Patent	Date	February 7, 2023	Court	Intellectual Property
Right	Case number	2022 (Gyo-Ke) 10037		High Court, Second
		-		Division

- A case in which, regarding an invention titled "air-discharge port adjusting mechanism for air-conditioning clothes, clothes main body of air-conditioning clothes, and air-conditioning clothes", the JPO decision dismissing the request for a trial for invalidation of the patent was rescinded by stating that a person ordinarily skilled in the art could have easily made the invention on the basis of the primary cited invention and the secondary cited invention.

Case type: Rescission of Trial Decision to Maintain

Result: Granted

References: Article 29, paragraph (2) of the Patent Act

Related rights, etc.: Patent No. 6158675

Decision of JPO: Invalidation Trial No. 2020-800103

Summary of the Judgment

1 This case is a suit against a decision which dismissed a request for a trial for invalidation of a patent of an invention titled "air-discharge port adjusting mechanism for air-conditioning clothes, clothes main body of air-conditioning clothes, and air-conditioning clothes" (Claims 3 to 10). The decision determined that, on the grounds for invalidation of lack of inventive step based on the primary cited invention, it cannot be considered that Invention 3 could have been easily made by a person ordinarily skilled in the art even by the primary cited invention and design matters, well-known art, or the secondary cited invention, and Inventions 4 to 10 including all the invention-specifying matters of Invention 3 could not have been easily made by a person ordinarily skilled in the art, either.

2 Invention 3

Invention 3 is, in short, an air-discharge port adjusting mechanism for adjusting an opening degree of an air-discharge port (a port for discharging air flowing through an air flow path to an outside and formed between a rear collar portion and a rear neck portion of a human body) of air-conditioning clothes (clothes for causing the air to flow in the air flow path formed between them and a human body by using air-blowing means), including a first adjusting belt having a first mounting portion and a second adjusting belt having a plurality of second mounting portions, characterized in that the air-discharge port is formed with the opening degree in multiple stages determined in advance between the rear collar portion and the rear neck portion of a human body by mounting the first mounting potion on at least one of the plurality of second mounting

portions.

3 Primary cited invention (publicly worked invention)

The primary cited invention is, in short, means for adjusting an air-discharge space around the neck in the air-conditioning clothes including the air-discharge port, including a string 1 and a string 2, and an air discharge amount can be adjusted by tying the string 1 and the string 2.

4 In this judgment, since it is found that, as described below, a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 relating to the difference between Invention 3 and the primary cited invention found in the decision (hereinafter, referred to as the "difference found in the decision"), the determination in the decision different from the above is erroneous and thus, the decision was rescinded by stating that the determination in the decision that a person ordinarily skilled in the art could not have easily made the invention on the basis of the primary cited invention for Inventions 4 to 10 is also erroneous.

(1) Difference between Invention 3 and the primary cited invention

In determination on how easily the configuration of Invention 3 relating to the difference found in the decision could have been conceived of, it is only necessary to examine each of the following points related to means for adjusting the degree of opening of the air discharge port (air-discharge port adjusting mechanism).

A Point that the "first adjusting belt" in Invention 3 "has the first mounting portion" but the "string 1" in the primary cited invention does not include such configuration

B Point that the "second adjusting belt" in Invention 3 "has a plurality of second mounting portions corresponding to the shape of the first mounting portion and enabling mounting to the first mounting portion" but the "string 2" in the primary cited invention does not include such configuration

C Regarding formation of the air-discharge port, point that Invention 3 is formed "by mounting the first mounting portion on at least one of the plurality of second mounting portions" but the primary cited invention does not include such configuration

D Regarding the degree of opening of the air-discharge port, point that Invention 3 is "in multiple stages determined in advance" but the primary cited invention does not include such configuration

(2) Finding of secondary cited invention

In the secondary cited example, it is found that the invention of nursing-care pants (secondary cited invention) including all the configurations corresponding to the configuration of Invention 3 relating to the difference is described.

(3) Application of secondary cited invention to primary cited invention

A The technical field to which the primary cited invention belongs and the technical field to which the secondary cited invention belongs have relevance in a point that they are the clothes surrounding a part of a body and worn by the body.

B According to the evidence, a person ordinarily skilled in the art who contacted the primary cited invention is found to recognize a well-known and apparent problem that adjustment of a length by tying and connecting the two string-shaped members or even tying and connecting the two string-shaped members itself takes labor and is not easy, and a person ordinarily skilled in the art is found to recognize this as means for solving the problem regarding the secondary cited invention and thus, the problem recognized from the primary cited invention and the problem to be solved by the secondary cited invention are in common. A point that the primary cited invention is for adjusting a size of a space for air discharge around the neck of the air-conditioning clothes, while the secondary cited invention is for adjusting a size around the waist of the nursing-care pants (the two are different in what to adjust) does not influence the conclusion on the commonality of the problems (the two are not different in the purpose and effect of adjusting the size of a space formed by clothes by fastening a string-shaped member).

C As described in the above A and B, it is reasonable to find that a person ordinarily skilled in the art who contacted the primary cited invention was motivated to employ the secondary cited invention.

(4) As described above, it is found that a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 relating to the difference and therefore, it is found that a person ordinarily skilled in the art could have easily conceived also of the configuration of Invention 3 relating to the difference found in the decision.

Judgment Rendered on February 7, 2023

2022 (Gyo-Ke) 10037, Case of Seeking Rescission of the JPO Decision

Date of Conclusion of Oral Argument: November 30, 2022

Judgment

Plaintiff: SUN-S Co., Ltd.

Defendant: SFT LABORATORY CO., LTD.

Main Text

1 The JPO decision on the case of Invalidation Trial No. 2020-800103 rendered by the Japan Patent Office on March 30, 2022 shall be rescinded.

2 The Defendant shall bear the court costs.

Facts and Reasons

No. 1 Claim

The same gist as Main Text, paragraph 1

No. 2 Background

This case is a lawsuit against the JPO decision dismissing a request for a trial for patent invalidation. The issues are presence / absence of violation of the clarity requirement, presence / absence of violation of the usurped application or joint application requirement, and presence / absence of inventive step.

1. Outline of Procedures and the like at the JPO

The Defendant is a patent right holder of the patent (Japanese Patent No. 6158675, hereinafter referred to as "the Patent") for the invention titled "Air-discharge port adjusting mechanism for air-conditioning clothes, clothes main-body of air-conditioning clothes, and air-conditioning clothes" (Exhibit Ko 1).

Regarding the Patent, an application was filed as Patent Application No. 2013-212139 (hereinafter, this application will be referred to as "the Application") on October 9, 2013 as the date of application (hereinafter, referred to as the "Date of Application"), and the establishment was registered (the number of claims was 10) on June 16, 2017 (Exhibit Ko 1, hereinafter, the description and the drawings at the registration of establishment related to the Patent shall be referred to as "the Description").

The Plaintiff made a request for a trial for invalidation of the Patent for the part pertaining to Claims 3 to 10 in the Patent on October 15, 2020, and the Japan Patent

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Office examined the case as case of Invalidation Trial No. 2020-800103.

The Japan Patent Office made a decision that "The request for the trial is not established." (hereinafter, referred to as "the Decision") on March 30, 2022, and the certified copy thereof was delivered to the Plaintiff on April 8 of the same year.

The Plaintiff instituted a suit seeking rescission of the Decision on May 6, 2022.

2. Summary of the Invention according to the Patent (Exhibit Ko 1)

The description in the Scope of Claims (Claims 3 to 10) according to the Patent is as follows (hereinafter, the invention pertaining to each of the claims shall be called "Invention 3" and the like correspondingly to the numbers of claims, and Inventions 3 to 10 are collectively called "Each of the Inventions").

[Claim 3]

An air-discharge port adjusting mechanism for adjusting an opening degree of an air discharge port that discharges air flowing through an air flow path to the outside, formed between a rear collar portion in air-conditioning clothes that causes air to flow in the air flow path formed between the human body and the air-conditioning clothes by using air blowing means, and a rear neck portion of a human body, comprising:

a first adjusting belt that has a first mounting portion and is mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof; and

a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion and is mounted at a second position, which is different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in the periphery thereof, wherein

by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body.

[Claim 4]

The air-discharge port adjusting mechanism according to Claim 3, wherein the first mounting portion is mounted on the first adjusting belt so as to oppose an inner surface of a cloth of the air conditioning clothes.

[Claim 5]

The air-discharge port adjusting mechanism according to Claim 1, 2, 3, or 4, wherein

the second mounting portion is a through hole.

[Claim 6]

The air-discharge port adjusting mechanism according to Claim 5, wherein the first mounting portion is a button.

[Claim 7]

The air-discharge port adjusting mechanism according to Claim 6, wherein the through hole is a buttonhole fabricated by making a cut line.

[Claim 8]

The air-discharge port adjusting mechanism according to Claim 7, wherein the buttonhole is formed such that a cutting direction of the buttonhole is substantially parallel to a longitudinal direction of the rear collar portion.

[Claim 9]

A clothes main-body of an air-conditioning clothes, comprising the air-discharge port adjusting mechanism according to any one of Claims 1 to 8.

[Claim 10]

Air-conditioning clothes, comprising the air-discharge port adjusting mechanism according to any one of Claims 1 to 8.

3. Gist of the Reasons Given in the Decision

The gist of the reasons given in the Decision (in the Reason for Invalidation 1 (violation of clarity requirement), excluding the part related to the clarity of the "periphery" of Invention 3 and the part related to the clarity of "the second mounting portion is a through hole" in Invention 5, which the Plaintiff does not assert as the grounds for the reasons for rescission in this lawsuit) is as follows:

- (1) Invalidation Reason 1 (violation of clarity requirement)
- A. "Air discharge port" in Invention 3
- (A) The Plaintiff asserts that it is not clear whether the "air discharge port" in Invention 3 refers to the opening portion formed between the rear collar portion and the rear neck portion, the one formed by the air-discharge port adjusting mechanism, or the region surrounded by the collar and the adjusting belt (air-discharge port adjusting mechanism) and what it means.
- (B) However, Invention 3 specifies the "air discharge port" as the one "formed between the rear collar portion of the air-conditioning clothes which causes air to flow in the air flow path formed between it and the human body by using the blowing means and the rear neck portion of a human body" and "the air discharge port that discharges air flowing in an air flow path to the outside."

From this specification, the "air discharge port" in Invention 3 is understood as the one "that discharges air flowing through an air flow path to the outside, formed between the rear collar portion of the air-conditioning clothes which causes air to flow in the air flow path formed between it and the human body by using the air blowing means and the rear neck portion of a human body."

- (C) This understanding is consistent with the description in the Description that "in order to distinguish the opening portion formed between the rear collar portion 12 and the rear neck portion from the other air discharge portions, it shall be called 'air discharge port'." (paragraph [0003]) and the description that "when a retainer 512 is passed through a through hole 532 and hooked, as shown in Fig. 6, an inner surface of the retainer 512 is brought into contact with an outer surface of a second adjusting belt 53 in a formed part of the through hole 532, and the retainer 512 is firmly fixed to the second adjusting belt 53. At this time, a vicinity of the rear collar portion 12 of the air-conditioning clothes 1 is loosened, and an air discharge port 13 is formed between the rear collar portion 12 and the rear neck portion of a wearer. Moreover, if a small amount of air is to be discharged from the air discharge port 13, the retainer 512 is not mounted in the through hole 532. In this case, since the opening portion is automatically ensured to some degree between the rear collar portion 12 and the rear neck portion by the pressure of the air flowing in the air flow path, this opening portion becomes an air discharge port 13, from which the small amount of air can be discharged to the outside. Therefore, by using the air-discharge port adjusting mechanism 50a of the second embodiment, the wearer can select the opening degree of the air discharge port 13 from two stages of the opening degrees in accordance with a use purpose of the air-conditioning clothes 1 and obtain a desired cooling effect." (paragraph [0041]).
- (D) The Plaintiff asserts that "the 'air discharge port' is not limited to the one formed by the 'air-discharge port adjusting mechanism'. Moreover, since each of the Inventions includes a form in which the adjusting belt is not present on the rear collar portion (form in which the first adjusting belt and the second adjusting belt are mounted in the periphery of the rear collar portion), it is difficult to understand that the region surrounded by the collar and the adjusting belt (air-discharge port adjusting mechanism) is the 'air discharge port'.", "According to the description in paragraph [0009] in the Description, it is described such that the 'air discharge port' is limited to the one formed by the air-discharge port adjusting mechanism.", "According to Fig. 3 and Fig. 6, the region surrounded by the collar and the adjusting belt (air-discharge port adjusting mechanism) is the air discharge port (13), and the other parts of the opening is not included in the air discharge port (13)", and "The description in the Description on the 'air discharge port' is not consistent, and a person ordinarily skilled in the art cannot understand the meaning."

Thus, the aforementioned assertion will be examined.

As described above, the "air discharge port" in the Invention 3 can be understood as being the one "formed between the rear collar portion of the air-conditioning clothes which causes air to flow in the air flow path formed between it and a human body by using the air blowing means and the rear neck portion of the human body" and is not the one formed only between the adjusting belt (air-discharge port adjusting mechanism) and the collar.

Moreover, the description in paragraph [0009] in the Description only describes that there is a case in which the "air discharge port 13" should not be formed by the air-discharge port adjusting mechanism depending on the use purpose of the air-conditioning clothes and does not describe that the "air discharge port" is limited to the one formed by the air-discharge port adjusting mechanism and does not contradict the aforementioned understanding.

Thus, the Plaintiff's aforementioned assertion is groundless.

- (E) As described above, the description as the "air discharge port" in Invention 3 is clear.
- B. Regarding the "opening degree", "predetermined opening degree in plural stages" in Invention 3
- (A) The Plaintiff asserts that, regarding the "opening degree" of the "air discharge port", since the meaning of the "air discharge port" is not clear as described in the aforementioned A(A), its meaning and measuring method are not clear.
- (B) However, as described in the aforementioned A, the "air discharge port" in Invention 3 is the one "that discharges air flowing through an air flow path to the outside, formed between the rear collar portion of the air-conditioning clothes which causes air to flow in the air flow path formed between it and the human body by using the air blowing means and the rear neck portion of a human body" and what it means is clear.

Moreover, the "opening degree" of the "air discharge port" can be understood to mean the "degree of a size of the opening" between the rear collar portion of the air-conditioning clothes and the rear neck portion of the human body", and the "predetermined opening degree in plural stages" can also be understood to mean that the "degree of a size of the opening" is present in plural stages.

(C) This understanding is also consistent with the description with the gist that the "opening degree" can be indicated in plural stages of the size such that "the degree of opening of the air discharge port 13 between the rear collar portion 12 and the rear neck portion is small as compared with an amount of the outside air taken from the air blowing means 11 into the air flow path" in the Description (paragraph [0007]).

- (D) Moreover, the Plaintiff asserts that, since the measuring method of the "opening degree" of the "air discharge port" of Invention 3 is unclear, the "predetermined opening degree in plural stages" is also unclear.
- (E) However, the "predetermined opening degree in plural stages" means that there are plural stages of "degrees of size of the opening", and they are not limited to the "opening degrees" expressed in specific numerical values, and indication by the size is not excluded and thus, even though the measuring method of the "opening degree" is not described, the "opening degree" of the "air discharge port" in Invention 3 is not considered to become unclear.
- (F) Therefore, the descriptions of the "opening degree" of the "air discharge port" in Invention 3, and the "predetermined opening degree in plural stages" are clear.

C. Invention 7

The Plaintiff asserts that "'fabricated by making a cut line' is the description of the manufacturing method of an article, and since there is no impossible / impractical circumstance, it violates the clarity requirement in that point, too."

However, the matter that "the through hole is a buttonhole fabricated by making a cut line" in Invention 7 can be understood to indicate a structure of the through hole obtained by making a cut line as the buttonhole.

Thus, the description that "a buttonhole fabricated by making a cut line" in Invention 7 is clear.

D. Summary

As described above, Invalidation Reason 1 asserted by the Plaintiff is groundless.

(2) Invalidation Reason 2 (violation of usurped application or joint application requirement)

A. Inventor

The inventor refers to a person who completed specific technical means for an invention described in the Scope of Claims, and if the number of persons who conceived of some technical means and are involved in all the processes for completing it is only one, only that person is the inventor, but if a plurality of persons are involved in the processes, the person who creatively contributed to completion of the featured part of the invention in the process is the inventor, and if there are a plurality of such persons, they are all the inventors (joint inventors). Here, the featured part of the invention is understood to refer to a part not found in the prior art; that is, a part on which the means for solving the problem specific to the invention is based in the inventions described in the Scope of Claims.

B. Featured part of each of the Inventions

When all the descriptions in the Description are considered, the featured part of each of the Inventions (hereinafter, referred to as the "Featured Part") is considered to be:

"in an air-discharge port adjusting mechanism for adjusting an opening degree of an air discharge port that discharges air flowing through an air flow path to the outside, formed between a rear collar portion in air-conditioning clothes that causes air to flow in the air flow path formed between the human body and the air-conditioning clothes by using air blowing means and a rear neck portion of a human body, including

a first adjusting belt that has a first mounting portion and mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof, and

a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion and is mounted at a second position, which is different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in the periphery thereof, in which

by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of a plurality of the second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body."

- C. Whether an employee A employed by the Plaintiff (hereinafter referred to as "A") contributed to the completion of the Featured Part or not
- (A) In the e-mail of July 24, 2013 in Exhibit Ko 67 from the defendant B to A, for which the Plaintiff also admitted establishment, at the point of time before July 31, 2013, when the e-mail in Exhibit Ko 3-1 was transmitted from A to C, who is an employee of the Plaintiff (hereinafter, referred to as "C"), the Defendant side refers to "- Button fastening of neck strip". Since a button and a buttonhole are required for the button fastening, the idea of the button and the buttonhole is considered to be on the Defendant's side.

Moreover, Exhibit Ko 67 also has the description that "- Gradual widening of collar", and the phrase "gradual widening" in the button fastening means adjustment in plural stages by the button and the buttonhole and thus, the idea of the adjustment of the air discharge port on the neck in plural stages is also considered to be on the Defendant's side.

(B) Then, in the Featured Parts, at least the part

"in an air-discharge port adjusting mechanism for adjusting an opening degree

of an air discharge port that discharges air flowing through an air flow path to the outside, formed between a rear collar portion in air-conditioning clothes that causes air to flow in the air flow path formed between it and the human body by using air blowing means and a rear neck portion of a human body,

a first adjusting belt that has a first mounting portion and is mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof, and

a plurality of second mounting portions that can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion" are provided, "by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body" is considered to be the creative contribution by the Defendant's side.

(C) Subsequently, in the Featured Parts, whether the idea that "the second adjusting belt having a plurality of the second mounting portions and mounted at a second position, which is different from the first position at which the first adjusting belt is mounted, on the rear collar portion or the periphery thereof" was made by A on the Plaintiff's side will be examined.

The aforementioned feature that A instructed / explained to C and provided in a sample sewn by D, who is an employee of the Plaintiff, is the one that "the button is provided on a satin tape mounted on a shoulder part on the right side", "the buttonholes are provided at two spots; that is, at a buttonhole tag mounted on the shoulder part on the left side and a cloth (shoulder facing) on the shoulder part on the left side", and "by mounting the button of an adjusting string at the buttonhole at a different position, loosening formed on the rear collar portion when the adjusting string is connected can be adjusted in two stages, and the opening degree of the air discharge port formed on the rear collar portion can be adjusted in two stages".

However, what A instructed / explained on the mounting position of the buttonhole is the "buttonhole tag mounted on the shoulder part on the left side" and the "cloth (shoulder facing) on the shoulder part on the left side", and they are different from the one of the Featured Parts in that the plurality of second mounting portions are provided on the second adjusting belt.

Moreover, the other evidence on the creative contribution by A on the Plaintiff's side to the second adjusting belt of the Featured Part is not approved, either.

(D) As described above, since A on the Plaintiff's side is not considered to have

creatively contributed to the completion of the Featured Part, A is not the "inventor" of each of the Inventions.

- D. Usurped Application
- (A) B is the inventor
- a. Facts pertaining to Patent Application

"B" described in Exhibit Ko 1 as the inventor of the Patent is a single inventor of Exhibit Ko 68 pertaining to the "cooling pillow, cooling clothes, and cooling helmet" filed as an international patent application on December 28, 1998 and a single inventor of the application pertaining to Exhibit Ko 34 pertaining to the "air-conditioning clothes" filed as a patent application on November 8, 2004 and thus, B can be considered to be a person ordinarily skilled in the art of the technical field of air-conditioning clothes.

b. Facts of Development

Moreover, Exhibit Ko 65 has descriptions such as "neck string", "[i] buttonholes at two spots", "[ii] one hole and stopper variable", and "[iii] one hole and stopper fixed" in the item described as "(448)" and has descriptions on the page subsequent to the page on which this item is described such as "No. 1 ... button and a plurality of button holes", "No. 2 variable stopper and one buttonhole", "adjusting belt" and the like. By considering them together with Exhibit Ko 66 (notebook with the description of "NO65 2013-5-29" on the cover), the contents of the item described as "(448)" are presumed to have been described before May 29, 2013. The contents of this item do not indicate the whole Featured Part but do not contradict the Application filed with "B" as the inventor.

c. Other Circumstances

- (a) For seven years from when the Patent was applied for on October 9, 2013 until when the invalidation trial was requested on October 15, 2020, the procedures for appeal on the ground of the usurped application have not been taken.
- (b) Moreover, as described in the aforementioned C(A), in Exhibit Ko 67, B on the Defendant's side referred to the button fastening to the Plaintiff's side, and the idea is considered to be on the Defendant's side.
- d. In view of the aforementioned a to c, there are no rational reasons for doubting that the inventor of each of the Inventions is "B", and "B" is considered to be the inventor of each of the Inventions.

(B) Assertion by Plaintiff

The Plaintiff asserts that the person involved in all the processes for conceiving and completing each of the Inventions is only A, and only A should be the inventor and

thus, "B" is not an inventor.

However, as described in the aforementioned C, A does not creatively contribute to the completion of the Featured Part and cannot be considered to be the "inventor" of each of the Inventions and thus, the Plaintiff's assertion has no grounds in the premise.

E. Violation of Joint Application Requirement

The Plaintiff asserts that, even if A, who is an employee of the Plaintiff, is not the single "inventor" of each of the Inventions and B on the Defendant's side is found to be involved for some reasons in the creation of the Featured Part, A is at least a joint inventor of each of the Inventions.

However, as described in the aforementioned C, A does not creatively contribute to the completion of the Featured Part and is not the "inventor" of each of the Inventions.

Therefore, A is not a joint inventor.

F. Summary

As described above, Invalidation Reason 2 asserted by the Plaintiff has no grounds.

- (3) Invalidation Reason 3 (lack of inventive step by publicly worked invention)
- A. Finding of the invention publicly worked (hereinafter, referred to as the "Publicly Worked Invention") by the product with the product No. "KU90550" carried in Exhibit Ko 2 (catalogue "Re. SUN-S Uniform Catalogue volume. 28 2008 SPRING & SUMMER COLLECTION", SUN-S CO., LTD. pages 136 to 139, 200, 201)

The Publicly Worked Invention is found to be as follows. (Publicly Worked Invention)

In the air-conditioning clothes which causes air to flow through an air flow path formed between it and a human body by using a fan, including an air discharge port which is formed between a collar of the air-conditioning clothes and the neck of the human body and discharges the air flowing in the air flow path to the outside, means for adjusting an air discharge space around the neck, including

a string 1 mounted at a first position on an inner surface of a cloth of the airconditioning clothes and on the collar or in a periphery thereof, and

a second string 2 mounted at a second position on the collar or in the periphery thereof, which is different from the first position at which the string 1 is mounted, and capable of adjusting an air discharge amount by tying the two strings (1, 2).

B. Comparison between Invention 3 and Publicly Worked Invention

The Invention 3 and the Publicly Worked Invention match each other in the following Common Feature 1 and are different from each other in Difference 1. (Common Feature 1)

A point that, in the air-conditioning clothes which causes air to flow through the air flow path formed between it and the human body by using air blowing means, it is means for adjusting the opening degree of the air discharge port that discharges air flowing in the air flow path to the outside and is formed between the rear collar portion and the rear neck portion of a human body.

(Difference 1)

A point that, with regard to the means for adjusting the opening degree of the air discharge port that discharges air flowing through the air flow path to the outside, formed between the rear collar portion and the rear neck portion of a human body, Invention 3 is the "air-discharge port adjusting mechanism for adjusting an opening degree" "including a first adjusting belt that has a first mounting portion and is mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof and a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion and is mounted at a second position on the rear collar portion or in the periphery thereof, which is different from the first position at which the first adjusting belt is mounted, and the air discharge port is formed with a predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of a human body by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions", while the Publicly Worked Invention is the "means for adjusting an air discharge space around the neck, including a string 1 mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in a periphery thereof, and a second string 2 mounted at a second position on the rear collar portion or in the periphery thereof, which is different from the first position at which the string 1 is mounted, and capable of adjusting an air discharge amount by tying the two strings (1, 2)"

C. Determination on Difference 1

(A) The Publicly Worked Invention corresponds to the conventional art described in paragraph [0006] and Fig. 8 in Exhibit Ko 1 (the Description), and the object to be adjusted by tying in the Publicly Worked Invention needs to be untied once and to be tied again at the adjustment, and the adjustment to have a knot at a position different from the position of the previous knot is difficult. On the other hand, in Invention 3, a change between the current mounting position and the adjacent mounting position is facilitated by "mounting the first mounting portion on at least any one of the plurality of second mounting portions".

- (B) As described above, though the Publicly Worked Invention has a merit that continuous adjustment can be done, it is not suitable for quick adjustment to a different position, whereas in Invention 3, although it is not suitable for fine adjustment in plural stages, a change to a different position is easy and thus, the two have technical meanings different from each other, and there is no motivation to replace the "means for adjusting an air discharge space around the neck" by tying the two strings of the Publicly Worked Invention with the "air-discharge port adjusting mechanism" in which "the air discharge port is formed with the predetermined opening degree in plural stages" by providing "the second adjusting belt" "having a plurality of second mounting portions" of Invention 3 and by "mounting the first mounting portion or the 'first adjusting belt' on at least any one of the plurality of second mounting portions".
- (C) Moreover, in the light of Exhibit Ko 15 (Unexamined Patent Application Publication No. 1998-88407), Exhibit Ko 16 (Unexamined Patent Application Publication No. 1999-46817), Exhibit Ko 17 (Unexamined Patent Application Publication No. 2003-201611), Exhibit Ko 18 (Unexamined Patent Application Publication No. 2003-342817), Exhibit Ko 19 (Unexamined Patent Application Publication No. 2005-137849), Exhibit Ko 20 (Unexamined Patent Application Publication No. 2007-325851), Exhibit Ko 21 (Unexamined Patent Application Publication No. 2009-120970), Exhibit Ko 22 (Unexamined Patent Application Publication No. 2011-161035), Exhibit Ko 23 ("Kojien 7th edition" edited by Izuru Shinmura (issued on January 12, 2018)), Exhibit Ko 24 (including branch numbers. "Heibonsha World Encyclopedia Ver. 10" by Hitachi Digital Heibonsha Co., Ltd. (1998)), Exhibit Ko 25 ("Button Lexicon" edited by Kazue Abe (1999)), Exhibit Ko 26 (Image carried on "Maman-Cool-Baby-Carry-Apron" on Amazon (May 17, 2007 (start date of handling))), Exhibit Ko 27 ("How to Use Elastic Buttonhole" (a webpage titled Az-net handcraft) (May 17, 2007 (date of archiving))), Exhibit Ko 28 (National Publication of International Patent Application No. 2007-515569), Exhibit Ko 29 (U.S. Patent Application Publication No. 2007 / 0017004 Description), Exhibit Ko 30 (Utility Model Registration No. 3172651 (issued on January 5, 2012)), Exhibit Ko 31 (Unexamined Patent Application Publication No. 2007-39855), Exhibit Ko 32 (Unexamined Patent Application Publication No. 2010-94139), Exhibit Ko 33 (Utility Model Registration No. 3105465 (Issued on October 28, 2004)), Exhibit Ko 34 (Unexamined Patent Application Publication No. 2006-132040), Exhibit Ko 35 (Unexamined Patent Application Publication No. 2007-270415), Exhibit Ko 36 (CD-ROM of Unexamined Utility Model Application Publication No. 1992-90691 (Unexamined Patent Application Publication No. 1994-42909), Exhibit Ko 37

(Unexamined Patent Application Publication No. 2009-167553), Exhibit Ko 38 (Unexamined Patent Application Publication No. 2009-138321), Exhibit Ko 39 (thread of "Which is the most convenient for a tie on the back of a bib, strings, a Velcro tape, or a button?" in Yahoo Answers on June 21, 2005), and Exhibit Ko 40 (thread of "About baby bibs, there are strings, Velcro tapes, buttons, and the like for tying on the neck, but which one is the easiest to use?" in Yahoo Answers" on March 24, 2005) submitted by the Plaintiff, it can be grasped, respectively, from Exhibits Ko 15 to 22 that the problem that it takes labor to tie (fasten) two string-shaped members to connect was a well-known and self-evident problem before the Date of Application, and in order to solve this problem, various more convenient fastening tools had been customarily used before the Date of Application, from Exhibits Ko 23 to 29 that in the clothing field, buttons, snap-buttons, Velcro tapes (planar tapes), snap fasteners, and the like have been well-known as a retainer for connecting two members, from Exhibits Ko 28 to 33 that a length of two string-shaped members (adjusting belts) when connected can be adjusted in plural stages by mounting one (a button or the like) of the fasteners such as buttons and the like to any one of the other in plural (a plurality of button holes and the like) had been well-known and customarily performed, and from Exhibits Ko 28 and 34 to 40 that the buttons, snap-buttons, Velcro tapes (planar tapes), and snap fasteners are detachable fixing means (fasteners) that can be selected as appropriate by a person ordinarily skilled in the art.

However, none of Exhibits Ko described above describes or suggests the one in which "the air discharge port is formed with the predetermined opening degree in plural stages" by providing "the second adjusting belt" "having a plurality of second mounting portions" and by "mounting the first mounting portion 'of the first adjusting belt' on at least any one of the plurality of second mounting portions" as Invention 3.

(D) Plaintiff's Assertion

a. On the assertion based on the design matters of the Publicly Worked Invention and Exhibits Ko 15 to 40, the Plaintiff asserts that, from Exhibits Ko 15 to 40, in the clothing field, adjustment of the length in plural stages when the two string-shaped members (adjusting belts) are connected by mounting one (button or the like) of the fastening tool such as buttons in any one of the other in plural (a plurality of buttonholes and the like) is the well-known and customary matter, and as the fastening tools for connecting the two members, there are buttons, snap-buttons, Velcro tapes (planar tapes), snap fasteners, and the like, but they can be selected as appropriate by a person ordinarily skilled in the art as the detachable fixing means (fastener), and which fastener to be used is a design matter that can be selected as appropriate by a person ordinarily

skilled in the art.

However, as described in the aforementioned (B), there is no motivation to replace the "means for adjusting an air discharge space around the neck" by tying the two strings of the Publicly Worked Invention with the "air-discharge port adjusting mechanism" in which "the air discharge port is formed with the predetermined opening degree in plural stages" by providing "the second adjusting belt" "having a plurality of second mounting portions" and by "mounting the first mounting portion of the first adjusting belt on at least any one of the plurality of second mounting portions" of Invention 3.

Moreover, Exhibits Ko 15 to 40 do not describe the one in which "the air discharge port is formed with the predetermined opening degree in plural stages" by providing "the second adjusting belt" "having a plurality of second mounting portions" and by "mounting the first mounting portion of the first adjusting belt on at least any one of the plurality of second mounting portions".

Thus, it cannot be considered that a person ordinarily skilled in the art could have easily conceived of the configuration of the Invention 3 pertaining to Difference 1 from the described matter in Exhibits Ko 15 to 40.

b. Assertion based on Publicly Worked Invention and Well-known Arts of Exhibits Ko 28 to 33

The Plaintiff asserts that a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 pertaining to Difference 1 by applying to the Publicly Worked Invention the well-known art indicated in Exhibits Ko 28 to 33 ("a first adjusting belt 'has a first mounting portion' and a second adjusting belt 'has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion', and the first adjusting belt and the second adjusting belt can adjust the length when being connected by 'mounting the first mounting portion on at least any one of the plurality of second mounting portions'").

However, as described in the aforementioned (B), there is no motivation to replace the "means for adjusting an air discharge space around the neck" by tying the two strings of the Publicly Worked Invention with the "air-discharge port adjusting mechanism" in which "the air discharge port is formed with the predetermined opening degree in plural stages" by providing "the second adjusting belt" "having a plurality of second mounting portions" and by "mounting the first mounting portion of the 'first adjusting belt' on at least any one of the plurality of second mounting portions" of Invention 3.

Moreover, the well-known art exemplified in Exhibits Ko 28 to 33 referred to by the Plaintiff is not the one that "the air discharge port is formed with the predetermined opening degree in plural stages" by "mounting the first mounting portion of the 'first adjusting belt' on at least any one of the plurality of second mounting portions".

Thus, a person ordinarily skilled in the art could not have easily conceived of the configuration of Invention 3 pertaining to Difference 1 from the well-known art exemplified in Exhibits Ko 28 to 33.

c. Assertion based on Matters Described in Publicly Worked Invention and Exhibit Ko 28

The Plaintiff asserts that Exhibit Ko 28 describes the invention that "a first adjusting belt 'has a first mounting portion' and a second adjusting belt 'has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion', and the first adjusting belt and the second adjusting belt can adjust the length when being connected 'by mounting the first mounting portion on at least any one of the plurality of second mounting portions" (hereinafter, referred to as the "Exhibit Ko 28 Invention"), and this Exhibit Ko 28 Invention and the Publicly Worked Invention are inventions belonging to the clothing field, they have common problems / object to adjust the length when the two string-shaped members are connected and have motivation to apply the Exhibit Ko 28 Invention to the Publicly Worked Invention, and a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 pertaining to Difference 1 by applying the Exhibit Ko 28 Invention to the Publicly Worked Invention.

However, Exhibit Ko 28 has an object to "provide an abdominal-part cover which fits a body type of a user, has a favorable wearing feeling, does not move after wearing, can maintain a fixed state at all times, and is integrally formed with various types of clothes or can be easily worn / taken off." (paragraph [0010] in Exhibit Ko 28), and the abdominal-part cover including a fastening string, a button, and a buttonhole in Exhibit Ko 28 is configured so that a waist size thereof can be adjusted in accordance with the body type in a state where the cover main-body and the fastening string surround the waist part of a human body, while the two strings of the Publicly Worked Invention are for adjusting the air discharge space around the neck without a supporting object inside when the two strings are tied and have different purposes and functions in a point that adjustment is done by surrounding the object when the lengths of the strings are to be adjusted.

Therefore, there is no motivation to employ the first adjusting belt and the second adjusting belt of the Exhibit Ko 28 Invention configured such that the waist size can be

adjusted in accordance with the body type in the state surrounding the waist part of a human body in place of the two strings for adjusting the air discharge space around the neck of the Publicly Worked Invention, which is different from that and has no supporting object inside when being tied. Moreover, Exhibit Ko 28 does not even indicate the one for forming the air discharge port with the predetermined opening degree in plural stages.

Thus, it cannot be considered that a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 pertaining to Difference 1 from the Exhibit Ko 28 Invention.

d. Assertion based on Matters Described in Publicly Worked Invention and Exhibit Ko $30\,$

The Plaintiff asserts that Exhibit Ko 30 describes the invention that "a first adjusting belt 'has a first mounting portion' and a second adjusting belt 'has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion', and the first adjusting belt and the second adjusting belt can adjust the length when being connected 'by mounting the first mounting portion on at least any one of the plurality of second mounting portions'" (hereinafter, referred to as the "Exhibit Ko 30 Invention"), and this Exhibit Ko 30 Invention and the Publicly Worked Invention are inventions belonging to the clothing field, they have common problems / object to adjust the lengths when the two string-shaped members are connected and have motivation to apply the Exhibit Ko 30 Invention to the Publicly Worked Invention, and a person ordinarily skilled in the art could have easily conceived of the configuration of Invention 3 pertaining to Difference 1 by applying the Exhibit Ko 30 Invention to the Publicly Worked Invention.

However, Exhibit Ko 30 has an object "to provide caring pants which can be easily worn by a person who uses the caring pants by himself / herself even in a standing attitude, a state in which the pants are worn is not conspicuous in appearance and moreover, which can be easily manufactured by simplifying manufacturing processes" (paragraph [0011] in Exhibit Ko 30), and the caring pants including a band strap and a fastening member such as a button of Exhibit Ko 30 are configured capable of being adjusted in accordance with a size around the waist with individual differences in a state where the waist string and the band strap surround the waist part of a human body, while the two strings of the Publicly Worked Invention are for adjusting the air discharge space around the neck without a supporting object inside when the two strings are to be tied and have different purposes and functions in a point that adjustment is made by surrounding the object when the lengths of the strings are to be adjusted.

Therefore, there is no motivation to employ the first adjusting belt and the second adjusting belt of the Exhibit Ko 30 Invention which can be adjusted in accordance with the size around the waist with individual differences in a state surrounding the waist part of a human body in place of the two strings for adjusting the air discharge space around the neck in the Publicly Worked Invention, which is different from that and has no supporting object inside when being tied. Moreover, the one which forms the air discharge port with the predetermined opening degree in plural stages is not even indicated in Exhibit Ko 30.

Thus, a person ordinarily skilled in the art could not have conceived of the configuration of Invention 3 pertaining to Difference 1 from the Exhibit Ko 30 Invention.

D. As described above, a person ordinarily skilled in the art could not have made Invention 3 on the basis of the design matters of the Publicly Worked Invention and Exhibits Ko 15 to 40, the well-known art in the Publicly Worked Invention and Exhibits Ko 28 to 33, the matters described in the Publicly Worked Invention and Exhibit Ko 28, or the matters described in the Publicly Worked Invention and Exhibit Ko 30.

E. Inventive Step of Inventions 4 to 10

All of Inventions 4 to 10 include all the invention specifying matters of Invention 3, and a person ordinarily skilled in the art could not have made Invention 3 on the basis of the design matters of the Publicly Worked Invention and Exhibits Ko 15 to 40, the well-known art in the Publicly Worked Invention and Exhibits Ko 28 to 33, the matters described in the Publicly Worked Invention and Exhibit Ko 28, or the matters described in the Publicly Worked Invention and Exhibit Ko 30 and thus, Inventions 4 to 10 could not have been made by a person ordinarily skilled in the art, either.

F. Summary

As described above, Invalidation Reason 3 asserted by the Plaintiff is groundless.

(4) Invalidation Reason 4 (lack of inventive step by the invention described in Exhibit Ko 34)

A. Finding of the invention described in Exhibit Ko 34 (hereinafter referred to as the "Exhibit Ko 34 Invention")

The Exhibit Ko 34 Invention is found to be as follows.

(Exhibit Ko 34 Invention)

A cloth portion which covers a predetermined part of a body and guides air along a surface of the body to a space between it and the body,

air blowing means for causing the air to flow in the space between the cloth portion and the body, and

a flow-path expanding portion which expands a flow path of the air by deflecting a part of the cloth portion are provided, in which

the flow-path expanding portion has one ends of planar tapes 80a, 80b mounted at each of two spots on an inner side of the cloth portion separated from each other by an arbitrary distance, and a size of this flow path is adjusted by adjusting a length when the two planar tapes 80a, 80b are connected, whereby an amount of the air can be adjusted, and

the flow-path expanding portion can be formed immediately below a collar on a rear side of the air-conditioning clothes, whereby the air is reliably caused to flow to the part on the rear side of the collar, and an upper part of a back part and the rear side of the neck part can be effectively cooled.

B. Comparison between Invention 3 and Exhibit Ko 34 Invention

Invention 3 and the Exhibit Ko 34 Invention are in common in the following Common Feature 2 and are different in Difference 2.

(Common Feature 2)

A point that, regarding the air-conditioning clothes which causes air to flow in the air flow path formed between it and the human body by using air blowing means, means for adjusting an amount of the air caused to flow to the rear side of the collar is provided.

(Difference 2)

A point that, regarding the means for adjusting the amount of the air caused to flow to the rear side of the collar, Invention 3 is the "air-discharge port adjusting mechanism" "including a first adjusting belt that has a first mounting portion and mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof and a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion and is mounted at a second position, which is different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in the periphery thereof in which, by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body", while the Exhibit Ko 34 Invention is the "air-flow path expanding portion" "having one ends of planar tapes 80a, 80b mounted at each of two spots on an inner side of the cloth portion separated from each other by an arbitrary distance, and a size of this flow path is

adjusted by adjusting a length when the two planar tapes 80a, 80b are connected, whereby an amount of the air can be adjusted," and "can be formed immediately below a collar on a rear side of the air-conditioning clothes, whereby the air is reliably caused to flow to the part on the rear side of the collar, and an upper part of the back part and the rear side of the neck part can be effectively cooled".

C. Determination on Difference 2

(A) Invention 3 is the one which adjusts the amount of air discharged from the air discharge port formed between the collar and the neck to the outside, while in the Exhibit Ko 34 Invention, as described in paragraph [0018] in Exhibit Ko 34, the amount of air discharged to the outside is adjusted by a degree of opening of the cut-in part provided on a sleeve or the like, and the "air-flow path expanding portion" is the one for adjusting the amount of air flowing in a space on the rear side of the collar, and the "air-discharge port adjusting mechanism" of Invention 3 and the "air-flow path expanding portion" of the Exhibit Ko 34 Invention are different in technical meaning.

Thus, there is no motivation to change the "air-flow path expanding portion" in the Exhibit Ko 34 Invention constituted by the two planar tapes, configured to adjust the amount of air flowing in the space on the rear side of the collar to the "air-discharge port adjusting mechanism" of Invention 3 configured such that the amount of air discharged from the air discharge port to the outside is adjusted.

Moreover, as described in the aforementioned (3)C(C), none of Exhibits Ko 15 to 40 describes the one including "the second adjusting belt" "having a plurality of second mounting portions" and that "an air discharge port is formed with the predetermined opening degree in plural stages" by "mounting the first mounting portion of 'the first adjusting belt' on at least any one of the plurality of second mounting portions".

(B) The Plaintiff asserts that the aforementioned Difference 2 is only the design matters of Exhibits Ko 15 to 40, that it could have been easily conceived of from the combination with the well-known art in Exhibits Ko 28 to 33, that it could have been easily conceived of from the combination with the matters described in Exhibit Ko 28, or that it could have been easily conceived of from the combination with the matters described in Exhibit Ko 30.

However, the "design matters of Exhibits Ko 15 to 40", the "well-known art in Exhibits Ko 28 to 33", the "matters described in Exhibit Ko 28", and the "matters described in Exhibit Ko 30" asserted by the Plaintiff are as described in the aforementioned (3)C(D) a to d, and as described in the aforementioned (A), there is no motivation to change the "air-flow path expanding portion" in the Exhibit Ko 34

Invention constituted by the two planar tapes, configured to adjust the amount of air flowing in the space on the rear side of the collar to the "air-discharge port adjusting mechanism" of Invention 3 configured such that the amount of air discharged from the air discharge port to the outside is adjusted.

Moreover, as described in the aforementioned (3)C(C), none of Exhibits Ko 15 to 40 describes the one including "the second adjusting belt" "having a plurality of second mounting portions" and that "an air discharge port is formed with the predetermined opening degree in plural stages" by "mounting the first mounting portion of 'the first adjusting belt' on at least any one of the plurality of second mounting portions".

D. Therefore, Invention 3 could not have been made by a person ordinarily skilled in the art on the basis of the design matters of the Exhibit Ko 34 Invention and Exhibits Ko 15 to 40, the well-known art in the Exhibit Ko 34 Invention and Exhibits Ko 28 to 33, the matters described in the Exhibit Ko 34 Invention and Exhibit Ko 28, or the matters described in the Exhibit Ko 34 Invention and Exhibit Ko 30.

E. Inventive Step of Inventions 4 to 10

All the Inventions 4 to 10 include all the invention specifying matters of Invention 3, and Invention 3 is not the one, as described in the aforementioned D, that could have been made by a person ordinarily skilled in the art on the basis of the design matters of the Exhibit Ko 34 Invention and Exhibits Ko 15 to 40, the well-known art in the Exhibit Ko 34 Invention and Exhibits Ko 28 to 33, the matters described in the Exhibit Ko 34 Invention and Exhibit Ko 28, or the matters described in the Exhibit Ko 34 Invention and Exhibit Ko 30 and thus, Inventions 4 to 10 could not have been made by a person ordinarily skilled in the art, either.

F. Summary

As described above, Invalidation Reason 4 asserted by the Plaintiff is groundless.

(omitted)

- No. 5 Judgment of this court
 - 1. Outline of Each of the Inventions
 - (1) Description in the Description

The Description has the following description.

[Technical Field] [0001]

The present invention relates to, in an air discharge port that discharges air

flowing through air-conditioning clothes to the outside and is formed between a rear collar portion in the air-conditioning clothes and the rear neck portion of a human body, an air-discharge port adjusting mechanism for adjusting an opening degree thereof.

[Background Art]

[0002]

Recently, air-conditioning clothes which evaporates sweat from a human body by causing air to flow through an air flow path formed between it and the human body by using air blowing means has been put into practical use. ... Figure 7 is a diagram for explaining a flow of air in the air-conditioning clothes, and Fig. 8 is a diagram for explaining an air discharge portion formed between a rear collar portion and a rear neck portion of a human body in the conventional air-conditioning clothes. On a hem of this air-conditioning clothes 1, a belt with elasticity is mounted, and a fastener for opening / closing is provided on a front side of the air-conditioning clothes 1. Moreover, on a lower part of the air-conditioning clothes 1, two units of the air blowing means 11, 11 are mounted. Here, as the air blowing means 11, a fan having a propeller is used.

[0003]

When the two air blowing means 11, 11 are operated after the belt is fastened and the fastener is closed, as shown in Fig. 7, outside air is taken into the airconditioning clothes 1 from each of the air blowing means 11. Then, the taken-in outside air flows upward in the air flow path in parallel to the human body and is discharged from an air discharge portion. Here, as the air discharge portion, an opening portion between a front collar portion of the air-conditioning clothes 1 and a front neck portion of a human body, an opening portion between a rear collar portion 12 of the air-conditioning clothes 1 and a rear neck portion of the human body, and an opening portion between a sleeve portion of the air-conditioning clothes 1 and an arm portion of the human body are provided. Of these opening portions, the opening portion between the rear collar portion 12 and the rear neck portion is formed clearly, unlike the other opening portions, and moreover, is more important than the other opening portions in a point that an air discharge amount is the largest. In the following, in order to discriminate the opening portion formed between the rear collar portion 12 and the rear neck portion from the other air discharge portions, it will be called "air discharge port".

[0004]

While the outside air taken into the air-conditioning clothes 1 flows through the air flow path, the sweat from the human body can be evaporated, and a temperature on

the body surface can be lowered by an evaporation heat upon the evaporation. Therefore, in order for the air-conditioning clothes 1 to have the cooling function to act efficiently, it is necessary that resistance received by the air flowing through the air flow path from the air discharge portion is made smaller, and a large amount of air flows in parallel to the human body. Moreover, a wearer of the air-conditioning clothes 1 may want to adjust a cooling effect of the air-conditioning clothes 1 depending Thus, the conventional air-conditioning clothes 1 includes a on a use purpose. mechanism for adjusting an opening degree of each of the air discharge portions. Here, due to the nature of the air discharge portion, although the opening degree of each of the air discharge portions cannot be expressed clearly in numerical values, the larger the opening degree is, the smaller the resistance received by the air from the air discharge portion becomes, and the amount of air discharged from the air discharge portion becomes larger. ... In the conventional air-conditioning clothes 1, as shown in Fig. 8, a pair of adjusting strings 21 for widening or narrowing an interval between the rear collar portion 12 and the rear neck portion is provided. An end part of each of the adjusting strings 21 is mounted on an inner surface of the rear collar portion 12. By tying the pair of the adjusting strings 21 and adjusting the length thereof, an air discharge port 13 is formed between the rear collar portion 12 and the rear neck portion, and the opening degree of the air discharge port 13 can be adjusted.

[Summary of Invention] [Technical Problem] [0006]

As described above, in the conventional air-conditioning clothes 1, as the mechanism for adjusting the opening degree of the air discharge port 13 between the rear collar portion 12 and the rear neck portion, as shown in Fig. 8, the one which provides loosening in the vicinity of the rear collar portion 12 by tying the pair of adjusting strings 21 so as to be a desired length is used. However, actually, it is extremely difficult to achieve the desired length by tying the pair of adjusting strings 21, and most of the wearers cannot properly adjust the opening degree of the air discharge port 13 between the rear collar portion 12 and the rear neck portion and thus, it has been difficult to exert the performance of the air-conditioning clothes 1 sufficiently.

[0009]

Therefore, realization of a new air-discharge port adjusting mechanism which can easily adjust the opening degree of the air discharge port 13 between the rear collar portion 12 and the rear neck portion has been in demand. Such new air-discharge port

adjusting mechanism needs to satisfy the following requirements: (1) it does not hinder washing; (2) the air discharge port 13 can be reliably formed; (3) it can be fabricated inexpensively; and (4) when the air discharge port 13 does not have to be formed, it does not hinder a user. Here, even without forming the air discharge port 13 between the rear collar portion 12 and the rear neck portion by the new air-discharge port adjusting mechanism, when the air blowing means 11 is operated, some degree of the opening portion is automatically ensured by a pressure of the air between the rear collar portion 12 and the rear neck portion and thus, there is a case in which it is better not to form the air discharge port 13, depending on the use purpose.

The present invention was made in view of the aforementioned circumstances and has an object to provide an air-discharge port adjusting mechanism which can easily adjust an opening degree of an air discharge port formed between a rear collar portion of air-conditioning clothes and a rear neck portion of a human body.

[Solution to Problem]

[0013]

Moreover, a second invention for achieving the aforementioned object is, regarding an air discharge port that discharges air flowing through an air flow path to the outside, formed between a rear collar portion of air-conditioning clothes which causes air to flow in the air flow path formed between it and a human body by using air blowing means and a rear neck portion of the human body, an air-discharge port adjusting mechanism for adjusting the opening degree, including a first adjusting belt that has a first mounting portion and is mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in a periphery thereof and a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion accordingly to a shape of the first mounting portion and is mounted at a second position different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in a periphery thereof, characterized in that the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions.

[0014]

In the air-discharge port adjusting mechanism according to the second invention, by means of the aforementioned configuration, only by mounting the first mounting portion on the second mounting portion, loosening is ensured in the vicinity of the rear collar portion of the air-conditioning clothes, and the air discharge port can be formed easily. Moreover, the opening degree of the air discharge port can be easily adjusted in plural stages depending on which of the second mounting portions the first mounting portion is mounted. Furthermore, since the second adjusting belt having the second mounting portion is provided, when the first mounting portion is mounted on the second mounting portion, the first mounting portion stays inside the air-conditioning clothes and is not seen from the outside and thus, its appearance is not damaged.

[Advantageous Effects of Invention] [0015]

According to the air-discharge port adjusting mechanism according to the present invention, the air discharge port can be easily formed in the vicinity of the rear collar portion of the air-conditioning clothes, and the opening degree of the air discharge port can be simply adjusted in plural stages.

[Description of Embodiments] [0035]

[Second Embodiment]

Subsequently, the air-discharge port adjusting mechanism, which is a second embodiment of the present invention, will be explained. Fig. 4 is a schematic plan view of air-conditioning clothes including the air-discharge port adjusting mechanism of the second embodiment being expanded and seen from the inside, Fig. 5 is a schematic plan view of a first adjusting belt and a second adjusting belt in the air-discharge port adjusting mechanism of the second embodiment, and Fig. 6 is a schematic diagram illustrating a collar portion of the air-conditioning clothes in which the air discharge port is formed by the air-discharge port adjusting mechanism of the second embodiment, when seen from above. ...

[0036]

The air-discharge port adjusting mechanism 50a of the second embodiment is, as shown in Fig. 4, provided in the air-conditioning clothes 1 having an ordinary collar portion 2a in which the collar can be folded back. Here, in Fig. 4, regarding the collar portion 2a, a state in which a folding-back part P is not folded back but is spread is shown. Moreover, in Fig. 6, the folding-back part P is not shown for the collar portion 2a. In the second embodiment, the air-discharge port adjusting mechanism 50a is provided not at a center part (rear collar portion 12) of the collar portion 2a but at a predetermined spot in the periphery of the rear collar portion 12, or more specifically at a spot slightly below the rear collar portion 12. This is because, although depending

on the shape of the air-conditioning clothes, in the ordinary air-conditioning clothes, in order to smoothly discharge the air flowing in the air flow path from the air discharge port to the outside, it is rational to provide the air discharge port slightly below the rear collar portion 12 rather than on the rear collar portion.

[0037]

This air-discharge port adjusting mechanism 50a of the second embodiment includes, as shown in Figs. 4, 5, and 6, a first adjusting belt 51a and a second adjusting belt 53. The first adjusting belt 51a has, as shown in Fig. 5A, a first band-shaped member 511a and a retainer 512 provided on one of end parts of the first band-shaped member 511a. In the second embodiment, too, a button is used as the retainer 512. The other end part of the first band-shaped member 511a is a mounting portion 513 for mounting at a predetermined first position on an inner surface of a cloth of the air-conditioning clothes 1 and the periphery of the rear collar portion 12. Here, the first adjusting belt 51a is disposed so that the retainer 512 is opposed to the inner surface of the cloth of the air-conditioning clothes 1 and a longitudinal direction of the first band-shaped member 511a is substantially in parallel to the longitudinal direction of the collar portion 2a, and the mounting portion 513 of the first band-shaped member 511a is sewn at the first position.

[0038]

The second adjusting belt 53 has, as shown in Fig. 5B, a second band-shaped member 351 and one through hole 532 for mounting the retainer 512 by being engaged with the retainer 512, formed on one of end parts of the second band-shaped member 531. As the second band-shaped member 531, a cloth with strength is preferably used. Moreover, the through hole 532 corresponds to an engaging portion of the present This through hole 532 is a buttonhole fabricated with a cut line. A cut-in direction of this buttonhole is a direction substantially in parallel with the longitudinal direction of the second band-shaped member 531. The other end part of the second band-shaped member 531 is a mounting portion 533 to be mounted at a predetermined second position on the inner surface of the cloth of the air-conditioning clothes 1 and in the periphery of the rear collar portion 12, which is different from the first position at which the first adjusting belt 51a is mounted. Here, the second adjusting belt 53 is disposed so that the longitudinal direction of the second band-shaped member 531 is substantially in parallel with the longitudinal direction of the collar portion 2a and the through hole 532 is located on the side of the first adjusting belt 51a, and the mounting portion 533 of the second band-shaped member 531 is sewn at the second position. Therefore, when the second adjusting belt 53 is mounted on the inner surface of the

cloth of the air-conditioning clothes 1, the cut-in direction of the buttonhole becomes substantially in parallel with the longitudinal direction of the rear collar portion 12. [0039]

As described above, in the second embodiment, the through hole 532 is not directly formed in the cloth of the air-conditioning clothes 1, but the second adjusting belt 53 is mounted on the inner surface of the cloth of the air-conditioning clothes 1, and the through hole 532 is provided in this second adjusting belt 53. This is because of the following reason. That is, the part slightly below the rear collar portion 12 where the air-discharge port mechanism 50a is provided is, unlike the collar portion 2a, normally constituted by a sheet of cloth and thus, if a through hole is directly provided at this part, sufficient strength cannot be obtained at the part and moreover, when the retainer is mounted in the through hole, the retainer is exposed to the outside of the air-conditioning clothes, which damages the appearance.

It is assumed that a length of the first adjusting belt 51a from the mounting portion 513 of the first band-shaped member 511a to the retainer 512 is L3, a length of the second adjusting belt 53 from the mounting portion 533 of the second band-shaped member 531 to the through hole 532 is L4, and a distance along the cloth of the airconditioning clothes 1 from the first position where the first adjusting belt 51a is mounted (the mounting portion 513 of the first band-shaped member 511a) to the second position where the second adjusting belt 53 is mounted (the mounting portion 533 of the second band-shaped member 531) is L5. The lengths of the first adjusting belt 51a and the second adjusting belt 53, and the first position as well as the second position are designed to be L3 + L4 < L5. That is, the total length of the length L3 of the first adjusting belt 51a from the mounting portion 513 of the first band-shaped member 511a to the retainer 512 and the length L4 of the second adjusting belt 53 from the mounting portion 533 of the second band-shaped member 531 to the through hole 532 is shorter than the distance L5 along the cloth of the air-conditioning clothes 1 from the first position where the first adjusting belt 51a is mounted to the second position where the second adjusting belt 53 is mounted. [0041]

By passing the retainer 512 through the through hole 532 and by hooking it, as shown in Fig. 6, an inner surface of the retainer 512 is brought into contact with an outer surface of the second adjusting belt 53 in the part where the through hole 532 is formed, and the retainer 512 is firmly fixed to the second adjusting belt 53. At this time, the vicinity of the rear collar portion 12 of the air-conditioning clothes 1 is

loosened, and the air discharge port 13 is formed between the rear collar portion 12 and the rear neck portion of the wearer. Moreover, when a small amount of air is to be discharged from the air discharge port 13, the retainer 512 is not mounted in the through hole 532. In this case, since some degree of the opening portion is automatically ensured by the pressure of the air flowing through the air flow path between the rear collar portion 12 and the rear neck portion, this opening portion becomes the air discharge port 13, and the small amount of air can be discharged to the outside from here. Therefore, by using the air-discharge port adjusting mechanism 50a in the second embodiment, the wearer can select the opening degree of the air discharge port 13 in accordance with the use purpose of the air-conditioning clothes 1 from the opening degrees in two stages and obtain a desired cooling effect.

The air-discharge port adjusting mechanism in the second embodiment includes the first adjusting belt that has the retainer provided on one of the end parts of the first band-shaped member and the other end part of the first band-shaped member mounted at the predetermined first position on the inner surface of the cloth of the airconditioning clothes and in the periphery of the rear collar portion and the second adjusting belt that has the through hole formed in one of end parts of the second bandshaped member, which is engaged with the retainer and in which the retainer is mounted, and the other end part of the second band-shaped member mounted at the predetermined second position on the inner surface of the cloth of the air-conditioning clothes and in the periphery of the rear collar portion, which is different from the first position at which the first adjusting belt is mounted, and the total length of the length of the first adjusting belt from the other end part of the first band-shaped member to the retainer and the length of the second adjusting belt from the other end part of the second bandshaped member to the through hole is shorter than the distance along the cloth of the air-conditioning clothes from the first position where the first adjusting belt is mounted to the second position where the second adjusting belt is mounted. As a result, only by mounting the retainer in the through hole, loosening is ensured in the vicinity of the rear collar portion of the air-conditioning clothes, whereby the air discharge port can be formed easily and reliably. Moreover, the opening degree of the air discharge port can be easily adjusted in two stages in accordance with whether the retainer is mounted in the through hole or is not mounted in the through hole. Furthermore, by providing the second adjusting belt having the through hole, the retainer remains inside the airconditioning clothes when the retainer is mounted in the through hole and is not seen from the outside and thus, the appearance is not damaged.

[0046]

[Other Embodiments]

Note that the present invention is not limited to each of the aforementioned embodiments but is capable of various variations within a range of the gist.

[0048]

... In the aforementioned second embodiment, the case in which the one through hole is provided in the second adjusting belt was explained, but two or more through holes may be provided in the second adjusting belt. The greater the number of through holes that are provided, the finer the opening degree of the air discharge port can be adjusted.

[0049]

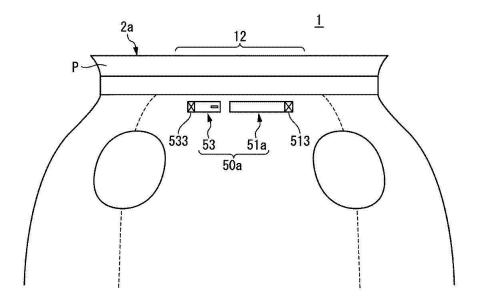
... In the aforementioned second embodiment, the case in which the first adjusting belt and the second adjusting belt are constituted by the band-shaped members, respectively, was explained, but it may be so configured that the first adjusting belt is constituted by a string-shaped member or the second adjusting belt is constituted by a string-shaped member. Moreover, in the aforementioned second embodiment, due to the structure of the air-conditioning clothes, there may be a cloth around a collar portion, and in this case, this cloth can be used as the second adjusting belt.

Moreover, in each of the aforementioned embodiments, the case in which a button is used as the retainer, and a buttonhole is used as the through hole (engaging portion) was explained, but the present invention is not limited to those, and a dedicated retainer may be used. In this case, by using the one corresponding to the dedicated retainer as the engaging portion, convenience when the retainer is mounted on the engaging portion is further improved. For example, a planar fastener may be used as the retainer and the engaging portion, or various snaps and hooks made of metal or a resin may be used.

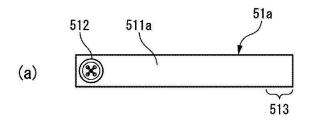
[Industrial Applicability] [0052]

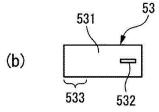
As described above, in the air-discharge port adjusting mechanism of the present invention, the air discharge port can be easily formed in the vicinity of the rear collar portion of the air-conditioning clothes, and the opening degree of the air discharge port can be simply adjusted in plural stages. Therefore, the present invention is suitable for use as a mechanism for adjusting the opening degree of the air discharge port formed in the vicinity of the rear collar portion of the air-conditioning clothes.

[Fig. 4]

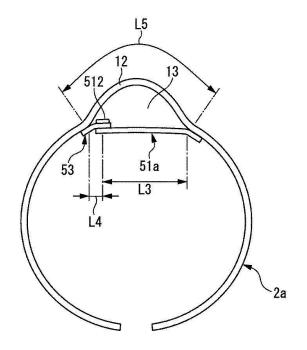


[Fig. 5]

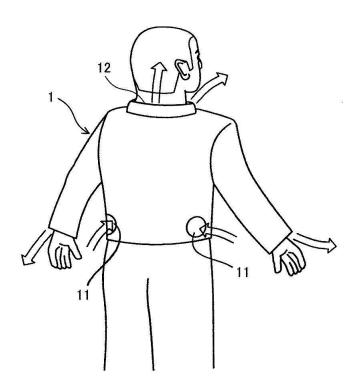




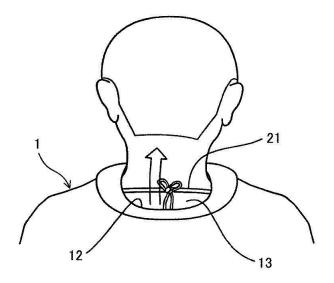
[Fig. 6]



[Fig. 7]



[Fig. 8]



(2) Outline of Each of the Inventions

According to the description in the aforementioned (1), the outline of each of the Inventions is recognized to be as follows. That is, each of the Inventions relates to, in the air discharge port (an outlet to discharge the air flowing in the air-conditioning clothes to the outside) formed between the rear collar portion and the rear neck portion of a human body of the air-conditioning clothes (clothes which can cool the body by causing sweat from the human body to evaporate by causing the air to flow in the air flow path formed between it and the human body by using the air blowing means), an air-discharge port adjusting mechanism for adjusting the opening degree thereof. the conventional air-conditioning clothes, the opening degree of the air discharge port is adjusted by tying a pair of adjusting strings mounted on the inner surface of the rear collar portion and by adjusting the lengths thereof, but actually, it is extremely difficult to have the desired length by tying the pair of adjusting strings, and most of the wearers cannot properly adjust the opening degree of the air discharge port and thus, there was a problem in that the performance of the air-conditioning clothes cannot be exerted With a purpose of solving such problem and of providing an airsufficiently. discharge port adjusting mechanism which can simply adjust the opening degree of the air discharge port, each of the Inventions employs such a configuration that, in the airdischarge port adjusting mechanism for adjusting the opening degree of the air discharge port of the air-conditioning clothes, there are provided the first adjusting belt that has the first mounting portion and is mounted at the first position on the inner surface of the cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof and the second adjusting belt that has a plurality of the second mounting portions which can be mounted with the first mounting portion

correspondingly to a shape of the first mounting portion and is mounted at the second position different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in the periphery thereof, and by using a pressure of the air flowing in the air flow path by mounting the first mounting portion on at least any one of the plurality of second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body. As a result, each of the Inventions exerts such effects that the air discharge port can be easily formed in the vicinity of the rear collar portion of the air-conditioning clothes, and that the opening degree of the air discharge port can be simply adjusted in plural stages.

2. Grounds for Rescission 3 (related to erroneous determination on lack of inventive step by Publicly Worked Invention / Invalidation Reason 3)

In view of the case, determination shall be made from the Grounds for Rescission 3.

- (1) Publicly Worked Invention
- A. Description of Exhibit Ko 2

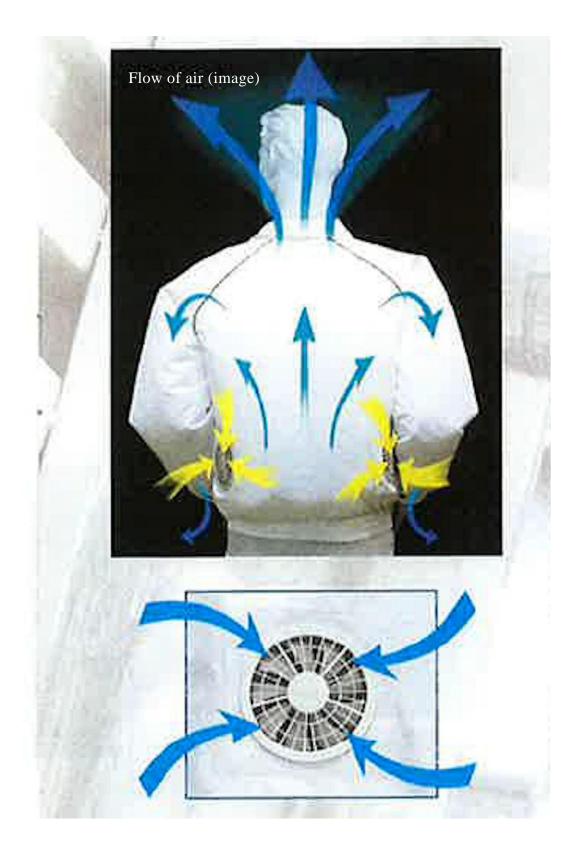
Exhibit Ko 2 has the following description.

(A) Air-conditioning clothes

The principle of "physiological cooler" is used, and refreshing feeling spreads over the whole body

A human being sweats when the body temperature rises, and an evaporation heat generated at evaporation lowers the body temperature. This mechanism called "physiological cooler" is used in the air-conditioning clothes. Air is caused to flow between the body and the uniform so as to promote evaporation of sweat. The body temperature and humidity are adjusted to a comfortable level for each individual. Even in summer, since there is no need to drastically lower the room temperature by a cooler, not only an energy-saving effect but even prevention of a cooling sickness can be expected (page 136).

(B) Diagram titled "flow of air (image)" (page 136)



(C) Introduction of products of product number "KU90550" and the like (page 139)



B. Description in Exhibit Ko 41 ("Handling Manual for Air-Conditioning Clothes" related to the product with the stock number "KU90550" and the like made by SUN-S Co., Ltd. and another company (printed on April 19, 2005))

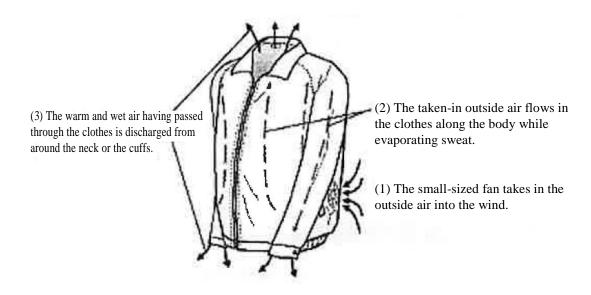
Exhibit Ko 41 has the following description.

(A) Handling Manual for Air-Conditioning Clothes KU90520, KU 90530, KU90540, KU90550, KU90560 in common

Features of this product

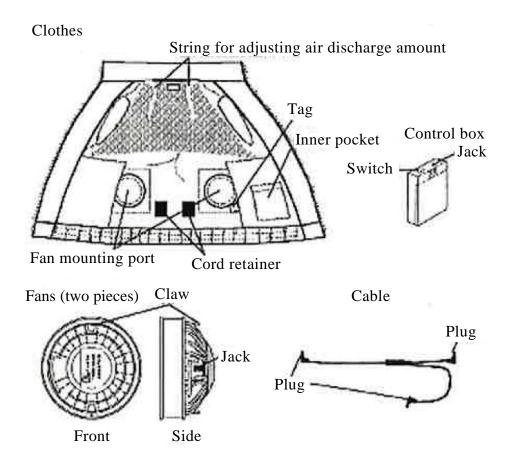
[Mechanism of this product]

The air-conditioning clothes is a goods for cool and comfortable life by taking the outside air into the clothes by two small-sized fans mounted around the left and right waists and by cooling the body by an evaporation heat caused by evaporation of sweat.



Package contents and name of each part

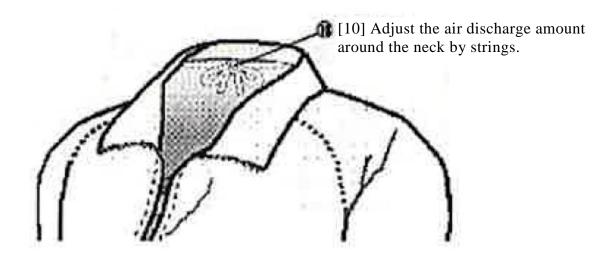
Please check the contents of the box and make sure that the following items are all packaged. ...



(1 page so far)

(B) e. Adjust air discharge amount around the neck

[10] The two strings mounted on the collar are for adjusting the air discharge space around the neck. By tying the strings, the interval between the neck and the nape can be widened, and the air discharge amount from the nape can be increased. Please make adjustment as you like.



C. Finding of Publicly Worked Invention

According to the descriptions in the aforementioned A and B, the Publicly Worked Invention is found to be as found in the JPO decision (No. 2, 3(3)A described above)

(2) Comparison between Invention 3 and the Publicly Worked Invention

A. When Invention 3 and the Publicly Worked Invention are compared, as the finding by the JPO decision (No. 2, 3(3)B described above), regarding the means for adjusting the opening degree of the air discharge port (air-discharge port adjusting mechanism), the two inventions are found to include the following configurations, respectively.

(A) Invention 3

"An air-discharge port adjusting mechanism for adjusting an opening degree" "including a first adjusting belt that has a first mounting portion and is mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof and a second adjusting belt that has a plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion and is mounted at a second position different from the first position at which the first adjusting belt is mounted, on the rear collar portion or in the periphery thereof, in which by using a pressure of the air flowing in the air flow path by mounting the first adjusting portion on at least any one of the plurality of second mounting portions, the air discharge port is formed with the predetermined opening degree in plural stages between the rear collar portion and the rear neck portion of the human body"

(B) Publicly Worked Invention

"Means for adjusting an air discharge space around the neck, including a string 1 mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the rear collar portion or in a periphery thereof, and a string 2 mounted at a second position on the rear collar portion or in the periphery thereof, which is different from the first position at which the string 1 is mounted, and capable of adjusting an air discharge amount by tying the two strings (1, 2)"

B. The configurations of both inventions pertaining to the means for adjusting the opening degree of the air discharge port as described in the aforementioned A (air-discharge port adjusting mechanism) will be further examined.

- (A) It is found that the "first adjusting belt" and the "second adjusting belt" of Invention 3 are fastened so as to adjust the opening degree of the air discharge port, while according to the description in Exhibit Ko 41 (aforementioned (1)B(B)), the "string 1" and the "string 2" of the Publicly Worked Invention are also fastened so as to adjust the air discharge space and to adjust the air discharge amount and thus, the "string 1" and the "string 2" of the Publicly Worked Invention correspond to the "first adjusting belt" and the "second adjusting belt" of Invention 3.
- (B) The "first adjusting belt" in Invention 3 is "mounted at the first position on the inner surface of the cloth of the air-conditioning clothes and on the rear collar portion or in the periphery thereof", while the "string 1" of the Publicly Worked Invention is also "mounted at the first position on the inner surface of the cloth of the air-conditioning clothes and on the rear collar portion or the periphery thereof" and thus, the two inventions are in common in this point.
- (C) The "second adjusting belt" of Invention 3 is "mounted at a second position on the rear collar portion or the periphery thereof which is different from the first position at which the first adjusting belt is mounted", while the "string 2" of the Publicly Worked Invention is also "mounted at a second position on the rear collar portion or in the periphery thereof, which is different from the first position at which the string 1 is mounted" and thus, the two inventions are in common in this point.
- (D) As described in Exhibit Ko 41 (aforementioned (1)B(B)), the "air discharge space around the neck" of the Publicly Worked Invention can widen the interval between the neck and the nape so as to increase the air discharge amount from the nape, and it is obvious that this corresponds to the "air discharge port" of Invention 3 and moreover, according to the description in Exhibit Ko 41 (same as above), the "adjustment" of the "air discharge amount" and the "adjustment" of the "air-discharge space" in the Publicly Worked Invention are found to be done by the adjustment of the opening degree of the "air discharge space around the neck" and thus, the "means for adjusting the air discharge space around the neck, capable of adjusting the air discharge amount" of the Publicly Worked Invention corresponds to the "air-discharge port adjusting mechanism for adjusting the opening degree", in which "the air discharge port is formed" "between the rear collar portion and the rear neck portion of the human body" of the Invention.
- (E) According to the description in Exhibit Ko 2 (aforementioned (1)A(B)) and the description in Exhibit Ko 41 (aforementioned (1)B(A)), the "air discharge space around the neck" of the Publicly Worked Invention is found to be formed by using a pressure of the air flowing through the inside of the air-conditioning clothes and thus,

the Publicly Worked Invention is considered to include such configuration that "the air-discharge port is formed" "by using the pressure of the air flowing in the air flow path" in Invention 3.

- (F) According to the above, in determination on how easily the configuration of Invention 3 pertaining to Difference 1 could have been conceived of, it is considered to be only necessary to examine each of the following points related to the means for adjusting the opening degree of the air discharge port (air-discharge port adjusting mechanism) (hereinafter, each of these points shall be collectively referred to as the "Difference").
- a. Point that the "first adjusting belt" of Invention 3 "has the first mounting portion", whereas the "string 1" of the Publicly Worked Invention does not include such configuration
- b. Point that the "second adjusting belt" of Invention 3 "has a plurality of the second mounting portions which can be mounted with the first mounting portion correspondingly to a shape of the first mounting portion" but the "string 2" of the Publicly Worked Invention does not include such configuration
- c. Point that, regarding the formation of the air discharge port, in Invention 3, it is formed "by mounting the first mounting portion on at least any one of the plurality of second mounting portions", while the Publicly Worked Invention does not have such configuration
- d. Point that, regarding the opening degree of the air discharge port, Invention 3 has the one "predetermined in plural stages", while the Publicly Worked Invention does not have such configuration
- (G) Regarding the points, the Defendant asserts that, in finding of the differences between Invention 3 and the Publicly Worked Invention, "adjustment of the opening degree of the air discharge port formed between the rear collar portion of the air-conditioning clothes and the rear neck portion of the human body in plural stages" and the "mechanism for adjusting the length (configuration related to the first mounting portion, the second mounting portion, the first adjusting belt, and the second adjusting belt)" should be integrally considered to be the difference.

However, there is no reason to prohibit analytical finding of the difference related to each of the members themselves of the Patent Invention and the major cited invention (the difference related to the "mechanism for adjusting the length" asserted by the Defendant) and the difference related to the method of the member and the result when it is used (the difference related to "adjustment of the opening degree of the air discharge port in plural stages") asserted by the Defendant) for the invention with each

of the members constituting the air-discharge port adjusting mechanism of the air-conditioning clothes as in Invention 3, the use method thereof, and the result when it is used as the invention specifying matters, and besides that point, regarding the formation of the air discharge port, the Difference in the aforementioned (F) does not eliminate that Invention 3 has the configuration "by mounting the first mounting portion on at least any one of the plurality of second mounting portions", unlike the Publicly Worked Invention, and regarding the opening degree of the air discharge port, Invention 3 has the one "predetermined plural stages" (aforementioned (F)c and d), unlike the Publicly Worked Invention.

As described above, the aforementioned assertion by the Defendant cannot be accepted.

(3) Invention described in Exhibit Ko 30

A. Description in Exhibit Ko 30

Exhibit Ko 30 has the following description.

[Claim 1]

Caring pants formed using a flat fabric, characterized in that a pants main-body having an inseam portion and a front cover portion as well as a rear cover portion and having a spreading fan shape from front and rear of the inseam portion is formed in an expanded shape, a band strap having a length surrounding the waist of a user, with an excess length, is connected to both end parts of the spreading fan shape of the rear cover portion, a fastening member for detachable fixation in a state the length is adjusted in accordance with the waist circumference of the user is provided at each end part of the band strap, and a fixing member which detachably connects the two end parts to each other is provided on the both end parts of the front cover portion and the two end parts of the rear cover portion.

[Claim 3]

The caring pants according to Claim 1 or 2, wherein the fastening member provided on the two end parts of the band strap or the fixing member provided on the two end parts of the front cover portion and the two end parts of the rear cover portion detachably connect both of the fastening member such as a planar fastener, a snap button, a button, or the like, or the fixing member.

[Technical Field] [0001]

The present device relates to caring pants which is made of a flat-shaped fabric and can be replaced easily by a person in need of nursing care or a person with a tendency of incontinence himself / herself.

[Summary of Device] [Technical Problem] [0008]

As described above, even those in need of nursing care are required to wear the pants by themselves in some cases. At that time, in order to wear the flat-shaped diapers as in Patent Document 1 in the standing attitude, in a state where either one of the right-front body part and the left-front body part is caused to follow the body and be retained, it is necessary to pull the other of the right-front body part and the left-front body part and to overlap them, and then to connect them.

[0009]

Moreover, in a state where a covering part, which is a front end part of the pants, hangs down to the rear of the body, it is necessary to hold the covering part with the other hand, to pull it out of the inseam, and to place it on the lower part of the abdomen part. Therefore, the work for the user in the standing attitude to wear the pants by himself / herself is difficult, and the work requires unexpected labor. [0010]

Moreover, the caring pants in Patent Document 1 can be worn in a state not different from ordinary pants, but the right-front body part, the left-front body part, and the covering part of the pants overlap one another in front of the abdomen part, and the swollen caring pants can be seen conspicuously from above trousers or a skirt worn over the pants or worn clothes, which is inconvenient.

[0011]

This device was made in view of the aforementioned circumstances and has an object to provide caring pants which can be easily worn by a user even when the user is in a standing attitude and moreover, whose appearance is not conspicuous when worn and furthermore, which can be easily manufactured by simplifying manufacturing processes.

[Solution to Problem] [0012]

In order to achieve the aforementioned objects, the caring pants in Claim 1 of the present device is characterized in that a pants main-body having an inseam portion and a front cover portion as well as a rear cover portion formed having a spreading fan shape from front and rear of the inseam portion is formed in an expanded shape, a band strap having a length surrounding the waist of the user, with an excess length, is connected to both end parts of the spreading fan shape of the rear cover portion, a fastening member for detachable fixation in a state where the length is adjusted in

accordance with the waist circumference of the user is provided at each end part of the band strap, and a fixing member which detachably connects the two end parts to each other is provided on the two end parts of the front cover portion and the two end parts of the rear cover portion.

[0014]

Moreover, the caring pants in Claim 3 of the present device is characterized in that the fastening member provided on the both end parts of the band strap or the fixing member provided on both end parts of the front cover portion and both end parts of the rear cover portion detachably connects both of the fastening member such as a planar fastener, a snap button, a button, or the like, or the fixing member in Claim 1 or 2.

[Advantageous Effects of the Device] [0025]

Moreover, in the caring pants of the present device, by detachably fixing in a state where the wearing length of the band strap is adjusted by using the fastening member such as a planar fastener, a snap button, a button, or the like as the fixing member provided on both end parts of the band strap or both end parts of the front cover portion and both end parts of the rear cover portion, the caring pants can be worn in accordance with the size around the waist with individual differences.

[Description of Embodiments] [Embodiment 1]

[0031]

Regarding the caring pants 1 in this embodiment, as shown in Fig. 1 or Fig. 2, a pants main-body 5 can be manufactured by forming the expanded shape having an inseam portion 2 and a front cover portion 3 as well as a rear cover portion 4 formed having a spreading fan shape from front and rear of the inseam portion 2 by using a flat cloth material.

[0033]

Moreover, in the caring pants 1 of the present device, lengthy band straps 6a, 6b formed having a length surrounding the waist of the user, with an excess length, are fixed to both end parts of the spreading fan shape of the rear cover portion 4 by sewing and the like. These lengthy band straps 6a, 6b are constituted by a plain-woven fabric or may be constituted by flat-shaped rubber string having rubber elasticity. [0034]

In the configuration as above, when the band straps 6a, 6b are fixed along the end parts of the rear cover portion 4 by sewing and the like, it may be so configured that the entire band straps 6a, 6b are constituted by elastic flat-shaped rubber strings,

and using both ends thereof, lengths required as the band straps 6a, 6b are taken from both ends of the rear cover portion 4.

[0035]

Moreover, it may be so configured that an elastic or non-elastic flat-shaped waist string 10 is fixed only to a peripheral edge of the rear cover portion 4, whereas the non-elastic band straps 6a, 6b are fixed only by the required lengths from the two ends of the rear cover portion 4.

[0036]

Moreover, at each of the end parts of the band straps 6a, 6b on both sides, fastening members 7a, 7b for detachable fixation are provided in a state where the length is adjusted in accordance with the waist circumference of the user. As the fastening members 7a, 7b, a planar fastener, a snap button, a button, or the like is fixed, and at a position where it is fixed with respect to the lengthy planar fastener or a plurality of snap buttons or buttons, the wearing lengths of the band straps 6a, 6b are adjusted so as to deal with the size around the waist with individual differences.

Note that the drawing shown in Fig. 1 is a drawing in which the short planar fastener 7a is used on the end part of the one band strap 6a, and the lengthy planar fastener 7b is used on the end part of the other band strap 6b as the fastening members 7a, 7b and the fixing members 8a, 8b, 9a, 9b.

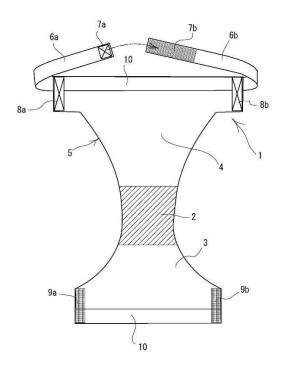
[0039]

Moreover, the drawing shown in Fig. 2 is a drawing in which the one button 7a is used on the end part of the one band strap 6a, and a plurality of buttons 7b are used on the end part of the other band strap 6b as the fastening members 7a, 7b and the fixing members 8a, 8b, 9a, 9b.

[0048]

Furthermore, in the caring pants 1 of the present device, since the lengthy planar fastener, the plurality of snap buttons, the plurality of buttons, or the like are used as both end parts of the band straps 6a, 6b or the fastening members 7a, 7b provided on both end parts of the front cover portion 3 and both end parts of the rear cover portion 4, by detachably fixation in the state where the wearing lengths of the band straps 6a, 6b are adjusted, wearing in accordance with the size around the waist with individual differences is made possible.

[Fig. 1]



[Fig. 2]

7a
7b
7b
7b
7b
7b
8a

8a

9a

9a

9a

9a

9b

B. Invention Described in Exhibit Ko 30

(A) As described in the aforementioned A, in the caring pants 1 described in Exhibit Ko 30, the lengthy "band strap 6a" and "band strap 6b" are provided on both end parts of the rear cover portion 4, and since these "band strap 6a" and "band strap 6b" are provided so as to adjust their wearing lengths for the purpose of obtaining such effect that the caring pants 1 can be worn in accordance with the size around the waist

with individual differences, it can be considered that they correspond to the "first adjusting belt" and the "second adjusting belt" of Invention 3, respectively.

- (B) As described in the aforementioned A, the "band strap 6a" described in Fig. 2 in Exhibit Ko 30 has the "button 7a" provided as the fastening member, and it is obvious that this corresponds to the "first mounting portion" provided in the "first adjusting belt" in Invention 3.
- (C) As described in the aforementioned A, the "band strap 6b" described in Fig. 2 in Exhibit Ko 30 has a plurality of the "buttons 7b" provided as the fastening members, and since the "button 7a" and the "button 7b" are detachably attached to each other, it can be considered that the "buttons 7b" are a plurality of members which can be mounted with the "button 7a" correspondingly to a shape of the "button 7a". Moreover, it is obvious that the "button 7b", which is the fastening member provided on the "band strap 6b" corresponds to the "second mounting portion" provided on the "second adjusting belt" in Invention 3. As described above, the "button 7b" described in Fig. 2 in Exhibit Ko 30 can be considered to correspond to the "plurality of second mounting portions which can be mounted with the first mounting portion correspondingly to the shape of the first mounting portion" in Invention 3.
- (D) As described in the aforementioned A, the "button 7a" described in Fig. 2 in Exhibit Ko 30 is fitted in any one of the plurality of "buttons 7b" and thus, it can be considered that Exhibit Ko 30 discloses the configuration corresponding to the configuration that "the first mounting portion is mounted on at least any one of the plurality of second mounting portions" in Invention 3.
- (E) According to the description in the aforementioned A, the wearing lengths of the "band strap 6a" and the "band strap 6b" can be considered to become predetermined in plural stages depending on which of the "button 7b" the "button 7a" described in Fig. 2 in Exhibit Ko 30 is fitted. Therefore, it can be considered that Exhibit Ko 30 discloses the configuration corresponding to the configuration "predetermined in plural stages" in Invention 3.
- (F) As described above, it is reasonable to find that Exhibit Ko 30 describes the invention of the caring pants (hereinafter, referred to as the "Exhibit Ko 30 Invention") including all the configurations corresponding to the configuration of Invention 3 pertaining to the Difference
 - (4) Application of Exhibit Ko 30 Invention' to Publicly Worked Invention
 - A. Relevance of Technical Field
- (A) According to each of the descriptions in the aforementioned (1)A and B and the aforementioned 1(1), it is found that the Publicly Worked Invention belongs to the

technical field of the air-conditioning clothes (clothes which can cool a human body by evaporating sweat from the human body by causing air to flow through an air flow path formed between it and the human body by using air blowing means), while, according to the description in the aforementioned (3)A, the Exhibit Ko 30 invention' is found to be the invention belonging to the technical field of the caring pants. Although the air-conditioning clothes and the caring pants have different shapes and use purposes, they have relevance in a point that both are "clothes" worn on the body by wrapping a part of the body (note that the Defendant does not dispute this point, either).

(B) Regarding this point, the Defendant asserts that the technical matters described in Exhibit Ko 30 are not related to the air discharge port of the air-conditioning clothes and thus, the technical field to which the Publicly Worked Invention belongs does not completely match the technical field to which the technical matters described in Exhibit Ko 30 belongs, and the relevance between the two is small.

However, since the air-conditioning clothes are also clothes, a person ordinarily skilled in the art pertaining to the air-conditioning clothes usually takes consideration of various prior arts related to the clothes and thus, regarding the relevance in the technical fields to which both belong, which should be considered in examination on whether or not there is motivation to apply the Exhibit Ko 30 Invention' to the Publicly Worked Invention, it is too narrow-minded to construe that the relevance between the two is small if details such as the "air discharge port of the air-conditioning clothes" should match, and it is not reasonable.

Therefore, the Defendant's aforementioned assertion cannot be accepted.

- B. Commonality of Problems
- (A) Problem recognized from Publicly Worked Invention
- a. Description in Exhibit Ko 15

Exhibit Ko 15 has the following description.

[0001]

[Technical Field] The present invention relates to improvement of ski pants worn for snow skiing, or in more detail, to ski pants in which an upper edge of a connected cylindrical cloth on slightly upward inner surface of a hem portion is mounted, and a cylindrical tightening band is mounted on a lower edge of this connected cloth.

[0002]

[Background Art] Conventionally, means for preventing creeping-up of a hem portion of ski pants have been taken. That is, the hem portion of the ski pants can easily creep up with movement of a leg, and when it creeps up, snow or water droplets enter through a space between the hem portion of the ski pants and a ski boot and give an

uncomfortable feeling, and the creeped-up ski pants are extremely poor in appearance in the ski fashion with an emphasis on styles.

[0003] Specific prevention measures included the following. [i] configuration in which, after thin strings are mounted at two spots with an interval in a peripheral direction on an outer surface of a hem portion slightly upward of ski pants, the ski pants and ski boots are worn in a loosened state and then, the hem portions of the ski pants are bound above the ski boots with the two strings so as to bring the ski pants and the ski boots into close contact

[0004]

[Technical Problem] However, in the aforementioned configuration in [i], fastening of the strings is bothersome and binding of thin strings in a state with ski gloves worn on a ski slope at a low temperature is difficult, and depending on the length of the string or the fastening strength, the creeping-up prevention function of the hem portion is not sufficiently exerted, or, to the contrary, not only that ankles are unnecessarily restrained and free movement is hindered, but also there are untidiness of the hanging excess string and inexpediency that the strings are untied during use.

b. Description in Exhibit Ko 16

Exhibit Ko 16 has the following description.

[0001]

[Technical Field] This invention relates to a drawcord included in clothes or the like. [0002]

[Background Art] In clothes such as sweat pants, loose-fitting pants, and the like, for example, drawcords for adjusting a dimension of a waist portion are usually provided. The drawcord is formed by passing a string along an inside of the waist portion, and the end parts of the string are extended from two opening portions provided at spots corresponding to an abdomen portion in the waist portion, respectively. That is, it is configured such that, by drawing each of the end parts of the string from the opening portion together, the waist portion is narrowed, and the dimension around the waist portion is reduced, while the dimension of the waist portion is increased by sending the end part of the string into the inside of the opening portion.

[0003] Incidentally, in the aforementioned sweat pants and the like, when they are worn / taken off or washed in the aforementioned state, there is a large concern that the end part of the string gets into the opening portion and thus, in order to prevent that, each of the two end parts of the string is usually tied tightly in advance or the like so as to form a so-called ball with substantially the same size as the opening portion or the end parts of the string are tied into a bow after the adjustment of the waist portion.

[0004]

[Technical Problem] However, the means of forming a ball at each of the end parts, respectively, had inconvenience that handling thereof becomes cumbersome such that tip end parts become bulky and cannot be tied into a bow easily or the like. On the other hand, the means of tying the end parts into a bow had inconvenience in that the bow needs to be tied each time when the sweat pants or the like are worn / taken off or the dimension of the waist portion is adjusted, which requires cumbersome work.

c. Description in Exhibit Ko 17

Exhibit Ko 17 has the following description.

[0001]

[Technical Field] The present invention relates to a one-touch separate-type Obi which can be easily worn / taken off.

[0002]

[Background Art] A major type of conventional one-touch separate-type Obi was configured such that a body wrapping part is wrapped twice around the trunk and then fixed by being tied with strings, and a tied part was also fixed by tying with strings. [0003]

[Technical Problem] However, since the conventional one-touch separate-type Obi is attached by tying with strings after being wrapped around the trunk twice, knots of the Obi and strings can be loosened or become too tight, which makes it difficult to adjust wearing feeling, and since a material of the string is mainly cotton or muslin, it is awkward if it is seen. Thus, particularly the string supporting the knot part should be covered by the Obi sash, and in the current times when Kimonos are no longer often worn, development of simple one-touch separate-type Obi which can be easily worn / taken off is in demand.

d. Description in Exhibit Ko 18

Exhibit Ko 18 has the following description.

[0001]

[Technical Field] The present invention relates to ... a wearing band for "aprons such as an apron, a front cover, and the like " to be worn on a front surface of a body during cooking and the like.

[0002]

[Background Art] Regarding an apron worn on a body when cooking, cleaning, and the like, a form used by being worn and set on the body by a wearing string wound around the neck or wrapped around the waist of a wearer has been spread for a long time. ...
[0003]

[Technical Problem] The conventional aprons described above ... require a work of adjusting the length of the wearing strings, tying and setting them in accordance with the body shape and the body size specific to a wearer at each time of wearing, and the wearing and taking-off works are bothersome and inconvenient.

e. According to each of the descriptions in the aforementioned a to d, at the time of the Date of Application, in the technical field of the clothes, it is found that there was a well-known and self-evident problem that adjustment of the length by tying and connecting two string-shaped members or tying and connecting of the two string-shaped members itself is cumbersome and not easy (Note that as in the aforementioned 1(1), the Description also has a description as the problem which is present at the time of the Date of Application that the tying of a pair of adjusting strings to a desired length is extremely difficult, and most wearers cannot properly adjust the opening degree of the air discharge port).

Then, in view of the configuration itself of the Publicly Worked Invention belonging to the technical field of the clothes (the configuration that "the string 1 mounted at a first position on an inner surface of a cloth of the air-conditioning clothes and on the collar or in a periphery thereof and" "a string 2 mounted at a second position on the collar or in a periphery thereof, which is different from the first position at which the string 1 is mounted, are provided" and "an air discharge amount can be adjusted by tying the two strings (1, 2)"), and according to the description in Exhibit Ko 41 that "widens the interval between the neck and nape" (aforementioned (1)B(B)) and the illustration that the string is on the rear of the neck (same as above), it is reasonable to admit that a person ordinarily skilled in the art at the time of the Date of Application, who contacted the Publicly Worked Invention, would have recognized the aforementioned problem.

(B) Problems to be Solved by Exhibit Ko 30 Invention'

As described in the aforementioned (3)A, the Exhibit Ko 30 Invention' is the one in which, by employing the configuration that the "button 7a" is provided on the "band strap 6a" and the plurality of "buttons 7b" on the "band strap 6b", respectively, and the "button 7a" is fitted in any one of the plurality of "buttons 7b", and the wearing lengths of the "band strap 6a" and the "band strap 6b" are adjusted, whereby wearing of the caring pants 1 in accordance with the size around the waist with individual differences is made possible, and by also considering that Exhibit Ko 30 has the description on ease of wearing (paragraphs [0008], [0009], [0011]), and the well-known and self-evident problems as in the aforementioned (A)e were present in the technical field of the clothes at the time of the Date of Application, it is reasonable to find that a person ordinarily

skilled in the art at the time of the Date of Application could have recognized the Exhibit Ko 30 Invention' as means for solving the problem that the adjustment of the length by tying and connecting the two string-shaped members is bothersome and not easy.

(C) As described in the aforementioned (A) and (B), it is reasonable to find that the problem recognized from the Publicly Worked Invention and the problem solved by the Exhibit Ko 30 Invention' are in common.

(D)a. In this regard, the Defendant asserts that the problem of the Publicly Worked Invention is to form the opening portion of the air discharge port and is different in nature and is different from the technical matters described in Exhibit Ko 30.

However, as described in each description in the aforementioned (1)A and B, the Publicly Worked Invention is the one including the "string 1" mounted at a first position on the inner surface of the cloth of the air-conditioning clothes and on the collar or in a periphery thereof and the "string 2" mounted at a second position on the collar or a periphery thereof, which is different from the first position at which the "string 1" is mounted, in which the size of the air discharge space formed between the neck and the nape is adjusted by tying the "string 1" and the "string 2", and by also considering that the well-known and self-evident problems as described in the aforementioned (A)e were present in the technical field of the clothes at the time of the Date of Application, it is found that a person ordinarily skilled in the art at the time of the Date of Application, who contacted the Publicly Worked Invention, could have recognized that the problem of the Publicly Worked Invention is that the adjustment of the length by tying and connecting the "string 1" and the "string 2", which is means for adjusting the size of the air discharge space, is bothersome and not easy. On the other hand, as described in the aforementioned (B), regarding the Exhibit Ko 30 Invention', a person ordinarily skilled in the art at the time of the Date of Application is found to recognize this as the means for solving the problem that the adjustment of the length by tying and connecting the two string-shaped members is bothersome and not easy and thus, it is reasonable to find that the problem recognized from the Publicly Worked Invention and the problem solved by the Exhibit Ko 30 Invention' are in common. The fact that the Publicly Worked Invention is the one for adjusting the size of the air discharge space around the neck of the air-conditioning clothes, whereas the Exhibit Ko 30 Invention' is the one for adjusting the size around the waist of the caring pants; that is, the fact that the two are different in what to adjust, does not influence the aforementioned conclusion related to the commonality of the problem (the two are not different in the purpose or effect of adjusting the size of the space formed by the clothes by fastening the string-shaped members).

Therefore, the aforementioned assertion by the Defendant cannot be accepted.

b. The Defendant asserts that the problem of the Invention 3 is novel and this can be a circumstance that denies the commonality between the problem of the Publicly Worked Invention and the problem of the technical matter described in Exhibit Ko 30.

However, even if the problem of Invention 3 is novel, it does not influence the problem recognized from the Publicly Worked Invention or the problem to be solved by the Exhibit Ko 30 Invention' and thus, the aforementioned assertion by the Defendant cannot be accepted.

- C. Presence / absence of motivation to apply Exhibit Ko 30 Invention' to Publicly Worked Invention
- (A) As described in the aforementioned A and B, it is reasonable to find that a person ordinarily skilled in the art at the time of the Date of Application, who contacted the Publicly Worked Invention belonging to the technical field of the clothes, recognized the problem that the adjustment of the length by tying and connecting the "string 1" and the "string 2", which is means for adjusting the size of the air discharge space, is bothersome and not easy and was motivated to accept the Exhibit Ko 30 Invention' belonging to the same technical field of the clothes in order to solve the problem.
- (B) With this regard, the Defendant asserts that, since at the time of the Date of Application, there was no common general technical knowledge that the opening degree of the air discharge port of the air-conditioning clothes can be adjusted, the technical matter described in Exhibit Ko 30 could not be combined with the Publicly Worked Invention, and cited the description in the paragraph [0006] of the Description as the ground for that.

However, as described in the aforementioned 1(1), paragraph [0006] in the Description only describes that it is extremely difficult to have the desired length by tying the pair of adjusting strings, and most of the wearers cannot properly adjust the opening degree of the air discharge port and the like, and it cannot be found from this description that at the time of the Date of Application, there was the common general technical knowledge that the opening degree of the air discharge port of the air-conditioning clothes can be hardly adjusted. Besides, there is no sufficient evidence to find that at the time of the Date of Application, there was the common general technical knowledge that the opening degree of the air discharge port of the air-conditioning clothes can be hardly adjusted.

Therefore, the aforementioned assertion by the Defendant cannot be accepted.

(5) Summary

According to the above, since it is reasonable to find that a person ordinarily skilled in the art at the time of the Date of Application could have easily conceived of the configuration of Invention 3 pertaining to the Difference by applying the Exhibit Ko 30 Invention' to the Publicly Worked Invention, it is found that the person ordinarily skilled in the art at the time of the Date of Application could have also easily conceived of the configuration of Invention 3 pertaining to Difference 1. Thus, the determination in the JPO decision different from this is erroneous, and the Grounds for Rescission 3 has reasons.

3. Inventions 4 to 10

The JPO decision judged that Inventions 4 to 10 could not have been easily made by a person ordinarily skilled in the art on the grounds of the Publicly Worked Invention, either, only on the grounds that the invention specifying matters of Invention 3 are all provided and that Invention 3 could not have been easily made by a person ordinarily skilled in the art on the basis of the Publicly Worked Invention. However, since Reason for Rescission 3 has a reason as described in the aforementioned 2, the judgment of the JPO decision lacks the premise and is erroneous.

4. Conclusion

As described above, even without determining on the remaining reasons for rescission, the Plaintiff's claim has reasons.

Intellectual Property High Court, Second Division

Presiding Judge: HONDA Tomonari

Judge: ASAI Ken

Judge: NAKAJIMA Tomohiro