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(54) **METHOD FOR CONTROLLING A CLOTHES TREATING APPARATUS**
BETRIEBSVERFAHREN FÜR EINE KLEIDERBEHANDLUNGSVORRICHTUNG
PROCÉDÉ DE COMMANDE POUR UN APPAREIL DE TRAITEMENT DES VÊTEMENTS

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EP 2 118 360 B1

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Description

Technical Field

[0001] The present invention relates to a clothes treating apparatus and a method for controlling the same, and more particularly, to a clothes treating apparatus, which can improve the safety of the clothes treating apparatus, and a method for controlling the same.

Background Art

[0002] Generally, a clothes treating apparatus is an apparatus for regenerating clothes. That is, the clothes treating apparatus performs the function of removing creases and smells of clothes kept inside using steam and hot air.

[0003] Such a clothes treating apparatus firstly supplies steam into a casing to treat clothes, and then supplies dry air into the casing to dry the clothes. Hence, the clothes treating apparatus has the advantage of clothes ironing effect, as well as reducing the number of washing times by eliminating contamination sources on clothes.

[0004] However, the clothes treating apparatus according to the prior art uses steam and hot air upon regenerating clothes, and this may lead to the problem of a safety incident caused by high-temperature steam and hot air in the event a user arbitrarily opens the door provided on the casing.

[0005] US 5 305 484 A relates to a clothes steaming and drying cabinet, and in particular to a steaming and drying cabinet for steaming and drying clothes, such as for example, jackets, trousers, blouses, skirts and the like.

Disclosure of invention

Technical Problem

[0006] It is an object of the present invention to provide a clothes treating apparatus, which can prevent a safety incident caused by steam and hot air and improve safety by preventing the door from being opened and closed randomly in the operation of the clothes treating apparatus, and a method for controlling the same.

[0007] Additionally, it is another object of the present invention to provide a clothes treating apparatus, which can prevent a safety incident and improve safety by restrictively supplying steam or hot air as the door is opened and closed in the operation of the clothes treating apparatus, and can put or take out clothes in or from the clothes treating apparatus at any time.

Technical Solution

[0008] In an aspect of the present invention, a clothes treating apparatus comprises: a casing having a clothes treating space and a doorway, through which clothes are

put into and taken out of the clothes treatment space ; a clothes treatment device that treats clothes disposed within the clothes treatment space; a door that opens and closes the doorway; an opening and closing detection sensor that detects the opening and closing of the door; and a controller that stops a certain operation of the clothes treatment device when the opening of the door is detected by the opening and closing detection sensor.

[0009] In another aspect of the present invention, a clothes treating apparatus comprises: a casing having a clothes treatment space and a doorway, through which clothes are put into and taken out of the clothes treatment space; a clothes treatment device that treats clothes disposed within the clothes treatment space; a door that opens and closes the doorway; a locking device that locks the door to the casing; and a controller that locks the door to the casing using the locking device during a certain operation of the clothes treatment device.

[0010] In still another aspect of the present invention, a clothes treating apparatus comprises:

a casing having a doorway, through which clothes are put in and taken out, and
defining a clothes treatment space where clothes are kept; a door for opening and
closing the doorway; a locking device for locking the door to the casing; and a control unit for locking the door by operating the locking device if the temperature of the clothes treatment space is higher than a set temperature.

[0011] In still another aspect of the present invention, A method for controlling a clothes treating apparatus, the clothes treating apparatus comprising a casing having a clothes treatment space and a doorway, through which clothes are put into and taken out of the clothes treatment space and a door that opens and closes the doorway, the method comprising: treating clothes disposed in the clothes treatment space by operating a clothes treatment device; and locking the door using a locking device during the clothes treating step.

[0012] In still another aspect of the present invention, A method for controlling a clothes treating apparatus, the clothes treating apparatus comprising a casing having a clothes treatment space and a doorway, through which clothes are put into and taken out of the clothes treatment space and a door that opens and closes the doorway, the method comprising: treating clothes disposed in the clothes treatment space by operating a clothes treatment device; and stopping a certain operation of the clothes treatment device by a controller if an opening and closing detection sensor detects that the door is opened during the clothes treating step.

Advantageous Effects

[0013] The clothes treating apparatus and method for controlling the same according to the present invention

can prevent a safety incident caused by steam and hot air and improve the safety of the clothes treating apparatus by preventing the door from being opened and closed randomly in the steam step and the dry step.

[0014] Furthermore, the method for controlling the clothes treating apparatus according to the present invention can prevent a safety incident and improve safety by repeating the stopping and re-operating of the dry air supply device or the steam supply device as the door is opened and closed in the preheating step and the cooling step.

Brief Description of the Drawings

[0015] The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this application, illustrate embodiment(s) of the invention and together with the description serve to explain the principle of the invention. In the drawings:

FIG. 1 is a perspective view of a clothes treating apparatus according to one embodiment of the present invention;

FIG. 2 is a side cross sectional view of the clothes treating apparatus as shown in FIG. 1;

FIG. 3 is an exploded perspective view showing main parts of a dry air supply device and a steam supply device as shown in FIG. 1;

FIG. 4 is a partial exploded perspective view showing the dry air supply device and the steam supply device being mounted to a lower casing as shown in FIG. 1, in which some pipes are omitted;

FIG. 5 is a schematic diagram of the steam supply device as shown in FIG. 1;

FIG. 6 is a block diagram schematically showing the configuration for controlling the clothes treating apparatus as shown in FIG. 1;

FIG. 7 is a sequence view sequentially showing the step of controlling the clothes treating apparatus as shown in FIG. 1;

FIG. 8 is a sequence view showing a method for controlling the clothes treating apparatus in the steps of controlling of FIG. 7;

FIG. 9 is a sequence view sequentially showing the steps of controlling the clothes treating apparatus according to another embodiment of the present invention; and

FIG. 10 is a sequence view sequentially showing the method for controlling the clothes treating apparatus in the steps of controlling of FIG. 9.

Best Mode for Carrying Out the Invention

[0016] FIGs. 1 to 5 illustrate a clothes treating apparatus 100 according to one embodiment of the present invention.

[0017] Referring to FIG. 1, the clothes treating appa-

ratus 100 includes an outer casing 110 and an inner casing 120 disposed within the outer casing 110 and defining a clothes treatment space 125. The outer casing 110 has a doorway 111 formed on the front face, through which clothes are put in and taken out. A door 112 for opening and closing the doorway 111 is rotatably disposed at one side of the outer casing 110. Top and bottom parts of the door 112 are hinged to the outer casing 110.

[0018] An opening and closing sensor 113 for detecting the opening and closing of the door 112 is disposed on the door 112 and the outer casing 110. The opening and closing sensor 113 includes a first contact 113a formed on the back face of the door 112 and a second contact 113b formed on the front face of the outer casing so as to correspond to the first contact 113a. Anode power and cathode power are supplied to the first contact 113a and the second contact 113b, respectively. Thus, the opening and closing of the door 112 is detected depending upon the presence of current passing through the first and second contacts 113a and 113b. However, the opening and closing sensor 113 is not limited to this embodiment, but various structures may be applied. For instance, a contact switch disposed at a detachable region of at least one of the door 112 and the outer casing 110 or a position sensor for detecting the position coordinate of the door 112 may be used.

[0019] A locking device 114 for restraining the operation of the door 112 upon closing the door 112 is disposed on the door 112 and the outer casing 110. The locking device 114 includes a door latch 114a formed on the back face of the door 112 and a door switch 114b formed on the front face of the outer casing 110 so as to correspond to the door latch 114a. The door latch 114a is inserted into the door switch 114b upon closing the door 112. The door switch 114b provides a latching force of a predetermined intensity upon inserting the door latch 114a, and if necessary, holds the door latch 114a so as to avoid the door latch 114a from being separated. Of course, this embodiment is not limited to the locking device 114, but various structures may be applied.

[0020] A control panel 116 having an operating portion 115 for allowing a user to directly operate the clothes treating apparatus is disposed on at least one of the door 112 and the outer casing 110.

[0021] Referring to FIGs. 1 and 2, the inner casing 120 is smaller than the outer casing 110 by a predetermined size so as to be disposed within the outer casing 110. The inner casing 120 includes both side portions 121 forming both side faces of the clothes treatment space 125, a top portion 122 forming the top face of the clothes treatment space 125, a bottom portion 123 forming the bottom face of the clothes treatment space 125, and a back portion 124 forming the back face of the clothes treatment space 125.

[0022] Both opposite ends of a hanger 126 disposed in a lateral direction within the clothes treatment space 125 are fixed to the both side portions 121. An air outlet 127 for discharging air or moisture within the clothes

treatment space 125 is formed at the rear side of the top portion 122. A condensing chamber 129 is formed between the back portion 124 and the outer casing 110. An air inlet 128 is formed at a lower part of the back portion 124 for introducing air of the condensing chamber 129 to the clothes treatment space 125.

[0023] The condensing chamber 129 is a space in which wet air introduced through the air outlet 127 is condensed as it falls. Hence, the upper part of the condensing chamber 129 is connected to communicate with the air inlet 128, and the lower part of the condensing chamber 129 is connected to communicate with the air inlet 128. The air discharged through the air outlet 127 is dry air or wet air. By the way, when wet air is introduced to the condensing chamber 129 through the air outlet 127, the wet air is condensed as it is heat-exchanged with outdoor air of a relatively low temperature by using the outer casing 110 as a heat exchange medium. The outer casing 110 is formed of a material having a high heat conductivity, such as steel or aluminum, in order to improve heat exchange performance with wet air.

[0024] Optionally, a humidity sensor 130 for detecting a humidity within the clothes treatment space 125 may be disposed at one side of the inner surface of the inner casing 120.

[0025] Referring to FIGs. 1 to 3, the clothes treating apparatus 100 includes a steam supply device 140 disposed at one side of the bottom of the clothes treatment space 125. The steam supply device 140 is a device for generating steam and supplying the steam into the clothes treatment space 125. Therefore, creases or particles of contaminants on the clothes kept in the clothes treatment space 125 can be removed by the steam.

[0026] Referring to FIGs. 4 and 5, the steam supply device 140 includes a water tank 141 for storing a predetermined amount of water therein, a steam housing 142 for storing water supplied from the water tank 141, a steam heater 143 disposed at an inner lower part of the steam housing 142 and for generating steam, a drainage tank 162 for collecting the water remaining in the steam housing 142, and a water level sensor 145 for detecting the amount of water in the steam housing 142. Further, the supply of water from the water tank 141 to the steam housing 142 may be conducted by a supply flow path 146. A water supply valve 147 is placed on the supply flow path 146, and the water supply valve 147 is opened and closed by a control signal of the water level sensor 145 or a control unit (not shown).

[0027] The drainage tank 162 includes a storage unit 163 for collecting the water introduced from the steam housing 142. A drainage flow path 148 connects the steam housing 142 and the drainage tank 162. As a water discharge valve 149 is placed on the drainage flow path 148, the water discharge valve 149 is opened and closed by a control signal of the control unit (not shown). Also, the drainage tank 162 may be installed so as to be attachable to and detachable from the outer casing 110 of the clothes treating apparatus 100. The drainage tank

162 may be placed in a drawer type at the bottom of the outer casing 110. A grip hole 162b may be formed on the drainage tank 162 for allowing a user to put his or her hand in and pull out. Therefore, in a case where the amount of water collected in the storage unit 163 reaches a saturated state, or the water in the drainage tank 162 is neglected for a predetermined period of time so that there is a concern of bacterial growth or the like, the user can easily empty the drainage tank 162 by putting his or her hand in the grip hole 162b and pulling out. Further, since the condensing space and the clothes treatment space are connected to the drainage tank 162, a condensate water condensed is also introduced into the drainage tank 162. A separate on-off valve may be placed on a flow path 178 connecting the condensing space and the clothes treatment space to the drainage tank 162.

[0028] Referring to FIGs. 1 to 3, the clothes treating apparatus 100 further includes a dry air supply device 150 disposed at a lower part of the clothes treatment space 125. The dry air supply device 150 is a device which sucks air in the condensing chamber 129 or outdoor air, generates a high temperature dry air, and then supplies the dry air into the clothes treatment space 125. Hereinafter, this embodiment is limited to a case in which the air in the condensing chamber 129 is sucked into the dry air supply device 150.

[0029] In other words, the dry air supply device 150 includes a dry housing 151 forming an air flow path between the air inlet 128 and the clothes treatment space 125, a blower fan 152 disposed within the dry housing 151 to suck the air in the condensing chamber 129 through the air inlet 128 and then discharge it into the clothes treatment space 125, and a dry heater (not shown) for heating the air discharged to the clothes treatment space 125 by the blower fan 152.

[0030] The dry housing 151 is a duct-shaped member storing the blower fan 152 and the dry heater therein. One end of the dry housing 151 is connected so as to communicate with the air inlet 128, and the other side of the dry housing 151 is disposed within the clothes treating space 125. A discharge opening 153 for discharging dry air into the clothes treatment space 125 is disposed at the other side of the dry housing 151.

[0031] Referring to FIG. 1, a lower casing 160 having the steam supply device 140 and the dry air supply device 150 disposed therein is formed at one side of the lower part of the clothes treatment space 125. Especially, the water tank 141 is detachably coupled to a supply tank coupling portion 161 formed on the top of the lower casing 160. Therefore, if the water stored in the water tank is consumed, the water tank 141 is easily separated from the supply tank coupling portion 161, thereby allowing the water tank 141 to perform re-supply conveniently. Alternatively, the water tank 141 may be connected to exterior water supply piping (not shown), and automatically filled by the operation of a valve (not shown).

[0032] Referring to FIGs. 6 to 8, a method for controlling the clothes treating apparatus 100 will be described

below. Referring to FIGs. 6 and 7, the method for controlling the clothes treating apparatus 100 includes the steam step S of supplying steam into a clothes treatment space 125 by operating a steam supply device 140 and the dry step D of supplying a high temperature dry air into the clothes treatment space 125 by operating a dry air supply device 150. This will be discussed in detail below.

[0033] In the steam step S, steam is supplied into the clothes treatment space 125 by the steam supply device 140 to regenerate clothes hung on a hanger 126 within the clothes treatment space 125. In other words, when water is supplied from the water tank 141 into the steam housing 142 of the steam supply device 140, the water in the steam housing 142 is heated by the steam heater 143 and phase-changed into steam, and the steam is supplied into the clothes treatment space 125. Accordingly, the steam can remove contaminants on the clothes and smooth out creases on the clothes.

[0034] In the dry step D, upon finishing the steam step S, dry air is supplied into the clothes treatment space 125 by the dry air supply device 150 to dry the clothes hung on the hanger 126 of the clothes treatment space 125. In other words, when the blower fan 152 of the dry air supply device 150 is operated, dry air is introduced through the air inlet 128, and the dry air is heated by a dry heater, turns into a high temperature dry air, and is discharged into the clothes treatment space 125 through a discharge opening 153 of the dry housing 151. Wet air in the clothes treatment space 125 is discharged to the condensing chamber 129 through the air outlet 127 of the inner casing 120, and the wet air is condensed while heat-exchanging with outdoor air, and the condensed air is supplied again into the dry housing 151 through the air inlet 128. Accordingly, moisture of the clothes is removed by the dry air circulating through the dry air supply device 150 and the condensing chamber 129.

[0035] Referring to FIGs. 6 and 8, in the steam step S and the dry step D, the control unit 170 operates the locking device 114 to lock the door 112 to the outer casing 110 so as to keep the user from getting burned upon opening the door 112. In other words, once the steam step S or the dry step D is started, the control unit 170 operates a door switch 114b of the locking device 114 to grip a door latch 114a inserted into the door switch 114b. Hence, the door 112 is locked by the locking device 114, being closed to the front face of the outer casing 110.

[0036] In the steam step S, a high temperature wet air is filled in the inner casing 120, and thus latent heat of the wet air increases the risk of burning. Further, in the latter stage of the dry step, though most of the moisture in the inner casing 120 is removed, the inner casing 120 is in a state of being heated to quite a high temperature, thus increasing the risk of burning due to the sensible heat of the dry air. Accordingly, in the steam step S and the dry step D, the inside temperature of the inner casing 120 is very high, and thus the opening of the door 112 is prevented by the locking device 114, thereby further im-

proving the safety of the clothes treating apparatus 100.

[0037] However, this invention is not limited thereto. In the entire steps, as well as in the steam step S and the dry step D, if the temperature of the clothes treatment space 125 is higher than a set temperature, the door 112 may be locked by operating the locking device 114.

[0038] FIG. 7 specifically illustrates one example of a method of locking the door 112 in the steam step S and the dry step D. In other words, if the door 112 is detected to be in a closed state by the opening and closing sensor 113, the control unit 170 determines whether the steam supply device 140 and the dry air supply device 150 are operated or not (S1, S2, S3, and S4).

[0039] If it is determined that, in the steam step S or the dry step D, the steam supply device 140 or the dry air supply device 150 is normally operated, the control unit 170 operates the locking device 114 to lock the door 112 in a state in which the door 112 is closed to the front face of the outer casing 110 (S5).

[0040] On the other hand, if both of the steam supply device 140 and the dry air supply device 150 are not normally operated, the control unit 170 determines that this step is neither the steam step S nor the dry step D, it stops the operation of the locking device 114 to release the locked state of the door 112.

[0041] Referring to FIGs. 9 and 10, a method for controlling a clothes treating apparatus 100 according to another embodiment will be discussed. Like reference numerals as in the above-described embodiment designate like members. The following description will be made with respect to differences from the above-described embodiment.

[0042] The method for controlling a clothes treating apparatus as shown in FIGs. 9 and 10 is different from the method for controlling a clothes treating apparatus as shown in FIGs. 6 to 8, in that the method further includes the preheating step P of supplying a high temperature dry air into the clothes treatment space for a predetermined time by operating the dry air supply device 150 before the steam step S and the cooling step C of supplying a low temperature dry air into the clothes treatment space 125 by the dry air supply device 150 upon finishing the dry step D.

[0043] Referring to FIG. 10, in the preheating step P and the cooling step C, when the opening and closing sensor 113 detects the opening of the door 112, the operation of the dry air supply device 150 is stopped (S10, S11, and S13). On the contrary, in the preheating step P and the cooling step C, when the opening and closing sensor 113 detects the closing of the door 112, the dry air supply device 150 can be re-operated (S10, S11, and S12).

[0044] That is to say, in the preheating step P and the cooling step C, as the door 112 is opened and closed, the dry air supply device 150 is stopped or re-operated. Thus, upon opening and closing the door 112, the user is not directly exposed to the dry air from the dry air supply device 150, and the indoor air in the inner casing 120

has only latent heat of a high temperature, thereby sharply decreasing the risk of burning unlike in the steam step S and the dry step D. Further, unlike the steam step S or the dry step D, the opening of the door 112 is possible. Hence, in the preheating step P and the cooling step C, it is possible to put more clothes in and take them from the clothes treatment space 125.

[0045] Meanwhile, in the preheating step P and the cooling step C, when the closing of the door 112 is detected by the opening and closing sensor 113, the dry air supply device 150 can be re-operated by operating the operating portion 115. That is, in the preheating step P and the cooling step C, the dry air supply device 150 may be automatically re-operated upon closing the door 112, and alternatively the dry air supply device 150 may be re-operated by a manual operation whereby a user's start command is inputted.

[0046] Although the method for controlling a clothes treating apparatus in accordance with the invention have been described with reference to the illustrated drawings, the present invention is not limited to the aforementioned embodiment and drawings. It will be apparent that those skilled in the art that they can make various modifications and changes thereto within the scope of the invention defined by the claims.

Industrial Applicability

[0047] The clothes treating apparatus and method for controlling the same according to the present invention can prevent a safety incident caused by steam and hot air and improve the safety of the clothes treating apparatus by preventing the door from being opened and closed randomly in the steam step and the dry step.

Claims

1. A method for controlling a clothes treating apparatus, the clothes treating apparatus comprising a casing (110) having a clothes treatment space (125) and a doorway (111), through which clothes are put into and taken out of the clothes treatment space and a door (122) that opens and closes the doorway, the method comprising:

supplying steam (S) into the clothes treatment space (125) operating a steam supply device (140);

locking the door (122) using a locking device (114) to lock the door (122) so as to keep a user from opening the door (122) during supplying steam;

supplying a high temperature dry air (D) into the clothes treatment space (125) by operating a dry air supply device (150) after finishing the steam supplying;

locking the door (122) using the locking device

during supplying a high temperature dry air; supplying a low temperature dry air (C) into the clothes treatment space (125) by operating the dry air supply device after finishing the high temperature dry air supplying; and unlocking the door (122) using the locking device to unlock the door (122) during supplying a low temperature dry air

2. The method of claims 1, wherein during the low temperature air supplying, when the door is opened, the operation of dry air supply device (150) is stopped.

3. The method of claim 2, wherein, during the low temperature air supplying, when the door (122) is closed again, the dry air supply device (150) is re-operated.

4. The method of claim 1, further comprising a preheating step (P) of supplying a high temperature dry air into the clothes treatment space for a predetermined time by operating the dry air supply device before the steam supplying, wherein, in the preheating step, when the door (122) is opened, operation of the dry air supply device (150) is stopped.

5. The method of claim 4, wherein, In the preheating step, when the door (122) is closed again, the dry air supply device (150) is re-operated.

Patentansprüche

1. Steuerverfahren für eine Wäschebehandlungsvorrichtung, wobei die Wäschebehandlungsvorrichtung aufweist: ein Gehäuse (110) mit einem Wäschebehandlungsraum (125) und einen Eingang (111), durch den Wäsche in den Wäschebehandlungsraum gelegt und aus ihm herausgenommen wird, und eine Klappe (122), die den Eingang öffnet und schließt, wobei das Verfahren aufweist:

Zuführen von Wasserdampf (S) in den Wäschebehandlungsraum (125), wobei eine Wasserdampfführungsvorrichtung (140) betrieben wird;

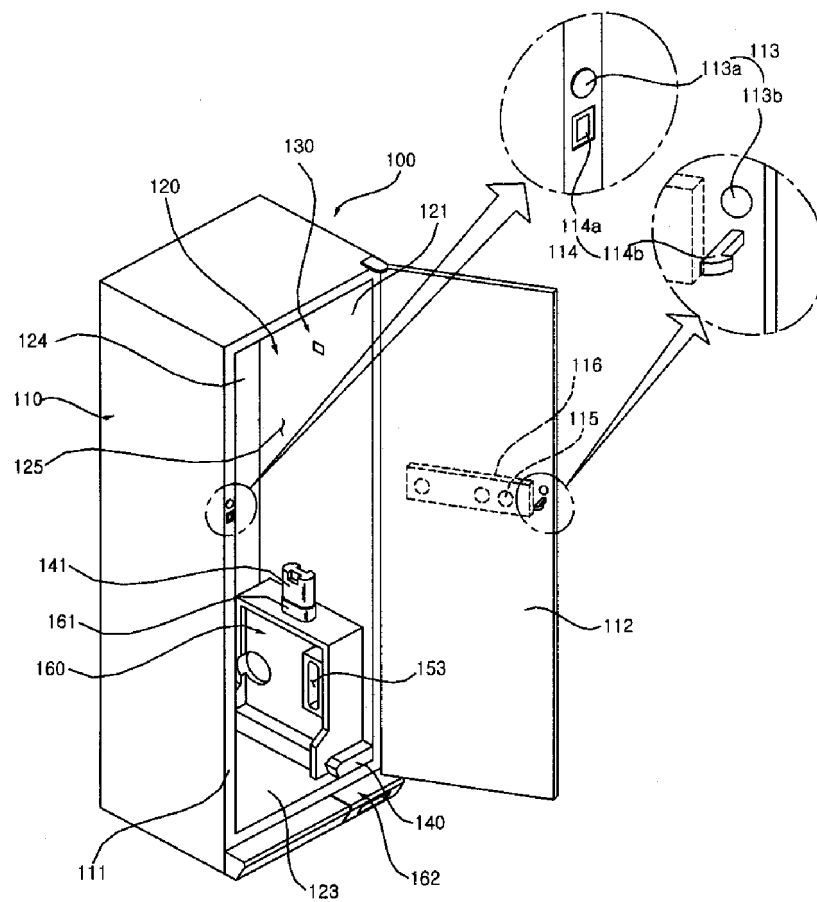
Verriegeln der Klappe (122) unter Verwendung einer Verriegelungsvorrichtung (114), um die Klappe (122) zu verriegeln, um einen Benutzer davon abzuhalten, die Klappe (122) während der Zuführung von Wasserdampf zu öffnen;

Zuführen einer Hochtemperaturtrockenluft (D) in den Wäschebehandlungsraum (125) durch Betreiben einer Trockenluftzuführungsvorrichtung (150) nach dem Beenden der Wasserdampfführung;

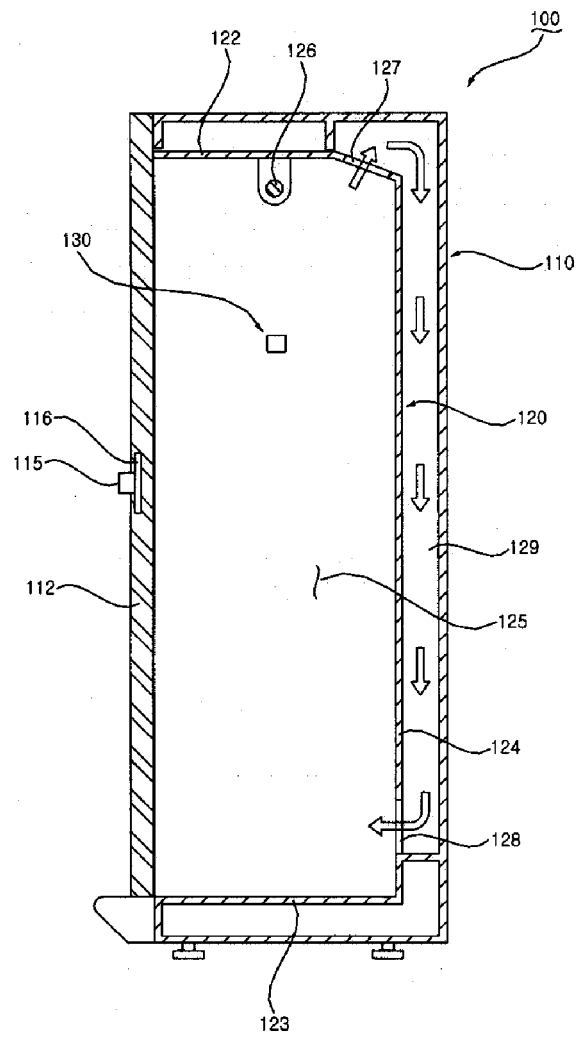
Verriegeln der Klappe (122) unter Verwendung

- der Verriegelungsvorrichtung während des Zuführens einer Hochtemperaturtrockenluft;
 Zuführen einer Niedertemperaturtrockenluft (C) in den Wäschebehandlungsraum (125) durch Betreiben der Trockenluftzuführungsvorrichtung nach dem Beenden der Zuführung von Hochtemperaturtrockenluft;
 Entriegeln der Klappe (122) unter Verwendung der Verriegelungsvorrichtung, um die Klappe (122) während des Zuführens einer Niedertemperaturtrockenluft zu entriegeln.
2. Verfahren nach Anspruch 1, wobei wenn während der Zuführung der Niedertemperaturluft die Klappe geöffnet wird, der Betrieb der Trockenluftzuführungsvorrichtung (150) gestoppt wird.
3. Verfahren nach Anspruch 2, wobei wenn die Klappe (122) während der Zuführung der Niedertemperaturluft wieder geschlossen wird, die Trockenluftzuführungsvorrichtung (150) wieder betrieben wird.
4. Verfahren nach Anspruch 1, das ferner einen Vorheizschritt (P) aufweist, um eine vorgegebene Zeit lang eine Hochtemperaturtrockenluft in den Wäschebehandlungsraum zuzuführen, indem vor der Wasserdampfzuführung die Trockenluftzuführungsvorrichtung betrieben wird, wobei wenn in dem Vorheizschritt die Klappe (122) geöffnet wird, der Betrieb der Trockenluftzuführungsvorrichtung (150) gestoppt wird.
5. Verfahren nach Anspruch 4, wobei wenn in dem Vorheizschritt die Klappe (122) wieder geschlossen wird, die Trockenluftzuführungsvorrichtung (150) wieder betrieben wird.
- Revendications**
1. Procédé de commande d'un appareil de traitement de vêtements, l'appareil de traitement de vêtements comprenant un boîtier (110) présentant un espace de traitement de vêtements (125) et un encadrement de porte (111), par lequel des vêtements sont placés dans l'espace de traitement de vêtements et sortis de celui-ci, et une porte (122) qui ouvre et ferme l'encadrement de porte, le procédé comprenant :
- l'alimentation de vapeur (S) dans l'espace de traitement de vêtements (125) en actionnant un dispositif d'alimentation de vapeur (140) ;
 le verrouillage de la porte (122) en utilisant un dispositif de verrouillage (114) pour verrouiller la porte (122) de sorte à empêcher un utilisateur d'ouvrir la porte (122) pendant l'alimentation de vapeur ;
- l'alimentation d'un air sec haute température (D) dans l'espace de traitement de vêtements (125) par l'actionnement d'un dispositif d'alimentation d'air sec (150) après la fin de l'alimentation de vapeur ;
 le verrouillage de la porte (122) en utilisant le dispositif de verrouillage pendant l'alimentation de l'air sec haute température ;
 l'alimentation d'un air sec basse température (C) dans l'espace de traitement de vêtements (125) par l'actionnement du dispositif d'alimentation d'air sec après la fin de l'alimentation d'air sec haute température ; et
 le déverrouillage de la porte (122) en utilisant le dispositif de verrouillage pour déverrouiller la porte (122) pendant l'alimentation d'un air sec basse température.
2. Procédé selon la revendication 1, dans lequel pendant l'alimentation d'air basse température, lorsque la porte est ouverte, le fonctionnement du dispositif d'alimentation d'air sec (150) est arrêté.
3. Procédé selon la revendication 2, dans lequel pendant l'alimentation d'air basse température, lorsque la porte (122) est de nouveau fermée, le dispositif d'alimentation d'air sec (150) est remis en marche.
4. Procédé selon la revendication 1, comprenant en outre une étape de préchauffage (P) d'alimentation d'un air sec haute température dans l'espace de traitement de vêtements pendant une durée prédéterminée par l'actionnement du dispositif d'alimentation d'air sec avant l'alimentation de vapeur, dans lequel dans l'étape de préchauffage, lorsque la porte (122) est ouverte, le fonctionnement du dispositif d'alimentation d'air sec (150) est arrêté.
5. Procédé selon la revendication 4, dans lequel dans l'étape de préchauffage, lorsque la porte (122) est de nouveau fermée, le dispositif d'alimentation d'air sec (150) est remis en marche.

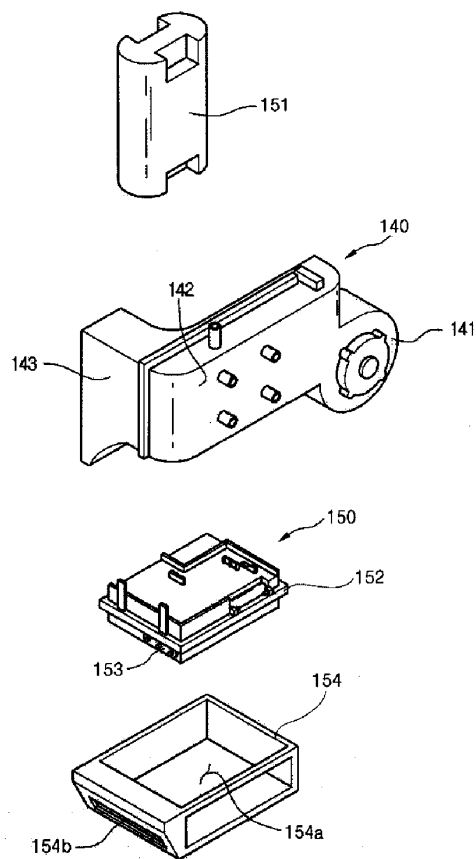
[Fig. 1]



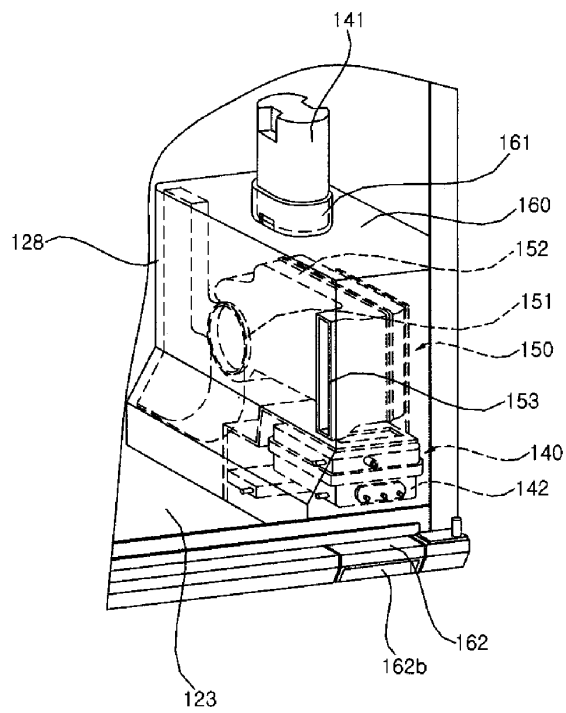
[Fig. 2]



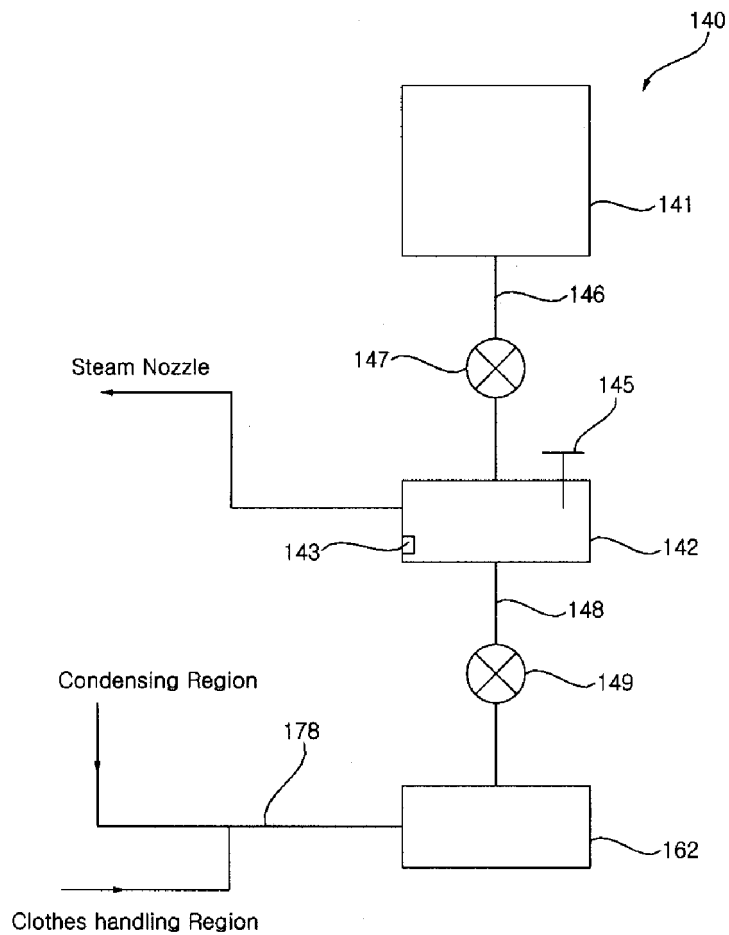
[Fig. 3]



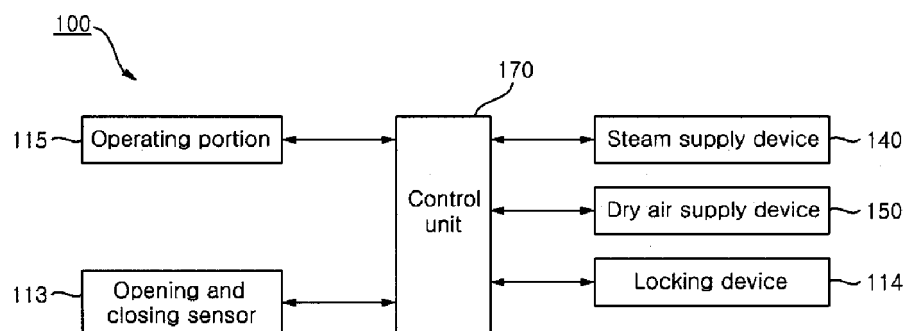
[Fig. 4]



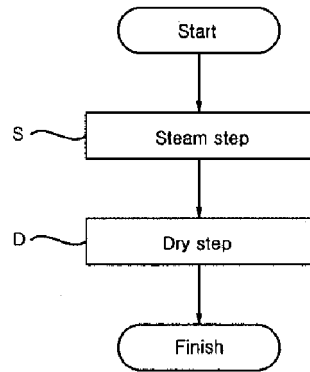
[Fig. 5]



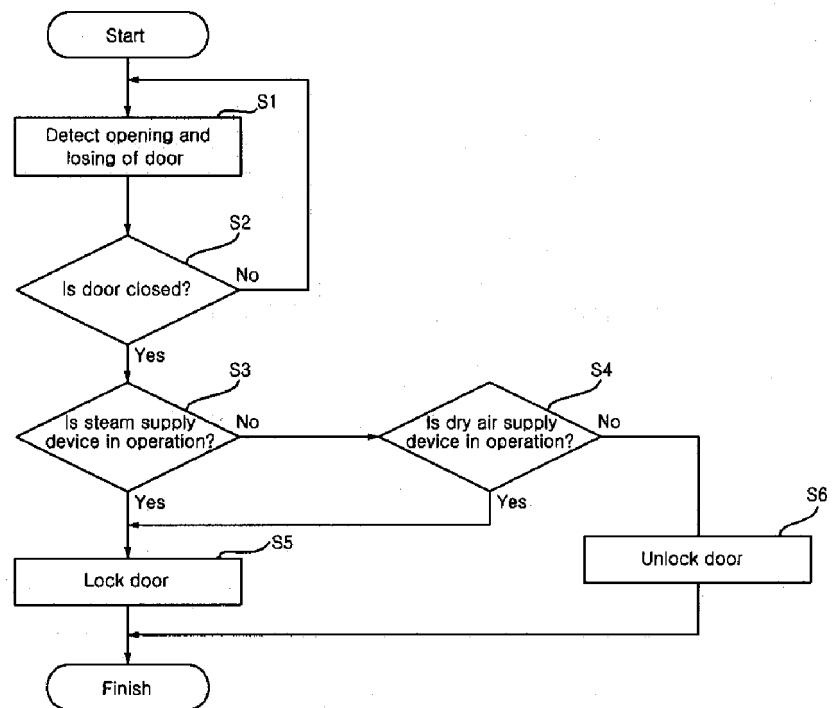
[Fig. 6]



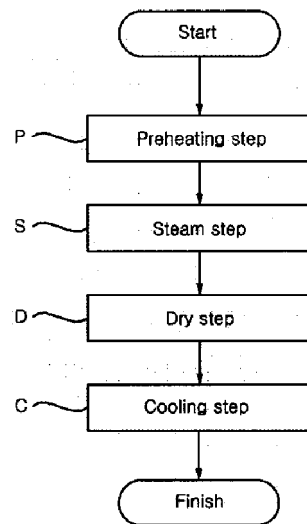
[Fig. 7]



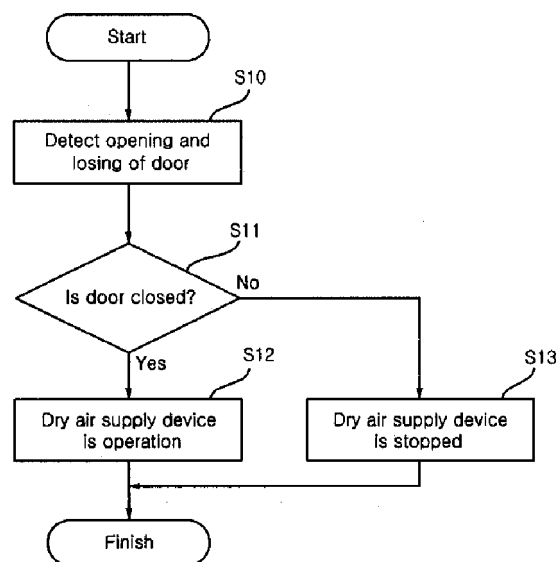
[Fig. 8]



[Fig. 9]



[Fig. 10]



REFERENCES CITED IN THE DESCRIPTION

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