are integrally projected. Further, as shown in FIG. 7, on the inner peripheral surfaces of the right and left vertical frames 2c and 2d, door stops 20 and 21 of the paper screens 17, 17 are integrally projected.

[0019] Therefore, when the window frame before remodeling is remodeled into the new window frame 8, the existing window frame 2 before remodeling is left as it is without being removed from the building base 1, and the rails 18 and 19 projecting from the inner

peripheral surfaces of the upper and lower frames 2a and 2b of the existing window frame 2 as simply shown in FIG. 6, door stops 20 and 21 projecting from the inner peripheral surfaces of the left and right vertical frames 2c and 2d of the existing window frame 2 as shown in FIG. 7, and a part of the vertical piece 22 of the indoor side are scraped off as shown by thick lines to form the inner peripheral surfaces of the upper and lower frames 2a and 2b of the existing window frame 2 and the inner peripheral surfaces of the left and right vertical frames 2c and 2d on the flat surface 7 as shown in FIG. 1 and FIG. 2."

(12) Evidence A No. 16

Evidence A No. 16 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "The present invention has been made in view of the above circumstances, and an object of the present invention... is to provide a method of remodeling a window enabling obtaining sufficient lighting without reducing the opening area of the new window frame." (page 2, column 3, lines 16 to 24)

B "As shown in FIG. 11, the lower frame 2 cuts and removes parts 2'a and 2'd projecting inward and getting in the way when mounting the lower frame 30 of the new window frame D on the rail 2d fixed to the indoor wall 2a projecting inward from the window frame mounting opening C, and the coupling wall 2b, the lower frame 30 of the new window frame D is placed and screwed on the remaining part on the lower frame 2 of the existing window frame, and a gap between the lower frames 2 and 30 is filled with the filler 36.

At that time, the drainage plate 31 is simultaneously attached.

Further, if the shape of the lower frame 30 of the new window frame D is different, as shown in FIG. 12, the parts 2'a and 2'd projecting inward and getting in the way in the indoor wall 2a and the rail 2d of the lower frame 2 of the existing window frame are cut and removed, and then the lower frame 30 may be mounted." (page 4, column 7, lines 8 to 22)

(13) Evidence A No. 17

Evidence A No. 17 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[0021] The portion shown by diagonal lines in FIG. 1 and FIG. 2 of each

inward projecting piece 8 of the upper frame 4, the lower frame 5, and the vertical frame 6 of the remaining existing metal frame 3 is cut and removed."

B "[0024] As shown in FIG. 3 and FIG. 4, a base material 12 is attached to the frame main body 7 of each frame to reinforce each frame firmed with the hole 11. The base material 12 on the four circumferences is an opening for mounting a newly installed heat insulating sliding window, and the inward projecting piece 8 of the upper frame 4, the lower frame 5, and the vertical frame 6 has been cut and removed, so that the opening for mounting is large.
... The indoor side member 13 of the base material 12 is mounted with a screw 16 to the indoor side portion closer to the indoor side than to the slit-shaped hole 11 of the frame body 7."

(14) Evidence A No. 18

Evidence A No. 18 that is a publication distributed before the original filing date of the patent invention describes the following matters.

"[0002] Conventionally, although there are many types of aluminum alloys used for building materials, for example, aluminum alloys suitable for sashes such as entrances and shutters are alloys specified by the symbol A6063 in the JIS standard. This aluminum alloy of A6063 is an alloy having excellent extrudability and surface treatment property by adding a small amount of magnesium (Mg) and silicon (Si) to aluminum (Al), and extruded products using this alloy have excellent strength, plastic workability, and cutting machinability, and have particularly excellent corrosion resistance."

(15) Evidence A No. 19

Evidence A No. 19 that is a publication distributed before the original filing date of the patent invention describes the following matters.

"[0002] [Conventional Art] Most of profiles used for fittings such as windows and doors are so-called aluminum sashes, and these aluminum sashes are generally made by putting a lump of aluminum alloy into an extruder and extruding that. The sash is formed by interposing a die."

(16) Evidence A No. 20

"Extruded aluminum profiles 63S-T5" is described in the remarks column of

"frame" in the table about the components of "UBKP-Y1216B2-B" specially for "Fuji sanitary unit" bathroom at the right bottom on page 15 of Evidence A No. 20 that is a publication distributed before the original filing date of the patent invention.

(17) Evidence A No. 21

Evidence A No. 21 that is a publication distributed before the original filing date of the patent invention describes the following matters.

"[0020] Of the window frame 10 of the window unit 1, the outer peripheral surfaces of the upper frame 10A, the side frames 10C, and 10D are provided with tongue-shaped tight members 17, 12 ...(hereafter, called a rain barrier) that come into contact with the skeleton opening surface (expected surface by the mortar M) in the remodeled state, so that airtightness and watertightness can be maintained without sealing from the outside."

(18) Evidence A No. 22

Evidence A No. 22 that is a publication distributed before the original filing date of the patent invention describes the following matters.

"[0012] A new window frame 33 is fixed to such a base frame 30. The new window frame 33 includes an upper frame member 33a, a lower frame member 33b, and vertical frame members 33c and 33d respectively provided corresponding to an upper frame member 30a, a lower frame member 30b, and vertical frame members 30c and 30d of the base frame 30. The upper frame member 33a, the lower frame member 33b, and the vertical frame members 33c and 33d are extruded profiles made of an aluminum alloy. Further, the upper frame member 33a, the lower frame member 33b, and the vertical frame members 33c, 33d are formed with dovetail grooves 39a to 39d extending in the longitudinal direction, respectively, and gaskets 40a to 40d are fitted in these dovetail grooves 39a to 39d....Watertightness is achieved by such gaskets 40a-40d."

(19) Evidence A No. 23

Evidence A No. 23 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "[Claim 1] A modified sash lower frame overlapped and mounted on an existing sash lower frame in which a rail receiving door rollers of a paper screen

interposed at an entrance and exit of a skeleton partitioning the inside and outside of a room is at a lower position than an upper surface of a window stool positioned on a floor surface of a room or at one step higher than the floor surface of the room, comprising:

an upper plate portion formed in which an upper end of a projecting element including the rail receiving the door rollers of the paper screen is formed at substantially the same predetermined height; and a fixed leg portion extending downward from the upper plate portion and fixed to the existing sash lower frame, wherein the length along the height direction of the fixed leg portion is formed as a length giving a position at substantially the same height as the floor surface of the room or the upper surface of the window stool, while the fixed leg portion is fixed to the existing sash lower frame."

B "[0001] The present invention relates to a modified sash lower frame that is installed on top of an existing sash lower frame while leaving the existing sash lower frame as it is, and a modification method by a so-called cover method using the modified sash lower frame."

C "[0005]

[Problem to be Solved by the Invention] The present invention has been made based on such a background, and an object of the present invention is to provide a modified sash lower frame which does not require the above-mentioned coupling member and can be made almost flush with a floor surface in a room or an upper surface of a window stool in an installed state, and a modification method using the modified sash lower frame. Furthermore, an object of the present invention is also to provide a modification method for realizing barrier-free by making a floor surface in a room or an upper surface of a window stool, an upper end of the modified sash lower frame, and a floor surface of a balcony flush with each other."

D "[0022]

[Embodiments of the Invention] Hereinafter, an embodiment of a modified sash lower frame according to the present invention and a modification method using the modified sash lower frame will be described with reference to the drawings. In the following embodiment, a modified sash frame for a sliding door is illustrated, but it can also be configured as a modified sash frame for a single sliding door.

[0023] First Embodiment; First, as the first embodiment, a modification example in which a step is eliminated from the floor surface in the room to the balcony will be described based on the modified sash lower frame and the modification method of the present

invention.
[0024] [Explanation of Modified Sash Frame 1]
[0025] As shown in FIG. 1, the modified sash frame 1 is composed of a modified lower frame 2, a pair of modified vertical frames 3, and a modified upper frame 4, and a paper screen So on the outdoor side and a paper screen Si on the indoor side can be opened and closed by alternately being pulled in opposite sliding directions x. Then, as will be described later, the modified lower frame 2, the modified vertical frame 3, and the modified upper frame 4 constituting the modified sash frame 1 are installed so as to cover the existing lower frame 12, the existing vertical frame 13, and the existing upper frame 14 of the existing sash frame, respectively.
[0026] Description of the modified lower frame 2; The modified lower frame 2 is formed so as to have a cross-sectional shape as shown in FIG. 2 and FIG. 3 by extruding an aluminum material. On the upper plate portion 21, an edge wall 21a as a "protruding element" from the outdoor side to the indoor side, a rail 21b for receiving the door rollers of the screen door that is not shown, two rails 21c for receiving the door rollers of the paper screens So and Si, and a rising wall 21d are projected, and the upper ends of these are at the same predetermined height.
[0027] The edge wall 21a is a portion indicating that it is the outdoor side end of the modified lower frame 2. The rising wall 21d on the opposite side mainly has a function of providing watertightness and airtightness in the room to the modified lower frame 2...."

E "[0034] A fixing piece 23h hanging downward is formed on the bottom wall 23f of the drainage receiving chamber 23. The fixing piece 23h is perforated with a screw hole, and is fixed to the outdoor side rail 12b projecting from the upper plate portion 12a of the existing lower frame 12 by a screw N. Then, a "fixed leg portion" is formed by the fixing piece 23h and the wall defining the drainage receiving chamber 23. The length size of the fixing piece 23h and the drainage receiving chamber 23 along the height direction is formed so that while the fixing piece 23h is fixed to the rail 12b of the existing lower frame 12, the upper ends of the edge wall 21a, the rails 21b, 21c, the rising wall 21d, and the rising wall portion 22d as the "projecting elements" of the modified lower frame 2 are at substantially the same height as the floor surface Rf in the room. Therefore, "barrier-free" of the modified lower frame 2 with respect to the floor surface Rf in the room is realized.
[0035] Further, an inverted L-shaped support member 24 is provided on the back surface of the indoor side end portion of the upper plate portion 21. A horizontal plate portion 24a thereof is screwed to the upper plate portion 21 and a vertical plate portion 24b is

screwed to a floor in the room to support a load acting on the upper plate portion 21. In this example, the support member 24 is separated from the modified lower frame 2, but the reason therefor is that since the upper plate portion 12a of the existing sash lower frame to be modified has different inclinations in the horizontal direction, if the support member is integrally molded with the modified sash lower frame with a specific length, the portion corresponding to the vertical plate portion may be too long for attachment."

F "[0058]
[Advantage of the Invention] According to the modified sash lower frame of the present invention, the upper end of the modified sash lower frame can be substantially flush with the floor surface in the room or the upper surface of the window stool.... Further, according to the modified sash lower frame and the modification method of the present invention, the opening dimensions of the modified sash frame can be made larger in the height direction than that of the conventional modified sash frame."

G Looking at FIG. 2 based on the description in E above, it can be seen that while the indoor side end portion of the upper plate portion 21 and the vertical plate portion 24b of the inverted L-shaped support member 24 abut on the edge wall ranging to the end portion on the furthest indoor side of the upper plate portion 12a of the existing sash lower frame 12, the vertical plate portion 24b of the inverted L-shaped support member 24 is screwed to the edge wall.

H According to A to G above, it is recognized that Evidence A No. 23 describes the following matter.

"A modified sash lower frame overlapped and mounted on an existing sash lower frame in which a rail receiving door rollers of a paper screen interposed at an entrance and exit of a skeleton partitioning the inside and outside of a room is at a lower position than an upper surface of a window stool positioned on a floor surface of a room or at one step higher than the floor surface of the room, the modified sash lower frame comprising:

an upper plate portion formed in which an upper end of a projecting element including the rail receiving the door rollers of the paper screen is formed at substantially the same predetermined height; and a fixed leg portion extending downward from the upper plate portion and fixed to the existing sash lower frame, wherein the length along the height direction of the fixed leg portion is formed as a length giving a position substantially the same height as the floor surface of the room on the upper end of the projecting element or the upper surface of the window stool, while the fixed leg portion

is fixed to the existing sash lower frame, and

wherein an inverted L-shaped support member is provided on a back surface of an indoor side end portion of the upper plate of the modified sash lower frame, a lateral plate portion thereof is screwed to the upper plate portion, and while the indoor side end portion of the upper plate portion of the modified sash lower frame and a vertical plate portion of the inverted L-shaped member abut on an edge wall ranging to an end portion on the furthest indoor side of the upper plate portion of the existing sash lower frame, the vertical plate portion of the inverted L-shaped support member is screwed to the edge wall."

(20) Evidence A No. 27

Evidence A No. 27 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "Narrowed dimensions by covering construction method with respect to existing opening dimensions are shown in TABLE-1 and TABLE-2 in general standard sash doors." (page 9, lines 7 to 8)

B In TABLE-1 on page 9, "100 mm or less" is described in the "height dimension" column.

C "Installation of new fittings is based on the following specifications.
(1) TABLE-6 shows the specifications of joining and mounting auxiliary materials (spacers).
...
(2) The mounting auxiliary materials (spacers), anchor pieces, etc. are securely fixed to the existing frame by screwing or welding." (page 12, lines 2 to 4)

D In TABLE-6 on page 12, "Lower frame portion" is described in the "Use classification" column, "Mounting auxiliary material (spacer) of the lower frame shall be a through material" is described in the "Production specifications" column, and "1.5 mm or more" is described in the "Aluminum profiles" section of the "Wall thickness specifications of the screw receiving portion" column.

E "The mounting accuracy is as shown in TABLE 7.

...

However, if the accuracy cannot be maintained due to the conflict between the

existing frame and the old finished surface, etc., after consultation between the parties in advance, it is installed within the range where the functions and performance of the fittings can be maintained." (page 12, lines 9 to 11)

F In TABLE-7 on page 12, "within ±2.0 mm" is described in the "tolerance" column corresponding to the "frame level difference" section in the "use classification."

(21) Evidence A No. 32

Evidence A No. 32 that is a publication distributed before the original filing date of the patent invention describes the following matters.

A "Examples of the present invention shown in the drawings will be described. When an aluminum window frame 1 shown in FIG. 1 is manufactured at a factory, an anchor 3 made of a bent steel plate is fixed to a lower part of a lower frame 2 by screws 4, 4. The window frame 1 in this way is carried into a room, and the glass paper screen made of the steel frame fitted to an existing steel window frame 5 is removed. Immediately, an indoor side lower surface 3' of the anchor 3 is supported on an upper surface of an indoor side ridge 6' of an existing steel lower frame 6, and if the aluminum window frame 1 with the support portion as a fulcrum is made to stand upright, an upper frame 7 and vertical frames 8, 8 of the window frame 1 face an existing steel upper frame 9 and vertical frames 10, 10." (page 1, line 10, right bottom column, to page 2, left upper column, line 1)

B "...Reference numeral 22 denotes a height-adjustable washer interposed between the support leg 21 and the upper surface of the steel lower frame 6, reference numeral 23 denotes an anchor 3 fixing screw,... or the anchor 3 has a horizontal portion 3' contacting with the indoor side ridge 6' of the existing steel lower frame 6 at the lower end of the aluminum lower frame 2, and the support leg 21 contacting with the lower portion 33 of the steel lower frame 6 via the height-adjustable washer 22, ..." (page 2, left upper column, line 12 to page 2, right upper column, line 3)

(22) Evidence A No. 33-1

In the table on the right side on page 5 of Evidence A No. 33-1, "RC housing sash" is described in the "Item" column, "Cover method (screw method)" is described in the "Remarks" column, and "10. Standard sash for modification, standard storage view, sliding door" is described in the "Drawing name" column.

At the right bottom of the drawing on the same page, it is described that "The one-dot chain line indicates that screws are mounted at the factory. To the places where the screws are specified, screws are mounted on-site."

Looking at the drawing on the left side of the same page, it can be seen that the end of the outdoor side rail of the two rails of the existing lower frame is filled with diagonal lines, and the description "Existing rail end (50 mm) cut" is added. Further, it can be seen that the lower frame for modification is fixed with screws to the upper surface of the indoor side end portion of the existing lower frame via a member having an inverted L-shaped cross section attached at the factory.

(23) Evidence A No. 34

In the table on the right side on page 1 of Evidence A No. 34, "Sash (sash for RC housing)" is described in the "Item" column, and "Sliding window/cover method (screw fastening method)" is described in the "Drawing name" column.

Looking at the drawing on the left side of the same page, of the two rails of the existing lower frame, the outdoor side rail is filled with diagonal lines. Further, it can be seen that the lower frame for modification is fixed with screws to the upper surface of the indoor side end portion of the existing lower frame via a member having an inverted L-shaped cross section.

(24) Evidence A No. 35

In the table on the right side of Evidence A No. 35, "RC sash for housing" is described in the "Product name" column, and "Construction method for sash for modification, cover method (screw fastening method), standard storage view, waist-high window" is described in the "Drawing name" column.

Looking at the drawing on the left side, of the two rails of the existing lower frame, the outdoor side rail is filled with diagonal lines, and the description "Both end rails cut" is added. Further, it can be seen that the lower frame for modification is fixed to the upper surface of the indoor side end portion of the existing lower frame with screws via a member having an inverted L-shaped cross section.

(25) Evidence A No. 36

In the table on the right side of Evidence A No. 36, "RC housing sash" is described in the "Product name" column, and "10. Construction method for sash for modification, cover construction method (screw fastening method), standard storage view, waist-high window" is described in the "Drawing name" column. Further, looking at the drawing

on the left side, of the two rails of the existing lower frame, the outdoor side rail is filled with diagonal lines, and the description "Both end rails cut" is added. Further, it can be seen that the lower frame for modification is fixed to the upper surface of the indoor side end portion of the existing lower frame with screws via a member having an inverted L-shaped cross section.

(26) Evidence A No. 37

In the column of "2001 (Heisei 13)" of "Kenchiku Kiasou Kyokai / Better Living Timeline" described on pages 26 to 27 of Evidence A No. 37, "Aluminum → Aluminum sash for modification is certified by BL" is described.

(27) Evidence A No. 38

Evidence A No. 38 describes the following matter.

"Nihonkentetsu will completely transfer its aluminum building materials business, such as building sashes and curtain walls, to Tostem on April 1." (page 3/6, lines 4 to 5)

(28) Evidence A No. 39

Looking at the drawing of the left bottom on page 23 of Evidence A No. 39, on the outdoor side rail of the two rails of the existing lower frame, the description "Both end rails cut" is added. Further, it can be seen that a member having an inverted L-shaped cross section is screwed on the indoor side rising surface of the existing frame, and the lower frame for modification is screwed with the member having the inverted L-shaped cross section.

(29) Evidence No. 44-1 to Evidence A No. 44-3

In Evidence A No. 44-3 that is a written reply to a written request for inquiry of Evidence A No. 44-1, it is described that the date of submission of Attachment 1 (Evidence A No. 36) of Evidence A No. 44-1 to Better Living Foundation is January 22, 2002, and the date on which the product related to the lower figure on page 23 of Attachment 2 (Evidence A No. 39) of Evidence A No. 44-1 is released is July 15, 2002.

3 Regarding Reason for invalidation 1 (violation of requirements for clarity)

(1) The Demandant's allegation

The Demandant alleges that although Inventions 1 to 6 respectively require that "an upper end of the back wall and an upper end of the lower frame for modification are

almost the same height," it is not clear what is the specific range of the difference in height between the upper end of the back wall and the upper end of the lower frame for modification for corresponding to "almost the same height," and there is no common general technical knowledge about what is the specific range of the difference in height between the upper end of the back wall and the upper end of the lower frame for modification for corresponding to "almost the same height".

(2) Judgment

In Inventions 1 to 6, since it is considered that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" means that the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification are approximately the same height; that is, the heights are the same so that they do not have to be exactly the same, it cannot be said that Inventions 1 to 6 are immediately unclear due to this matter.

On the other hand, the specification of the patent invention describes the following matter.

A "[Problem to be Solved by the Invention]

[0010]

In such a conventional technique, the lower frame 13 for modification is fixed to the existing lower frame 5 in a state of being placed on the existing lower frame 5, so that there is a problem that width H1 in the height direction of a space between the lower frame 13 for modification and the upper frame 15 for modification becomes small and the effective opening area is reduced.

[0011]

Further, since the lower frame base material 30 of the lower frame 13 for modification is directly placed on the guide rails 21 and 22 of the existing lower frame 5 and fixed with reference to the guide rails 21 and 22, there is a problem that the width H1 in the height direction of the space between the lower frame 13 for modification and the upper frame 15 for modification becomes smaller, and the effective opening area is reduced.

[0012]

An object of the present invention is to provide a modification method of a sliding door device and a modified sliding door device capable of ensuring a wide opening area".

B "[Advantage of the Invention]

[0018]

According to the present invention described in Claims 1 to 6, since the outdoor

side guide rail of the existing lower frame is cut and removed, the width in the height direction of the space between the lower frame for modification and the upper frame for modification is large, and a large opening area can be ensured without reducing the effective opening area.

In addition, a mounting auxiliary member is provided on the indoor side portion of the existing lower frame, the mounting auxiliary member is fixed and mounted with screws to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame, and the sliding door frame for modification is mounted to the existing sliding door frame with reference to the mounting auxiliary member, so that the same sliding door frame for modification can be mounted to the existing sliding door frame having different shapes and dimensions by using the mounting auxiliary member having the shape and dimensions corresponding to the shape and dimensions of the existing sliding door frame".

C "[0092]

(2) Further, since the above-mentioned (1) and the outdoor side lower frame sealing material 300 are press-contacted with the front wall 102 of the existing lower frame 56, the lower frame 69 for modification having the same shape can also be mounted on the existing lower frame 56 having large rising dimensions of the indoor side guide rail 115.

For example, as shown in FIG. 10, the height dimensions of the mounting auxiliary member 106 are increased, and the indoor side wall portion 108 is made to abut on the bottom wall 103 and is mounted on the indoor side guide rail 115 with a screw 110.

The indoor side lower frame sealing material 300 is brought into abut on the front wall 102.

In this case, the support wall 89 projects slightly above the back wall 104".

In light of the descriptions of A and B above, in Inventions 1 to 6, it is recognized that the technical significance of the matter "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" is to make the width in the height direction of the space between the lower frame for modification and the upper frame for modification large, and not to reduce the effective opening area.

In light of the descriptions of B and C above, although it is understood that the lower frame for modification in Inventions 1 to 6 can be mounted to an existing sliding door frame with different shape and dimensions by supporting and mounting the sliding door frame for modification with the mounting auxiliary member, it is understood that depending on the shape and dimensions of the existing sliding door frame, the upper end

of the back wall and the upper end of the lower frame for modification may not be exactly the same height, for example, as in the embodiment shown in FIG. 10 of the patent.

Then, in Inventions 1 to 6, it is understood that the matter "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" permits a slight difference in height between the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification due to the shape, dimensions, etc. of the existing lower frame, but does not intend to actively change the height of the upper end of the back wall and the upper end of the lower frame for modification, and means that the effective opening area is not substantially reduced.

Accordingly, regarding the specifying matter that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height," a person ordinarily skilled in the art understand that the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification should be at the same height as much as possible so that the effective opening area is not substantially reduced, and it is not necessary to recognize the allowable range of the height difference between the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification. That is, it does not mean that the gist of Inventions 1 to 6 cannot be found, unless the allowable range of the height difference between the upper end of the back wall and the upper end of the lower frame for modification is indicated.

Thus, since there is no unclear point in Inventions 1 to 6 as alleged by the Demandant, the Demandant's allegation cannot be accepted.

Further, in Claims 1 to 6 of the patent, no other unclear description is found.

Therefore, the patent relating to Inventions 1 to 6 does not violate the provisions of Article 36(6)(ii) of the Patent Act, and thus it cannot be invalidated due to Reason for invalidation 1 alleged by the Demandant.

4 Regarding Reason for Invalidation 2 (violation of requirements for support)

(1) The Demandant's allegation

The Demandant alleges that in the Detailed Description of the Invention of the specification, the embodiment equipped with all constitutions of Inventions 1 to 6 is not described, and further, association of the constitutions in Inventions 1 to 6 is not described, so that Invention 1 to 6 are not disclosed in the Detailed Description of the Invention.

(2) Judgment

A Regarding Inventions 1 and 4

(A) Paragraphs [0019] to [0060] of the specification of the patent describes as follows, regarding the embodiment of the invention described in FIG. 1 to FIG. 4 (hereinafter, referred to as "Embodiment 1").

"[0019]

FIG. 1 is a vertical cross-sectional view of a window 51 in which a sliding door device 50 for modification according to an embodiment of the present invention is installed, and FIG. 2 is a horizontal cross-sectional view of the window 51 as seen from the cutting plane lines II-II of FIG. I. The sliding door device 50 for modification of the present embodiment is installed at a lower edge portion 55 facing the opening 54 of the opening 53 of the building 52 from a lower side, in a state of being fitted in an existing sliding door frame 63 having an existing lower frame 56 fixed substantially horizontally (in a direction perpendicular to the paper surface of FIG. 1), a pair of existing vertical frames 59, 60 fixed substantially vertically (in the vertical direction in FIG. 1) to both side edges 57, 58 facing the opening 54 of the opening 53 from both left and right sides, and an existing upper frame 62 fixed substantially horizontally to an upper edge portion 61 facing the opening 54 of the opening 53 from above.

[0020]

The sliding door device 50 for modification has a plurality of guide rails 66 and 67 that movably support paper screens 64 and 65 in the frontage direction indicated by substantially horizontal arrows A1 and A2, and includes a lower frame 69 for modification, which abuts on the existing lower frame 56 from an outdoor 73 side to be supported, a pair of vertical frames 70 and 71, which abut on the existing vertical frames 59 and 60 from the outdoor 73 side to be supported, an upper frame 72 for modification, which abuts on the existing upper frame 62 from the outdoor 73 side to be supported,...

...

[0023]

The above-mentioned lower frame 69 for modification, vertical frames 70 and 71 for modification, upper frame 72 for modification, vertical frame holding members 74 and 75, and an upper frame holding member 76 are made of extruded aluminum alloy. The existing lower frame 56, the existing vertical frames 59 and 60, and the existing upper frame 62 are also made of an extruded aluminum alloy.

[0024]

The lower frame 69 for modification and the configuration related thereto will be described. In the lower frame 69 for modification, a plurality of drain holes 84 that open a space S1 between the lower frame 69 for modification and the existing lower frame 56 while facing the outdoor 73 are spaced and formed in the longitudinal direction of the

lower frame 69 for modification. The lower frame 69 for modification has a front wall 80 facing the outdoor 73 and extending in a substantially horizontal frontage direction (horizontal direction in FIG. 2), a bottom wall 81 ranging to an upper end portion of the front wall 80 while bending toward the indoor 68 side and inclined upward from the outdoor 73 toward the indoor 68 while forming stepped portions, a support wall 89 projecting downward from the vicinity of the end portion of the bottom wall 81 closest to the indoor 68 side, two guide rails 66 and 67 projecting upward from the bottom wall 81, and a screen door rail 83 rising upward from the end portion of the bottom wall 81 on the furthest outdoor 73 side.

[0025]

The bottom wall 81 has first to third bottom wall portions 85, 86, and 87 from the outdoor 73 toward the indoor 68. The first bottom wall portion 85 is formed over the screen door rail 83 and the outdoor side guide rail 66, and has a draining gradient i1 that is inclined upward from the outdoor 73 toward the indoor 68. The second bottom wall portion 86 is formed over the outdoor side guide rail 66 and the indoor side guide rail 67, and has a step portion 90 with a generally L-shaped cross section, an indoor side leg portion 91 with an inverted T-shaped cross section formed immediately below the indoor side guide rail 67, and an outdoor side leg portion 92 projecting downward from the vicinity of the end portion near the outdoor side guide rail 66 of the step portion 90. The third bottom wall portion 87 projects horizontally from an intersecting portion of the indoor side leg portion 91 and the indoor side guide rail 67 into the indoor 68 side, and extends in the frontage direction. The support wall 89 is integrally formed on the lower surface near the end portion on the indoor 68 side of the third bottom wall portion 87.

[0026]

The step portion 90 has a horizontal portion 93 that is substantially horizontal and extends in the frontage direction, and a rising portion 94 that bends upward at a right angle from the end portion on the indoor 68 side of the horizontal portion 93 and rises. The upper end portion of the rising portion 94 ranges to the indoor side leg portion 91. Fitting recesses 95 and 96 that open toward the outdoor 73 side are formed in the indoor side leg portion 91 and the indoor side guide rail 67, respectively, and packings 97 and 98 are fitted in these fitting recesses 95 and 96, respectively. The packings 97 and 98 are made of a flexible and elastic water-repellent material such as chloroprene rubber, and are provided all around in the circumferential direction from the lower frame 69 for modification via the respective vertical frames 70 and 72 for modification.

[0027]

The existing lower frame 56 has an L-shaped outdoor side leg portion 101 with an

L-shaped cross section which is supported while abutting on a wall surface 100 facing the outdoor 73 side of the lower edge portion 55 from the outdoor 73 side, a front wall 102 ranging at a right angle to a free end portion farthest from the wall surface 100 of the outdoor side leg portion 101, a bottom wall 103 having a draining gradient i2 inclined upward from the upper end portion of the front wall 102 toward the indoor 68 side, a back wall 104 ranging to the end portion on the furthest indoor 68 side of the bottom wall 103 and rising to the same height as the indoor side guide rail 67, an indoor side leg portion 105 with an L-shaped cross section projecting downward from the intersecting portion of the back wall 104 and the bottom wall 103, an outdoor side guide rail 114, and an indoor side guide rail 115.

[0028]

In order to secure a mounting space for the lower frame 69 for modification when mounting the lower frame 69 for modification, the outdoor side guide rail 114 has been cut and removed from the vicinity of a root, as shown by virtual lines in FIG. 1 and FIG. 3 described later.

[0029]

A mounting auxiliary member 106 is interposed between the existing lower frame 56 and the lower frame 69 for modification. The mounting auxiliary member 106 has an outdoor side wall portion 107, an indoor side wall portion 108, and an upper wall portion 109 ranging to each upper end portion of the outdoor side wall portion 107 and the indoor side wall portion 108, and is made from a long material with an inverted U-shaped cross section The mounting auxiliary member 106 is installed on the existing lower frame 56 with the upper wall portion 109 facing upward, while making the outdoor side wall portion 107 abut on the indoor side guide rail 115 from the outdoor 73 side, and making the indoor side wall portion 108 abut on the back wall 104 from the outdoor 73 side. The outdoor side wall portion 107 is fixed to the indoor side guide rail 115 with screws.

[0030]

The indoor side leg portion 91 and the support wall 89 of the installed lower frame 69 for modification are supported on the upper wall portion 109 of the mounting auxiliary member 106, and the third bottom wall portion 86 is fixed by a screw 111. Further, the front wall 80 is fixed to the front wall 102 of the existing lower frame 56 by a screw 112.

[0031]

In the state where the lower frame 69 for modification is mounted to the existing lower frame 56 in this way, the end portion 112 on the furthest indoor 68 side of the third bottom wall portion 86 abuts on the back wall 104 of the existing lower frame 56 from

the outdoor 73 side, and the front wall 80 abuts on the front wall 102 of the existing lower frame 56. The lower frame 69 for modification is positioned with respect to the existing lower frame 56 in the face direction in the right and left direction of FIG. 1, and can be easily mounted without any hassle in positioning work.

[0032]

Further, since the front wall 80 is fixed to the front wall 102 of the existing lower frame 56 by a screw 112 screwed from the outdoor 73 side toward the indoor 68 side, the lower frame 69 for modification is prevented from deviating to the outdoor 73 side with respect to the existing lower frame 56 during mounting work, and if the screw 112 is simply tightened, the lower frame 69 for modification is positioned with respect to the existing lower frame 56, and the efficiency of the mounting work is improved.

...

[0051]

FIG. 3 is an exploded view showing a vertical cross section for explaining a procedure for mounting the sliding door device 50 for modification to the existing sliding door frame 63, and FIG. 4 is an exploded view showing a horizontal cross section seen from a cut plane line IV-IV of FIG. 3. When attaching the sliding door device 50 for modification to the existing sliding door frame 63, first, the outdoor side guide rail 114 of the existing lower frame 56 is cut and removed from the vicinity of the root, and the mounting auxiliary member 106 is installed to the indoor side guide rail 115 with the upper wall portion 109 facing upward and is fixed by a screw 110. In this way, in the state where the mounting auxiliary member 106 is mounted on the indoor side guide rail 115, the upper wall portion 109 is arranged substantially horizontally.

The mounting auxiliary member 106 may be mounted over the entire length in the longitudinal direction, or may be mounted at a plurality of positions in the longitudinal direction.

[0052]

The lower frame 69 for modification, the vertical frames 70 and 71 for modification, and the upper frame 72 for modification are coupled to each other to assemble the square sliding door frame 78 for modification, and the assembled sliding door frame 78 for modification is fitted and installed on the existing sliding door frame 63 from the outdoor 73 side. Then, the vertical frame holding members 74 and 75 are respectively installed from the indoor 68 side between the vertical frames 71, 71 for modification of the installed sliding door frame 78 for modification and the existing vertical frames 59 and 60. Between the upper frame 72 for modification and the existing upper frame 62, the upper frame holding member 76 is installed from the indoor 68 side.

...

[0055]

When the sliding door frame 78 for modification, the vertical frame holding members 74 and 75, and the upper frame holding member 76 are installed on the existing sliding door frame 63 in this way, the vertical frame holding portions 74 and 75 are fixed to the existing vertical frames 59 and 60 by screws 154 and 174, the lower frame 69 for modification is fixed to the existing lower frame 56 by the screw 112 from the outdoor 73 side, and the vertical frame holding members 74 and 75 and the vertical frames 70 and 71 for modification are coupled by screws 153 and 173 from the inside, the upper frame holding member 76 and the upper frame 72 for modification are connected by screws 134 and 136, and the lower frame 69 for modification is fixed to the mounting auxiliary member 106 by a screw 110. Then, by building the paper screens 64 and 65 on the guide rails 66 and 67, the installation work of the sliding door device 50 for modification is completed.

[0056]

As described above, according to the present embodiment, the lower frame 69 for modification is supported while abutting on the existing lower frame 56 from the outdoor 73 side, the vertical frames 70 and 71 for modification are supported while abutting on the existing vertical frames 59 and 60 from the outdoor 73 side, and the upper frame 72 for modification is supported while abutting on the existing upper frame 62 from the outdoor 73 side. Further, the vertical frame holding members 74 and 75 are supported while abutting on the existing vertical frames 59 and 60 from the indoor 68 side, and are coupled to the vertical frames 70 and 71 for modification, respectively, and thus the vertical frames 70 and 71 for modification are mounted to the existing vertical frames 59 and 60 in cooperation with the vertical frame holding members 74 and 75....

...

[0060]

Further, according to the present embodiment, since the drain hole 84 is formed in the lower frame 69 for modification, water that has entered the space S1 between the lower frame 69 for modification and the existing lower frame 56 from the outside, dew condensation water generated by dew condensation in the space S1, and the like can be discharged to the outdoor 73 side to surely block the infiltration and leakage of the water into the indoor 68 side.

Further, according to the present embodiment, the outdoor side guide rail 114 of the existing lower frame 56 is cut and removed, and the indoor side leg portion 91 and the support wall 89 of the lower frame 69 for modification are supported on the upper

wall portion 109 of the mounting auxiliary member 106, so that the width in the height direction of the space between the lower frame 13 for modification and the upper frame 15 for modification is large, and the effective opening area is less likely to decrease.

Moreover, since the lower frame 69 for modification can be mounted with reference to the mounting auxiliary member 106, the same lower frame 69 for modification can be mounted by using the mounting auxiliary member 106 having a shape and dimensions corresponding to the shape and dimensions of the existing lower frame 56...."

(B) Paragraphs [0067] to [0100] of the specification of the patent describe as follows, regarding the embodiment of the invention described in FIG. 6 and FIG. 7 (hereinafter, referred to as "Embodiment 2"), and the modified example of Embodiment 2 described in FIG. 14 (hereinafter, referred to as "Embodiment 3").

"[0067]

FIG. 6 is a vertical cross-sectional view of a window 51 in which a sliding door device 50b for modification according to another embodiment of the present invention, and FIG. 7 is a horizontal cross-sectional view of the window 51 as seen from the cut plane line B-B of FIG. 6. Further, the same reference numerals are given to the parts corresponding to the embodiment shown in FIGS. 1 and 2 described above. The sliding door device 50b for modification of the present embodiment is basically configured in the same manner as the sliding door device 50 for modification of the embodiment shown in FIGS. 1 and 2 described above, and the sliding door device 50b for modification is installed while being fitted in the existing sliding door frame 63 that has the existing lower frame 56 generally horizontally fixed to the lower edge portion 55 facing the opening 54 of the opening portion 53 of the building 52 from the lower side, a pair of existing vertical frames 59 and 60 generally vertically fixed to both side edge portions 57 and 58 facing the opening 54 of the opening portion 53 from both of the right and left sides, and the existing upper frame 62 generally horizontally fixed to the upper edge portion 61 facing the opening 54 of the opening portion 53 from the upper side. The sliding door device 50b for modification includes the lower frame 69 for modification that has the plurality of guide rails 66 and 67 for movably in a generally horizontally supporting the paper screen that is not shown, and is supported by the existing lower frame 56 from the indoor 68 side, the pair of vertical frames 70 and 71 for modification supported by the existing vertical frames 59 and 60 from the indoor 68 side, a sliding door frame 250 for modification that is supported by the existing upper frame 62 from the indoor 68 side and is composed of the upper frame 72 for modification having an outdoor side rib 123 and

an indoor side rib 124 supporting the paper screen so as to move in a generally horizontal direction, a pair of vertical frame holding members 74 and 75 supported by the existing vertical frames 59 and 60 from the outdoor 73 side and coupled to the vertical frames 70 and 71 for modification, respectively, the upper frame holding member 76 supported by the existing upper frame 62 from the outdoor 73 side and coupled to the upper frame 72 for modification, and the mounting auxiliary member 106 mounted to the existing lower frame 56.

[0068]

In this embodiment, the existing sliding door frame 63 and the sliding door frame 78 for modification are located in the middle in the indoor/outdoor direction of the opening portion 53, and the opening portion 53 projects outward from the outdoor side portion of the sliding door frame 78 for modification.

[0069]

The existing lower frame 56, the lower frame 69 for modification, and the mounting auxiliary member 106 of this embodiment are substantially the same as the existing lower frame 56, the lower frame 69 for modification, and the mounting auxiliary member 106 of the embodiment shown in FIGS. 1 and 2 described above, and have a lateral piece 104a facing the indoor 68 side at the upper end portion of the back wall 104 of the existing lower frame 56. Those are quite different in the points that the lateral piece 104a and the upper end portion of the support wall 89 of the lower frame 69 for modification are at the same height, and that a dry type outdoor side lower frame sealing material 300 is installed at the outdoor 73 side part of the lower frame 69 for modification while facing the indoor 68 side, and the outdoor side lower frame sealing material 300 is press-contacted on the front wall 102 of the existing lower frame 56.

[0070]

Specifically, the outdoor side guide rail 114 of the existing lower frame 56 is cut and removed as shown by the virtual line in FIG. 6. All of the outdoor side guide rail 114 may be cut and removed, or it may be removed by leaving some of it.

The mounting auxiliary member 106 is fixedly mounted to the indoor side guide rail 115 at the outdoor side wall portion 107 with a screw 110.

The support wall 89 of the lower frame 69 for modification and the indoor side leg portion 91 are supported by the upper wall portion 109 of the mounting auxiliary member 106, and the outdoor side portion of the bottom wall 81 is supported on the outdoor side portion of the bottom wall 103 of the existing lower frame 56 via the spacer 301 and is fixed to the mounting auxiliary member 106 with a screw 112.

[0071]

The existing upper frame 62, the upper frame 72 for modification, and the upper frame holding member 76 are substantially the same as the existing upper frame 62, the upper frame 72 for modification, and the upper frame holding member 76 shown in FIGS. 1 and 2, and a major difference thereof is that a dry type outdoor upper frame sealing material 302 is installed to the outdoor side portion of the upper frame 72 for modification, and that the upper frame holding member 76 is provided with a cover 303.

[0072]

Specifically, a sealing material mounting portion 304 facing the indoor side is provided on a portion 127 projecting out upward from the bottom wall 122 on the front wall 120 of the upper frame 72 for modification, and the dry type outdoor side upper frame sealing material 302 is installed on the sealing material mounting portion 304.

The outdoor side upper frame sealing material 302 has an outdoor side fin 302a and an indoor side fin 302b. Preferably, it has an upward U-shape in cross section, and has an upward recessed-shaped drainage groove 302c between the outdoor side fin 302a and the indoor side fin 302b.

The outdoor side fin 302a contacts with the outdoor side portion in relation to the existing sealing material 305 at the upper edge portion 61 of the opening portion 53 of the building 52, and serves as a primary tight.

The indoor side fin 302b press-contacts with the outdoor side portion of the existing upper frame 62, for example, the outdoor side flange 126, and serves as a secondary tight.

[0073]

That is, the outdoor side fin 302a makes it difficult for rainwater or the like to enter the indoor side fin 302b, and the indoor side fin 302b prevents rainwater or the like entering from a seal portion of the outdoor side fin 3021 and rainwater or the like entering from the existing sealing material 305 through the inside of the building 52, from entering into a space between the outdoor side portion of the existing upper frame 62 and the outdoor side portion of the upper frame 72 for modification.

Preferably, each of the above-mentioned entering rainwater or the like is drained to the outside through the drainage groove 302c.

That is, when the existing sliding door frame 63 is modified, the building 52 (framework) or the existing sealing material 305 are deteriorated, and rainwater or the like may enter from them.

[0074]

The cover 303 is attached to the flange 130 of the upper frame holding member 76 in a snap manner.

The portion above the web 131 of the flange 130 is fixed to the indoor side flange 306 of the existing upper frame 62 with a screw 136, and the portion below the web 131 of the flange 130 is contacted with the back wall 121 of the upper frame 72 for modification via the upper frame sealing material 78 and adhered by screws 134 to couple the upper frame 72 for modification and the upper frame holding member 76.

The cover 303 is mounted after screwing the screw 134 and the screw 136, and covers the screws 134 and 136 so that they cannot be seen from the indoor side.

The indoor side flange 306 of the existing upper frame 62 is provided with the lateral piece 306a facing the indoor 68 side.

[0075]

The existing vertical frames 59, 60, the repair vertical frames 70, 71 for modification, and the vertical frame holding members 74, 75 are substantially the same as the existing vertical frames 59, 60, the vertical frames 70, 71 for modification, and the vertical frame holding members 74 and 75 shown in FIGS. 1 and 2 described above, a major difference thereof is that a dry type outdoor side vertical frame sealing material 310 and a rattling prevention member 311 are installed on the outdoor side portions of the vertical frames 70 and 71 for modification, and that the vertical frame holding members 74 and 75 are attached with the cover 312 in a snap manner.

Specifically, a sealing material mounting portion 313 facing the indoor side is integrally provided at a portion projecting out to the existing vertical frame 59 from the web 142 of the front wall 140 of the repair vertical frame 70. The outdoor side vertical frame sealing material 310 is installed on the sealing material mounting portion 313 while facing sideways.

The outdoor side vertical frame sealing material 310 has an outdoor side fin 310a and an indoor side fin 310b. Preferably, it has an upward U-shaped cross section, and has a lateral recessed-shaped drainage groove 310c between the outdoor side fin 310a and the indoor side fin 310b.

The outdoor side fin 310a contacts with the outdoor side portion in relation to the existing sealing material 314 at one vertical edge portion 57 of the opening portion 53 of the building 52 and serves as a primary tight.

The indoor side fin 310b press-contacts with the outdoor side portion of one of the existing vertical frames 59, for example, the outdoor side flange 146, and serves as a secondary tight.

[0076]

That is, the outdoor side fin 310a makes it difficult for rainwater or the like to enter the indoor side fin 310b, and the indoor side fin 310b prevents rainwater that has entered

from the seal portion of the outdoor side fin 310a and rainwater that has entered through the inside of the building 52 from entering from a space between the outdoor side portion of the one existing vertical frame 59 and the outdoor side portion of the one repair vertical frames 70.

...

[0084]

Next, a procedure for mounting the sliding door frame 250 for modification to the existing sliding door frame 63 will be described. This procedure is almost the same as the mounting procedure of the sliding door device 50 for modification shown in FIGS. 1 and 2, but a difference is that the vertical frame for modification and the vertical frame holding member are coupled by screws while they are tightened to each other.

(Procedure 1)

The outdoor side guide rail 114 of the existing lower frame 56 is cut and removed. This cutting work is carried out with a circular saw or a special cutting tool.

(Procedure 2)

The mounting auxiliary member 106 is mounted on the indoor side guide rail 115 of the existing lower frame 56 with a screw 110. The mounting auxiliary member 106 may extend over the entire length of the indoor side guide rail 115, or a plurality of short mounting auxiliary members 106 may be mounted at intervals in the longitudinal direction.

(Procedure 3)

The lower frame 69 for modification, the vertical frames 70 and 71 for modification, and the sliding door frame 78 for modification assembling the upper frame 72 for modification in a rectangular shape are installed with the lower frame sealing material 79, the outdoor lower frame sealing material 300, the outdoor side upper frame sealing material 302, and the outdoor side vertical frame sealing material 310, and the sliding door frame 250 for modification is inserted into the existing sliding door frame 63 from the outdoor 73 side of the opening 54, the lower frame sealing material 79 is contacted with the back wall 104 of the existing lower frame 56, and the outdoor side lower frame sealing material 300 is contacted with the front wall 102 of the existing lower frame 56.

In this state, the lower frame 69 for modification and the mounting auxiliary member 106 are adhered with the screws 112, and the lower frame 69 for modification is mounted on the existing lower frame 56.

...

[0091]

According to this embodiment, the same function and effect as those in FIGS. 1 and 2 are obtained, and the following function and effect are obtained.

(1) The mounting auxiliary member 106 is mounted on the existing lower frame 56, and the indoor side leg portion 91 and the support wall 89 (that is, the indoor side portion of the lower frame 69 for modification) of the lower frame 69 for modification are placed on the mounting auxiliary member 106, and fixedly mounted on the mounting auxiliary member 106 by the screw 112, thereby changing the height dimensions of the mounting auxiliary member 106 to mount the lower frame 69 for modification having the same shape to the existing lower frame 56 having a different shape while the support wall 89 and the back wall 104 are the same height.

...

[0100]

Further, as shown in FIG. 14, the indoor side guide rail 115 of the existing lower frame 56 is cut and removed in the same manner as described above, and the mounting auxiliary member 106 may be adhered to the back wall 104 of the existing lower frame 56 with the screw 110.

For example, the indoor side wall portion 108 of the mounting auxiliary member 106 is adhered to the back wall 104 of the existing lower frame 56 with the screws 110. In this case, it is preferable to form a screw insertion hole (not shown) in the outdoor side wall portion 107 and screw through the screw insertion hole."

(C) According to the description of the Detailed Description of the Invention of the specification of the patent, in Inventions 1 to 6, there were a problems that (a) since the lower frame for modification is fixed to the existing lower frame while being placed on the existing lower frame, the width in the height direction of the space between the lower frame for modification and the upper frame for modification becomes smaller, and the effective opening area decreases, and a problem (subject) that (b) since the lower frame base material of the lower frame for modification is directly placed on the guide rail of the existing lower frame and fixed with reference to the guide rail, the width in the height direction of the space between the lower frame for modification and the upper frame for modification becomes smaller and the effective opening area decreases. Therefore, these problems (subjects) are solved by (1) cutting and removing the outdoor side guide rail of the existing lower frame (Configuration 1), and (2) providing an auxiliary mounting member on the indoor side portion of the existing lower frame, mounting the mounting auxiliary member with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower

frame, supporting the indoor side portion of the lower frame for modification with the mounting auxiliary member, and mounting the sliding door frame for modification to the existing sliding door frame with reference to the mounting auxiliary member (Configuration 2). By exploring Configurations 1 and 2, the width in the height direction of the space between the lower frame for modification and the upper frame for modification is large, and a wide opening area can be ensured, and by using Constitution 2, it is recognized that an effect (the present effect) is shown, which can mount the same sliding door frame for modification on the existing sliding door frames having different shapes and dimensions using the mounting auxiliary member of the shape and dimensions according to the shape and dimensions of the existing sliding door frame.

Then, as a specific configuration of "supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member" of Inventions 1 to 3 or "an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member" of Inventions 4 to 6, Paragraph [0070] of the specification of the patent describes the specific configurations (embodiments) of Configurations 1 and 2 in the case where the upper wall portion 109 of the mounting auxiliary member 106 supports the indoor side leg portion 91 and the support wall 89 of the lower frame 69 for modification (however, of Configuration 2, the configuration part in which the mounting auxiliary member is fixed with screws to the rising surface of the back wall ranging to the indoor side end portion of the existing lower frame is described in [0100]).

As described above, in a person ordinarily skilled in the art, it can be said that the Detailed Description of the Invention of the specification of the patent describes the problems of Inventions 1 to 6 and the means for solving the problems, and other technical matters necessary for a person ordinarily skilled in the art to understand the Inventions 1 to 6.

(D) In comparison of Embodiment 1 described in the Detailed Description of the Invention of the specification of the patent and Inventions 1 and 4, in Inventions 1 and 4, an indoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame via the spacer, whereas Embodiment 1 does not have such a configuration. Also, in Inventions 1 and 4, the mounting auxiliary member is fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame, whereas, in Embodiment 1, the mounting auxiliary member 106 makes the outdoor side wall portion 107 abut on the indoor side guide rail 115 from the outdoor 73 side, and the outdoor side wall portion 107 is fixed to the indoor side guide rail 115 with

screws. Those are different in the above points, but the remaining configurations are the same, including fixing the front wall of the lower frame for modification to the front wall of the existing lower frame with screws.

On the other hand, in Embodiment 3, it is described that the mounting auxiliary member 106 is fixed to the back wall 104 of the existing lower frame 56 with the screw 110. In comparison of Embodiment 3 and Inventions 1 and 4, although those are different in the point that in Inventions 1 and 4, the front wall of the lower frame for modification is fixed to the front wall of the existing lower frame with screws, whereas, in Embodiment 3, the dry type outdoor side lower frame sealing material 300 is installed at the outdoor 73 side part of the lower frame 69 for modification while facing the indoor 68 side and the outdoor side lower frame sealing material 300 is press-contacted on the front wall 102 of the existing lower frame 56, the remaining configurations are identical, including fixing with the screw the mounting auxiliary member to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame 56, and supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame with the spacer.

Then, in light of description of the specification of the patent and the descriptions of FIG. 1 and FIG. 14, Embodiment 1 and Embodiment 3 are common in the basic configuration of the lower frame for modification, the mounting auxiliary member, and the existing lower frame, and are common in the point of exerting the actions and effects that the width in the height direction of the space between the lower frame for modification and the upper frame for modification is large, a wide opening area can be ensured, and by using the mounting auxiliary member having a shape and dimensions according to the shape and dimensions of the existing sliding door frame, the same sliding frame for modification can be mounted to the existing sliding door frame having a different shape and dimensions. Therefore, it is obvious for a person ordinarily skilled in the art that in Embodiment 1, as in Embodiment 3, the mounting auxiliary member 106 may be fixed to the back wall 104 of the existing lower frame 56 with the screw 110, and an outdoor side portion of the lower frame for modification may be supported while being contacted with an outdoor side portion of the existing lower frame via the spacer. In contrast, it is also obvious for a person ordinarily skilled in the art that in Embodiment 3, as in Embodiment 1, the front wall of the lower frame for modification may be fixed to the front wall of the existing lower frame with screws.

Furthermore, as described above, a positional relationship or an installation aspect of respective structure members such as the lower frame for modification, the mounting

auxiliary member, the spacer, the existing lower frame, etc. in the case of applying the configuration of Embodiment 3 to Embodiment 1, or applying the configuration of Embodiment 1 to Embodiment 3, are obvious, in light of the descriptions of the specification and the drawings.

Therefore, to a person ordinarily skilled in the art, it can be said that the Detailed Description of the Invention of the specification of the patent describes the problems of Inventions 1 and 4 and the means for solving the problems, and other technical matters necessary for a person ordinarily skilled in the art to understand Inventions 1 and 4, and thus the Demandant's allegation cannot be accepted.

B Regarding Inventions 2, 3, 5, and 6

In comparison of Evidence 3 of A above and Inventions 2, 3, 5, and 6, although those is a difference in the point that in Inventions 2 and 5, the front wall of the lower frame for modification is fixed to the front wall of the existing lower frame with screws, whereas, in Embodiment 3, the dry type outdoor side lower frame sealing material 300 is installed at the outdoor 73 side part of the lower frame 69 for modification while facing the indoor 68 side and the outdoor side lower frame sealing material 300 is press-contacted on the front wall 102 of the existing lower frame 56, the remaining configurations are identical.

Then, it is obvious for a person ordinarily skilled in the art that in Embodiment 3, as in Embodiment 1, the front wall of the lower frame for modification may be fixed to the front wall of the existing lower frame by screws, as examined in A above.

Further, as described above, a positional relationship or an installation aspect of respective structure members such as the lower frame for modification, the mounting auxiliary member, the spacer, the existing lower frame, etc. in the case of applying the configuration of Embodiment 1 to Embodiment 3 are obvious, in light of the descriptions of the specification and the drawings.

Therefore, to a person ordinarily skilled in the art, it can be said that the Detailed Description of the Invention of the specification of the patent describes the problems of Inventions 2, 3, 5, and 6 and the means for solving the problems, and other technical matters necessary for a person ordinarily skilled in the art to understand Inventions 2, 3, 5, and 6, and thus the Demandant's allegation cannot be accepted.

C Summary

As described above, the patent relating to Inventions 1 to 6 does not violate the provisions of Article 36(6)(i) of the Patent Act, and thus it cannot be invalidated due to

Reason for invalidation 2 alleged by the Demandant.

5 Regarding Reason for invalidation 3 (violation of enablement requirement)

(1) The Demandant's allegation

As alleged in Reason for invalidation 1, the Demandant alleges that Inventions 1 to 6 cannot be clearly grasped from the description of the specification, even if a person ordinarily skilled in the art tries to carry out the inventions of the case, so that he/she cannot understand how to carry out Inventions 1 to 6.

(2) Judgment

As examined in 3 above, since Inventions 1 to 6 are clear, the Demandant's allegation cannot be accepted.

Further, the Detailed Description of the Invention and the drawings of the specification are clear and sufficient to enable a person ordinarily skilled in the art to carry out Inventions 1 to 6.

Therefore, the patent relating to Inventions 1 to 6 does not violate the provisions of Article 36(6)(i) of the Patent Act, and thus it cannot be invalidated due to Reason for invalidation 3 alleged by the Demandant.

6 Regarding Reason for invalidation 4 (lack of inventive step)

(1) Patent Invention 1

A Comparison

Invention 1 and A5 Invention 1 will be compared.

(A) The matter of "leaving an existing sliding door frame which has an existing upper frame made of extruded aluminum alloy profiles attached to an opening portion of a building, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles" of Invention 1, and the matter of "leaving an existing sliding door frame which has an existing upper frame made of aluminum alloys remaining at an opening portion between a bathroom and a dressing room in a building, an existing lower frame made of aluminum alloys and provided with a dressing room side rail m2 and a bathroom side rail m3, and an existing vertical frame made of aluminum alloys" of A5 Invention 1 will be compared.

"An existing sliding door frame which has" "an existing upper frame made of extruded aluminum alloy profiles attached to an opening portion of a building," "an

existing lower frame" "made of extruded aluminum alloy profiles," and "an existing vertical frame made of extruded aluminum alloy profiles" of Invention 1, and "an existing sliding door frame which has" "an existing upper frame made of aluminum alloys remaining at an opening portion between a bathroom and a dressing room in a building," "an existing lower frame" "made of aluminum alloys," and "an existing vertical frame made of aluminum alloys" of A5 Invention 1 are common in the point that those are "an existing sliding door frame which has an existing upper frame made of aluminum alloys attached to an opening portion of a building, an existing lower frame made of aluminum alloys, and an existing vertical frame made of aluminum alloys".

Further, "an indoor side guide rail" and "an outdoor side guide rail" of Invention 1 and "a dressing room side rail m2" and "a bathroom side rail; m3" of A5 Invention 1 are common in the point that those are "one side guide rail" and "the other side guide rail."

Then, the two are common in the point of "leaving an existing sliding door frame which has an existing upper frame made of aluminum alloys attached to an opening portion of a building, an existing lower frame made of aluminum alloys and provided with one side guide rail and the other side guide rail, and an existing vertical frame made of aluminum alloys".

(B) The matter of "providing a mounting auxiliary member on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame " of Invention 1, and the matters of "forming a wall portion m5 rising to be a bathroom side surface at an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame, forming a lateral piece part m6 bending to the dressing room side at an upper end of the wall portion m5, and forming an extension part m7 extending to the bathroom side on the bathroom side of the lateral piece part m6" and "making an inverted L-shaped member s that extends an upper wall s1 to the bathroom side abut on a lower surface of the extension part m7, and fixing a vertical wall s2 thereof on the bathroom side surface of the wall portion m5 with screws" of A5 Invention 1 will be compared.

While "auxiliary" means "to assist and help, also, those helping that" (Kojien 6th edition), "a mounting auxiliary member" of Invention 1 is mounted to "the existing lower frame", and "supports" "the indoor side portion of the lower frame for modification, when mounting "the lower frame for modification", so that it is recognized as a member assisting and helping the mounting of the lower frame for modification to the existing

lower frame.

Then, "an inverted L-shaped member s" of A5 Invention 1 "fixes a vertical wall s2 thereof on the bathroom side surface of the wall portion m5 with screws," and "fixes a dressing room side portion of the lower frame for modification" "to an upper wall s1" of the inverted L-shaped member s "with screws," and since it can be said that it is a member assisting and helping the mounting of the lower frame for modification to the existing lower frame, it corresponds to "a mounting auxiliary member" of Invention 1.

Further, "a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame" of Invention 1 and "a wall portion m5 rising to be a bathroom side surface" at "an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame" of A5 Invention 1 are common in the point of being "a rising surface of a back wall ranging to an end portion on the furthest side of a bottom wall of the existing lower frame".

Then, the two are common in the point of "providing a mounting auxiliary member on one side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the furthest side of a bottom wall of the existing lower frame ".

(C) In comparison of the matter "then, inserting a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, in the existing sliding door frame from the outdoor side" of Invention 1, and the matter "then, inserting a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a vertical frame for modification made of aluminum alloys, and a lower frame for modification made of aluminum alloys, flat, and provided with a bottom wall where the height of the bathroom side and the dressing room side are the same, into the existing sliding door frame from the bathroom side" of A5 Invention 1, the two are common in the point of "then, inserting a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a vertical frame for modification made of aluminum alloys, and a lower frame for modification made of aluminum alloys, in the existing sliding door frame from the other side".

(D) The matters of "supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member" and "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member" of Invention 1, and the matters of "fixing an inverted L-shaped member t to a wall portion m4 on the bathroom side of the existing lower frame with screws" and "fixing a bathroom side portion of the lower frame for modification to an upper portion of the inverted L-shaped member t, and making a dressing room side portion of the lower frame for modification abut on an upper surface of the lateral piece part m6 of the existing lower frame and fixing that to an upper wall s1 of the inverted L-shaped member s with screws" of A5 Invention 1 will be compared.

"The inverted L-shaped member s" of A5 Invention 1 fixes "a dressing room side portion of the lower frame for modification" "to an upper wall s1 with screws," and thus it can be said that it "supports" "the lower frame for modification".

Although Invention 1 "mounts the sliding door frame for modification with reference to the mounting auxiliary member," in light of the fact that "reference" means "a source becoming basics of things" (Digital Daijisen dictionary) and the description that "a mounting auxiliary member is provided on the indoor side portion of the existing lower frame, the mounting auxiliary member is fixed and mounted with screws to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame, and the sliding door frame for modification is mounted to the existing sliding door frame with reference to the mounting auxiliary member, so that the same sliding door frame for modification can be mounted to the existing sliding door frame having different shapes and dimensions by using the mounting auxiliary member having the shape and dimensions corresponding to the shape and dimensions of the existing sliding door frame." (Paragraph [0018]), it is recognized that "to mount the sliding door frame for modification with reference to the mounting auxiliary member" means that the sliding door frame for modification is mounted by using the mounting auxiliary member as a source for positioning the sliding door frame for modification with respect to the existing sliding door frame.

Whereas, in A5 Invention 1, since "the inverted L-shaped member s" makes "an upper wall s1 abut on a lower surface of the extension part m7" and "the lower frame for modification" makes "a dressing room side portion abut on an upper surface of the lateral piece part m6 of the existing lower frame," "the sliding door frame for modification" of

A5 Invention 1 "is mounted with reference to" "the lateral piece part m6 of the existing lower frame" and it is cannot be said that it "is mounted with reference to" "the inverted L-shaped member s".

Then, the two are common in the points of "supporting one side portion of the lower frame for modification by the mounting auxiliary member," and "fixing the lower frame for modification to the existing lower frame with screws to mount the sliding door frame for modification".

(E) The matter that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" of Invention 1, and the matter that "a difference in height between an upper end of the wall portion m5 of the existing lower frame and an upper end of the lower frame for modification is 3 mm" of A5 Invention 1 will be compared.

As examined in 3 above, in Invention 1, it is understood that the matter "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" permits a slight difference in height between the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification due to the shape, dimensions, etc. of the existing lower frame, but does not intend to actively change the height of the upper end of the back wall and the upper end of the lower frame for modification, and means that the effective opening area is not substantially reduced.

In Evidence A No. 5-2, "existing sash H = 2,000" is described (see 2 (1) B (A) c above), and in light of the fact that a distance between the existing upper frame and the existing lower frame; that is, the height of the opening portion, is 2000 mm, since it can be said that the fact that the difference in height between the upper end of the wall portion m5 of the existing lower frame and the upper end of the lower frame for modification is 3 mm does not substantially reduce the effective opening area, A5 Invention 1 includes the configuration that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height".

(F) According to the above, Invention 1 and A5 Invention 1 correspond with each other in the following point.

<Corresponding Feature>

"A modification method for a sliding door device, comprising:

leaving an existing sliding door frame which has an existing upper frame made of aluminum alloys attached to an opening portion of a building, an existing lower frame made of aluminum alloys, and provided with one side guide rail and the other side guide

rail, and an existing vertical frame made of aluminum alloys;

providing a mounting auxiliary member on one side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted with screws to a rising surface of a back wall ranging to an end portion on the most one of a bottom wall of the existing lower frame;

then, inserting a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a vertical frame for modification made of aluminum alloys, and a lower frame for modification made of aluminum alloy, in the existing sliding door frame from the other side, and supporting the one side portion of the lower frame for modification by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

fixing the lower frame for modification to the existing lower frame with screws to mount the sliding door frame for modification."

(G) On the other hand, the two are different in the following points.

<Different Feature 1-1>

Regarding an opening portion of the building provided with the sliding door device, in Invention 1, it is the opening between the outdoor side and the indoor side, whereas, In A5 Invention 1, it is the opening portion between the bathroom and the dressing room.

<Different Feature 1-2>

Regarding a material of the existing sliding door frame and the sliding door frame for modification, in Invention 1, the existing upper frame, the existing lower frame, the existing vertical frame, the upper frame for modification, the vertical frame for modification, and the lower frame for modification are made of extruded aluminum alloy profiles, whereas, in A5 Invention 1, those are made of aluminum alloys, but it is unknown whether or not those are extruded aluminum alloy profiles.

<Different Feature 1-3>

Regarding a guide rail of the existing lower frame, in Invention 1, the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, whereas, in A5 Invention 1, the bathroom side rail m3 of the existing lower frame is not removed.

<Different Feature 1-4>

Regarding a structure of the lower frame for modification, in Invention 1, the lower frame for modification is inclined while being stepped upward from the outdoor side to the indoor side, and is provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, whereas in A5 Invention 1, the lower frame is flat, and is provided with a bottom wall where the height of the bathroom side and that of the dressing room side are the same.

<Different Feature 1-5>

Regarding a mounting structure of the sliding door frame for modification, Invention 1 includes supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member, whereas, A5 Invention 1 does not have such a structure.

B Judgment

(A) Regarding Different Features 1-3 to 1-5

First, Different Features 1-3 to 1-5 above will be examined together.

a Evidence A No. 6 describes, as A6 Invention 1, the invention of "a sash modifying method for mounting a new window frame 5 made of aluminum alloy profiles to an old window frame 1, wherein in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side and form an outside flange 5a suspended from a position proximal to its side end, and to form a vertical C-shaped groove 5b in the longitudinal direction on the inside surface and form a horizontal flange 5C from its upper end to the indoor side; wherein an anchor 6 is inserted in the C-shaped groove 5b, and the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side; and wherein the outside flange 5a of the lower frame of the new window frame 5 is screwed to a suspension flange 1b of an existing steel lower frame, and a flange 6b of the anchor 6 is screwed to the existing steel lower frame" (see 2 (2) above).

Then, "an old window frame 1" of A6 Invention 1 and "an existing sliding door frame" of Invention 1 are common in the point that those are "existing frames". Also, "a new window frame 5" of A6 Invention 1 corresponds to "a sliding door frame for modification" of Invention 1; similarly, below, "a lower frame" wherein "a side surface shape is stepped to form a downward slope toward the outdoor side" corresponds to "a

lower frame for modification" "provided with a bottom wall inclined while being stepped upward from the outdoor side to the indoor side where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion," and "the outside flange 5a of the lower frame of the new window frame 5" "is screwed to a suspension flange 1b of a lower frame" corresponds to "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws."

b The lower frame for modification provided with the bottom wall inclined while being stepped upward from the outdoor side to the indoor side where the outdoor side portion is low and the indoor side portion is higher than the outdoor side portion is well known, as described in Evidence A No. 7 and Evidence A No. 8 (see 2 (3) and (4) above).

c Evidence A No. 9 describes that a plurality of lower frame spacers 13 are inserted between the lower frame 5 of the old window frame 1 and the lower frame mounting auxiliary frame 59 (see 2 (5) above), and "the lower frame 5" and "the lower frame spacers 13" respectively correspond to "the existing lower frame" and "a spacer" of Invention 1.

Evidence A No. 10 describes that the lower frame mounting hardware 4b is fixed to the lower frame 2b of the old window frame 2, and is made to hit on the mounting reference pieces 6 and 7 via the adjusting tool 8 such as a liner to fix the lower frame 3b of the new window frame 3 to the lower frame mounting hardware 4b (see 2 (6) above); "the lower frame 2b," "the adjusting tool 8," and "the lower frame 3b" respectively correspond to "the existing lower frame," "the spacer," and "the lower frame for modification" of Invention 1.

Evidence A No. 11 describes that the lower frame 4b and a lower auxiliary member 6b are attached to the upper surface of the lower discard frame 3b via a spacer 5 and a fixing bracket 20 (see 2 (7) above); "a spacer 5" corresponds to "a spacer" of Invention 1.

Evidence A No. 27 describes that a mounting auxiliary material (spacer) is fixed to the existing lower frame (see 2 (20) above).

Evidence A No. 32 describes that the support leg 21 of the anchor 3 fixed to a lower portion of the lower frame 2 is contacted with the lower portion 33 of the steel lower frame 6 via the height-adjustable washer 22 (see 2 (21) above); "the lower frame 2," "the existing steel lower frame 6," and "the height-adjustable washer 22" respectively correspond to "the lower frame for modification," "the existing lower frame," and "the spacer" of Invention 1.

d When mounting the lower frame for modification, it is well known that the guiderail of the existing lower frame getting in the way is cut and removed, as described in Evidence A No. 7, and Evidence A No. 15 to Evidence A No. 17 (see 2 (3), (11) to

(13) above).

e When mounting the lower frame for modification, it is well known that of the two rails of the existing lower frame, the outdoor side rail is cut and removed, and the lower frame for modification is fixed to the indoor side of the existing lower frame with screws via the inverted L-shaped member, as described in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39 (especially, in Evidence A No. 36 and Evidence A No. 36) (see 2 (22) to (25), and (28) above).

f However, it is not described in any evidence mentioned above that the indoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame with a spacer, and the sliding door frame for modification is mounted with reference to the mounting auxiliary member, and it is not recognized as a well-known technique. Further, since "the inverted L-shaped member s" of A5 Invention 1 makes "the upper wall s1 abut on the lower surface of the extension part m7," it cannot be "a reference" when mounting "the sliding door frame for modification" to "the existing sliding door frame".

Further, although A6 Invention 1, in the first place, "relates to a mounting structure in the case where expected dimensions of the new window frame are smaller than those of an old window frame, when mounting the new window frame to the old window frame" (see 2 (2) B above), in A5 Invention 1, expected dimensions of the sliding door frame for modification are not smaller than expected dimensions of the existing sliding door frame, and since A5 Invention 1 and A6 Invention 1 are quite different in the support structure on the dressing room side (indoor side) of the lower frame for modification, there is no motivation to extract only the shape of "the new window frame 5" in which "a side surface shape is stepped to form a downward slope," and the configuration that "the outside flange 5a of the lower frame 5" "is screwed to "the suspension flange 1b of" the existing "lower frame" of A6 Invention 1, and to apply that to A5 Invention 1.

Then, in light of the well-known techniques mentioned above, even if it can be easily made by a person skilled in the art to adopt the lower frame for modification that is inclined while being stepped upward from the bathroom side to the dressing room side, and there is provided a bottom wall where a bathroom side portion is low and a dressing room side portion is higher than the bathroom side portion, in A5 Invention 1, and to cut and remove from the vicinity of the root the bathroom side rail m3 of the existing lower frame getting in the way when mounting the lower frame for modification, at that time, furthermore, it cannot be said that it is also easy for a person skilled in the art to support the bathroom side portion of the lower frame for modification while making it contact

with the bathroom side portion of the existing lower frame via the spacer, and to fix the front wall of the lower frame for modification to the front wall of the existing lower frame with screws, thereby mounting the sliding door frame for modification with reference to the inverted L-shaped member s.

Further, Evidence A No. 12 to Evidence A No. 14 were submitted as evidences indicating that the sliding door device used for the bathroom is also used for the opening facing outside, Evidence A No. 18 to Evidence A No. 20 were submitted as evidences indicating that it is well known that extruded aluminum alloy profiles are used for the sliding door frame, and Evidence A No. 21 and Evidence A No. 22 were submitted as evidences indicating that it is well known that a sealing material is installed on the outdoor side portions of the upper frame for modification and the vertical frame for modification, and that the sealing material is contacted with the opening portion of the building. None of them tell that it is a structure related to Different Features 1-3 to 1-5, in A5 Invention 1.

Therefore, In A5 Invention 1, it cannot be said that it could have been easily made by a person ordinarily skilled in the art to make the structure of Invention 1 related to Different Feature 1-3 to Different Feature 1-5.

(B) Demandant's allegation

The Demandant alleges that in the configuration of "mounting the sliding door frame for modification with reference to the mounting auxiliary member," there is no special meaning for specifying as "reference," and it merely means that the sliding door frame for modification is prevented from moving (is positioned) by being fixed with the mounting auxiliary member (Oral proceeding statement brief, page 12, lines 1 to 15).

However, in Invention 1, the meaning of "mounting the sliding door frame for modification with reference to the mounting auxiliary member" is as examined in A (D) above, so that the Demandant's allegation cannot be accepted.

C Summary

As described above, it cannot be accepted that Invention 1 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 1, A6 Invention 1, and the well-known techniques without examining Different Feature 1-1 and Different Feature 1-2.

(2) Regarding Invention 2

A Comparison

Although Invention 2 was described as an independent claim, substantially, it can be said that in Invention 1, it is further limited to "installed with an outdoor side upper frame sealing material on an outdoor side portion of the upper frame for modification, and is installed with an outdoor side vertical frame sealing material on an outdoor side portion of the vertical frame for modification of the sliding door frame for modification," and when inserting the sliding door frame for modification in the existing sliding door frame, "making the outdoor side upper frame sealing material contact with an upper edge portion of the opening portion of the building and making the outdoor side vertical frame sealing material contact with a vertical edge portion of the opening portion of the building".

Therefore, in comparison of Invention 2 and A5 Invention 1, the two are different in the following point, in addition to Different Features 1-1 to 1-5.

<Different Feature 1-6>

In Invention 2, the outdoor side upper frame sealing material is installed on the outdoor side portion of the upper frame for modification, the outdoor side vertical frame sealing material is installed on the outdoor side portion of the vertical frame for modification of the sliding door frame for modification, the outdoor side upper frame sealing material is contacted with the upper edge portion of the opening portion of the building, and the outdoor side vertical frame sealing material is contacted with the vertical edge portion of the opening portion of the building, whereas A5 Invention 1 does not have such a configuration.

B Judgment

In A5 Invention 1, as with (1) B above, it cannot be said that the configuration of Invention 2 related to Different Feature 1-3 to Different Feature 1-5 can be easily conceived by a person ordinarily skilled in the art.

Therefore, it cannot be accepted that Invention 2 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 1, A6 Invention 1, and the well-known techniques without examining Different Feature 1-1, Different Feature 1-2, and Different Feature 1-6.

(3) Regarding Invention 3

A Comparison

Although Invention 3 was described as an independent claim, it can be said that Invention 1 is substantially limited to "cutting and removing the indoor guide rail".

Therefore, in comparison of Invention 3 and A5 Invention 1, in addition to Different Features 1-1 to 1-5 above, the two are different in the following point.

<Different Feature 1-7>

Regarding the guide rail of the existing lower frame, in Invention 3, the indoor side guide rail of the existing lower frame is cut and removed, whereas, in A5 Invention 1, the dressing room side rail m3 of the existing lower frame is not removed.

B Judgment

In A5 Invention 1, as with (1) B above, it cannot be said that the configuration of Invention 3 related to Different Feature 1-3 to Different Feature 1-5 can be easily conceived by a person ordinarily skilled in the art.

Therefore, it cannot be accepted that Invention 3 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 1, A6 Invention 1, and the well-known techniques without examining Different Feature 1-1, Different Feature 1-2, and Different Feature 1-7.

(4) Regarding Invention 4

A Comparison

Invention 4 and A5 Invention 2 will be compared.

(A) The matter "an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of extruded aluminum alloy profiles, an existing lower frame made of extruded aluminum alloy profiles and provided with an indoor side guide rail and an outdoor side guide rail, and an existing vertical frame made of extruded aluminum alloy profiles" of Invention 4, and the matter "an existing sliding door frame remaining at an opening portion between a bathroom and a dressing room in a building, has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys and provided with a dressing room side rail m2 and a bathroom side rail m3, and an existing vertical frame made of aluminum alloys" of A5 Invention 2 will be compared.

The matter "an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of extruded aluminum alloy profiles," "an existing lower frame" "made of extruded aluminum alloy profiles" "and an existing vertical frame made of extruded aluminum alloy profiles" of Invention 4, and the matter "an existing sliding door frame remaining at an opening portion between a bathroom and

a dressing room in a building, has an existing upper frame made of aluminum alloys, "an existing lower frame made of aluminum alloys and an existing vertical frame made of aluminum alloys" of A5 Invention 2 are common in the point that "an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys, and an existing vertical frame made of aluminum alloys".

Further, "an indoor side guide rail" and "an outdoor side guide rail" of Invention 4, and "a dressing room side rail m3" and "a bathroom side rail m3" of A5 Invention 2 are common in the point that those are "one side guide rail" and "the other side guide rail".

Then, the two are common in the point that "an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys and provided with one side guide rail and the other side guide rail, and an existing vertical frame made of aluminum alloys".

(B) The matter "a mounting auxiliary member is provided on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame with screws" of Invention 4, and the matters of "a wall portion m5 rising to be a bathroom side surface at an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame is formed, a lateral piece part m6 bending to the dressing room side is formed at an upper end of the wall portion m5, and an extension part m7 extending to the bathroom side is formed on the bathroom side of the lateral piece part m6" and "an inverted L-shaped member s that extends an upper wall s1 to the bathroom side is make the upper wall s1 abut on a lower surface of the extension part m7, and a vertical wall s2 thereof is fixed on the bathroom side surface of the wall portion m5 with screws" of A5 Invention 2 will be compared.

While "auxiliary" means "to assist and help, also, those helping that" (Kojien 6th edition), "a mounting auxiliary member" of Invention 4 is mounted to "the existing lower frame", and "supports" "the indoor side portion of the lower frame for modification, when mounting "the lower frame for modification", so that it is recognized as a member assisting and helping the mounting of the lower frame for modification to the existing lower frame.

Then, "an inverted L-shaped member s" of A5 Invention 2 "fixes a vertical wall s2 thereof on the bathroom side surface of the wall portion m5 with screws," and "fixes a

dressing room side portion of the lower frame for modification" "to an upper wall s1 of the inverted L-shaped member s with screws," and since it can be said that it is a member assisting and helping the mounting of the lower frame for modification to the existing lower frame, it corresponds to "a mounting auxiliary member" of Invention 4.

Further, "a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame" of Invention 4 and "a wall portion m5 rising to be a bathroom side surface" at "an end portion on the furthest dressing room side of a bottom wall part m1 of the existing lower frame" of A5 Invention 2 are common in the point that each is "a rising surface of a back wall ranging to an end portion on the furthest one side of a bottom wall of the existing lower frame".

Then, the two are common in the point of "providing a mounting auxiliary member on one side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest one side of a bottom wall of the existing lower frame with screws".

(C) In comparison of the matter of "a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing sliding door frame" of Invention 4, and the matter "a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a lower frame for modification made of aluminum alloys, flat, and provided with a bottom wall where the height of the bathroom side and the height of the dressing room side are the same, and a vertical frame for modification made of aluminum alloys, is inserted into the existing sliding door frame" of A5 Invention 2, the two are common in the point that "a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a lower frame for modification made of aluminum alloys, and a vertical frame for modification made of aluminum alloys, is inserted in the existing sliding door frame".

(D) The matter "an outdoor side portion of the lower frame for modification of the sliding door frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member" and "a

front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws" of Invention 4, and the matters of "an inverted L-shaped member t is fixed to a wall portion m4 on the bathroom side of the existing lower frame with screws" and "a bathroom side portion of the lower frame for modification of the sliding door from for modification is fixed to an upper portion of the inverted L-shaped member t wit screws, and a dressing room side portion of the lower frame for modification is made to abut on an upper surface of the lateral piece part m6 of the existing lower frame and is fixed to an upper wall s1 of the inverted L-shaped member s with screws" of A5 Invention 2 will be compared.

"The inverted L-shaped member s" of A5 Invention 2 "fixes" "a dressing room side portion of the lower frame for modification" "to an upper wall s1 with screws," and thus it can be said that it "supports" "the lower frame for modification".

Then, the two are common in the points of "supporting one side portion of the lower frame for modification by the mounting auxiliary member," and "fixing the lower frame for modification to the existing lower frame with screws".

(E) The matter that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" of Invention 4, and the matter that "a different in height between an upper end of the wall portion m5 of the existing lower frame and an upper end of the lower frame for modification is 3 mm" of A5 Invention 2 will be compared.

As examined in 3 above, in Invention 4, it is understood that the matter "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height" permits a slight difference in height between the upper end of the back wall of the existing lower frame and the upper end of the lower frame for modification due to the shape, dimensions, etc. of the existing lower frame, but does not intend to actively change the height of the upper end of the back wall and the upper end of the lower frame for modification, and means that the effective opening area is not substantially reduced.

In Evidence A No. 5-2, "existing sash H = 2,000" is described (see 2 (1) B (A) c above), and in light of the fact that a distance between the existing upper frame and the existing lower frame, that is, the height of the opening portion, is 2000 mm, since it can be said that the fact that the difference in height between the upper end of the wall portion m5 of the existing lower frame and the upper end of the lower frame for modification is 3 mm does not substantially reduce the effective opening area, A5 Invention 2 includes the configuration that "an upper end of the back wall and an upper end of the lower frame for modification are almost the same height".

(F) According to the above, Invention 4 and A5 Invention 2 correspond to each other in the following point.

<Corresponding Feature>

"A modified sliding door device,

wherein an existing sliding door frame remaining at an opening portion of a building has an existing upper frame made of aluminum alloys, an existing lower frame made of aluminum alloys and provided with one side guide rail and the other side guide rail, and an existing vertical frame made of aluminum alloys, and a mounting auxiliary member is provided on the one side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest one side of a bottom wall of the existing lower frame with screws;

wherein a sliding door frame for modification which has an upper frame for modification made of aluminum alloys, a lower frame for modification made of aluminum alloys, and a vertical frame for modification made of aluminum alloys, is inserted in the existing sliding door frame;

wherein one side portion of the lower frame for modification of the sliding door frame for modification is supported by the mounting auxiliary member, wherein an upper end of the back wall and an upper end of the lower frame for modification are almost the same height; and

wherein the lower frame for modification is fixed to the existing lower frame with screws".

(G) On the other hand, the two are different in the following points.

<Different Feature 1-A>

Regarding the opening portion of the building provided with the sliding door device, in Invention 4, it is the opening between the outdoor side and the indoor side, whereas, In A5 Invention 2, it is the opening portion between the bathroom and the dressing room.

<Different Feature 1-B>

Regarding a material of the existing sliding door frame and the sliding door frame for modification, in Invention 4, the existing upper frame, the existing lower frame, the existing vertical frame, the upper frame for modification, the vertical frame for modification, and the lower frame for modification are made of extruded aluminum alloy

profiles, whereas, in A5 Invention 2, those are made of aluminum alloys, but it is unknown whether or not those are extruded aluminum alloy profiles.

<Different Feature 1-C>

Regarding a guide rail of the existing lower frame, in Invention 4, the outdoor side guide rail of the existing lower frame is cut and removed from the vicinity of a root, whereas, in A5 Invention 2, the bathroom side rail m3 of the existing lower frame is not removed.

<Different Feature 1-D>

Regarding the structure of the lower frame for modification, in Invention 4, the lower frame for modification is inclined while being stepped upward from the outdoor side to the indoor side, and is provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, whereas in A5 Invention 2, the lower frame for modification is flat, and is provided with a bottom wall where the height of the bathroom side and the height of dressing room side are the same.

<Different Feature 1-E>

Regarding the mounting structure of the sliding door frame for modification, in Invention 4, an outdoor side portion of the lower frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws, whereas, A5 Invention 2 does not have such a structure.

B Judgment

First, Different Features 1-C to 1-E above will be examined together.

(A) Evidence A No. 6 describes, as A6 Invention 2, the invention of "a modified sash mounting a new window frame 5 made of aluminum profiles to an old window frame 1, wherein in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side and form an outside flange 5a suspended from a position proximal to its side end, and to form a vertical C-shaped groove 5b in the longitudinal direction on the inside surface and form a horizontal flange 5c from its upper end; and wherein the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side, the outside flange 5a of the lower frame of the new window frame 5 is screwed with a suspension flange 1b of an existing steel lower frame, and a flange 6b of an anchor 6 locked to the C-shaped groove

5b is screwed with the existing steel lower frame" (see 2 (2) above).

Then, "an old window frame 1" of A6 Invention 2 and "an existing sliding door frame" of Invention 4 are common in the point that those are "existing frames". Also, "a new window frame 5" of A6 Invention 2 corresponds to "a sliding door frame for modification" of Invention 4; similarly below, "a lower frame" wherein "a side surface shape is stepped to form a downward slope toward the outdoor side" corresponds to "a lower frame for modification" "inclined while being stepped upward from the outdoor side to the indoor side and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion," and "the outside flange 5a of the lower frame of" "the new window frame 5" "is screwed to a suspension flange 1b of a lower frame" corresponds to "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws."

(B) The lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side and provided with the bottom wall where the outdoor side portion is low and the indoor side portion is higher than the outdoor side portion is well known, as described in Evidence A No. 7 and Evidence A No. 8 (see 2 (3) and (4) above).

(C) Evidence A No. 9 describes that a plurality of lower frame spacers 13 are inserted between the lower frame 5 of the old window frame 1 and the lower frame mounting auxiliary frame 59 (see 2 (5) above), and "the lower frame 5" and "the lower frame spacers 13" respectively correspond to "the existing lower frame" and "a spacer" of Invention 4.

Evidence A No. 10 describes that the lower frame mounting hardware 4b is fixed to the lower frame 2b of the old window frame 2, and is made to hit on the mounting reference pieces 6 and 7 via the adjusting tool 8 such as a liner to fix the lower frame 3b of the new window frame 3 to the lower frame mounting hardware 4b (see 2 (6) above), and "the lower frame 2b," "the adjusting tool 8," and "the lower frame 3b" respectively correspond to "the existing lower frame," "the spacer," and "the lower frame for modification" of Invention 4.

Evidence A No. 11 describes that the lower frame 4b and a lower auxiliary member 6b are attached to the upper surface of the lower discard frame 3b via a spacer 5 and a fixing bracket 20 (see 2 (7) above), and "a spacer 5" corresponds to "a spacer" of Invention 4.

Evidence A No. 27 describes that a mounting auxiliary material (spacer) is fixed to the existing lower frame (see 2 (20) above).

Evidence A No. 32 describes that the support leg 21 fixed to a lower portion of the

lower frame 2 is contacted with the lower portion 33 of the steel lower frame 6 via the height-adjustable washer 22 (see 2 (21) above), and "the lower frame 2," "the existing steel lower frame 6," and "the height-adjustable washer 22" respectively correspond to "the lower frame for modification," "the existing lower frame," and "the spacer" of Invention 4.

(D) When mounting the lower frame for modification, it is well known that the guiderail of the existing lower frame getting in the way is cut and removed, as described in Evidence A No. 7, and Evidence A No. 15 to Evidence A No. 17 (see 2 (3), (11) to (13) above).

(E) When mounting the lower frame for modification, it is well known that of the two rails of the existing lower frame, the outdoor side rail is cut and removed, and the lower frame for modification is fixed to the indoor side of the existing lower frame with screws via the inverted L-shaped member, as described in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39 (especially, in Evidence A No. 36 and Evidence A No. 36) (see 2 (22) to (25), and (28) above).

(F) However, it is not described in any evidence mentioned above that the indoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame via a spacer, and it is not recognized as a well-known technique.

Further, although A6 Invention 2, in the first place, "relates to a mounting structure in the case where expected dimensions of the new window frame are smaller than those of an old window frame, when mounting the new window frame to the old window frame" (see 2 (2) B above), in A5 Invention 2, expected dimensions of the sliding door frame for modification are not smaller than expected dimensions of the existing sliding door frame, and since A5 Invention 2 and A6 Invention 2 are quite different in the support structure on the dressing room side (indoor side) of the lower frame for modification, there is no motivation to extract only the shape of "the new window frame 5" in which "a side surface shape is stepped to form a downward slope," and the configuration that "the outside flange 5a of the lower frame 5" "is screwed to "the suspension flange 1b of" the existing "lower frame" of A6 Invention 2, and to apply that to A5 Invention 2.

Then, in light of the well-known techniques mentioned above, even if it can be easily made by a person ordinarily skilled in the art to adopt the lower frame for modification that is inclined while being stepped upward from the bathroom side to the dressing room side, and is provided with a bottom wall where a bathroom side portion is low and a dressing room side portion is higher than the bathroom side portion, in A5 Invention 2, and to cut and remove from the vicinity of the root the bathroom side rail m3

of the existing lower frame getting in the way when mounting the lower frame for modification, at that time, furthermore, it cannot be said that it also would have been easy for a person ordinarily skilled in the art to support the bathroom side portion of the lower frame for modification while making it contact with the bathroom side portion of the existing lower frame via the spacer, and to fix the front wall of the lower frame for modification to the front wall of the existing lower frame with screws.

Further, Evidence A No. 12 to Evidence A No. 14 were submitted as evidences indicating that the sliding door device used for the bathroom is also used for the opening facing outside, Evidence A No. 18 to Evidence A No. 20 were submitted as evidences indicating that it is well known that extruded aluminum alloy profiles are used for the sliding door frame, and Evidence A No. 21 and Evidence A No. 22 were submitted as evidences indicating that it is well known that a sealing material is installed on the outdoor side portions of the upper frame for modification and the vertical frame for modification, and that the sealing material is contacted with the opening portion of the building. None of them indicate that a structure related to Different Features 1-C to 1-E,is made in A5 Invention 2.

Therefore, In A5 Invention 2, it cannot be said that it could have been easily made by a person ordinarily skilled in the art to make the structure of Invention 4 related to Different Feature 1-C to Different Feature 1-E.

C Summary

As described above, it cannot be accepted that Invention 4 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 2, A6 Invention 2, and the well-known techniques without examining Different Feature 1-A and Different Feature 1-B.

(5) Regarding Invention 5

A Comparison

Although Invention 5 was described as an independent claim, substantially, it can be said that Invention 4 is further limited to "an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification and the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building" and "an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification, and the outdoor side vertical frame sealing material is contacted with a vertical edge portion of the opening portion of the building".

Therefore, in comparison of Invention 5 and A5 Invention 2, the two are different in the following point in addition to Different Features 1-A to 1-E.

<Different Feature 1-F>

In Invention 5, the outdoor side upper frame sealing material is installed at the outdoor side portion of the upper frame for modification, the outdoor side upper frame sealing material is contacted with the upper edge portion of the opening portion of the building, the outdoor side vertical frame sealing material is installed at the outdoor side portion of the vertical frame for modification, and the outdoor side vertical frame sealing material is contacted with the vertical edge portion of the opening portion of the building, whereas A5 Invention 2 does not have such a configuration.

B Judgment

In A5 Invention 2, it is the same as (4) B above that it cannot be said that the configuration of Invention 5 related to Different Feature 1-C to Different Feature 1-E can be easily conceived by a person skilled in the art.

Therefore, it cannot be accepted that Invention 5 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 2, A6 Invention 2, and the well-known techniques without examining Different Feature 1-A, Different Feature 1-B, and Different Feature 1-F.

(6) Regarding Invention 6

A Comparison

Although Invention 6 was described as an independent claim, it can be said that Invention 4 is substantially limited to "cutting and removing the indoor guide rail".

Therefore, in comparison of Invention 6 and A5 Invention 2, in addition to Different Features 1-A to 1-E above, the two are different in the following point.

<Different Feature 1-G>

Regarding the guide rail of the existing lower frame, in Invention 6, the indoor side guide rail is cut and removed, whereas, in A5 Invention 2, the dressing room side rail m3 of the existing lower frame is not removed.

B Judgment

In A5 Invention 2, it is the same as (4) B above in that it cannot be said that the configuration of Invention 6 related to Different Feature 1-C to Different Feature 1-E can

be easily conceived by a person skilled in the art.

Therefore, it cannot be accepted that Invention 6 could have easily been invented by a person ordinarily skilled in the art based on A5 Invention 2, A6 Invention 2, and the well-known techniques without examining Different Feature 1-A, Different Feature 1-B, and Different Feature 1-G.

(7) Summary

As described above, since Inventions 1 to 3 could not have easily been invented by a person ordinarily skilled in the art on the basis of A5 Invention 1, A6 Invention 1, and the well-known techniques, and Inventions 4 to 6 could not have easily been invented by a person ordinarily skilled in the art on the basis of A5 Invention 2, A6 Invention 2, and the well-known techniques, regardless of whether A5 Invention 1 and A5 Invention 2 are inventions that had been publicly known or inventions that had been publicly worked before the original filing date of the patent, the patent relating to Inventions 1 to 6 does not violate the provisions of Article 29(2) of the Patent Act.

Therefore, the patent relating to Inventions 1 to 6 cannot be invalidated for Reason for invalidation 4 alleged by the Demandant.

7 Regarding Reason for invalidation 5 (lack of inventive step)

(1) Patent invention 1

A Comparison

Invention 1 and A6 Invention 1 will be compared.

(A) "An old window frame 1" of A6 Invention 1 and "an existing sliding door frame" of Invention 1 are common in the point that those are "existing frames". Also, "an existing" "lower frame," "a new window frame 5," "a lower frame of the new window frame 5," and "a sash modifying method" of A6 Invention 1, respectively correspond to "an existing lower frame," "a sliding door frame for modification," "a lower frame for modification," and "a modification method of a sliding door device" of Invention 1.

(B) It is obvious that "an old window frame 1" of A6 Invention 1 is provided at an opening portion of a building, and has an upper frame and a vertical frame in addition to "a lower frame," and the upper frame and the vertical frame are also made of steel like the lower frame. Further, in A6 Invention 1, "a new window frame 5 is mounted" to "an old window frame 1," it is obvious that "an old window frame 1" remains.

Then, since "an upper frame" and "a vertical frame" of "an old window frame 1"

of A6 Invention 1 correspond to "an existing upper frame" and "an existing vertical frame" of Invention 1, A6 Invention 1 is equipped with the configuration that "the existing frame which has "an existing upper frame" "mounted at an opening portion of a building," "an existing lower frame," and "an existing vertical fame remains".

(C) It is obvious that "a new window frame 5" of A6 Invention 1 has an upper frame and a vertical frame in addition to "a lower frame".

Further, "aluminum profiles" of A6 Invention 1 corresponds to "extruded aluminum alloy profiles" of Invention 1, and similarly, "in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side" corresponds to "a lower frame for modification" of Invention 1 being "inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion".

Then, A6 Invention 1 is provided with "a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion".

(D) The matters of "providing a mounting auxiliary member on an indoor side portion of the existing lower frame, the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame with screws," "then," "inserting a sliding door frame for modification in the existing sliding door frame from the outdoor side, supporting an outdoor side portion of the lower frame for modification while making it contact with an outdoor side portion of the existing lower frame via a spacer, and supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member," and "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification with reference to the mounting auxiliary member" of Invention 1, and the matters of "an anchor 6 is inserted in the C-shaped groove 5b, and the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side" and "the outside flange 5a of the lower frame of the new window frame 5 is screwed

to a suspension flange 1b of an existing steel lower frame, and a flange 6b of the anchor 6 is screwed to the existing steel lower frame" of A6 Invention 1 will be compared.

a While "auxiliary" means "to assist and help, also, those helping that" (Kojien 6th edition), "a mounting auxiliary member" of Invention 1 is mounted to "the existing lower frame", and "supports" "the indoor side portion of the lower frame for modification," when mounting "the lower frame for modification", so that it is recognized as a member assisting and helping the mounting of the lower frame for modification to the existing lower frame.

Then, since "an anchor 6" of A6 Invention 1 "is inserted in the C-shaped groove 5b" formed on "on the inside surface" of "a lower frame of the new window frame 5," and "a flange 6b" of the anchor 6 "is screwed to the existing steel lower frame," even if it is a member for assisting and helping the mounting of the lower frame of the new window frame 5 to the existing steel lower frame, it corresponds to "a mounting auxiliary member" of Invention 1, and it can be said that it "supports" the indoor side portion of "a lower frame of the new window frame 5".

b The matter of "an anchor 6 is inserted in the C-shaped groove 5b, and the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side" of A6 Invention 1, and the matter of "inserting" "a sliding door frame for modification" "in the existing sliding door frame from the outdoor side" of Invention 1 are common in the point of "inserting a sliding door frame for modification in the existing frame from the outdoor side".

c "'An outside flange 5a' of 'a lower frame of a new window frame 5'" and "'a suspension flange 1b' of 'an existing' 'lower frame,'" of A6 Invention 1 respectively correspond to "'a front wall' of 'the lower frame for modification'" and "'a front wall' of 'the existing lower frame'" of Invention 1, and the matter of "the outside flange 5a of the lower frame of the new window frame 5" "is screwed to a suspension flange 1b of an existing" "lower frame, and a flange 6b of the anchor 6 is screwed to the existing" "lower frame" of A6 Invention 1 corresponds to the matter of "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws" of Invention 1.

d Although Invention 1 "mounts the sliding door frame for modification with reference to the mounting auxiliary member," in light of the fact that "reference" means "a source becoming a basis of things" (Digital Daijisen dictionary) and the description that "a mounting auxiliary member is provided on the indoor side portion of the existing lower frame, the mounting auxiliary member is fixed and mounted to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall

of the existing lower frame with screws, and the sliding door frame for modification is mounted to the existing sliding door frame with reference to the mounting auxiliary member, so that the same sliding door frame for modification can be mounted to the existing sliding door frame having different shapes and dimensions by using the mounting auxiliary member having the shape and dimensions corresponding to the shape and dimensions of the existing sliding door frame." (Paragraph [0018]), it is recognized that "to mount the sliding door frame for modification with reference to the mounting auxiliary member" means that the sliding door frame for modification is mounted by using the mounting auxiliary member as a source for positioning the sliding door frame for modification with respect to the existing sliding door frame.

Whereas, in A6 Invention 1, "a flange 6b of the anchor 6" previously "inserted in the C-shaped groove 5b" of "a lower frame of the new window frame 5" "is screwed to the existing steel lower frame," so that it cannot be said that it "mounts" "the new window frame 5" "with reference to the anchor 6".

e Then, the two are common in the following point of "inserting a sliding door frame for modification in the existing sliding door frame from the outdoor side, supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member," and "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws to mount the sliding door frame for modification".

(E) According to the above, Invention 1 and A6 Invention 1 correspond to each other in the following point.

<Corresponding Feature>

"A modification method for a sliding door device, comprising:

leaving an existing frame having an existing upper frame attached to an opening portion of a building, an existing lower frame, and an existing vertical frame;

then, inserting a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, in the existing sliding door frame from the outdoor side; and

supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member, and fixing a front wall of the lower frame for modification

to a front wall of the existing lower frame with screws to mount the sliding door frame for modification".

(F) On the other hand, the two are different in the following points.

<Different Feature 2-1>

Regarding material of the existing frame, in Invention 1, the existing sliding door frame is made of extruded aluminum alloy profiles, whereas, in A6 Invention 1, the old window frame 1 is made of steel.

<Different Feature 2-2>

Regarding an existing lower frame, the existing lower frame of Invention 1 is a lower frame of a sliding door frame, is provided with the indoor side guide rail and the outdoor side guide rail, and the indoor side guide rail is cut and removed from the vicinity of a root, whereas, it is unknown whether or not the existing steel lower frame of A6 Invention 1 is the lower frame of the sliding door frame, and it is also unknown whether or not the outdoor side guide rail is cut and removed from the vicinity of a root.

<Different Feature 2-3>

Regarding a mounting procedure of a sliding door frame for modification, in Invention 1, the mounting auxiliary member is fixedly mounted to the rising surface on the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame, then the sliding door frame for modification is inserted in the existing sliding door frame from the outdoor side, and the indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, whereas, in A6 Invention 1, the anchor 6 is inserted in the C-shaped groove 5b to insert the new window frame 5 assembled in a rectangular shape in the old window frame 1 from the outdoor side, and the flange 6b of the anchor 6 is screwed with the existing lower frame.

<Different Feature 2-4>

Regarding a mounting structure of a sliding door frame for modification, in Invention 1, the outdoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame via a spacer, and the sliding door frame for modification is mounted with reference to the mounting auxiliary member, whereas A6 Invention 1 does not have such a configuration.

<Different Feature 2-5>

Regarding the height of an upper end of a back wall of an existing lower frame and an upper end of a lower frame for modification, in Invention 1, the upper end of the back wall and the upper end of the lower frame for modification are almost the same height, whereas, in A6 Invention 1, it is unknown whether or not those are almost the same height.

B Judgment

(A) Regarding Different Feature 2-3 and Different Feature 2-4

First, Different Features 2-3 to 2-4 above will be examined together.

a Evidence A No. 23 describes "a modified sash lower frame overlapped and mounted on an existing sash lower frame in which a rail receiving door rollers of a paper screen interposed at an entrance and exist of a skeleton partitioning the inside and outside of a room is at a lower position than an upper surface of a window stool positioned on a floor surface or at one step higher than the floor surface, the modified sash lower frame comprising: an upper plate portion formed in which an upper end of a projecting element including the rail receiving the door rollers of the paper screen is formed at substantially the same predetermined height; and a fixed leg portion extending downward from the upper plate portion and fixed to the existing sash lower frame, wherein the length along the height direction of the fixed leg portion is formed as a length giving a position substantially the same height as the floor surface of the room or the upper surface of the window stool, while the fixed leg portion is fixed to the existing sash lower frame, wherein an inverted L-shaped support member is provided on a back surface of an indoor side end portion of the upper plate of the modified sash lower frame, a lateral plate portion thereof is screwed to the upper plate portion, and while the indoor side end portion of the upper plate portion of the modified sash lower frame and a vertical plate portion of the inverted L-shaped member abut on an edge wall ranging to an end portion on the furthest indoor side of the upper plate portion of the existing sash lower frame, the vertical plate portion of the inverted L-shaped support member is screwed to the edge wall". (See 2 (19) above. Hereinafter, referred to as "A23 Art".).

"An existing sash lower frame" and "a modified sash lower frame" of A23 Art correspond to "an existing lower frame" and "a lower frame for modification" of Invention 1, and the matter of "an inverted L-shaped support member is provided on a back surface of an indoor side end portion of the upper plate of the modified sash lower frame, a lateral plate portion thereof is screwed to the upper plate portion, and while the indoor side end portion of the upper plate portion of the modified sash lower frame and a vertical plate portion of the inverted L-shaped member abut on an edge wall ranging to

an end portion on the furthest indoor side of the upper plate portion of the existing sash lower frame, the vertical plate portion of the inverted L-shaped support member is screwed to the edge wall" of A23 Art, corresponds to the matters of "the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame with screws" and "supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member" of Invention 1.

b Evidence A No. 9 describes that a plurality of lower frame spacers 13 are inserted between the lower frame 5 of the old window frame 1 and the lower frame mounting auxiliary frame 59 (see 2 (5) above), and "the lower frame 5" and "the lower frame spacers 13" respectively correspond to "the existing lower frame" and "a spacer" of Invention 1.

Evidence A No. 10 describes that the lower frame mounting hardware 4b is fixed to the lower frame 2b of the old window frame 2, and is made to hit on the mounting reference pieces 6 and 7 of the lower frame mounting hardware 4b via the adjusting tool 8 such as a liner to fix the lower frame 3b of the new window frame 3 to the lower frame mounting hardware 4b (see 2 (6) above), "the lower frame 2b," "the adjusting tool 8," and "the lower frame 3b" respectively correspond to "the existing lower frame," "the spacer," and "the lower frame for modification" of Invention 1.

Evidence A No. 11 describes that the lower frame 4b and a lower auxiliary member 6b are attached to the upper surface of the lower discard frame 3b via a spacer 5 and a fixing bracket 20 (see 2 (7) above), "a spacer 5" corresponds to "a spacer" of Invention 1.

Evidence A No. 27 describes that a mounting auxiliary material (spacer) is fixed to the existing lower frame (see 2 (20) above).

Evidence A No. 32 describes that the support leg 21 of the anchor 6 fixed to a lower portion of the lower frame 2 is contacted with the lower portion 33 of the steel lower frame 6 via the height-adjustable washer 22 (see 2 (21) above), "the lower frame 2," "the existing steel lower frame 6," and "the height-adjustable washer 22" respectively correspond to "the lower frame for modification," "the existing lower frame," and "the spacer" of Invention 1.

c When mounting the lower frame for modification, it is well known that the guiderail of the existing lower frame getting in the way is cut and removed, as described in Evidence A No. 7, Evidence A No. 15 to Evidence A No. 17 (see 2 (3), (11) to (13) above).

d It is well known to use extruded aluminum alloy profiles for the sliding door frame as described in Evidence A No. 18 to Evidence A No. 20 (see 2 (14) to (16) above).

e When mounting the lower frame for modification to the lower frame of the existing sliding door frame, it is well known that of the two rails of the existing lower frames, the outdoor side rail is cut and removed, and the lower frame for modification is fixed to the indoor side of the existing lower frame via the inverted L-shaped member with screws, as described in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39 (especially, in Evidence A No. 36 and Evidence A No. 39) (see 2 (22) to (25), and (28) above).

f However, an object of A6 Invention 1 is to provide a mounting structure of a new window frame capable of simply mounting a new window frame with small expected dimensions to an old window frame (see 2 (2) B above), and as a means for solving the problem, it is configured to insert the anchor 6 in the C-shaped groove 5b formed on the inside surface of the lower frame and to screw the flange 6b of the anchor 6 to the existing steel lower frame, whereas in the E23 Art, while the indoor side end portion of the upper plate portion of the modified sash lower frame abut on the edge wall ranging to the end portion on the furthest indoor side of the upper plate of the existing sash lower frame, the inverted L-shaped support member fixed to the back surface of the modified sash lower frame is screwed to the edge wall, and does not relate to the mounting structure of the modified sash lower frame with small expected dimensions to the existing sash lower frame, so that the support structure of the modified sash lower frame by the inverted L-shaped support member related to A23 Art cannot be immediately applied instead of the mounting structure by the anchor 6 of A6 Invention 1.

Therefore, there is no motivation to apply the support structure of the modified sash lower frame by the inverted L-shaped support member of A23 Art, instead of the mounting structure by the anchor 6 in A6 Invention 1. The same applies to the inverted L-shaped member of the well-known technique disclosed in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39.

Further, it is not described in any of the above evidences, nor is it recognized as a well-known technique, to support the indoor side portion of the lower frame for modification while making it contact with the outdoor side portion of the existing lower frame via a spacer, and to mount the sliding door frame for modification with reference to the mounting auxiliary member.

Then, in light of the evidences and well-known techniques mentioned above, it cannot be said that it is easy for a person ordinarily skilled in the art to fixedly mount the mounting auxiliary member to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing steel lower frame with screws, to support the outdoor side portion of the lower frame of the new window

frame 5 while making it contact with the outdoor side portion of the existing steel lower frame through the spacer, to support the indoor side portion of the lower frame of the new window frame 5 by the mounting auxiliary member, and to mount the lower frame of the new window frame 5 with reference to the mounting auxiliary member, in A6 Invention 1.

Further, Evidence A No. 7 and Evidence A No. 8 were submitted as evidences indicating that the lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, is well known, Evidence A No. 12 and Evidence A No. 14 were submitted as evidences indicating that the sliding door used for a bath is also used for an opening facing the outdoor, and Evidence A No. 21 and Evidence A No. 22 were submitted as evidences indicating that it is well known that a sealing material is installed on the outdoor side portions of the upper frame for modification and the vertical frame for modification, and that the sealing material is contacted with the opening portion of the building. None of them indicate that a structure related to Different Features 2-3 and 2-4,is made in A6 Invention 1.

Therefore, In A6 Invention 1, it cannot be said that it could have been easily made by a person skilled in the art to make the structure of Invention 1 related to Different Features 2-3 and 2-4.

(B) Demandant's allegation

The Demandant alleges that both A6 Invention 1 and A23 Art are related to refurbished sashes and belong to the same very narrow technical field, and it is merely a design matter of naturally being carried out by a person ordinarily skilled in the art to combine a plurality of publicly know techniques belonging to the same technical field, so that it is naturally carried out by a person ordinarily skilled in the art to apply to A6 invention the inverted L-shaped support member A23 Art to A6 Invention 1 for obtaining actions and effects (downsizing, etc.) thereby, and there is enough motivation (Oral proceedings statement brief, page 30, line 19 to page 31, line 2).

However, as described (A) f above, since there is no motivation for applying A23 Art to A6 Invention 1, the Demandant's allegation cannot be accepted.

C Summary

As described above, it cannot be accepted that Invention 1 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 1, A23 Art, and

the well-known techniques without examining Different Feature 2-1, Different Feature 2-2, and Different Feature 2-5.

(2) Regarding Invention 2

A Comparison

Although Invention 2 was described as an independent claim, substantially, it can be said that Invention 1 is further limited to "installed with an outdoor side upper frame sealing material on an outdoor side portion of the upper frame for modification, and is installed with an outdoor side vertical frame sealing material on an outdoor side portion of the vertical frame for modification of the sliding door frame for modification," and when inserting the sliding door frame for modification in the existing sliding door frame, "making the outdoor side upper frame sealing material contact with an upper edge portion of the opening portion of the building and making the outdoor side vertical frame sealing material contact with a vertical edge portion of the opening portion of the building".

Therefore, in comparison of Invention 2 and A6 Invention 1, the two are different in the following point, in addition to Different Features 2-1 to 2-5.

<Different Feature 2-6>

In Invention 2, the outdoor side upper frame sealing material is installed on the outdoor side portion of the upper frame for modification, the outdoor side vertical frame sealing material is installed on the outdoor side portion of the vertical frame for modification of the sliding door frame for modification, the outdoor side upper frame sealing material is contacted with the upper edge portion of the opening portion of the building, and the outdoor side vertical frame sealing material is contacted with the vertical edge portion of the opening portion of the building, whereas A6 Invention 1 does not have such a configuration.

B Judgment

In A6 Invention 1, it is the same as (1) B above that it cannot be said that the configuration of Invention 2 related to Different Feature 2-3 and Different Feature 2-4 can be easily conceived by a person ordinarily skilled in the art.

Therefore, it cannot be accepted that Invention 2 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 1, A23 Art, and the well-known techniques without examining Different Feature 2-1, Different Feature 2-2, Different Feature 2-5, and Different Feature 2-6.

(3) Regarding Invention 3

A Comparison

Although Invention 3 was described as an independent claim, it can be said that Invention 1 is substantially limited to "cutting and removing the indoor guide rail".

Therefore, in comparison of Invention 3 and A6 Invention 1, in addition to Different Features 2-1 to 2-5 above, the two are different in the following point.

<Different Feature 2-7>

Regarding the guide rail of the existing lower frame, in Invention 3, the existing lower frame of Invention 3 is the lower frame of the sliding door, and is provided with the indoor side guide rail and the outdoor side guide rail, and the indoor side guide rail of the existing lower frame is cut and removed, whereas, regarding the existing steel lower frame of A6 Invention 1, it is not unknown whether or not the indoor side guide rail and the outdoor side guide rail are provided, and it is also unknown whether or not the indoor side guide rail is cut and removed.

B Judgment

In A6 Invention 1, it is the same as (1) B above that it cannot be said that the configuration of Invention 3 related to Different Feature 2-3 and Different Feature 2-4 can be easily conceived by a person ordinarily skilled in the art.

Therefore, it cannot be accepted that Invention 3 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 1, A23 Art, and the well-known techniques without examining Different Feature 2-1, Different Feature 2-2, Different Feature 2-5, and Different Feature 2-7.

(4) Regarding Invention 4

A Comparison

Invention and A6 Invention 2 will be compared.

(A) "An old window frame 1" of A6 Invention 2 and "an existing sliding door frame" of Invention 4 are common in the point that those are "existing frames". Also, "an existing" "lower frame," "a new window frame 5," "a lower frame of the new window frame 5," and "a sash modifying method" of A6 Invention 2, respectively correspond to "an existing lower frame," "a sliding door frame for modification," "a lower frame for modification," and "a modification method of a sliding door device" of Invention 4.

(B) It is obvious that "an old window frame 1" of A6 Invention 2 is provided at an opening portion of a building, and has an upper frame and a vertical frame in addition to "a lower frame," and the upper frame and the vertical frame are also made of steel like the lower frame. Further, in A6 Invention 2, "a new window frame 5 is mounted" to "an old window frame 1," it is obvious that "an old window frame 1" remains.

Then, since "an upper frame" and "a vertical frame" of "an old window frame 1" of A6 Invention 2 correspond to "an existing upper frame" and "an existing vertical frame" of Invention 4, A6 Invention 2 is equipped with the configuration that "an existing sliding door frame remaining at an opening portion of a building has an existing upper frame, an existing lower frame," and "an existing vertical frame" of Invention 4.

(C) It is obvious that "a new window frame 5" of A6 Invention 2 has an upper frame and a vertical frame in addition to "a lower frame".

Further, "aluminum profiles" of A6 Invention 2 correspond to "extruded aluminum alloy profiles" of Invention 1, and similarly, "in a lower frame of the new window frame 5, a side surface shape is stepped to form a downward slope toward the outdoor side" corresponds to "a lower frame for modification" of Invention 1 is "inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion".

Then, A6 Invention 2 is provided with "a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a vertical frame for modification made of extruded aluminum alloy profiles, and a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion".

(D) The matter of "the new window frame 5 assembled in a rectangular shape is inserted in the old window frame 1 from the outdoor side" of A6 Invention 2 and the matter of "a sliding door frame for modification" "is inserted in the existing sliding door frame" of Invention 4 are common in the point of "a sliding door frame for modification is inserted in the existing frame".

(E) The matters of "a mounting auxiliary member is provided on an indoor side portion of the existing lower frame," "the mounting auxiliary member being fixedly

mounted to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame with screws," "an outdoor side portion of the lower frame for modification of the sliding door frame for modification is supported while being contacted with an outdoor side portion of the existing lower frame via a spacer, and an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member," and "a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws" of Invention 4, and the matter of "the outside flange 5a of the lower frame of the new window frame 5 is screwed with a suspension flange 1b of an existing steel lower frame, and a flange 6b of an anchor 6 locked to the C-shaped groove 5b is screwed with the existing steel lower frame" of A6 Invention 2 will be compared.

a While "auxiliary" means "to assisti and help, also, those helping that" (Kojien 6th edition), "a mounting auxiliary member" of Invention 4 is mounted to "the existing lower frame", and "supports" "the indoor side portion of the lower frame for modification," when mounting "the lower frame for modification", so that it is recognized as a member assisting and helping the mounting of the lower frame for modification to the existing lower frame.

Then, since "an anchor 6" of A6 Invention 2 "is "locked in the C-shaped groove 5b" formed on "on the inside surface" of "a lower frame of the new window frame 5," and "a flange 6b" of the anchor 6 "is screwed to the existing steel lower frame," even if it is a member for assisting and helping the mounting of the lower frame of the new window frame 5 to the existing steel lower frame, it corresponds to "a mounting auxiliary member" of Invention 4, and it can be said that it is provided "on an indoor side portion of the existing lower frame," and "supports" "an indoor side portion of the existing lower frame".

b "'An outside flange 5a' of 'a lower frame of a new window frame 5'" and "'a suspension flange 1b' of 'an existing' 'lower frame,'" of A6 Invention 2 respectively correspond to "'a front wall' of 'the lower frame for modification'" and "'a front wall' of 'the existing lower frame'" of Invention 4, and the matter of "the outside flange 5a of the lower frame of the new window frame 5" "is screwed to a suspension flange 1b of an existing" "lower frame corresponds to the matter of "fixing a front wall of the lower frame for modification to a front wall of the existing lower frame with screws" of Invention 4.

c Then, the two are common in the following points that "a mounting auxiliary member is provided on an indoor side portion of the existing lower frame," "an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member," and "a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws".

(E) According to the above, Invention 4 and A6 Invention 2 correspond to each other in the following point.

<Corresponding Feature>

"A modified sliding door device,

wherein an existing frame remaining at an opening portion of a building has an existing upper frame, an existing lower frame, and an existing vertical frame, and a mounting auxiliary member is provided on an indoor side portion of the existing lower frame

wherein a sliding door frame for modification which has an upper frame for modification made of extruded aluminum alloy profiles, a lower frame for modification made of extruded aluminum alloy profiles, inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, and a vertical frame for modification made of extruded aluminum alloy profiles, is inserted in the existing frame; and

wherein an indoor side portion of the lower frame for modification is supported by the mounting auxiliary member, and a front wall of the lower frame for modification is fixed to a front wall of the existing lower frame with screws".

(F) On the other hand, the two are different in the following points.

<Different Feature 2-A>

Regarding material of the existing frame, in Invention 4, the existing sliding door frame is made of extruded aluminum alloy profiles, whereas, in A6 Invention 2, the old window frame 1 is made of steel.

<Different Feature 2-B>

Regarding an existing lower frame, the existing lower frame of Invention 4 is a lower frame of a sliding door frame, is provided with the indoor side guide rail and the outdoor side guide rail, and the indoor side guide rail is cut and removed from the vicinity of a root, whereas, it is unknown whether or not the existing steel lower frame of A6 Invention 2 is the lower frame of the sliding door frame, and it is also unknown whether or not the outdoor side guide rail is cut and removed from the vicinity of a root.

<Different Feature 2-C>

Regarding a mounting structure of a sliding door frame for modification, in

Invention 4, the mounting auxiliary member is fixedly mounted to the rising surface on the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame, and the outdoor side portion of the lower frame for modification is supported while being contacted with the outdoor side portion of the existing lower frame via a spacer, whereas A6 Invention 2 does not have such a configuration.

<Different Feature 2-D>

Regarding the height of an upper end of a back wall of an existing lower frame and an upper end of a lower frame for modification, in Invention 4, the upper end of the back wall and the upper end of the lower frame for modification are almost the same height, whereas, in A6 Invention 2, it is unknown whether or not those are almost the same height.

B Judgment

First, Different Feature 2-C will be examined.

(A) Evidence A No. 23 describes "a modified sash lower frame overlapped and mounted on an existing sash lower frame in which a rail receiving door rollers of a paper screen interposed at an entrance and exist of a skeleton partitioning the inside and outside of a room is at a lower position than an upper surface of a window stool positioned on a floor surface or at one step higher than the floor surface, the modified sash lower frame comprising: an upper plate portion formed in which an upper end of a projecting element including the rail receiving the door rollers of the paper screen is formed at substantially the same predetermined height; and a fixed leg portion extending downward from the upper plate portion and fixed to the existing sash lower frame, wherein the length along the height direction of the fixed leg portion is formed as a length giving a position substantially the same height as the floor surface of the room or the upper surface of the window stool, while the fixed leg portion is fixed to the existing sash lower frame, wherein an inverted L-shaped support member is provided on a back surface of an indoor side end portion of the upper plate of the modified sash lower frame, a lateral plate portion thereof is screwed to the upper plate portion, and while the indoor side end portion of the upper plate portion of the modified sash lower frame and a vertical plate portion of the inverted L-shaped member abut on an edge wall ranging to an end portion on the furthest indoor side of the upper plate portion of the existing sash lower frame, the vertical plate portion of the inverted L-shaped support member is screwed to the edge wall". (See 2 (19) above. Hereinafter, referred to as "A23 Art".).

"An existing sash lower frame" and "a modified sash lower frame" of E23 Art

correspond to "an existing lower frame" and "a lower frame for modification" of Invention 4, and the matter of "an inverted L-shaped support member is provided on a back surface of an indoor side end portion of the upper plate of the modified sash lower frame, a lateral plate portion thereof is screwed to the upper plate portion, and while the indoor side end portion of the upper plate portion of the modified sash lower frame and a vertical plate portion of the inverted L-shaped member abut on an edge wall ranging to an end portion on the furthest indoor side of the upper plate portion of the existing sash lower frame, the vertical plate portion of the inverted L-shaped support member is screwed to the edge wall" of A23 Art, corresponds to the matters of "the mounting auxiliary member being fixedly mounted to a rising surface of a back wall ranging to an end portion on the furthest indoor side of a bottom wall of the existing lower frame with screws" and "supporting an indoor side portion of the lower frame for modification by the mounting auxiliary member" of Invention 4.

(B) Evidence A No. 9 describes that a plurality of lower frame spacers 13 are inserted between the lower frame 5 of the old window frame 1 and the lower frame mounting auxiliary frame 59 (see 2 (5) above), and "the lower frame 5" and "the lower frame spacers 13" respectively correspond to "the existing lower frame" and "a spacer" of Invention 4.

Evidence A No. 10 describes that the lower frame mounting hardware 4b is fixed to the lower frame 2b of the old window frame 2, and is made to hit on the mounting reference pieces 6 and 7 of the lower frame mounting hardware 4b via the adjusting tool 8 such as a liner to fix the lower frame 3b of the new window frame 3 to the lower frame mounting hardware 4b (see 2 (6) above), "the lower frame 2b," "the adjusting tool 8," and "the lower frame 3b" respectively correspond to "the existing lower frame," "the spacer," and "the lower frame for modification" of Invention 4.

Evidence A No. 11 describes that the lower frame 4b and a lower auxiliary member 6b are attached to the upper surface of the lower discard frame 3b via a spacer 5 and a fixing bracket 20 (see 2 (7) above), "a spacer 5" corresponds to "a spacer" of Invention 4.

Evidence A No. 27 describes that a mounting auxiliary material (spacer) is fixed to the existing lower frame (see 2 (20) above).

Evidence A No. 32 describes that the support leg 21 fixed to a lower portion of the lower frame 2 is contacted with the lower portion 33 of the steel lower frame 6 via the height-adjustable washer 22 (see 2 (21) above), "the lower frame 2," "the existing steel lower frame 6," and "the height-adjustable washer 22" respectively correspond to "the lower frame for modification," "the existing lower frame," and "the spacer" of Invention 4.

(C) When mounting the lower frame for modification, it is well known that the guiderail of the existing lower frame getting in the way is cut and removed, as described in Evidence A No. 7, Evidence A No. 15 to Evidence A No. 17 (see 2 (3), (11) to (13) above).

(D) It is well known to use extruded aluminum alloy profiles for the sliding door frame as described in Evidence A No. 18 to Evidence A No. 20 (see 2 (14) to (16) above).

(E) When mounting the lower frame for modification to the lower frame of the exiting sliding door frame, it is well known that of the two rails of the existing lower frames, the outdoor side rail is cut and removed, and the lower frame for modification is fixed to the indoor side of the existing lower frame via the inverted L-shaped member with screws, as described in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39 (especially, in Evidence A No. 36 and Evidence A No. 39) (see 2 (22) to (25), and (28) above).

(F) However, an object of A6 Invention 2 is to provide a mounting structure of a new window frame capable of simply mounting a new window frame with small expected dimensions to an old window frame (see 2 (2) B above), and as a means for solving the problem, the flange 6b of the anchor 6 locked to the C-shaped groove 5b formed on the inside surface of the lower frame is screwed to the existing steel lower frame, whereas E23 Art, while the indoor side end portion of the upper plate portion of the modified sash lower frame abut on the edge wall ranging to the end portion on the furthest indoor side of the upper plate of the existing sash lower frame, the inverted L-shaped support member fixed to the back surface of the modified sash lower frame is screwed to the edge wall, and does not relate to the mounting structure of the modified sash lower frame with small expected dimensions to the existing sash lower frame, so that the support structure of the modified sash lower frame by the inverted L-shaped support member related to A23 Art cannot be immediately applied instead of the mounting structure by the anchor 6 of A6 Invention 2.

Therefore, there is no motivation to apply the support structure of the modified sash lower frame by the inverted L-shaped support member of A23 Art, instead of the mounting structure by the anchor 6 in A6 Invention 2.

The same applies to the inverted L-shaped member of the well-known technique disclosed in Evidence A No. 33-1, Evidence A No. 34 to Evidence A No. 36, and Evidence A No. 39.

Further, it is not described in any of the above evidences, nor is it recognized as a well-known technique, to support the indoor side portion of the lower frame for modification while making it contact with the outdoor side portion of the existing lower

frame via a spacer.

Then, in light of the evidences and well-known techniques mentioned above, it cannot be said that it is easy for a person ordinarily skilled in the art to provide the mounting auxiliary member to the indoor side portion of the existing lower frame, to mount the mounting auxiliary member to the rising surface of the back wall ranging to the end portion on the furthest indoor side of the bottom wall of the existing lower frame with screws, to support the outdoor side portion of the lower frame for modification of the sliding door frame for modification while making it contact with the outdoor side portion of the existing lower frame via the spacer, and to support the indoor side portion of the lower frame for modification 5 by the mounting auxiliary member, in A6 Invention 2.

Further, Evidence A No. 7 and Evidence A No. 8 were submitted as evidences indicating that the lower frame for modification inclined while being stepped upward from the outdoor side to the indoor side, and provided with a bottom wall where an outdoor side portion is low and an indoor side portion is higher than the outdoor side portion, is well known, and Evidence A No. 21 and Evidence A No. 22 were submitted as evidences indicating that it is well known that a sealing material is installed on the outdoor side portions of the upper frame for modification and the vertical frame for modification, and that the sealing material is contacted with the opening portion of the building. None of them do tell that it is a structure related to Different Feature 2-C in A6 Invention 2.

Therefore, In A6 Invention 2, it cannot be said that it could have been easily made by a person ordinarily skilled in the art to make the structure of Invention 4 related to Different Feature 2-C.

C Summary

As described above, it cannot be accepted that Invention 4 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 2, A23 Art, and the well-known techniques without examining Different Feature 2-A, Different Feature 2-B, and Different Feature 2-D.

(5) Regarding Invention 5

A Comparison

Although Invention 5 was described as an independent claim, substantially, it can be said that Invention 4 it is further limited to "an outdoor side upper frame sealing material is installed at an outdoor side portion of the upper frame for modification and

the outdoor side upper frame sealing material is contacted with an upper edge portion of the opening portion of the building" and "an outdoor side vertical frame sealing material is installed at an outdoor side portion of the vertical frame for modification, and the outdoor side vertical frame sealing material is contacted with a vertical edge portion of the opening portion of the building".

Therefore, in comparison of Invention 5 and A6 Invention 2, the two are different in the following point in addition to Different Features 2-A to 2-D.

<Different Feature 2-E>

In Invention 5, the outdoor side upper frame sealing material is installed at the outdoor side portion of the upper frame for modification, the outdoor side upper frame sealing material is contacted with the upper edge portion of the opening portion of the building, the outdoor side vertical frame sealing material is installed at the outdoor side portion of the vertical frame for modification, and the outdoor side vertical frame sealing material is contacted with the vertical edge portion of the opening portion of the building, whereas A6 Invention 2 does not have such a configuration.

B Judgment

In A6 Invention 2, it is the same as (4) B above that it cannot be said that the configuration of Invention 5 related to Different Feature 2-C can be easily conceived by a person skilled in the art.

Therefore, it cannot be accepted that Invention 5 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 2, A23 Art, and the well-known techniques without examining Different Feature 2-A, Different Feature 2-B, Different Feature 2-D, and Different Feature 1-E.

(6) Regarding Invention 6

A Comparison

Although Invention 6 was described as an independent claim, it can be said that Invention 4 is substantially limited to "cutting and removing the indoor guide rail".

Therefore, in comparison of Invention 6 and A6 Invention 2, in addition to Different Features 2-A to 2-D above, the two are different in the following point.

<Different Feature 2-F>

Regarding the guide rail of the existing lower frame, in Invention 6, the indoor side guide rail is cut and removed, whereas, in A6 Invention 2, it is unknown whether or

not the indoor side guide rail is provided, and it is also unknown whether or not the indoor side guide rail is cut and removed.

B Judgment

In A6 Invention 2, it is the same as (4) B above that it cannot be said that the configuration of Invention 6 related to Different Feature 2-C can be easily conceived by a person ordinarily skilled in the art.

Therefore, it cannot be accepted that Invention 6 could have easily been invented by a person ordinarily skilled in the art based on A6 Invention 2, A23 Art, and the well-known techniques without examining Different Feature 2-A, Different Feature 2-B, Different Feature 2-D, and Different Feature 2-F.

(7) Summary

As described above, since Inventions 1 to 3 could not have easily been invented by a person ordinarily skilled in the art on the basis of A6 Invention 1, A23 Art, and the well-known techniques, and Inventions 4 to 6 could not have easily been invented by a person ordinarily skilled in the art on the basis of A6 Invention 2, A23 Art, and the well-known techniques, the patent relating to Inventions 1 to 6 does not violate the provisions of Article 29(2) of the Patent Act.

Therefore, the patent relating to Inventions 1 to 6 cannot be invalidated for Reason for invalidation 5 alleged by the Demandant.

No. 7 Closing

As described above, the patent relating to Inventions 1 to 6 cannot be invalidated for Reason for invalidation 1 to Reason for invalidation 5 alleged by the Demandant.

The costs in connection with the trial shall be borne by the Demandant under the provisions of Article 61 of the Code of Civil Procedure which is applied mutatis mutandis in the provisions of Article 169(2) of the Patent Act.

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

March 16, 2017

Chief administrative judge: ONO, Chuetsu
Administrative judge: NAKADA, Makoto
Administrative judge: MAEKAWA, Shinki