

Trial decision

Invalidation No. 2018-880005

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The case of trial regarding the invalidation of design registration of Japanese Design Registration No. 1224615, entitled "LIGHTING DEVICE FOR INSPECTION," 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 History of the procedures

An application for the design of Design Registration No. 1224615 (hereinafter referred to as "the Registered design") was filed on April 12, 2004 (Japanese Design Application No. 2004-11226), an establishment of the design right was registered on October 22, 2004 after examination, a design bulletin was issued on December 6, 2004, and then, in summary, the following procedures were conducted by the body.

- Demand for trial of the case May 10, 2018
- Submission of Written reply of the trial case July 10, 2018
- Submission of Written refutation of the trial case August 21, 2018
- Submission of Oral proceedings statement brief (Demandee) October 5, 2018
- Submission of Oral proceedings statement brief 2 (Demandee) October 12, 2018
- Submission of Oral proceedings statement brief (Demandant) October 22, 2018
- Oral proceeding November 5, 2018
- Submission of Written statement (Demandee) November 13, 2018

(The contents of the written statement, which was submitted after the conclusion of proceedings, are irrelevant to the reasons for invalidation. Thus, this written statement is not subjected to the trial.)

No. 2 Demandant's petition and reasons

The Demandant petitioned, as the object of demand for the trial, that "we request a trial decision that registration of design registration No. 1224615 is invalid, and that the costs in connection with the trial shall be borne by the Demandee," argued the grounds as summarized below (including the contents of the "written refutation of the trial case" and the "oral proceedings statement brief") and submitted Evidences A No. 1 to No. 10 listed in 5 below to prove the stated facts.

1 Gist of reasons for invalidation of design registration

The Design registration (the design of Design Registration No. 1224615, Appendix 1 of the written demand for trial, see Appendix 1 of the trial decision) should be invalidated under the provisions of Article 48(1)(i) of the Design Act, for the following reasons A and B.

A The Registered design should not be registered under the provisions of Article 3(1)(iii) or Article (3)(ii) of the Design Act due to the design (heat radiation part) described in Evidence A No. 1, which is a publication distributed before the filing of the application for the Registered design, the design (heat radiation part) described in Evidence A No. 2, or the design (heat radiation part) described in Evidence A No. 3.

B The Registered design should not be registered under the provisions of Article 3(2) of the Design Act due to the design described in Evidence A No. 1 and the design described in Evidence A No. 2, or due to the design described in Evidence A No. 1 and the design described in Evidence A No. 3.

2 Reasons for invalidation of the Registered design

(1) Gist of the Registered design and the designs described in Evidences A No. 1 to No. 3

A Gist of the Registered design (see Appendix 1)

The basic constitution of the Registered design is as follows.

(A) A lighting device for inspection includes a heat radiation part (partial design).

(B) The heat radiation part includes an extending axial body.

(C) The axial body includes a plurality of disk-like fins having the same diameter arranged at equal intervals.

(D) An end fin of the fins is thicker than the other fins.

The form (specific constitution) of the parts of the Registered design is as follows.

(E) The interval between the fins is about 12.5% of the diameter of the fin.

(F) The total number of the fins is three, one end fin and two other fins.

(G) The thickness of the other fins is about 4.2% of the diameter of the fin, and the end fin is about twice as thick as the other fins.

(H) The axial body extends with the same diameter, which is about 20.8% that of the fin.

(I) The entire edge on the rear face of the end fin is chamfered (about 10.0% of the thickness).

B Gist of Evidence A No. 1 (see Appendix 2)

Evidence A No. 1 is a copy of the book "Perfect Introduction to Thermal Design for Electronics".

Date of issue July 18, 1997

Author Naoki KUNIMINE

Publisher NIKKAN KOGYO SHIMBUN, LTD

The design described in Evidence A No. 1 (heat radiation part (tower-type heatsink)) is a prior design which was publicly known before the filing of the application for the Registered design. The article is an electronic device in general, as is obvious from the description, "used for electronic components having large surface heat flux density", in Evidence A No. 1 p. 169 the 6th line from the bottom.

The basic constitution of the design described in Evidence A No. 1 is as follows.

(a1) An electronic device includes a heat radiation part.

(b1) The heat radiation part includes an extending axial body.

(c1) The axial body includes a plurality of disk-like fins having the same diameter arranged at equal intervals.

(d1) An end fin of the fins is as thick as the other fins.

The form (specific constitution) of the parts of the design described in Evidence A No. 1 is as follows.

(e1) The interval between the fins is about 21% of the diameter of the fin.

(f1) The total number of the fins is four, one end fin and three other fins.

(g1) The thickness of the fins is about 4% of the diameter of the fin.

(h1) The axial body extends with the same diameter, which is about 38% that of the fin.

(i1) The edge on the rear face of the end fin is not chamfered.

C Gist of Evidence A No. 2 (see Appendix 3)

The design described in Evidence A No. 2 is a prior design which was publicly worked (in 2002 at the latest) before the filing of the application for the Registered design. The article is a lighting device for inspection.

The basic constitution of the heat radiation part of the design described in Evidence A No. 2 is as follows.

(a2) A lighting device for inspection includes a heat radiation part.

(b2) The heat radiation part includes an extending axial body.

(c2) The axial body includes a plurality of disk-like fins having the same diameter arranged at equal intervals.

(d2) An end fin of the fins is thicker than the other fins.

The form (specific constitution) of the parts of the Registered design is as follows.

(e2) The interval between the fins is about 5% of the diameter of the fin.

(f2) The total number of the fins is three, one end fin and two other fins.

(g2) The thickness of the other fins is about 5% of the diameter of the fin, and the end fin is about twice as thick as the other fins.

(h2) The axial body extends with the same diameter, which is about 76% that of the fin.

(i2) The entire edge on the rear face of the end fin is chamfered (about 25% of the thickness).

D Gist of Evidence A No. 3 (see Appendix 4)

The article of the design described in Evidence A No. 3 (Date of issue: June 16, 2003) is a lighting device for inspection,

The basic constitution of the heat radiation part of the design described in Evidence A No. 3 is as follows.

(a3) A lighting device for inspection includes a heat radiation part.

(b3) The heat radiation part includes an extending axial body.

(c3) The axial body includes a plurality of disk-like fins having the same diameter arranged at equal intervals.

(d3) An end fin of the fins is thicker than the other fins.

The form (specific constitution) of the parts of the Registered design is as follows.

(e3) The interval between the fins is about 10% of the diameter of the fin.

(f3) The total number of the fins is two, one end fin and one other fin.

(g3) The thickness of the other fins is about 4.2% of the diameter of the fin, and the end fin is about 2.5 times as thick as the other fins.

(h3) The axial body extends with the same diameter, which is about 42% that of the fin.

(i3) The entire edge on the rear face of the end fin is chamfered (about 33% of the thickness).

(2) Comparison between the Registered design and the designs described in Evidences A No. 1 to No. 3

A Comparison between the Registered design and Evidence A No. 1

(Comparison of article)

The article described in Evidence A No. 1 (Note by the body: It is recognized as an error for "the Registered design") is a "lighting device for inspection", while the article described in Evidence A No. 1 is an electronic device which is not limited to the "lighting device for inspection".

(Comparison of form)

(A) The basic constitution (A) of the Registered design is a "lighting device for inspection", while the basic constitution (a1) of Evidence A No. 1 is an "electronic device".

(B) The basis constitutions (b1) and (c1) of Evidence A No. 1 are the same as the basic constitutions (B) and (C) of the Registered design.

(C) The basis constitution (D) of the Registered design indicates that "an end fin of the fins is thicker than the other fins". The basic constitution (d1) of Evidence A No. 1 indicates that "an end fin of the fins is as thick as the other fins".

(D) The forms (specific constitutions) (E) to (H) of the parts of the Registered design are different in exact value from the forms (specific constitutions) (e1) to (h1) of the parts of Evidence A No. 1.

(E) The form (specific constitution) (I) of the parts of the Registered design indicates that "the entire edge on the rear face of the end fin is chamfered (about 10.0%

of the thickness)". The form (specific constitution) (i1) of the parts of Evidence A No. 1 indicates that "the edge on the rear face of the end fin is not chamfered".

B Comparison between the Registered design and Evidence A No. 2

(Comparison of article)

The article regarding the Registered design and the article regarding Evidence A No. 3 (Note by the body: It is recognized as an error for "Evidence A No. 2") are the same "lighting device for inspection".

(Comparison of form)

(A) The basic constitutions (a2), (b2), (c2), and (d2) of Evidence A No. 2 are the same as the basic constitutions (A), (B), (C), and (D) of the Registered design.

(B) The forms (specific constitutions) (E) to (I) of the parts of the Registered design are different in exact value from the forms (specific constitutions) (e2) to (i2) of the parts of Evidence A No. 2.

C Comparison between the Registered design and Evidence A No. 3

(Comparison of article)

The article regarding the Registered design and the article regarding Evidence A No. 3 are the same "lighting device for inspection".

(Comparison of form)

(A) The basic constitutions (a3), (b3), (c3), and (d3) of Evidence A No. 3 are respectively the same as the basic constitutions (A), (B), (C), and (D) of the Registered design.

(B) The forms (specific constitutions) (E) to (I) of the parts of the Registered design are different in exact value from the forms (specific constitutions) (e3) to (i3) of the parts of Evidence A No. 2.

(3) Evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 to No. 3

On the basis of the provisions of Article 3(1) of the Design act (and provisions of Article 24(2) of the Design Act), evaluations should be conducted as follows.

A Evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 1

The article described in Evidence A No. 1 (Note by the body: It is recognized as an error for "the Registered design") is a "lighting device for inspection", while the article described in Evidence A No. 1 is an electronic device which is not limited to the "lighting device for inspection". Accordingly, since the article "lighting device for inspection" regarding the Registered design is included in the article "electronic device" described in Evidence A No. 1, the article regarding the Registered design and the

article described in Evidence A No. 1 have common features.

The part attracting consumers in the Registered design is the basic constitutions (B) and (C) as follows.

(B) The heat radiation part includes an extending axial body.

(C) The axial body includes a plurality of disk-like fins having the same diameter arranged at equal intervals.

The basic constitutions (b1) and (c1) of Evidence A No. 1 are identical with the basic constitutions (B) and (C) of the Registered design.

The slight difference in value between the forms (specific constitutions) (E) to (H) of the parts of the Registered design and the forms (specific constitutions) (e1) to (h1) of the parts of Evidence A No. 1 does not obviously affect an aesthetic impression to be created on the consumers.

Regarding the difference between the basic constitution (D) and the form (specific constitution) (I) of the parts of the Registered design and the basic constitution (d1) and the form (specific constitution) (i1) of the parts of Evidence A No. 1, an end fin in a "lighting device for inspection" is made thicker than other fins and is chamfered naturally. Thus, the difference does not obviously affect an aesthetic impression to be created on the consumers. Chamfering is performed normally for safety in industrial equipment including a lighting device for inspection. Thickness is increased due to chamfering, inevitably.

B Evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 2

The article regarding the Registered design and the article described in Evidence A No. 2, which indicate a "lighting device for inspection", have common features.

The part attracting consumers in the Registered design is the basic constitutions (B) and (C). The basic constitutions (b2) and (c2) of Evidence A No. 2 are identical with the basic constitutions (B) and (C) of the Registered design. The basic constitution (d2) of Evidence A No. 2 is identical with the basic constitution (D) of the Registered design.

The slight difference in value between the forms (specific constitutions) (E) to (I) of the parts of the Registered design and the forms (specific constitutions) (e2) to (i2) of the parts of Evidence A No. 2 does not affect an aesthetic impression to be created on the consumers.

C Evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 3

The article regarding the Registered design and the article described in Evidence

A No. 3, which indicate a "lighting device for inspection", have common features.

The part attracting consumers in the Registered design is the basic constitutions (B) and (C). The basic constitutions (b3) and (c3) of Evidence A No. 3 are identical with the basic constitutions (B) and (C) of the Registered design. The basic constitution (d3) of Evidence A No. 3 is identical with the basic constitution (D) of the Registered design.

The slight difference in value between the forms (specific constitutions) (E) to (I) of the parts of the Registered design and the forms (specific constitutions) (e3) to (i3) of the parts of Evidence A No. 3 does not affect an aesthetic impression to be created on the consumers.

(4) Conclusions based on the evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 to No. 3

A Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 1

(Conclusion based on the evaluation under the provisions of Article 3(1) of the Design Act (and the provisions of Article 24(2) of the Design Act))

It should be considered that the Registered design, which has common design and aesthetic impression with the design described in Evidence A No. 1, cannot be registered under the provisions of Article 3(1)(iii) of the Design Act.

(Conclusion based on the evaluation under the provisions of Article 3(2) of the Design Act)

Evidence A No. 1 is the second impression of the first edition issued on July 18, 1997, and the first edition (the 26th impression) is still sold at bookstores or on the Internet. The Demandant also has owned it before this demand for invalidation trial (or previous disputes with the Demande) (the 17th impression). As such, the book presented by Evidence A No. 1, which has been widely read by technical experts of thermal design, is very well known.

Evidence A No. 1 indicates that a tower-type heatsink is a representative heatsink shape (p. 171 FIG. 16-7), and that heatsinks including the tower-type heatsink is used for electronic components having large surface heat flux density (p. 169 the 6th line from the bottom). Another book (for example, Evidence A No. 4 (FIG. 1. 1. 28)) also describes that a tower-type heatsink is a representative heatsink shape, and many other documents (for example, Evidence A No. 2, Evidence A No. 3, Evidence A No. 5, Evidence A No. 6, Evidence A No. 7, or the like) on optical technology also describe

the above matter.

Accordingly, this book assumes using the heat radiation part (tower-type heatsink) described in Evidence A No. 1 for radiating heat generated from an LED (electronic component) which emits light even for a lighting device for inspection.

The design described in Evidence A No. 1 (heat radiation part (tower-type heatsink)) is very well known, and it is a model for thermal design technicians in the characteristics of the book. Thus, approving that one party (having no relation with the author) exclusively uses a shape which is about the same as the above shape in a lighting device for inspection is hard for thermal design technicians, and prevents development of Japanese industries which aim to keep a product competitive advantage in the global market.

Thus, it should be considered that the Registered design, which could be easily created by a person skilled in the art based on the design described in Evidence A No. 1, cannot be registered under the provisions of Article 3(2) of the Design Act.

B Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 2

(Conclusion based on the evaluation under the provisions of Article 3(1) of the Design Act (and the provisions of Article 24(2) of the Design Act))

It should be considered that the Registered design, which has common design and aesthetic impression with the design described in Evidence A No. 2, cannot be registered under the provisions of Article 3(1)(iii) of the Design Act.

(Conclusion based on the evaluation under the provisions of Article 3(2) of the Design Act)

It should be considered that the Registered design, which could be easily created by a person skilled in the art based on the design described in Evidence A No. 2, cannot be registered under the provisions of Article 3(2) of the Design Act.

C Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the design described in Evidence A No. 3

(Conclusion based on the evaluation under the provisions of Article 3(1) of the Design Act (and the provisions of Article 24(2) of the Design Act))

It should be considered that the Registered design, which has common design and aesthetic impression with the design described in Evidence A No. 3, cannot be registered under the provisions of Article 3(1)(iii) of the Design Act.

(Conclusion based on the evaluation under the provisions of Article 3(2) of the Design Act)

Act)

It should be considered that the Registered design, which could be easily created by a person skilled in the art based on the design described in Evidence A No. 3, cannot be registered under the provisions of Article 3(2) of the Design Act.

D Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 and No. 2

(Conclusion based on the evaluation under the provisions of Article 3(2) of the Design Act)

Examination Guidelines for Design (for Design Act revised in 1998 and 1999) include the following description, in a case where a "fence" and a "decorative plate for fence" are publicly known designs, "In the field of the design, it is ordinary for a person skilled in the art to simply replace a decorative plate part of a publicly known design by another decorative plate".

The "fence" corresponds to the design described in Evidence A No. 1 (heat radiation part), and the "decorative plate for fence" corresponds to the end fin of which the entire edge on the rear face is chamfered with a thickness different from that of other fins in the design described in Evidence A No. 1 (Note by the body: It is recognized as an error for "Evidence A No. 2") (heat radiation part). Thus, "in the field of the design, it is ordinary for a person skilled in the art to simply replace an end fin of a radiation part of a publicly known design by another end fin".

Thus, it should be considered that the Registered design, which could be easily created by a person skilled in the art based on the designs described in Evidence A No. 1 and Evidence A No. 2, cannot be registered under the provisions of Article 3(2) of the Design Act.

E Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 and No. 3

(Conclusion based on the evaluation under the provisions of Article 3(2) of the Design Act)

For the same reason as the above "D Conclusion based on the evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 and No. 2", it should be considered that the Registered design, which could be easily created by a person skilled in the art based on the designs described in Evidence A No. 1 and Evidence A No. 3, cannot be registered under the provisions of Article 3(2) of the Design Act.

(5) Accordingly, the Registered design, which falls under the provisions of Article 48(1)(i) of the Design Act, should be invalidated for the reasons A and B in 1 above.

3 Allegation in "Written refutation of the trial case"

(1) Refutation in regard to the essential part of the Registered design (No. 3 1(1) mentioned later)

The refutation in regard to the requirements A to E of the essential part of the Registered design alleged by the Demandee is described in the next section.

(2) Refutation against the refutation in regard to the reasons for invalidation (No. 3 1(2) mentioned later)

A Refutation against "Refutation 1" (No. 3 1(2)B mentioned later)

(A) The Demandee mentioned about the "Gist of the Registered design" in No. 2 2 (1) A, as follows:

"The Demandant indicates, in this column, the Registered design the contents thereof lack objectivity, and it is obviously unreasonable as a reference for determining similarity and creative difficulty. The essential part of the Registered design is above A to E, objectively."

Among the requirements A to E, the requirement in A, "casing with a power cable drawn out of a peripheral surface at the rear end part", and the requirement in E, "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface", are not described in the "Gist of the Registered design" in No. 2 2 (1) A. Accordingly, it seems that the Demandee alleges "lack of objectivity" due to the absence of the description.

The allegation that the "Gist of the Registered design" in No. 2 2 (1) A "lacks objectivity" and the allegation that "the essential part of the Registered design is above A to E, objectively", are extremely arbitrary and nonobjective as indicated in B.

(B) The revocation of trial decision (2018 (Gyo-ke) 10020) rendered a decision that the requirement E, "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface", cannot be an essential part.

The revocation of trial decision (2018 (Gyo-ke) 10020) concluded as follows (Note: Design A-2 is the Registered design, Design A-1 is a related design of the Registered design, and the Plaintiff is the Demandee of the invalidation trial).

"1 (1) C ... Meanwhile, the "form in which there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out" related to the Plaintiff's argument common feature is not a form which

can be concretely recognized visually from the solid line part and the A-1 corresponding part. In the part indicated by the dashed lines in the figures in Appendix 1 and Appendix 3, the wiring cable or the power cable is drawn out from a side peripheral surface of a front member in each axial body and each fin part. Thus, only the fact that 'there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out' can be indirectly grasped. The Plaintiff's argument common feature is not a form which can be concretely recognized visually from the area (the solid line part and the A-1 corresponding part) specified as "the part for which the design registration is requested as a partial design" in the application for design registration. Therefore, the common feature cannot be recognized as a common feature between the Registered design (the solid line part) and the Design A-1 (the A-1 corresponding part)."

"For the same reason as indicated in 1 (1) C, the Plaintiff's argument common feature cannot be recognized as a common feature between the Registered design (the solid line part) and the Design A-2 (the A-2 corresponding part). Thus, the above Plaintiff's argument cannot be accepted.

Therefore, the above Plaintiff's argument cannot be accepted."

B Refutation against "Refutation 3" (No. 3 1(2) D mentioned later)

(A) Regarding "Reason for invalidation [1] (lack of novelty based on the Design A-1)"

The Demande argues, "We do not understand why the article of the Design A-1 is an electronic device, and what it means", but the intention thereof is unclear. As is obvious from the description in No. 2 2 (1), "The article is an electronic device in general, as is obvious from the description, 'used for electronic components having large surface heat flux density', in Evidence A No. 1 p. 169 the 6th line from the bottom, the article of Evidence A No. 1 is an 'electronic device'".

The Demande argues, "In the Design A-1, ..., all fins having the same thickness, and it is obviously different from the form including a plurality of intermediate fins and an end fin thicker than them like the partial design". However, it is natural to form an end fin thicker than an intermediate fin in this field of article (already mentioned in 2), and the thick end fin in the Registered design does not affect an aesthetic impression.

(B) Regarding "Reason for invalidation [2] (lack of creative difficulty based on the Design A-1)"

The Demande argues, "The form having an end fin thicker than a plurality of intermediate fins is obviously different from the form of the Design A-1, and it is a non-conventional and novel form for consumers or a person skilled in the art of this field of

article." However, as indicated about the Reason for invalidation [1], it is natural to form an end fin thicker than intermediate fins in this field of article.

(C) Regarding "Reason for invalidation [3] (lack of novelty based on the Design A-2)"

The Demandee argues, "Even if the projection is a fin, it is arranged around the side of the casing, and it is not arranged behind the casing like the Registered design". However, the design of Evidence A No. 2 includes a rear member (part behind the step) having only a heat radiation effect without component housing function.

(D) Regarding "Reason for invalidation [4] (lack of creative difficulty based on the Design A-2)"

The Demandee argues, "In the Design A-2, the power cable is drawn out from the casing rear end, however, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea." However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part. Thus, the Demandee's allegation is obviously unreasonable.

(E) Regarding "Reason for invalidation [5] (lack of novelty based on the Design A-3)"

The Demandee argues, "In the right side view and the reference A-A enlarged cross-sectional view, a through-hole is formed in a fin-like member. Consumers or a person skilled in the art can clearly understand that the through-hole is a cable through-hole for holding a power cable or allowing the cable to pass through." However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part.

The Demandee also argues, "In the Design A-3, the fin-like member is considered as a part of the casing. The form having a fin structure (rear member) arranged behind the casing like the Registered design is not disclosed in the Design A-3 at all." However, if the "casing" is one having component housing function, consumers or a person skilled in the art will naturally understand that the front part housing the LED, or the like in Evidence A No. 3 is a casing and the rear part is a fin structure (rear member). In a dictionary (Digital Daijisen), a casing is "packaging material, outer case, bag, or tube". In the reference A-A enlarged cross-sectional view of the Registered design (Note by the body: It is recognized as an error for "Design A-3"), there is an upper through-hole and an lower through-hole, which are inconsistent

with the right side view.

(F) Regarding "Reason for invalidation [6] (lack of creative difficulty based on the Design A-3)"

The Demandee argued, "In the Design A-3, the power cable is drawn out from the casing rear end surface; however, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea."

However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part. Thus, the Demandee's allegation is obviously unreasonable.

(G) Regarding "Reason for invalidation [7] (lack of creative difficulty based on the Design A-1 and the Design A-2)"

The Demandee argued, "Since the Design A-2 (and Design A-1 as well) does not depart from the design idea of drawing out a power cable in an axial direction from a casing rear end, it is hard to believe that a person skilled in the art of the field of article could easily conceive of attaching a fin related to the Design A-1 or various other forms to the casing rear end surface due to the obstructive power cable of the Design A-2". However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part.

As indicated in 2 mentioned above, it is natural for a person skilled in the art to replace the rear end fin of the design of Evidence A No. 1, which has been very popular for a person skilled in the art and well known, by a known thick rear end fin as described in Evidence A No. 2.

(H) Regarding "Reason for invalidation [8] (lack of creative difficulty based on the Design A-1 and the Design A-3)"

The Demandee argued, "Since the Design A-3 (and Design A-1 as well) does not depart from the design idea of drawing out a power cable in an axial direction from a casing rear end, it is hard to believe that a person skilled in the art of the field of article could easily conceive of attaching a fin related to the Design A-1 or various other forms to the casing rear end surface due to the obstructive power cable of the Design A-3". However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part.

As indicated in 2 mentioned above, it is natural for a person skilled in the art to

replace the rear end fin of the design of Evidence A No. 1, which has long been very popular for a person skilled in the art and extremely well known, by a known thick rear end fin as described in Evidence A No. 3.

4 Allegation in "Oral proceedings statement brief"

(1) Regarding No. 3 2 (1) mentioned later

A The Demandee argued, "The reason why the Constitution E was not recognized as an essential part in the decision of the revocation of trial decision (Note by the body: 2018 (Gyo-ke) 10020) is that the expression is indirect", and "Actually, ... Consumers or traders of the article focus the essential part E for determination of similarity, for certain."

Since the Constitution E is not an essential part, consumers or traders never focus the essential part E for determination of similarity.

B The Demandee alleges that the reason for the lost lawsuit in the revocation of trial decision is expression of the allegation. However, it may be true that the Demandee lost the lawsuit because a judgment was made on the shape which is subjected to the trial. The decision may not be influenced by the expression of the allegation of the reasons for petition in the revocation of trial decision.

According to the revocation of trial decision, the matter, "there is no slot through which the power cable is drawn out in the rear end surface", cannot be an essential part. In the constitution E, the following descriptions remain: "the power cable does not penetrate through", and "In plan view, the surface of the rear end fin is flat, and the surface of each intermediate fin is flat." The expression "flat" is not necessarily unambiguous, however; if the above remaining expression means no-hole, it is a typical tower-type heatsink, which is the most well-known shape. The constitution cannot be an essential part or has no creative difficulty.

(2) Closing

Therefore, the Demandee's allegation in the oral proceedings statement brief (and the written reply) submitted by the Demandee is incorrect.

5 Evidences submitted by the Demandant

The Demandant submitted the following Evidences A No. 1 to No. 10 (all are recognized to be copies) as attached documents of the written demand for trial and the written refutation of the trial case.

Evidence A No. 1

Abstract of the book "Perfect Introduction to Thermal Design for Electronics" (copy)

Evidence A No. 2	Instructions (I)
Evidence A No. 3	Design Registration No. 1175712
Evidence A No. 4	Abstract of the book "Thermal Design Handbook" (copy)
Evidence A No. 5	Catalogue of Violet Laser Diode, which is a product manufactured by NEOARK CORPORATION (copy)
Evidence A No. 6	Japanese Unexamined Patent Application Publication No. 2000-75496
Evidence A No. 7	Japanese Unexamined Patent Application Publication No. 2000-131764
Evidence A No. 8	Abstract of Examination Guidelines for Design (copy)
Evidence A No. 9	Japanese Unexamined Patent Application Publication No. 2003-240721
Evidence A No. 10	Copy of Written reply (dated November 25, 2016)

No. 3 Demandee's reply and the gist of the reasons

The Demandee submitted the written reply of the trial case to the effect that,
"The demand for trial of the case was groundless.

The costs in connection with the trial shall be borne by the Demandant", and alleges the reasons thereof summarized as follows (including the contents of the "Oral proceedings statement brief" and "Oral proceedings statement brief (2)").

1 Reasons of the reply

(1) Essential part of the Registered design

The essential part of the Registered design is as follows.

A In a rear member of a casing including a light-emitting surface (light output port) formed on a front end surface and configured to draw out a power cable from a side peripheral surface of a rear end part,

B a support axial body is arranged which extends rearward from the center of the rear end surface of the casing,

C in a middle part of the support axial body, a plurality of disk-like intermediate fins having the same diameter are arranged at equal intervals and aligned with a central axis,

D in a rear end part of the support axial body, one disk-like rear end fin having

the same diameter as the intermediate fin and thicker than the intermediate fin is arranged and aligned with the central axis,

E the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface.

(2) Refutation in regard to Reasons for invalidation

A Gist of Reasons for invalidation

The reasons for invalidation (No. 2 1) alleged by the Demandant are summarized as follows.

[1] Lack of novelty based on the design described in Evidence A No. 1 (hereinafter referred to as Design A-1)

[2] Lack of creative difficulty based on the Design A-1

[3] Lack of novelty based on the design described in Evidence A No. 2 (hereinafter referred to as Design A-2)

[4] Lack of creative difficulty based on the Design A-2

[5] Lack of novelty based on the design described in Evidence A No. 3 (hereinafter referred to as Design A-3)

[6] Lack of creative difficulty based on the Design A-3

[7] Lack of creative difficulty based on the Design A-1 and the Design A-2

[8] Lack of creative difficulty based on the Design A-1 and the Design A-3

B Refutation 1

"Gist of the Registered design and the designs described in Evidences A No. 1 to No. 3"

Regarding (No. 2 2 (1))

The Demandant seems to have described the constitution of the Registered design on the basis of the drawings, in this column.

However, the actual circumstance in the field of article at the time of the filing of the application for the Registered design, such as what consumers or a person skilled in the art are interested in the Registered design, is not taken into consideration at all, and the contents thereof lacks objectivity. It is obviously unreasonable as a reference for determining similarity and creative difficulty. The essential part of the Registered design is the above A to E, objectively.

The same applies to the gist regarding each of the designs described in A-1 to A-3. The constitution is described on the basis only of an arbitrary feature of the Demandant without considering the actual circumstance in the field of article, and it is not described as an objective constitution in determining similarity and creative difficulty.

C Refutation 2

Regarding "Comparison between the Registered design and the designs described in Evidences A No. 1 to No. 3" and "Evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 to No. 3" (No. 2 2 (2) and (3))

As described above, the Demandant incorrectly recognizes objective constitution in determining similarity and creative difficulty of the Registered design. The result of comparison based on the wrong constitution makes no sense, and the evaluation is obviously unreasonable.

D Refutation 3

Regarding "Conclusions based on the evaluation of corresponding feature and different features in form between the Registered design and the designs described in Evidences A No. 1 to No. 3" (No. 2 2 (4))

In this column, grounds for the Reasons for invalidation [1] to [8] are argued.

However, as described above, the grounds are not based on the results of comparing and evaluating objective constitution in determining similarity and creative difficulty of the Registered design. Thus, the conclusions, or the argument regarding the grounds for the Reasons for invalidation [1] to [8], are obviously unreasonable.

The detail reasons thereof are as follows.

(A) Regarding Reason for invalidation [1]

The Demandant continuously alleges that the Registered design and the Design A-1 are similar because of a common aesthetic impression (No. 2 2 (4) A). However, the allegation is groundless.

An article of the Design A-1 is completely different from an article of the Registered design. Thus, the Registered design and the Design A-1 are not similar without comparing the form thereof.

The Demandant said that an article of the Design A-1 has common features with an article of the Registered design, because the article of the Design A-1 is an electronic device (No. 2 2 (3) A). However, an electronic device is an article obviously different from the lighting device for inspection of the Registered design, and the allegation that the article of the Design A-1 is an electronic device makes no sense at all.

In addition, regarding the form, the Design A-1, which does not indicate a relationship with the casing for housing an LED, or the like as described above and includes fins having the same thickness, is obviously different from the form including a plurality of intermediate fins and a rear end fin thicker than them like the partial design.

Therefore, the Reason for invalidation [1] alleged by the Demandant that the Registered design lacks novelty based on the Design A-1 which is not similar to the Registered design in both article and form, is obviously wrong.

(B) Regarding Reason for invalidation [2]

The Demandant continuously alleges that the Registered design can be easily created based on the Design A-1 (No. 2 2 (4) A). However, the allegation is groundless.

However, as described above, the Registered design is configured to draw out a power cable from a rear end by defying the common general technical knowledge or common general design at that time. The constitution where the power cable does not penetrate through and there is no slot through which the power cable is drawn out in the rear end surface (the power cable is drawn out from a side peripheral surface of the casing), and the constitution where the rear end fin is thicker than a plurality of intermediate fins is obviously different from the form of the Design A-1. It is a very novel form for consumers or a person skilled in the field of article.

The Design A-1 has no common feature with the Registered design also in article.

Therefore, even a person skilled in the art cannot easily create the Registered design from the Design A-1 which has no design idea of the Registered design and is extremely different from the Registered design also in article. The Reason for invalidation [2] alleged by the demandant that the Registered design lacks creative difficulty based on the Design A-1, is obviously unreasonable.

(C) Regarding Reason for invalidation [3]

The Demandant continuously alleges that the Registered design and the Design A-2 are similar because of a common aesthetic impression (No. 2 2 (4) B). However, the allegation is groundless.

Regarding the Design A-2, consumers or a person skilled in the field of article recognize a slot of the power cable, which is drawn out from a rear end surface, as the end of the casing.

Accordingly, consumers or a person skilled in the art understand that the Design A-2 does not include the fin of the Registered design (intermediate fins and rear end fin) and that grooves are formed around the casing to increase heat radiation area of the side peripheral surface of the casing.

Even if the projection is a fin, it is arranged around the side of the casing, and it is not arranged behind the casing, like the Registered design.

Thus, the Design A-2 is completely different from the Registered design in form.

Therefore, the Reason for invalidation [3] alleged by the Demandant that the

Registered design lack novelty based on the Design A-2, is obviously wrong.

(D) Regarding Reason for invalidation [4]

The Demandant continuously alleges that the Registered design can be easily created from the Design A-2 (No. 2 2 (4) B). However, the grounds for the allegation are unclear.

In the Design A-2, the power cable is drawn out from the casing rear end. However, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea.

Therefore, the Reason for invalidation [4] alleged by the Demandant that the Registered design lacks creative difficulty based on the Design A-2, is obviously unreasonable.

(E) Regarding Reason for invalidation [5]

The Demandant continuously alleges that the Registered design and the Design A-3 are similar because of a common aesthetic impression (No. 2 2 (4) C). However, the allegation is groundless.

In the Design A-3, at the rear end of the casing, a disk-shaped fin-like member is arranged. The fin-like member includes one thick fin arranged at the rear and one front fin thinner than the rear fin.

Meanwhile, in the front view showing the state of use in A-3, the power cable penetrates through the fin-like member in an axial direction and is drawn out from the rear.

In the right side view and the reference A-A enlarged cross-sectional view, a through-hole is formed in a fin-like member. Consumers or a person skilled in the art can clearly understand that the through-hole is a cable through-hole for holding a power cable or allowing the cable to pass through.

Therefore, for consumers or a person skilled in the art, the fin-like member in the Design A-3, which houses or holds a base end of the power cable, should be understood to be a part of the casing.

As long as the appearance of the power cable passing through and held by the fin-like member can be seen, consumers or a person skilled in the art cannot have great expectations of heat radiation performance and high luminance based thereon. In fact, expected improvement in heat radiation performance has not been achieved.

Such incomplete function and design are due to the fact of not departing from the idea of drawing out a power cable in an axial direction from the rear of a casing.

Accordingly, it should be said that the fin-like member in the Design A-3 forms a part of a casing, and a constitution of arranging a twin structure (rear member) at the

rear of the casing, like the Registered design, is not disclosed in the Design A-3 at all.

The above point can be understood only by consumers or a person skilled in the art of the field of article. The Registered design is obviously non-similar to the Design A-3.

Therefore, the Reason for invalidation [5] alleged by the Demandant that the Registered design lacks creative difficulty based on the Design A-3, is obviously wrong.

(F) Regarding Reason for invalidation [6]

The Demandant continuously alleges that the Registered design can be easily created from the Design A-3 (No. 2 2 (4) C). However, the grounds for the allegation are unclear.

In the Design A-3, the power cable is drawn out from the casing rear end. However, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea.

Therefore, the Reason for invalidation [6] alleged by the Demandant that the Registered design lacks creative difficulty based on the Design A-3, is obviously unreasonable.

(G) Regarding Reason for invalidation [7]

The Demandant continuously alleges that the Registered design can be easily created based on the Design A-1 and the Design A-2 (No. 2 2 (4) D). However, the allegation is groundless.

The Design A-1 is, as indicated in the refutation in regard to the Reasons for invalidation [1], not similar to the Registered design in form. Even if it is attached to the rear end of the Design A-2, the form thereof is not similar to the Registered design.

Since the Design A-2 (and Design A-1, too) does not depart from the design idea of drawing out a power cable in an axial direction from a casing rear end, it is hard to believe that a person skilled in the art of the field of article could easily conceive of attaching a fin related to the Design A-1 or various other forms to the casing rear end surface due to the obstructive power cable of the Design A-2.

Therefore, the Reason for invalidation [7] alleged by the Demandant that the Registered design lacks creative difficulty based on the Design A-1 and the Design A-2, is obviously unreasonable.

(H) Regarding Reason for invalidation [8]

The Demandant continuously alleges that the Registered design can be easily created based on the Design A-1 and the Design A-3 (No. 2 2 (4) E). However, the allegation is groundless.

The reason is substantially the same as the refutation in regard to the Reason for

invalidation [7].

The Design A-1 is, as indicated in the refutation in regard to the Reason for invalidation [1], not similar to the Registered design in form. Even if it is attached to the rear end of the Design A-3, the form thereof is not similar to the Registered design.

Since the Design A-3 (and Design A-1 as well) does not depart from the design idea of drawing out a power cable in an axial direction from a casing rear end, it is hard to believe that a person skilled in the art of the field of article could easily conceive of attaching a fin related to the Design A-1 or various other forms to the casing rear end surface due to the obstructive power cable of the Design A-3. Therefore, the Reason for invalidation [8] alleged by the Demandant that the Registered design lacks creative difficulty based on the Design A-1 and the Design A-3, is obviously unreasonable.

(3) Closing

As described above, the reasons for invalidation alleged by the demandant are groundless. The Registered design is valid. The trial of the case cannot be successful.

2 Allegations in "Oral proceedings statement brief" and "Oral proceedings statement brief (2)"

(1) In regard to No. 2 3 (2)

The Demandant's allegation in No. 2 3 (2) is based on the essential part (constitution) E, or as follows: the expression, "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface", which is not a form which can be concretely recognized visually, and cannot be recognized as an essential part, and the Demandee's allegations relating to the essential part E, which are different features between the Registered design and the Cited design, are all incorrect.

The Demandant presented, as a reason why the Constitution E is not recognized as an essential part, the decision of revocation of trial decision in a different case (invalidation trial (dismissal of request) requested by the Demandee demanding invalidation for the reason that the Demandant registered design is similar to the Registered design) (No. 2 3 (2) A (B)).

However, in determination of similarity in the above case, the design to be compared is different from that in the invalidation trial of the case, and a judgment on the essential part, which is a characteristic point, is different, of course. The decision in the different case cannot be employed as a ground even though only one design (the Registered design, in this case) is identical.

In the decision of the above revocation of trial decision, the Constitution E was

not recognized as an essential part, only due to the indirect expression (in this point, it is undeniable that the expression in the allegation of the Demandee was poor). In fact, consumers or traders of the article focus the essential part E for determination of similarity, for certain. Considering the essential part E, the reasons for invalidation alleged by the Demandant are unreasonable, as indicated in 1 mentioned above.

For eliminating doubtful expression, the Demandee corrected the essential part constitution of the Registered design.

A In a rear member of a casing including a light-emitting surface (light output port) formed on a front end surface,

B a support axial body is arranged which extends rearward from the center of the rear end surface of the casing,

C in a middle part of the support axial body, a plurality of disk-like intermediate fins having the same diameter are arranged at equal intervals and aligned with a central axis,

D in a rear end part of the support axial body, one disk-like rear end fin having the same diameter as the intermediate fin and thicker than the intermediate fin is arranged and aligned with the central axis,

E the power cable does not penetrate through, there is no slot through which the power cable is drawn out in the rear end surface, and in plan view, the surface of the rear end fin is flat and the surface of each intermediate fin is flat.

The term "flat" means that there is no hole through which a power cable, or the like, passes, which directly expresses the essential part in the partial design with direct form.

The above correction allows the Constitution E to be considered as a form which can be concretely recognized visually, and ensures that the different features from the Cited inventions indicated by the Demandant were clarified.

As a result, the grounds alleged by the Demandant that the essential part (especially, the Constituent E) is not a form which can be concretely recognized visually, are all irrelevant. The Demandant continuously alleges other trivial matters, which are groundless or not related to the reasons for invalidation.

(2) Closing

Therefore, the Demandant's allegation in No. 2 3 is incorrect, and there is no grounds for the reasons for invalidation.

3 Evidences submitted by the Demandee

The Demandee submitted the following Evidences B (all are copies) as attached

documents of the written reply of the trial case, the oral proceedings statement brief, and the oral proceedings statement brief (2).

- | | |
|-------------------|---|
| Evidence B No. 1 | Demandee catalogue (copy) created in June, 2005
The Article is called "spot lighting".
Explanation of the form/internal structure of new HLV series |
| Evidence B No. 2 | Demandant catalogue (copy) created in 2004
The Article is called "spot lighting". |
| Evidence B No. 3 | Demandee catalogue (copy) created in December 2012
Before development of the spot lighting, an optical fiber-type halogen lamp was used. |
| Evidence B No. 4 | Demandee price table (copy) created on November 1, 1995
The LV series was displayed/sold in November 1995 at the latest. |
| Evidence B No. 5 | Demandee catalogue (copy) created in 2010
Explanation of the form/structure of LV series |
| Evidence B No. 6 | Demandee catalogue (copy) created in January 2014
Explanation of the form/structure of old LV series |
| Evidence B No. 7 | Demandee price table (copy) created on January 15, 2012
The old LV series was displayed/sold in January 2002 at the latest. |
| Evidence B No. 8 | Design bulletin of Design registration No. 1180103 (copy)
Design registration of old HLV series |
| Evidence B No. 9 | Timely disclosure (copy) created on July 28, 2004
Sale of new HLV series was started in August 2004. |
| Evidence B No. 10 | Materials for press use (copy) created on May 26, 2010
Sale of HLV2 series was started in June 2010. |
| Evidence B No. 11 | Demandee catalogue (copy) created in July 2011
Explanation of the form/structure of HLV2 series |
| Evidence B No. 12 | Demandee catalogue (copy) created in 2016
The demandant sold IHVB series and IHVC series, and then stopped selling. |
| Evidence B No. 13 | Warning (copy) created in August 23, 2016 |

	Warning on the Demandant's product IHVB and IHVC based on the design right of the Demande (Design Registration No. 1224780 and Design Registration No. 1224615)
Evidence B No. 14	Written reply (copy) created on October 31, 2016 The Demandant replied to the above warning that the Demandant will immediately stop selling.
Evidence B No. 15	Plaintiff's fifth brief (copy) submitted by the Demande (Plaintiff) in the infringement lawsuit
Evidence B No. 16	Progress brief (copy) showing the contents of constitution corrected orally by the Plaintiff in the infringement lawsuit
Evidence B No. 17	Record of argument (copy) in the infringement lawsuit
Evidence B No. 18	List of articles and explanation of the articles (copy) attached to the bill in the infringement lawsuit

No. 4 Oral proceeding

The body conducted an oral proceeding on November 5, 2018 for the trial of the case, and the chief administrative judge concluded the trial on the same day. ("First oral proceedings statement brief" dated November 5, 2018)

No. 5 Judgment by the body

1 The Registered design (see Appendix 1)

(1) Article to the design of the Registered design

The article to the design of the Registered design is a "lighting device for inspection" according to the written demand for trial Appendix 1 (see Appendix 1). [Description of the article to the design] in the written demand for trial Appendix 1 includes the following description: "This article is used for detecting flaw or a mark of a product in a factory, or the like (generally referred to as inspection), includes an LED or an optical element (not shown) to emit light from a light output port located at a tip."

The Registered design is a part for which the design registration is requested as a partial design. [Description of the Design] in the written demand for trial Appendix 1 includes the following description: "The part indicated by the solid line (Note by the body: It is hereinafter referred to as "the Solid-line part") is a part for which the design registration is requested as a partial design."

(2) Usage and the function as well as the position, the size, and the scope of the Solid-

line part

The Solid-line part is a part of the lighting device for inspection, formed by integrating three fin parts located at the upper right in front view and an axial body connecting them. The Solid-line part is presumed to have a usage and a function relating to heat radiation of the lighting device for inspection, occupies a size and the scope of a lateral width of about 1/5 of the total width in front view, and is located at the upper right in front view.

(3) Form of the Solid-line part

The shape, patterns, or colors, or any combination thereof of the Solid-line part (The "shape, pattern, or colors, or any combination thereof" are hereinafter referred to as "Form") are as follows.

A Overall structure

When viewed from the front, a lateral cylindrical axial body is integrated with three substantially disk-like fin parts having a diameter larger than the axial body and arranged at equal intervals. Intermediate fin parts are the same in shape and size. A fin part located at the end part (hereinafter referred to as "rear fin part") has almost the same shape as the intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and a circumferential corner part in a rear end surface is chamfered.

B Right-side surface shape of fin parts

Circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular.

C Front shape of fin parts

The fin parts viewed from the front are substantially vertically-long rectangular. The ratio between the width and the length of the intermediate fin part is 1:24, and that of the rear fin part is 1:12. Thus, the rear fin part is about twice as thick as the intermediate fin parts.

D Constituent ratio between axial body and fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5. The ratio between the width of the axial body (=interval of the fin parts) and the width of the intermediate fin part is about 3:1.

2 Gist of the reasons for invalidation

A Reason for invalidation 1

The Reason for invalidation 1 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is similar to the design

described in Evidence A No. 1 (see Appendix 2) which is a publication distributed in Japan or a foreign country before the filing of the application for design registration, or the design of "Tower-type heatsink" (hereinafter referred to as "Design A-1) described on p.171 of the book "Perfect Introduction to Thermal Design for Electronics" issued on July 18, 1997, falls under the category of Article 3(1)(iii) of the Design Act, and should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act. Thus, the registration of the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

B Reason for invalidation 2

The Reason for invalidation 2 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is a design which could be easily created by a person ordinarily skilled in the field of the Registered design (hereinafter referred to as "a person skilled in the art") on the basis of the Design A-1, and should not be registered under the provisions of Article 3(2) of the Design Act. Thus, the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

C Reason for invalidation 3

The Reason for invalidation 3 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is similar to the design described in Evidence A No. 2 (see Appendix 2) which was publicly known in Japan or a foreign country before the filing of the application for design registration, or the design of "IHV-27R" (coaxial spot lighting) (hereinafter referred to as "Design A-2) manufactured based on the specifications (Material 1 of Evidence A No. 2, see Appendix 3) by 2002 at the latest, falls under the category of Article 3(1)(iii) of the Design Act, and should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act. Thus, the registration of the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

D Reason for invalidation 4

The Reason for invalidation 4 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-2, and should not be registered under the provisions of Article 3(2) of the Design Act. Thus, the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

E Reason for invalidation 5

The Reason for invalidation 5 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is similar to the design described in Evidence A No. 3 (see Appendix 4) which is a publication distributed in Japan or a foreign country before the filing of the application for design registration, or the design of Design Registration No. 1175712 (lighting device for inspection) described in the design bulletin issued on April 18, 2003, falls under the category of Article 3(1)(iii) of the Design Act, and should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act. Thus, the registration of the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

F Reason for invalidation 6

The Reason for invalidation 6 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-3, and should not be registered under the provisions of Article 3(2) of the Design Act. Thus, the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

G Reason for invalidation 7

The Reason for invalidation 7 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-1 and the Design A-2, and should not be registered under the provisions of Article 3(2) of the Design Act. Thus, the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

H Reason for invalidation 8

The Reason for invalidation 8 for the registration of the Registered design alleged by the Demandant is as follows: The Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-1 and the Design A-3, and should not be registered under the provisions of Article 3(2) of the Design Act. Thus, the Registered design falls under Article 48(1)(i) of the Design Act and should be invalidated under the provisions of the main paragraph thereof.

3 Judgment on Reason for invalidation 1

We will examine whether or not the Registered design is a design similar to the Design A-1.

(1) Design A-1 (see Appendix 2)

The Design A-1 is a design of "Tower-type heatsink" described in p.171 of the book "Perfect Introduction to Thermal Design for Electronics" (Evidence A No. 1, see Appendix 2). The book was issued on July 18, 1997, which is before the filing of the application for the Registered design.

A Article to the design of the Design A-1

The book includes the following description on p. 169, "It is required to increase wind speed or heat radiation area for an electronic component having large surface heat flux density. A heatsink, which can easily increase effective heat radiation area for taking temperature countermeasures (by reducing heat flux density), is an essential cooling component for an electronic device", and includes the following description on p. 171, "The tower type heatsink, which also has low directivity and low air resistance, is used for forced cooling. ... In forced cooling which forcibly generates airflow externally, reduction in thermal conductivity is smaller than that in natural cooling. Thus, in the forced cooling, it is more efficient to reduce fin interval and increase the number of fins."

According to the above descriptions, the article to the design of the Design A-1 is assumed to be "a component for an electronic device" having a usage for cooling an electronic device and having a function suitable for forced cooling.

B Form of Design A-1

The form of the Design A-1 is as follows.

The form of the Design A-1 is recognized in the direction of the drawings of the Registered design shown in the written demand for trial Appendix 1. The uppermost surface of the Design A-1 shown on p. 171 of the book is recognized as a right end surface, and the figure of the Design A-1 rotated to the right at 90 degrees is recognized as indicating the same direction as the "reference perspective view" of the Registered design.

(A) Overall structure

A lateral cylindrical axial body is integrated with four substantially disk-like fin parts having a diameter larger than the axial body and arranged at equal intervals. Intermediate fin parts are assumed to be the same in shape and size.

(B) Right-side surface shape of each fin part

Circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are assumed to be circular.

(C) Front shape of each fin part

It is assumed that each of the fin parts is formed so that the width is the largest in

the central part at the front and gradually decreases as it goes upward or downward, or so that the thickness in the central part is the largest and gradually decreases as it goes upward or downward. The shape of each fin part viewed from the front is assumed to be a substantially convex lens shape.

Alternatively, the Design A-1 is a figure represented in an oblique direction and may be represented in perspective drawing method. The width may be actually the same in the vertical direction in front view, or may be substantially the same. Accordingly, even if the figure is based on perspective drawing method, the front shape of each fin is unclear.

(D) Constituent ratio between axial body and each fin part

The ratio between the length of the axial body and the length of the fin parts viewed from the front is about 1:2.6. The ratio between the width of the axial body (=interval of the fin parts) and the width of each fin is unclear.

(2) Comparison of Registered design and Design A-1

A Article to the design

The article to the design of the Registered design is a "lighting device for inspection", has a usage for inspecting a product, includes an LED, and has a function of emitting light from a light output port located at a tip. The article to the design of the Design A-1 is assumed to be a "component for an electronic device", has a usage for cooling an electronic device, and has a function suitable for forced cooling. Thus, the article to the design of the Registered design and the article to the design of the Design A-1, which are different in usage and function, are different from each other.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and Design A-1

The Solid-line part and the Design A-1 both have a usage and a function relating to heat radiation. However, the Solid-line part has the usage and a function relating to heat radiation by constituting a part of the lighting device for inspection, while the Design A-1 has the usage and function relating to heat radiation as an independent component to be used in electronic devices in general. The solid-line part is located at the upper right in front view of the lighting device for inspection and occupies a size and the scope of a lateral width of about 1/5 of the total width in front view, or occupies a part of the lighting device for inspection. The Design A-1 is a cooling component and is used by being attached to an electronic device. Thus, the position, size and the scope corresponding to the Solid-line part (a part of the lighting device for inspection) cannot be found in the Design A-1.

C Form of Solid-line part and Design A-1

The following corresponding features and different features are recognized about forms of the Solid-line part and the Design A-1.

(A) Corresponding features

(A) Corresponding feature about the overall structure

A lateral cylindrical axial body is integrated with a plurality of substantially disk-like fin parts having a diameter larger than the axial body and arranged at equal intervals.

(B) Right-side surface shape of each fin part

Circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular.

(B) Different features

(a) Different feature in the number of fin parts, and presence or absence of a thick rear fin part

The solid-line part has three fin parts including a rear fin part which is thicker than intermediate fin parts (about double) and configured to chamfer a circumferential corner part in a rear end surface. The Design A-1 has four fin parts which are the same in shape and size.

(b) Different feature in front shape of fin parts

When viewed from the front, the fin parts of the Solid-line part are substantially vertically-long rectangular. The ratio between width and length of the intermediate fin part is about 1:24 and that of the rear fin part is about 1:12. The shape of the fin parts of the Design A-1 is substantially convex lens shape or unclear.

(c) Different feature in constituent ratio between axial body and fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5 in the Solid-line part, and about 1:2.6 in the Design A-1. The ratio between the width of the axial body (=interval of the fin parts) and the width of the intermediate fin part is about 3:1 in the Solid-line part, and it is unclear in the Design A-1.

(3) Determination of similarity between Registered design and Design A-1

When using a "lighting device for inspection", which is an article to the design of the Registered design, the whole of the article is exposed, and a user observes the article in all directions. Especially, since the fin parts and the axial body of the Solid-line part occupy about 1/5 in an axial direction of the upper part of the article, consumers including a user or a trader of the article can observe in detail the fin parts and the axial body from all directions. Thus, regarding determination of similarity of the design of the "lighting device for inspection", the shapes of the fin parts and the axial body are

evaluated from a viewpoint of the consumers based on the assumption of using or trading the article.

A Article to the design

As recognized in (2) A, the article to design of the Registered design and the article to the design of the Design A-1 are different from each other.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and Design A-1

As recognized in (2) B, the position, size and the scope corresponding to the Solid-line part (a part of the lighting device for inspection) cannot be found in the Design A-1.

C Evaluation of corresponding feature in form between the Solid-line part and the Design A-1

The shape that a lateral cylindrical axial body is integrated with a plurality of fin parts having a diameter larger than the axial body and arranged at equal intervals, and circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular, indicated in the corresponding feature (A) and the corresponding feature (B), had been widely known before the filing of the application in the design of the field of lighting device for inspection (for example, the design of "Light Irradiation Device (1)") in Japanese Unexamined Patent Application Publication No. 2004-111377 in the Publication of Unexamined Patent Application disclosed by Japan Patent Office on April 8, 2004, see Appendix 5). Thus, it is hard to believe that consumers focus on the shape. Therefore, it has to be said that the corresponding feature (A) and the corresponding feature (B) have small effect on determination of similarity between the Solid-line part and the Design A-1.

Accordingly, the corresponding features in form between the Solid-line part and the Design A-1 have small effect on determination of similarity, and it should be said that the corresponding features have small effect on determination of similarity even if taking into consideration visual impression combined with the corresponding features.

D Evaluation of different feature in form between the Solid-line part and the Design A-1

The different features in form between the Solid-line part and the Design A-1 are evaluated as follows.

The different feature in front shape of each of the fin parts indicated in the different feature (b), or the different feature between the substantially vertically-long shape (Solid-line part) and the substantially convex lens shape or unclear (Design A-1), is a difference in shape of the fin parts observed in detail by consumers, and the

difference gives different aesthetic impression to the consumers. Thus, the different feature (b) has a large effect on determination of similarity between the Solid-line part and the Design A-1.

The different feature, indicated in the different feature (c), that the ratio between the width of the axial body (=interval of the fin parts) and the width of the intermediate fin part is about 3:1 in the Solid-line part, and it is unclear in the Design A-1, is a different feature in shape of the Solid-line part and the Design A-1 observed from all directions, and it is unclear whether consumers have the same aesthetic impression as that the consumers have when viewing the Solid-line part having the ratio of about 3:1, with respect to the Design A-1. The different feature that the ratio of the length of the axial body occupied with respect to the maximum length of the fin parts is about twice ($\approx 1/2.6 \div 1/5$) in the Design A-1 with respect to the Solid-line part, also gives different visual impression to consumers. Thus, it has to be said that the different feature (c) has a large effect on determination of similarity between the Solid-line part and the Design A-1.

Regarding the different feature (a) that the thickness of the rear fin part is about twice that of the intermediate fin parts (Solid-line part) and all fin parts have the same thickness (Design A-1), consumers can find at a glance whether or not there is a thick rear fin part. It should be said that this different feature gives different visual impression to consumers. Thus, it has to be said that the different feature (a) has a large effect on determination of similarity between the Solid-line part and the Design A-1.

Accordingly, since the different feature (a) to the different feature (c) have a large effect on determination of similarity between the Solid-line part and the Design A-1, it can be said that the different features give the impression that the Solid-line part and the Design A-1 are different from each other.

E Demandant's allegation

The Demandant alleges as follows: "The article described in Evidence A No. 1 is a 'lighting device for inspection', while the article described in Evidence A No. 1 is an electronic device which is not limited to the 'lighting device for inspection.' Accordingly, since the article 'lighting device for inspection' regarding the Registered design is included in the article 'electronic device' described in Evidence A No. 1, the article regarding the Registered design and the article described in Evidence A No. 1 are common." (No. 2 2 (3) A)

However, since the Registered design is a "lighting device for inspection," which is a finished product, while the Design A-1 is an "electronic device component", the

article to the design is different. Even if a matter that an electronic device includes a lighting device for inspection is approved, it cannot be said that a finished product is identical with a component. Thus, the Demandant's allegation cannot be accepted.

F Summary

As described above, regarding the Registered design and the Design A-1, they are different in article to the design, and the Solid-line part and the Design A-1 (component) are also different in usage and function. The position, size, and the scope corresponding to the Solid-line part cannot be found in the Design A-1. The corresponding features in form have a small effect on determination of similarity, while the different features have a large effect on determination of similarity. The corresponding features give the impression that the Registered design and the Design A-1 are different from each other despite the aesthetic impression given to consumers. Thus, it cannot be said that the Registered design is similar to the Design A-1.

The Registered design, which is not similar to the Design A-1 (the design of "Tower-type heatsink" described on p. 171 of the book "Perfect Introduction to Thermal Design for Electronics") described in a publication which was distributed in Japan or a foreign country before the filing of the application for the registration, does not fall under the category stipulated in Article 3(1)(iii) of the Design Act. Thus, it cannot be said that the Registered design should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act.

Therefore, the Reason for invalidation 1 of the design registration alleged by the Demandant is groundless.

4 Judgment on Reason for invalidation 2

We will examine whether the Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-1.

(1) Design A-1

The finding of the Design A-1 is as indicated in 3 (1).

(2) Judgment on creative difficulty

As described in 3 (2) C (B), the Solid-line part and the Design A-1 are different in form. Especially, the form that the fin parts viewed from the front are substantially vertically-long rectangular, the ratio between the width of the axial body and the width of the intermediate fin part is about 3:1, and the thickness of the rear fin part is about twice that of the intermediate fin parts, cannot be easily derived by a person skilled in the art only from the form of the Design A-1 in which the ratio is unclear and the shape of the fin parts is a substantially convex lens shape or unclear. It cannot be said that a

person skilled in the field of the "lighting device for inspection" could easily create the Registered design on the basis of the form of the Design A-1.

(3) Demandant's allegation

The Demandant alleges as follows: "The design described in Evidence A No. 1 (heat radiation part (tower-type heatsink)) is very well known, and it is a model for thermal design technicians in the characteristics of the book. Thus, approving that one party (having no relation with the author) exclusively uses a shape which is about the same as the above shape in a lighting device for inspection is hard for thermal design technicians, and prevents development of Japanese industries which aim to keep a product competitive advantage in the global market." (No. 2 2 (4) A)

However, the Solid-line part and the Design A-1 are obviously different in form as indicated in 3 (2) C (B). The point alleged by the Demandant, "about the same", cannot be approved, and the above Demandant's allegation based on the assumption of the point cannot be accepted.

(4) Summary

As described above, it cannot be said that the Registered design could be easily created by a person ordinarily skilled in the field of the Registered design on the basis of the form of the Design A-1 which was publicly known in Japan or a foreign country before the filing of the application for the registration.

Therefore, the Reason for invalidation 2 of the design registration alleged by the demandant is groundless.

5 Judgment on Reason for invalidation 3

We will examine whether the Registered design is a design similar to the Design A-2.

(1) Design A-2 (see Appendix 3)

The Design A-2 is a design of "IHV-27R" (coaxial spot lighting) described in Material 1 of Evidence A No. 2 (see Appendix 3). According to the order form dated July 26, 2002 for "IHV-27R" and the shipping information dated August 29, 2002 (Material 2 of Evidence A No. 2, see Appendix 3), it is recognized that the Design A-2 had been publicly known in Japan or a foreign country by 2002, which is before the filing of the application for the Registered design.

A Article to the design of Design A-2

In "Image Labo" vol. 14 No. 10 (Material 4 of Evidence A No. 2, see Appendix 3) issued on October 1, 2003, which is before the filing of the application for the Registered design, the following descriptions are included, "the best for work inspection

on a mirror" as a usage of IHV series including "IHV-27R", and "a super brightness type configured to condense power LED with higher output than a super brightness LED by a unique technology" as characteristics.

According to the above descriptions, the article to the design of the Design A-2 (coaxial spot lighting) has a usage for work inspection and a function of condensing LED.

The part, in the Design A-2, for which the design registration is requested as a partial design of the Registered design; i.e., the part to be compared with the Solid-line part, is a part corresponding to the Solid-line part (hereinafter referred to as "A-2 corresponding part").

B Usage and the function as well as the position, the size, and the scope of the A-2 corresponding part

The A-2 corresponding part is a part of a coaxial spot lighting, which is formed by integrating four fin parts located at the front right side with an axial body connecting them, in the body part excluding a connector indicated as "SMR-03V-B". The A-2 corresponding part is assumed to have a usage and a function relating to heat radiation of the coaxial spot lighting, occupies a size and the scope of a lateral width of about 1/4.5 of the total width in front view, and is located at the upper right in front view.

C Form of A-2 corresponding part

The form of the A-2 corresponding part is as follows.

The form of the Design A-2 is recognized in the direction of the drawings of the Registered design shown in the written demand for trial Appendix 1. The figure of the Design A-2 shown on the left of the Material 1 of Evidence A No. 2 is recognized as a "front view".

(A) Overall structure

When viewed from the front, a lateral cylindrical axial body is integrated with four substantially disk-like fin parts having a diameter slightly larger than the axial body and arranged at equal intervals. Intermediate fin parts are the same in shape and size. A fin part located at the end part (rear fin part) has almost the same shape as the intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and a circumferential corner part in a rear end surface is chamfered.

On the right end surface, a cable of the connector (indicated as "SMR-03V-B" by an indicating line) is connected. It is assumed that a connection part to the cable is arranged, accordingly. (The shape of the connection part and the location in a lateral direction on the right-side surface of the rear fin part are unclear.)

(B) Right-side surface shape of each fin part

Circumferences of the fin parts viewed from the right-side surface (or right-side surface oblique direction) are assumed to be circular ("φ27" is indicated as a maximum length of the fins. "φ" is a symbol representing a diameter of a circle.)

(C) Front shape of each fin part

The ratio between the width and the length of the intermediate fin parts viewed from the front is about 1:18, and that of the rear fin part is about 1:11. Thus, the rear fin part is about 8/5 times as thick as the intermediate fin parts.

(D) Constituent ratio between axial body and fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 5:6.5. The ratio between the width of the axial body (=interval of the fin parts) and the width of the intermediate fin part is about 5:8.5.

(2) Comparison between the Registered design and Design A-2

A Article to the design

The article to the design of the Registered design is a "lighting device for inspection", and the article to the design of the Design A-2 is a "coaxial spot lighting". They both have a usage for inspection, and have a function of emitting or condensing an LED. Thus, the Registered design and the Design A-2 are identical in article to the design.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and the A-2 corresponding part

The Solid-line part and the A-2 corresponding part have a usage and a function relating to heat radiation, and are located at the upper right in front view or on the right side. It can be said that the Solid-line part having a width which occupies about 1/5 of the total width in front view and the A-2 corresponding part having a width which occupies about 1/4.5 of the total width of the body part in front view, are substantially the same in size and scope in the whole of the design. Therefore, the Solid-line part and the A-2 corresponding part are identical in usage and the function as well as the position, the size, and the scope.

C Form of Solid-line part and A-2 corresponding feature

The following corresponding features and different features are recognized between the Solid-line part and the A-2 corresponding part.

(A) Corresponding features

(A) Corresponding features about the overall structure

When viewed from the front, a lateral cylindrical axial body is integrated with a plurality of disk-like fin parts having a diameter larger than the axial body and arranged at equal intervals. Intermediate fin parts are the same in shape and size. A rear fin

part has almost the same shape as the intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and a circumferential corner part in a rear end surface is chamfered.

(B) Right-side surface shape of each fin part

Circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular.

(C) Front shape of fin parts

The ratio between the width and the length of the rear fin part viewed from the front is about 1:11 to 12.

(B) Different features

(a) Different feature in presence or absence of cable connection part

On the right end surface of the A-2 corresponding part, a connection part to the cable is arranged. In the Solid-line part, there is no connection part to the cable.

(b) Different feature in the number of fin parts

The Solid-line part has three fin parts, while the A-2 corresponding part has four fin parts.

(c) Different feature in the ratio between the length of the axial body and the maximum length of the fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5 in the Solid-line part and about 5:6.5 in the A-2 corresponding part.

(d) Different feature in the ratio between the width of the axial body and the width of the intermediate fin parts

The ratio between the width of the axial body (=interval of the fin parts) and the width of the intermediate fin parts is about 3:1 in the Solid-line part and about 5:8.5 in the A-2 corresponding part.

(e) The ratio between the width and the length of the intermediate fins viewed from the front is about 1:24 in the Solid-line part and about 1:18 in the A-2 corresponding part.

(3) Determination of similarity between Registered design and Design A-2

When using a "lighting device for inspection" or a "coaxial spot lighting", the whole of the article is exposed, and a user observes the article in all directions. Especially, since the fin parts and the axial body of the Solid-line part occupy about 1/5 in an axial direction of the upper part of the article, consumers including a user or a trader of the article can observe in detail the fin parts and the axial body from all directions. Thus, regarding determination of similarity of the design of the "lighting

device for inspection" or the "coaxial spot lighting", the shapes of the fin parts and the axial body are evaluated from a viewpoint of the consumers based on the assumption of using or trading the article.

A Article to the design

As recognized in (2) A above, the Registered design and the Design A-2 are identical in article to the design.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and the A-2 corresponding part

As recognized in (2) B above, the Solid-line part and the Design A-2 are identical in usage and the function as well as the position, the size, and the scope.

C Evaluation of corresponding feature in form between the Solid-line part and the A-2 corresponding part

The shape that a lateral cylindrical axial body is integrated with a plurality of fin parts having a diameter larger than the axial body and arranged at equal intervals, intermediate fin parts are the same in shape and size, a rear fin part has almost the same shape as the intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular, indicated in the corresponding feature (A) and the corresponding feature (B), had been widely known before the filing of the application in the design of the field of lighting device for inspection (for example, the design of "Light Irradiation Device (1)") in Japanese Unexamined Patent Application Publication No. 2004-111377 in the Publication of Unexamined Patent Application disclosed by Japan Patent Office on April 8, 2004, (see Appendix 5). Thus, it is hard to believe that consumers focus on the shape. Therefore, it has to be said that the corresponding feature (A) and the corresponding feature (B) have small effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

Regarding the corresponding feature indicated in the corresponding feature (C) that the ratio between the width and the length of the rear fin part viewed from the front is about 1:11 to 12, it is hard to say that a unique visual impression is presented. Thus, it can be said that the corresponding feature (C) has a small effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

Accordingly, the corresponding features in form between the Solid-line part and the A-2 corresponding part have small effect on determination of similarity, and it should be said that the corresponding features have small effect on determination of similarity even if taking into consideration of visual impression combined with the

corresponding features.

D Evaluation of different feature in form between the Solid-line part and the A-2 corresponding part

The different features in form between the Solid-line part and the A-2 corresponding part are evaluated as follows.

The difference indicated in the different feature (a) about the presence or absence of a connection part to the cable on the right end surface, is a difference that consumers can find at a glance, and it can be said that this difference creates different aesthetic impression to the consumers who observe the Solid-line part and the A-2 corresponding part. Thus, the different feature (a) has a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

The difference indicated in the different feature (c) that the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1.5 (Solid-line part) and about 5:6.5 (A-2 corresponding part), is a difference that a diameter of the axial body with respect to the maximum diameter of the fin parts in the Solid-line part is about $1/4$ times ($=1/5 \div 5/6.5$) as thick as that in the A-2 corresponding part. The axial body in the Solid-line part gives an extremely thin and light impression to consumers as compared with the A-2 corresponding part. Thus, it can be said that this difference has a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

The difference indicated in the different feature (d) that the ratio between the width of the axial body (=intervals of the fin parts) and the width of the intermediate fin parts is about 3:1 (Solid-line part) and about 5:8.5 (A-2 corresponding part), is a difference that the axial body is thick in the Solid-line part and the intermediate fin parts are thick in the A-2 corresponding part. The difference having the reversal of thickness gives different visual impression to consumers. Thus, the different feature (d) has a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

Regarding the difference indicated in the different feature (e) that the ratio between the width and the length of the intermediate fin parts viewed from the front is about 1:24 (Solid-line part) and about 1:18 (A-2 corresponding part), the ratio of the width with respect to the length in the A-2 corresponding part is about $4/3$ (≈ 1.3) times the ratio in the Solid-line part. The magnification 1.3 is a slight difference and it is hard to say that the difference gives a different visual impression to consumers. Thus, the different feature (e) has a small effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

Regarding the different feature (b) that the number of the fin parts is 3 or 4, since there are various examples about the number of fin parts in the design of the field of lighting device for inspection (e.g., two in the Design A-3), it is hard to say that consumers observing the Solid-line part especially focus on the fact that the number of fin parts is three. Thus, the different feature (b) has a small effect on determination of similarity between the Solid-line part and the A-2 corresponding part.

The different feature (a), the different feature (b), and the different feature (c) have large effect on determination of similarity between the Solid-line part and the A-2 corresponding part. Therefore, even if the effect of the different feature (b) and the different feature (e) is small, considering all the different features in form between the Solid-line part and the A-2 corresponding part, it can be said that the different features have a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part, and give the impression that the Solid-line part and the A-2 corresponding part are different from each other.

E Demandant's allegation

The Demandant's allegation is as follows: The Demandee argued that "Even if the projection is a fin, it is arranged around the side of the casing, and it is not arranged behind the casing like the Registered design".

However, the design of Evidence A No. 2 includes a rear member (part behind the step) having only a heat radiation effect without component housing function. (No. 2 3 (2) B (C))

However, regardless of whether the A-2 corresponding part (axial body with four fin parts) recognized in (1) C (A) has the component housing function, as indicated in G, the corresponding feature (a), the corresponding feature (c), and the corresponding feature (d) still have a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part. Thus, the Demandant's allegation cannot be accepted.

F Summary

As described above, the Registered design and the Design A-2 are identical in article to the design and in usage and the function as well as the position, the size, and the scope. In the form of the Solid-line part and the A-2 corresponding part, the corresponding features have a small effect on determination of similarity. Considering all the different features, the different features have a large effect on determination of similarity between the Solid-line part and the A-2 corresponding part, and give the impression that the Solid-line part and the A-2 corresponding part are different from each other. Thus, it cannot be said that the Registered design is similar to the Design

A-2.

Accordingly, the Registered design, which is not similar to the Design A-2 (the design of "IHV-27R" (coaxial spot lighting) described in the Material 1 of Evidence A No. 2) which was publicly known in Japan or a foreign country before the filing of the application for design registration, does not fall under the category stipulated in Article 3(1)(iii) of the Design Act. Thus, it cannot be said that the Registered design should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act.

Therefore, the Reason for invalidation 3 of the design registration alleged by the demandant is groundless.

6 Judgment on Reason for invalidation 4

We will examine whether the Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-2.

(1) Regarding Design A-2

The finding of the Design A-2 is as indicated in 5 (1).

(2) Judgment of creative difficulty

As indicated in 5 (2) C (B), the Solid-line part and the Design A-2 are different in form from each other. The form of the Solid-line part where no connection part to the cable is arranged on the right end surface, the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5, and the ratio between the width of the axial body (=intervals of the fin parts) and the width of the intermediate fin parts is about 3:1, cannot be easily derived only from the form of the A-2 corresponding part where a connection part to the cable is arranged on the right end surface, the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 5:6.5, and the ratio between the width of the axial body (=intervals of each of the fin parts) and the width of the intermediate fin parts is about 5:8.5. It cannot be said that the Registered design could be easily created by a person skilled in the field of "lighting device for inspection" on the basis of the form of the Design A-2.

(3) Demandant's allegation

The Demandant's allegation is as follows: The Demandee argues that "In the Design A-2, the power cable is drawn out from the casing rear end, however, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea." However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through

which the power cable is drawn out in the rear end surface" cannot be an essential part. (No. 2 3 (2) B (D))

However, the court ruled, in the decision (June 27, 2018) of the revocation of trial decision (2018 (Gyo-ke) 10020) cited by the Demandant, only that the Plaintiff's argument common feature, "the form in which there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out", cannot be recognized as a common feature that can be concretely recognized visually because only the fact "there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out" can be indirectly grasped. The court did not rule that the form cannot be an essential part (The word "essential part" is not used in "No. 4 Judgment by the court" in the above decision).

Therefore, the Demandant's allegation cannot be accepted.

(4) Summary

As described above, it cannot be said that the Registered design could be easily created by a person ordinarily skilled in the field of the Registered design on the basis of the form of the Design A-2 which was publicly known in Japan or a foreign country before the filing of the application for design registration.

Therefore, the Reason for invalidation 4 of the design registration alleged by the demandant is groundless.

7 Judgment on Reasons for invalidation 5

We will examine whether the Registered design is a design similar to the Design A-3.

(1) Design A-3 (see Appendix 4)

The Design A-1 is a design of Design Registration No. 1175712 (lighting device for inspection) described in the design bulletin (Evidence A No. 3, see Appendix 4). The design bulletin was issued on June 16, 2003, which is before the filing of the application for the Registered design.

A Article to the design of Design A-3

According to the description of Evidence A No. 3, the article to the design of the Design A-3 is a "lighting device for inspection". Evidence A No. 3 [Description of the article to the design] includes the following description, "This article is a lighting device used in a factory, or the like, to inspect appearance or flaw of a product by irradiating the product with light".

In the Design A-3, the part for which the design registration is requested as a

partial design of the Registered design, or a part to be compared with the Solid-line part, is a part corresponding to the Solid-line part (hereinafter referred to as the "A-3 corresponding part").

B Usage and the function as well as the position, the size, and the scope of the A-3 corresponding part

The A-3 corresponding part is a part of a lighting device for inspection which is formed by integrating two fin parts located at the upper right in front view and an axial body connecting them. The A-3 corresponding part is assumed to have a usage and a function relating to heat radiation of the lighting device for inspection, occupies a size and the scope of a lateral width of about 1/7 of the total width in front view, and is located at the upper right in front view.

C Form of A-3 corresponding part

The form of the A-3 corresponding part is as follows.

(A) Overall structure

When viewed from the front, a lateral cylindrical axial body is integrated with two disk-like fin parts having a diameter larger than the axial body. A fin part located at the end part (rear fin part) on the right side has almost the same shape as the intermediate fin parts on the left side, and is larger in width (thickness) than the intermediate fin parts, and a circumferential corner part in a rear end surface is chamfered.

(B) Right-side surface shape of each fin part

Circumference of the fin part viewed from the right-side surface (or right-side surface oblique direction) is circular.

(C) Front shape of each fin part

The ratio between the width and the length of the intermediate fin parts viewed from the front is about 1:23, and that of the rear fin part is about 1:10. The rear fin part is about 9/4 times as thick as the intermediate fin parts.

(D) Constituent ratio between axial body and fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 5:12. The ratio between the width of the axial body (=interval of each of the fin parts) and the width of the intermediate fin part is about 9:4.

(E) Regarding through-hole

Each of the fin parts includes a circular through-hole located close to an upper end viewed from the right side. According to the "Front view illustrating state of use", a cable is inserted through the through-hole.

(2) Comparison between the Registered design and the Design A-3

A Article to the design

The article to the design of the Registered design is a "lighting device for inspection", and the article to the design of the Design A-3 is a "lighting device for inspection". Thus, the Registered design and the Design A-3 are identical in article to the design.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and the A-3 corresponding part

The Solid-line part and the A-3 corresponding part both have a usage and a function relating to heat radiation of a lighting device for inspection, and are located at the upper right in front view or on the right side. The Solid-line part whose width occupies about 1/5 of the total width in front view and the A-3 corresponding part whose width occupies about 1/7 are not identical in size and the scope in the whole of the design. However, this difference is due to the number of fin parts, and there are various examples about the number of fin parts in the design of the field of lighting device for inspection (e.g., four in the Design A-2). Thus, the size and the scope of the Solid-line part and the size and the scope of the A-3 corresponding part are identical in that both are common in the field of lighting device for inspection.

Therefore, the Solid-line part and the A-3 corresponding part are identical in usage and the function as well as the position, the size, and the scope.

C Form of the Solid-line part and the A-3 corresponding part

The following corresponding features and different features are recognized in the Solid-line part and the A-3 corresponding part.

(A) Corresponding features

(A) Corresponding feature about the overall structure

When viewed from the front, a lateral cylindrical axial body is integrated with a plurality of disk-like fin parts having a diameter larger than the axial body and arranged at equal intervals. A rear fin part has almost the same shape as intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and a circumferential corner part in a rear end surface is chamfered.

(B) Right-side surface shape of each fin part

Circumferences of the fin parts viewed from the right-side surface (or right-side surface oblique direction) are circular.

(C) Front shape of each fin part

The ratio between the width and the length of the intermediate fin parts viewed from the front is about 1:23 to 24, and that of the rear fin part is about 1:10 to 12. The

rear fin part is about twice as thick as the intermediate fin parts.

(B) Different features

(a) Different feature in presence or absence of through-hole

Each of the fin parts of the A-3 corresponding part includes a circular through-hole located close to an upper end viewed from the right side. There is no through-hole in the Solid-line part.

(b) Different feature in the number of fin parts

The Solid-line part includes three fin parts, while the A-3 corresponding part includes two fin parts.

(c) Different feature in the ratio between the length of the axial body and the maximum length of the fin parts

The ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5 in the Solid-line part, and about 5:12 in the A-3 corresponding part.

(d) Different feature in the ratio between the length of the axial body and the length of the intermediate fin parts

The ratio between the length of the axial body (=intervals of the fin parts) and the length of the intermediate fin parts is about 3:1 in the Solid-line part and about 9:4 in the A-3 corresponding part.

(3) Determination of similarity between the Registered design and the Design A-3

When using a "lighting device for inspection", the whole of the article is exposed, and a user observes the article in all directions. Especially, since the fin parts and the axial body of the Solid-line part occupy about 1/5 in an axial direction of the upper part of the article, consumers including a user or a trader of the article can observe in detail the fin parts and the axial body from all directions. Thus, regarding determination of similarity of the design of the "lighting device for inspection", the shapes of the fin parts and the axial body are evaluated from a viewpoint of the consumers based on the assumption of using or trading the article.

A Article to the design

As recognized in (2) A, the Registered design and the Design A-3 are identical in article to the design.

B Usage and the function as well as the position, the size, and the scope of the Solid-line part and the A-3 corresponding part

As recognized in (2) B, the Solid-line part and the A-3 corresponding part are identical in usage and the function as well as the position, the size, and the scope.

C Evaluation of corresponding feature in form between the Solid-line part and

the A-3 corresponding part

The shape that a lateral cylindrical axial body is integrated with a plurality of fin parts having a diameter larger than the axial body and arranged at equal intervals, a rear fin part has almost the same shape as intermediate fin parts, and is larger in width (thickness) than the intermediate fin parts, and circumferences of the fin parts viewed from the right side (or in a right-side surface oblique direction) are circular, indicated in the corresponding feature (A) and the corresponding feature (B), had been widely known before the filing of the application in the design of the field of lighting device for inspection (for example, the design of "Light Irradiation Device (1)") in Japanese Unexamined Patent Application Publication No. 2004-111377 in the Publication of Unexamined Patent Application disclosed by Japan Patent Office on April 8, 2004, see Appendix 5). Thus, it is hard to believe that consumers focus on the shape. Therefore, it has to be said that the corresponding feature (A) and the corresponding feature (B) have a small effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

Regarding the corresponding feature indicated in the corresponding feature (C) that the thickness of the rear fin part is about twice the intermediate fin parts, it is hard to say that a certain aesthetic impression is created through the eyes of consumers. Regarding the corresponding feature that the ratio between the width and the length of the intermediate fins viewed from the front is about 1:23 to 24, it is hard to say that a unique visual impression is presented. Thus, it can be said that the corresponding feature (C) has a small effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

Accordingly, the corresponding features in form between the Solid-line part and the A-3 corresponding part have small effect on determination of similarity, and it should be said that the corresponding features have small effect on determination of similarity even if taking into consideration of visual impression combined with the corresponding features.

D Evaluation of different feature in form between the Solid-line part and the A-3 corresponding part

The different features in form between the Solid-line part and the A-3 corresponding part are evaluated as follows.

The difference indicated in the different feature (a) about the presence or absence of a circular through-hole through which a cable is inserted and located close to an upper end viewed from the right side in each fin part, is a difference that consumers can find at a glance, and it can be said that this difference creates different aesthetic

impression to the consumers who observe the Solid-line part and the A-3 corresponding part. Thus, the different feature (a) has a large effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

The difference indicated in the different feature (c) that the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5 (Solid-line part) and about 5:12 (A-3 corresponding part), is a difference that a diameter of the axial body with respect to the maximum diameter of the fin parts in the Solid-line part is 1/2 or less as compared with that in the A-3 corresponding part. The axial body in the Solid-line part gives an extremely thin and light impression to consumers. Thus, it can be said that this difference has a certain effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

The difference indicated in the different feature (d) that the ratio between the width of the axial body (=intervals of the fin parts) and the width of the intermediate fin parts is about 3:1 (Solid-line part) and about 9:4 (A-3 corresponding part) that indicates about 3:1.3, is a slight difference. It is hard to say that the difference gives different visual impression to consumers. Thus, the different feature (d) has a small effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

Regarding the different feature (b) that the number of the fin parts is 3 or 4, since there are various examples about the number of fin parts in the design of the field of lighting device for inspection (e.g., four in the Design A-2), it is hard to say that consumers observing the Solid-line part especially focus on the number of fin parts being three. Thus, the different feature (b) has a small effect on determination of similarity between the Solid-line part and the A-3 corresponding part.

The different feature (a) and the different feature (c) have large effect on determination of similarity between the Solid-line part and the A-3 corresponding part. Therefore, even if the effect of the different feature (b) and the different feature (d) is small, considering all the different features in form between the Solid-line part and the A-3 corresponding part, it can be said that the different features have a large effect on determination of similarity between the Solid-line part and the A-3 corresponding part, and give the impression that the Solid-line part and the A-3 corresponding part are different from each other.

E Demandant's allegation

The Demandant's allegation is as follows: The Demandee alleges that "In the right side view and the reference A-A enlarged cross-sectional view, a through-hole is formed in a fin-like member. Consumers or a person skilled in the art can clearly understand that the through-hole is a cable through-hole for holding a power cable or

allowing the cable to pass through". However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part. (No. 2 3 (2) B (E))

However, the court ruled, in the decision (June 27, 2018) of the revocation of trial decision (2018 (Gyo-ke) 10020) cited by the Demandant, only that the Plaintiff's argument common feature, "the form in which there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out", cannot be recognized as a common feature that can be concretely recognized visually because only the fact "there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out" can be indirectly grasped. The court did not rule that the form cannot be an essential part (The word "essential part" is not used in "No. 4 Judgment by the court" in the above decision).

Therefore, the Demandant's allegation cannot be accepted.

G Summary

As described above, regarding the Registered design and the Design A-3, they are identical in article to the design, and the Solid-line part and the A-3 corresponding part are identical in usage and the function as well as the position, the size, and the scope. The corresponding features in form between the Solid-line part and the A-3 corresponding part have a small effect on determination of similarity. Considering all the different features, the different features have a large effect on determination of similarity between the Solid-line part and the A-3 corresponding part, and give the impression that the Solid-line part and the A-3 corresponding part are different from each other. Thus, it cannot be said that the Registered design is similar to the Design A-3.

Accordingly, the Registered design, which is not similar to the Design A-3 (the design of Design Registration No. 1175712 (lighting device for inspection) described in the design bulletin) described in a publication (Evidence A No. 3) distributed in Japan or a foreign country before the filing of the application for design registration, does not fall under the category stipulated in Article 3(1)(iii) of the Design Act. Thus, it cannot be said that the Registered design should not be registered under the provisions of the main paragraph of Article 3(1) of the Design Act.

Therefore, the Reason for invalidation 5 of the design registration alleged by the demandant is groundless.

8 Judgment on Reason for invalidation 6

We will examine whether the Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-3.

(1) Regarding Design A-3

The finding of the Design A-3 is as indicated in 7 (1).

(2) Judgment of creative difficulty

As indicated in 7 (2) C (B), the Solid-line part and the Design A-3 are different in form from each other. The form of the Solid-line part where no circular through-hole is arranged close to an upper end viewed from the right side, and the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5, cannot be easily derived only from the form of the A-3 corresponding part where a circular through-hole is arranged close to the upper end viewed from the right side and the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 5:12. It cannot be said that the Registered design could be easily created by a person skilled in the field of "lighting device for inspection" on the basis of the form of the Design A-3.

(3) Demandant's allegation

The Demandant's allegation is as follows: The Demandee argues that "In the Design A-3, the power cable is drawn out from the casing rear end, however, it is hard to believe that a person skilled in the art of the field of article could easily create it as long as it does not depart from the design idea." However, as indicated in A (B), the matter that "the power cable does not penetrate through, and there is no slot through which the power cable is drawn out in the rear end surface" cannot be an essential part. (No. 2 3 (2) B (F))

However, the court ruled, in the decision (June 27, 2018) of the revocation of trial decision (2018 (Gyo-ke) 10020) cited by the Demandant, only that the Plaintiff's argument common feature, "the form in which there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out", cannot be recognized as a common feature that can be concretely recognized visually, because only the fact "there is no slot through which the power cable is drawn out in the rear end surface of the rear fin part, or the power cable is not drawn out" can be indirectly grasped. The court did not rule that the form cannot be an essential part (The word "essential part" is not used in "No. 4 Judgment by the court" in the above decision).

Therefore, the Demandant's allegation cannot be accepted.

(4) Summary

As described above, it cannot be said that the Registered design could be easily created by a person ordinarily skilled in the field of the Registered design on the basis of the form of the Design A-3 which was publicly known in Japan or a foreign country before the filing of the application for design registration.

Therefore, the Reason for invalidation 6 of the design registration alleged by the Demandant is groundless.

9 Judgment on Reason for invalidation 7

We will examine whether the Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-1 and the Design A-2.

(1) Regarding Design A-1 and Design A-2

The finding of the Design A-1 is as indicated in 3 (1) above and the finding of the Design A-2 is as indicated in 5 (1) above.

(2) Judgment of creative difficulty

As indicated in 3 (2) C (B), the Solid-line part and the Design A-1 are different in form from each other. As indicated in 5(2) C (B), the Solid-line part and the Design A-2 are also different in form from each other. The form of the Solid-line part where the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5, and the ratio between the width of the axial body (=intervals of the fin parts) and the width of the intermediate fin parts is about 3:1, cannot be easily derived only from the Design A-1 and the Design A-2. It cannot be said that the Registered design could be easily created by a person skilled in the field of "lighting device for inspection" on the basis of the form of the Design A-1 and the form of the Design A-2.

(3) Demandant's allegation

The Demandant's allegation is as follows, "it is natural for a person skilled in the art to replace the rear end fin of the design of Evidence A No. 1, which has been very popular for the person skilled in the art and well known, by a known thick rear end fin as described in Evidence A No. 2" (No. 2 3 (2) B (G)).

However, even if it is natural to increase the thickness of the rear fin on the basis of the form of the Design A-2, as described above, the form of the Solid-line part where the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5 and the ratio between the width of the axial body and the width of the intermediate fin parts is about 3:1, cannot be easily derived. Thus, the Demandant's allegation cannot be accepted.

(4) Summary

As described above, it cannot be said that the Registered design could be easily created by a person ordinarily skilled in the field of the Registered design on the basis of the form of the Design A-1 and the form of the Design A-2 which were publicly known in Japan or a foreign country before the filing of the application for design registration.

Therefore, the Reason for invalidation 7 of the design registration alleged by the demandant is groundless.

10 Judgment on Reason for invalidation 8

We will examine whether the Registered design is a design which could be easily created by a person skilled in the art on the basis of the Design A-1 and the Design A-3.

(1) Regarding Design A-1 and Design A-3

The finding of the Design A-1 is as indicated in 3 (1) above and the finding of the Design A-3 is as indicated in 7 (1) above.

(2) Judgment of creative difficulty

As indicated in 3 (2) C (B) above, the Solid-line part and the Design A-1 are different in form from each other. As indicated in 7(2) C (B) above, the Solid-line part and the Design A-3 are also different in form from each other. The form of the Solid-line part where the fin parts viewed from the front are substantially vertically-long rectangular, there is no circular through-hole close to an upper end viewed from the right side, and the ratio between the length of the axial body and the maximum length of the fin parts viewed from the front is about 1:5, cannot be easily derived only from the Design A-1 where the shape of the fin parts viewed from the front is substantially convex lens shape or unclear and the Design A-3 where there is a circular through-hole close to an end viewed from the right side. It cannot be said that the Registered design could be easily created by a person skilled in the field of "lighting device for inspection" on the basis of the form of the Design A-1 and the form of the Design A-3.

(3) Demandant's allegation

The Demandant's allegation is as follows, "it is natural for a person skilled in the art to replace the rear end fin of the design of Evidence A No. 1, which has been very popular for the person skilled in the art and well known, by a known thick rear end fin as described in Evidence A No. 3" (No. 2 3 (2) B (H)).

However, even if it is natural to increase the thickness of the rear fin as shown in the form of the Design A-3, as described above, the form of the Solid-line part cannot be easily derived only from the design of the Design A-1 and the design of the Design A-3. Thus, the Demandant's allegation cannot be accepted.

(4) Summary

As described above, it cannot be said that the Registered design could be easily created by a person ordinarily skilled in the field of the Registered design on the basis of the form of the Design A-1 and the form of the Design A-3 which were publicly known in Japan or a foreign country before the filing of the application for design registration.

Therefore, the Reason for invalidation 8 of the design registration alleged by the Demandant is groundless.

No. 6 Closing

As described above, all of the Reasons for invalidation 1 to Reasons for invalidation 8 alleged by the Demandant are groundless. Thus, the registration of the Registered design cannot be invalidated under the provisions of Article 48(1) of the Design Act.

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 which is applied *mutatis mutandis* in the provisions of Article 52 of the Design Act.

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

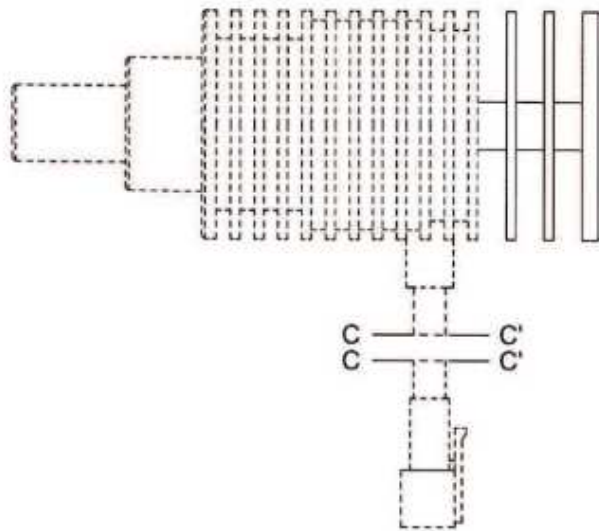
November 27, 2018

Chief administrative judge:	KIMOTO, Naomi
Administrative judge:	KOBAYASHI, Hirokazu
Administrative judge:	WATANABE, Kumi

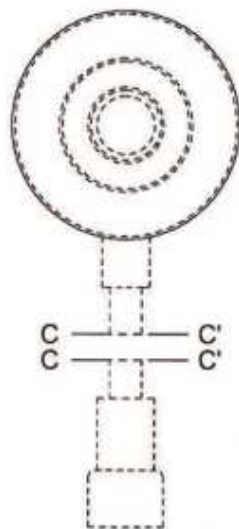
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(56) 【参考文献】意登1175712
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【図面】
【正面図】

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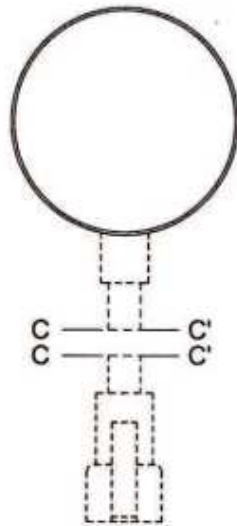
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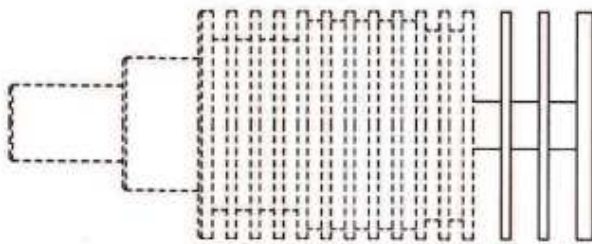
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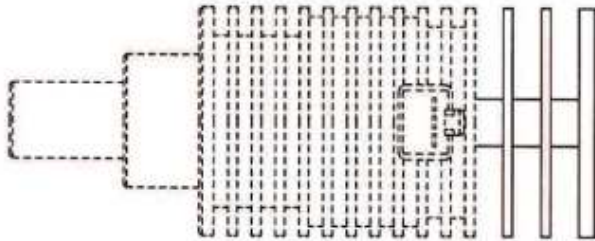
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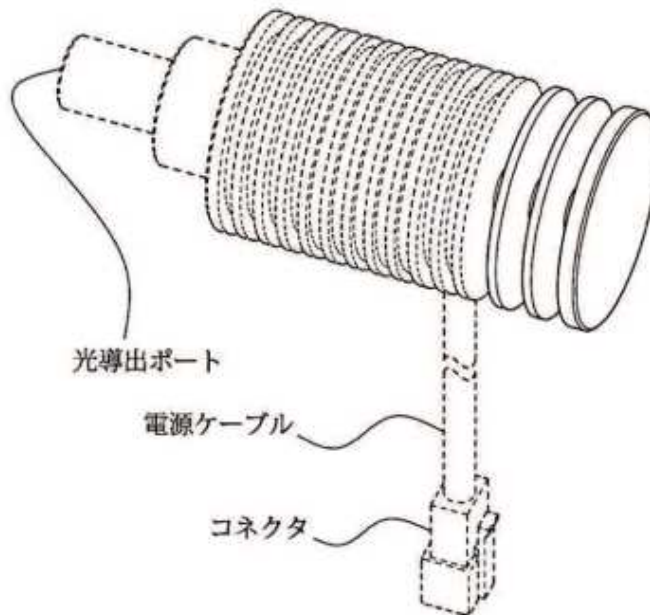
【底面図】

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【参考斜視図】





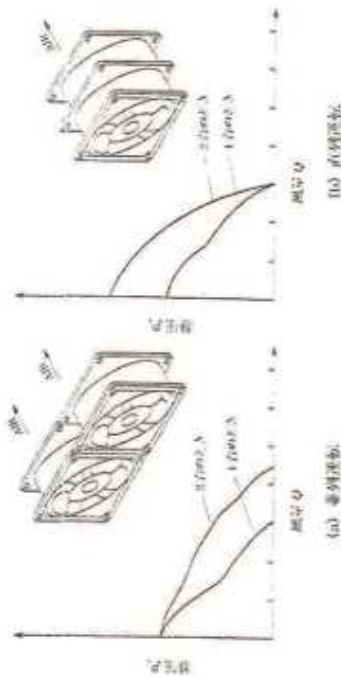


図15-3 ファンの種類・直列流れ

図15-3 (a) のように風量を増大させることができます。ただし、時にファンを2つ並列運転しても風量は2倍にはなりません。

図15-3 (b) のようにファンを並列に並べると圧力を増大させることができます。しかし、実際にファンを並列で置くとはれが1部、うまく性能が出ません。通常は電子機器の入口側と出口側にファンを設置し、ファン・ブレードが吸い込みで片側が吹き出し)を行います。この場合には風量の増加はあまり期待できません。配管が長く入口側ファンの吸込みが出口側まで充分届かない場合など、補助用として使います。

ファンを並列運転する際には、入口側ファンと出口側ファンを同じ性能にします。もし一方が小さかったりすると、もう一方に負荷がかかり、むしろ片側のファンは力がいまいというケースもあるので注意が必要です (図14参照)。

15.2 温度で風速が変わる！ インテリジェントな温度可変速ファン

最近では温度によって冷却能力をコントロールする ATP (Active Thermal Feedback) と呼ばれる技術が普及してきました。温度検出機構により、風速を制御できるようにした温度可変速ファンを使えば、手軽にこの技術を製品に応用できます。このファンは、コントロール端子にサーミスタを接続することにより、温度で回転数を制御できるようになります。サーミスタ温度と回転数変化率は図15-4に示すような図形になり、 T_1 (低速回転温度) と T_2 (高速回転温度) は利用者が設定することができます。

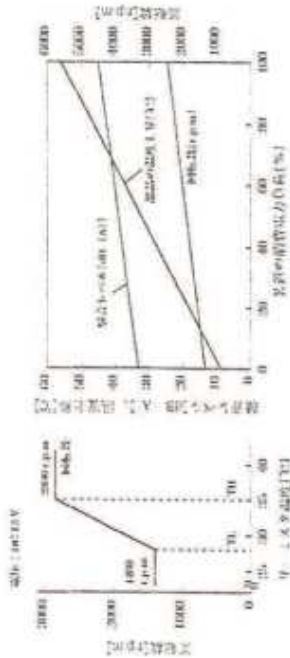


図15-4 温度可変速ファンの特性例

図15-5 可変速ファンの駆動電圧例

ます。

普通の定速ファンを使用する場合は、機器の消費電力が最大で周囲温度が上限のいわば「最悪の状態」を想定してファン容量を決めます。この場合、どんなに回りが寒くても、消費電力が小さくてもファンは一定速度で回り続けます。消費電力が100%出力に達しないような装置や、通常は低い周囲温度で使用される装置では、必要以上の冷却を行っていることになります。

温度可変速ファンを使うと、装置に応じて回転数を適して作動させることができますので、低騒音化やファンの消費電力削減が図れます。

図15-5は、実際に温度可変速ファンを実装し、装置の消費電力負荷を変化させた場合の騒音、回転数、温度の推移を示したものです。通常のファンを使用する場合に比べると、負荷が小さいほどファンの回転数が低下し、騒音が削減されていることがわかります。

15.3 ヒートシンクはどんなタイプを選ぶか？

表面の熱伝達率が大きい電子部品に対しては、風速を上げるか設置面積を増大させるか、どちらかの対策が必要になります。ヒートシンクは簡単に有効放熱面積を拡大して (熱伝達率を削減させて) 温度対策ができるため、電子機器にとっては不可欠な冷却部品になっていきます。ヒートシンクの選び方について考えてみましょう。

●ヒートシンクは大きさで性能が決まる

ヒートシンクにはいろいろな形状のものがありますが、実のところおおむね性能

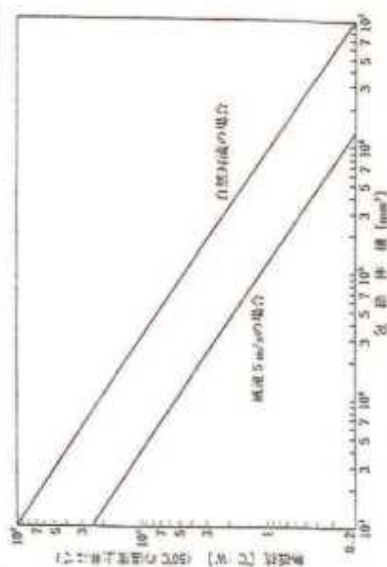


図15-6 ヒートシンクの自然対流と強制対流

はその包絡体積（最も外形が内めるエリア）で決まってしまう。図15-6は、ヒートシンクの包絡体積と熱伝達（ヒートシンク・周囲空気間）との関係を示したグラフです。ヒートシンクはその大きさ（包絡体積）が大きいほど熱伝達係数が小さくなることとが分かります。風速が大きくなると、グラフは熱伝達係数の小さい方へスライドしますが、傾きはほとんど変わりません。

ヒートシンクの取付けが必要になりそうな部品は、まず必要な熱伝達を計算し、計算された消費電力で覆う。図15-6から必要体積を求めます。そして、設計段階で周囲に十分な空間を確保しておきます。

●安易に強制冷却タイプを使用しない

ヒートシンクも最近はいろいろな種類のものが出まわっており、どれを選んだらよいか迷うこともしばしばあります。電力がババイスを放つだけのクリップ方式のものから、複雑な断面をした押し出し材、コルゲートフィンを使用したものまで様々です。

ここでは古くからの代表的ヒートシンクである「プレート型」、最近多用されている「ピン型」と「タワー型」（図15-7）について考えてみましょう。

図15-8は同じ包絡体積（といっても、タワー型は内部のため体積は同一ではありません）の3つのヒートシンクの性能を調べた例です。プレート型とピン型は似たような特性を示しています。ピン型は指向性が少ない分設計の自由度がありますが、価格はプレート型よりも若干高めになります。

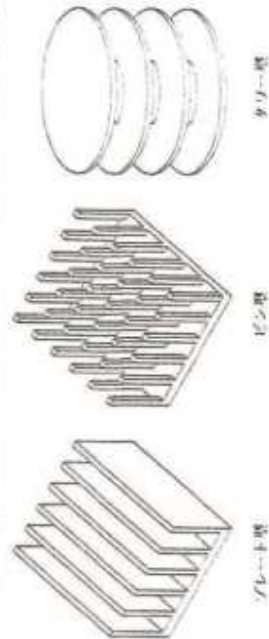


図15-7 代表的ヒートシンクの形状

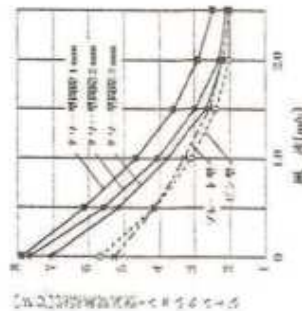


図15-8 ヒートシンクの特性

ピン型は、最近さまざまなピン断面形状（丸型、星型、星型など）のものが出まわっており、それぞれ性能に若干の差があります（図15-9）。タワー型も指向性が少なく、空気抵抗が小さいので多くの場合強制冷却に使われます。ただし細路は高めです。フィン間隔を使めるとその間に挟まれた空気の流動性が悪くなり、熱伝達率が小さくなってしまいます。しかし外部から強制的に空気流動を起こす強制冷却では、自然対流に比べると熱伝達率は小さくても構いません。このため強制冷却ではフィン間隔を小さくしてフィン枚数を増やした方が適当な場合があります。したがって強制冷却向きに設計されたヒートシンクのフィン間隔は自然対流向けのヒートシンクよりも小さめに設計されています。

改めて図15-8を見ると、フィン間隔の小さいタワー型とピン型は、風速が低

平成30年5月8日

説 明 書 (I)

株式会社イマック LED照明機器グループ 設計部 松本直人

和田祐二

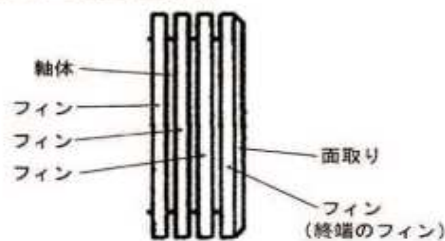
1. 説明対象商品

イマック製同軸スポット照明
IHV-27R

2. IHV-27Rの説明

(1) IHV-27RのRは赤色仕様であることを示している。IHV-27Rは、資料1の仕様図に従って製造され販売されたものである。資料1の左上(90度右回転して見て左上)には商品名「IHV-27R」が記載されている。

放熱部の拡大図は以下のとおりである。



(資料1より抜粋、各部の名称は付記した。)

(2) 資料2にIHV-27Rの販売実績の一例を示す。資料2①が注文書、資料2②が出荷案内書である。IHV-27Rは、2002年(平成14年)にはすでに販売されていたものである。

(3) IHV-27Rを含むIHVシリーズが記載されている刊行物を資料3(2002年(平成14年))と資料4(2003年(平成15年))に示す。また、拡販のためのIHV-27Rが記載されているリーフレット(2003年(平成15年))を資料5に示す。

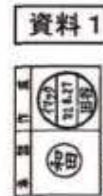
p. 1

位 置 附 錄	
---------	--

Details of Connector



- 1 Red LED
- Only 12V DC
- Electric Power Consumption 4.2W



IMAC IMAC Co., Ltd.

335-010A

平成14年7月26日

注文書

株式会社イマック
小谷 様

担当

受け渡し場所	当社
受渡期日	3週間以内希望

[illegible]

受注確認印
御注文有誤のごきま
出 発 日 指 当 者
受 注 地
2029
御イマミ

QMF-8240
改訂日



株式会社イマック
第1版

資料 2 ②

出荷案内書

受付NO. 21789
出荷日付 14年8月29日

☒ 納品書在中: ☐ 仮納品書: ☒ 請求書: ☐ 見積書
☒ 保証書: ☐ 御貸出票: ☐ 報告書: ☐ 貴社指定伝票: ☐ その他

株式会社イマック
〒524-0215 滋賀県守山市幸津川町1551番地
TEL(077) 585-6767
FAX(077) 585-6790

(001) 担当: 小谷

下記の通り納品致しましたのでご確認ください。

品名	数量	単位	単価	金額	税別	税額	合計
1335-610 1HV-27R	1	個					
				消費税等			

※明細金額: 税抜きです。

--	--

合計

資料 2 ②

Material 2-2

資料 3



資料 3 Material 3



(株)アルゴル 東京営業所

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LED

新型リング照明 GL-URING90

拡散板をU型にすることで色々な角度から拡散光が得られ、今まであきらめていた画像処理を可能にする照明です。LEDをドーナツ円板状に隙間なく並べることで蛍光灯照明の最大の欠点である暗部を解消しました。

■特長

- LEDの劣化や温度特性による輝度変化を低減させるため放熱効果を考えLED基盤のアルミ台座への直接取付け構造を採用。
- 白、青、赤の三色からワークに最適な色を選択できます。



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TEL : 077-585-6787 FAX : 077-585-6790

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LED

同軸・スポット照明「IHV-27」

テレセントリックレンズ/マクロレンズ装着のハロゲンライトガイド等の置換え用。同型従来品の数倍〜10倍以上の輝度UPを実現しました。LED照明なのでコンパクト・低消費電力。最も輝度が高いのは赤色ですが白色仕様も高輝度化。スポット照明としてもお使い頂けます。同一サイズ従来仕様のIV-27タイプでは赤・青・緑・白・赤外各色の製作が出来ます。

※セットの電源も各種取り揃えております。

※OEM供給も対応致します。



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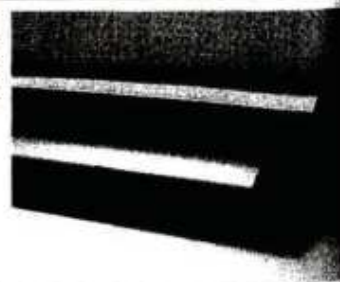
LED

チップラインセンサー照明「IDB-L/H」

超高輝度LED素子を、従来品より狭い幅に同一数高密度実装。ラインセンサー照明に必要な高輝度と均一性を両立。輝度に余裕があるため均一性の更なる向上には拡散板の透過度を選択頂けます(80%・60%・30%)。発熱対策のために全長に渡ってボディはアルミヒートシンク製(意匠登録申請品)。従来LED素子の高密度実装タイプや、従来素子の従来幅タイプなどのバリエーションもあります。

※セットの電源も各種取り揃えております。

※OEM供給も対応致します。



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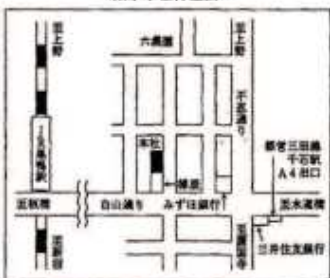
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10

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LED 新型リング照明 GL-URING90

拡散板をリ型にすることで色々な角度から拡散光が得られ、今まであきらめていた画像処理を可能にする照明。LEDをドーナツ状円板状に隙間なく並べることでより発光灯照明の最大の欠点である暗部を解消している。

■特徴

- LEDの劣化や温度特性による輝度変化を低減させるため放熱効果を考えLED基盤のアルミ台座への直接取り付け構造を採用。
- 白、青、赤の三色からワークに最適な色を選択可能。



(株)イマック LED機器事業部 営業

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紫外域LED 高輝度紫外域照明 UV-400タイプ

従来のピーク波長375nmキャンタイプ素子ではなく、 $\Phi 3$ モールドタイプ/ピーク波長400nm紫外域LED素子を使用した照明。リング・バードーム・エッジライト等各種対応する。

■特徴

- フィルターを使わず、光源そのものが紫外域で発光しているためロスのない特定波長での照射。
- モールド素子の使用により高密度実装が可能で従来の紫外域LED照明に無い高輝度/高均一を実現。
- 従来のステム素子タイプ(375nm)より約3倍出力が高い。400nmでも375nmをカバーすることができる。
- 拡散板の取り付けも可能。

■用途

- 表面のキズ・ムラ・シミの検査
- 特殊塗料材の文字などを認識可能
- 電子のハンダ検査
- 特殊な樹脂の硬化

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LED ラインセンサー照明 IDB-Lシリーズ

概要：超高輝度チップLED素子を高密度に配置、超高輝度でありながら高均一性の両立を実現。

■特徴

- 発光面積を従来の80%に縮めても同じ素子数なので薄型はUP
- 発熱対策にケース本体が全長ALヒートシンク製なので、外部からの冷却効果が非常に高く寿命を伸ばす
- 赤・青・緑・白・赤外での製作可能
- 長さ300mmをベースに600mm、900mm以上も製作可能
- 専任登録済商品

■用途

- 高速フィルム検査でのキズ・ピンホール検出では光均一性が威力を発揮
- 透過体ワークでも短波長光源の選択が可能
- 光均一な照明によりバックライト用にも最適

※特注品、OEM製作の対応も可能
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LED 同軸・スポット照明 IHVシリーズ

同軸照明採用マクロレンズ等に装着できるLED照明。(先鋒#8)

■特徴

- 超高輝度LEDよりさらに高出力のパワーLEDを独自技術で集光させた超高輝度タイプ
- 胴体径 $\Phi 27$ 、 $\Phi 18$ 等のバリエーション
- 赤・青・緑・白の各色の製作が可能で、様々なワークに適合

■用途

- 光ファイバライトガイドとの置き換え
- 鏡面上のワーク検査に最適
- 画像処理分野だけでなくスポット照明としても使用は広範囲
- 特注品、OEM製作の対応も可能
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11月号予定目次

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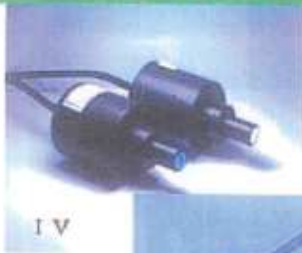
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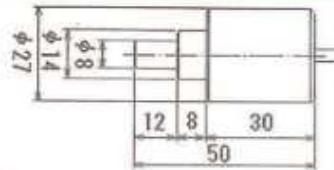
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テレセントリックレンズ同軸照明として、
また極小範囲のスポット照明として！



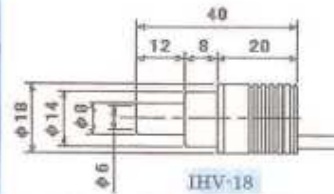
IV



新製品



IHV



IHV-18

品番	型式	仕様
335-100	IHV-18R(赤色)	抵抗box付き
335-010	IHV-27R(赤色)	抵抗box付き
335-020	IHV-27W(白色)	抵抗box付き
332-010	IV-27R(赤色)	素子数7個
332-020	IV-27W(白色)	素子数7個
332-023	IV-27W-12(白色)	先端径φ12
332-030	IV-14R	素子数1個
332-031	IV-14W	素子数1個

- ・テレセントリックレンズ等の光ファイバライトガイドへの置換え。
- ・画像処理分野だけでなくスポット照明としても使用は広範囲。
- ・新製品IHVは超高輝度タイプ！

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 【意匠法第 4 条第 2 項適用】この意匠は、新規性喪失の例外規定が適用されました。
 【審査官】川越 弘
 (55) 【意匠に係る物品の説明】この物品は、工場等において、製品に光を照射して製品の外観や傷等の検査に用いる照明器具であって、参考 A-A 線拡大断面図に示すように、窒化アルミ、基板、LED、反射カラー、非球面レンズ、及び Oリングを内部に備えるものである。
 (55) 【意匠の説明】背面図は正面図と対称に表れるので、底面図は正面図と同一に表れるので省略する。
 【図面】
 【正面図】



【左側面図】

(2)

意匠登録1175712



【右側面図】



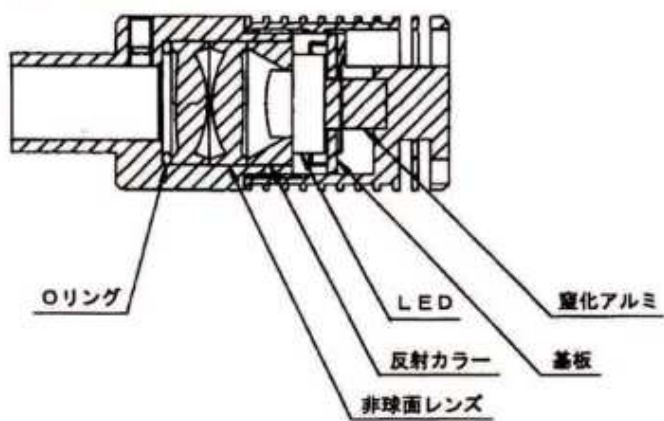
【平面図】



【使用状態を示す正面図】



【参考A-A線拡大断面図】



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(33) 優先権主張国 日本国 (JP)					
		最終頁に続く			

(54) 【発明の名称】 光照射装置

(57) 【要約】
【課題】特にパワーLEDを光源として用いたこの種の光射出装置において、放熱性、コンパクト化、組み立て簡単化、照射光精度に同時に寄与できる構造のものを提供する。
【解決手段】LED5と、このLED5を内蔵するとともに放熱部を有してなる筐体2とを具備し、その筐体2が所定軸線に沿って直列に結合した第1筐体要素21と第2筐体要素22とを有するものであって、前記各筐体要素21、22の結合に伴って前記第1筐体要素21側に設定した第1押圧面3bと前記第2筐体要素22側に設定した第2押圧面3aとの間でLED5を挟圧固定する挟圧構造3と、同結合に伴ってLED5の光軸を前記軸線に一致するように当該LED5の位置決めを行う位置決め構造4とを具備するものとした。
【選択図】図1

