



(19) **United States**
 (12) **Reissued Patent**
Ahn et al.

(10) **Patent Number: US RE50,220 E**
 (45) **Date of Reissued Patent: *Nov. 26, 2024**

(54) **FABRIC TREATING APPARATUS**
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 (*) Notice: This patent is subject to a terminal disclaimer.
 (21) Appl. No.: **17/956,038**
 (22) Filed: **Sep. 29, 2022**

(58) **Field of Classification Search**
 CPC D06F 39/00; D06F 39/14; D06F 58/20; D06F 39/04; D06F 58/30; D06F 58/206; D06F 25/00; D06F 58/10; D06F 58/203
 See application file for complete search history.

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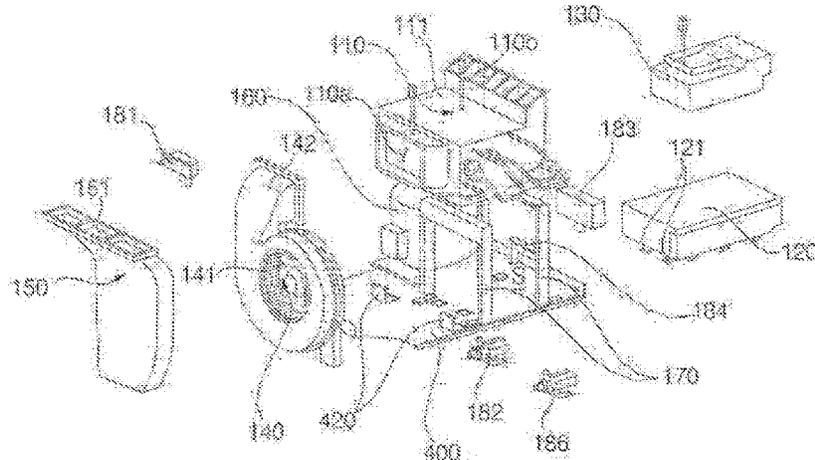
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Related U.S. Patent Documents
 Reissue of:
 (64) Patent No.: **10,138,586**
 Issued: **Nov. 27, 2018**
 Appl. No.: **14/972,454**
 Filed: **Dec. 17, 2015**
 U.S. Applications:
 (63) Continuation of application No. 16/797,187, filed on Feb. 21, 2020, now Pat. No. Re. 49,282, which is an application for the reissue of Pat. No. 10,138,586.

(57) **ABSTRACT**
 A fabric treating apparatus includes a casing that includes a treating chamber and a machinery room that is located below the treating chamber. The fabric treating apparatus further includes a base that is located at a bottom of the machinery room. The fabric treating apparatus further includes a heat pump module that is configured to condition air supplied to the treating chamber. The fabric treating apparatus further includes at least one supporter that is configured to support the heat pump module and that defines a space between the base and the heat pump module. The fabric treating apparatus further includes a steam generating module that is located in the space and that is configured to generate steam and supply steam to the treating chamber. The fabric treating apparatus further includes a controller
 (Continued)

(30) **Foreign Application Priority Data**
 Dec. 19, 2014 (KR) 10-2014-0184787
 (51) **Int. Cl.**
D06F 39/00 (2024.01)
D06F 39/04 (2006.01)
 (Continued)
 (52) **U.S. Cl.**
 CPC **D06F 58/203** (2013.01); **D06F 25/00** (2013.01); **D06F 39/40** (2024.01); **D06F 58/10** (2013.01); **D06F 58/20** (2013.01); **D06F 58/206** (2013.01)



that is configured to control at least one of the heat pump module or the steam generating module.

21 Claims, 7 Drawing Sheets

(51) **Int. Cl.**

D06F 39/14 (2006.01)
D06F 58/20 (2006.01)
D06F 25/00 (2006.01)
D06F 39/40 (2024.01)
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FIG. 1

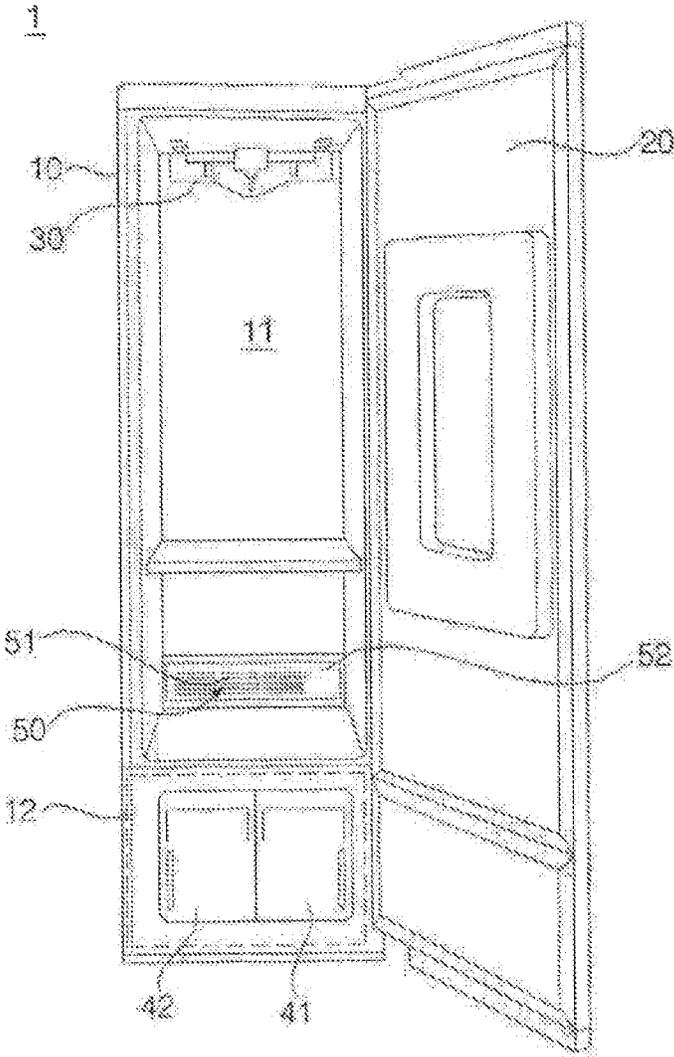


FIG. 2

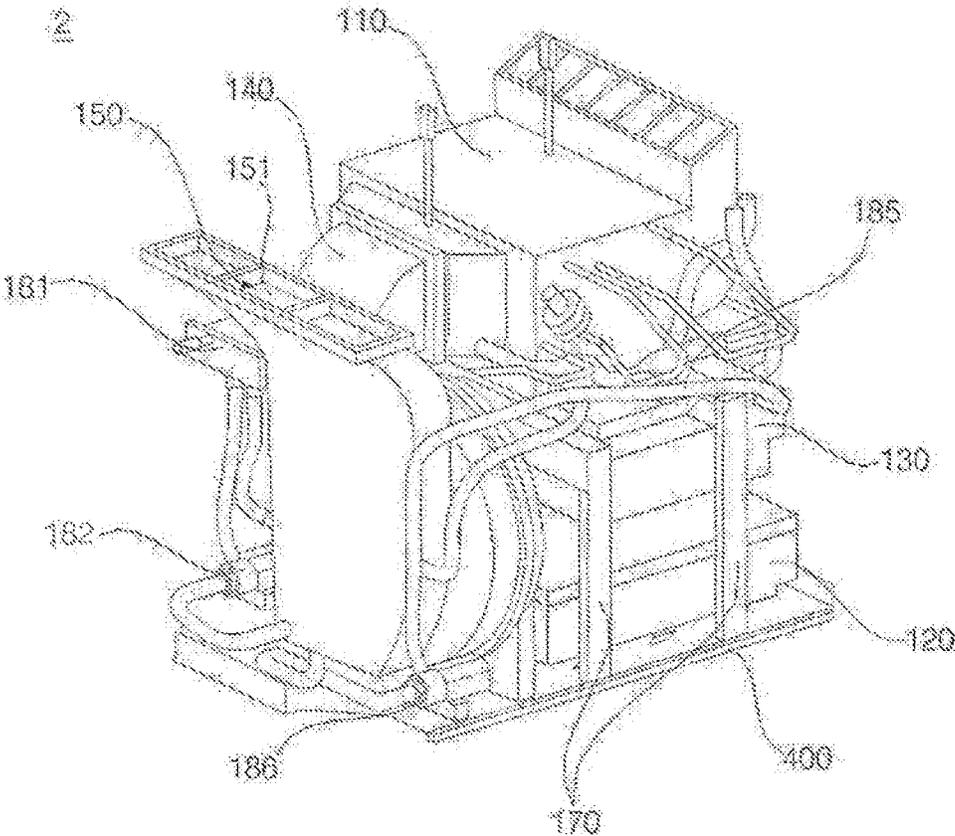
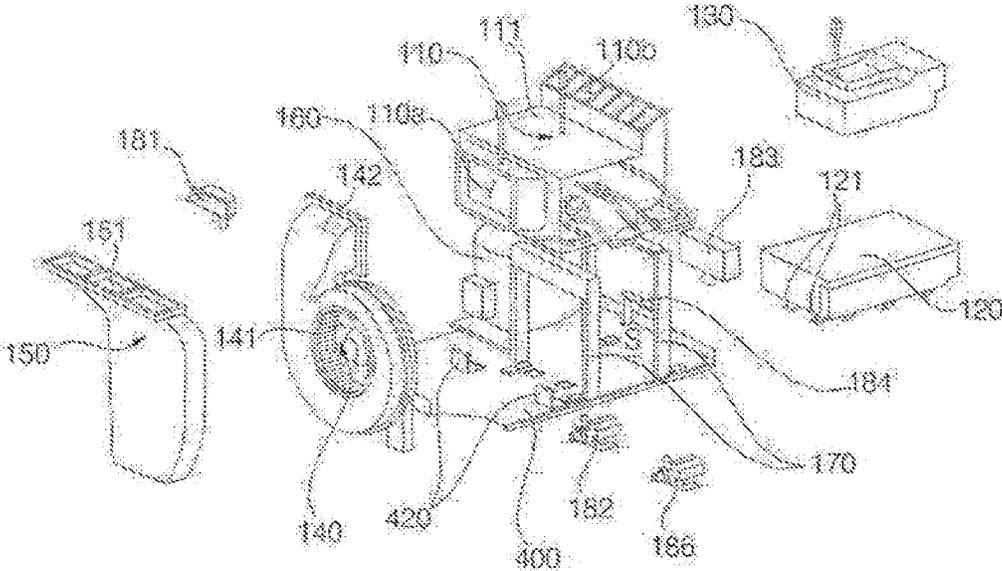


FIG. 3



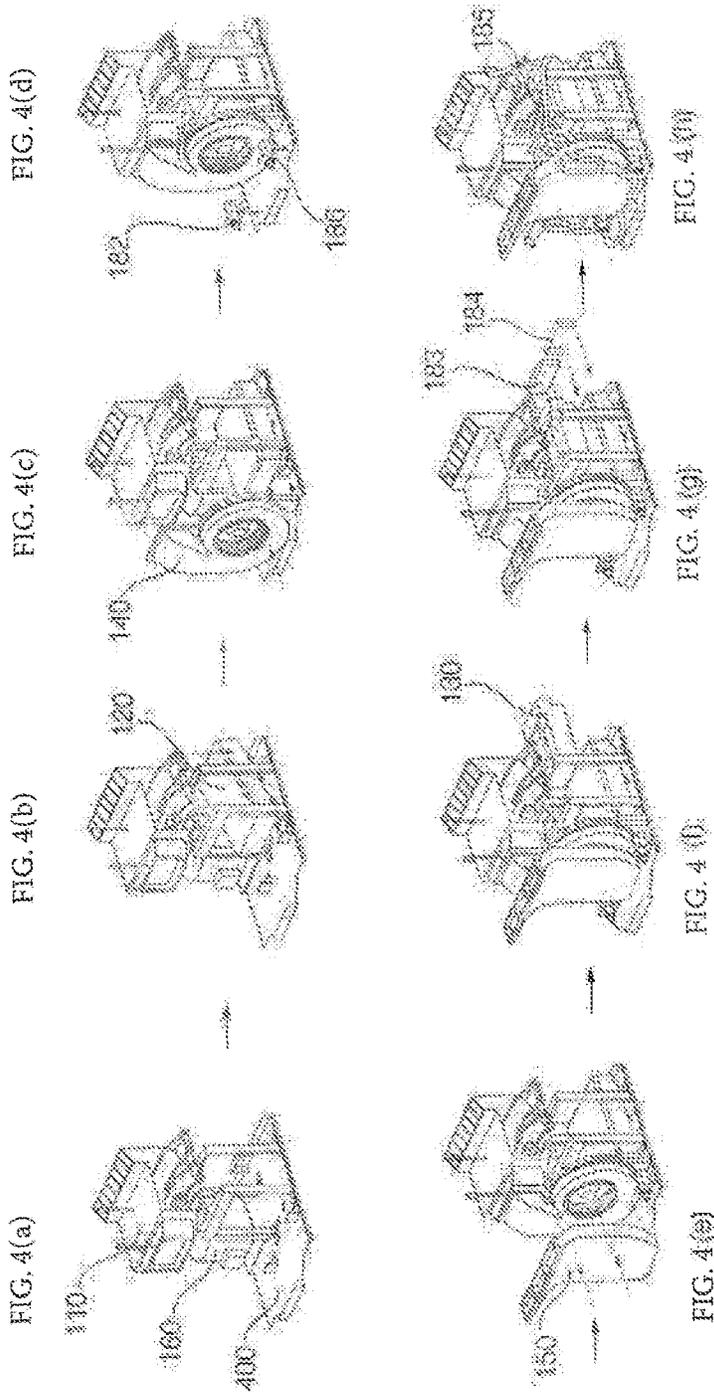


FIG. 5(a)

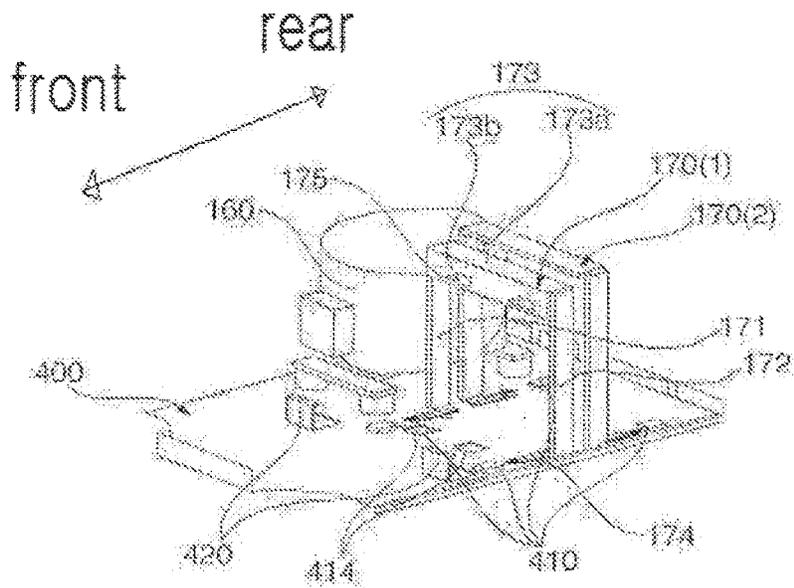


FIG. 5(b)

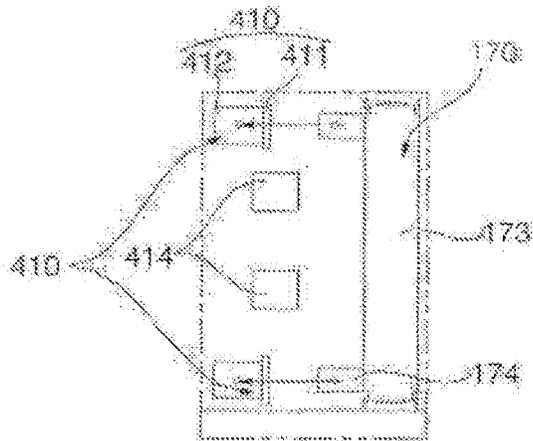


FIG. 6(a)

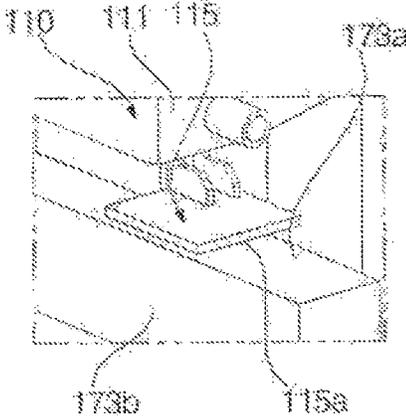
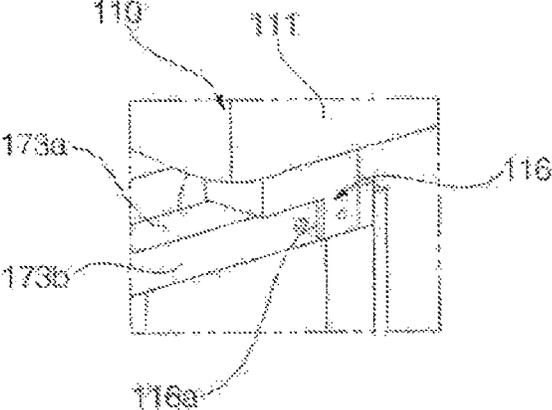
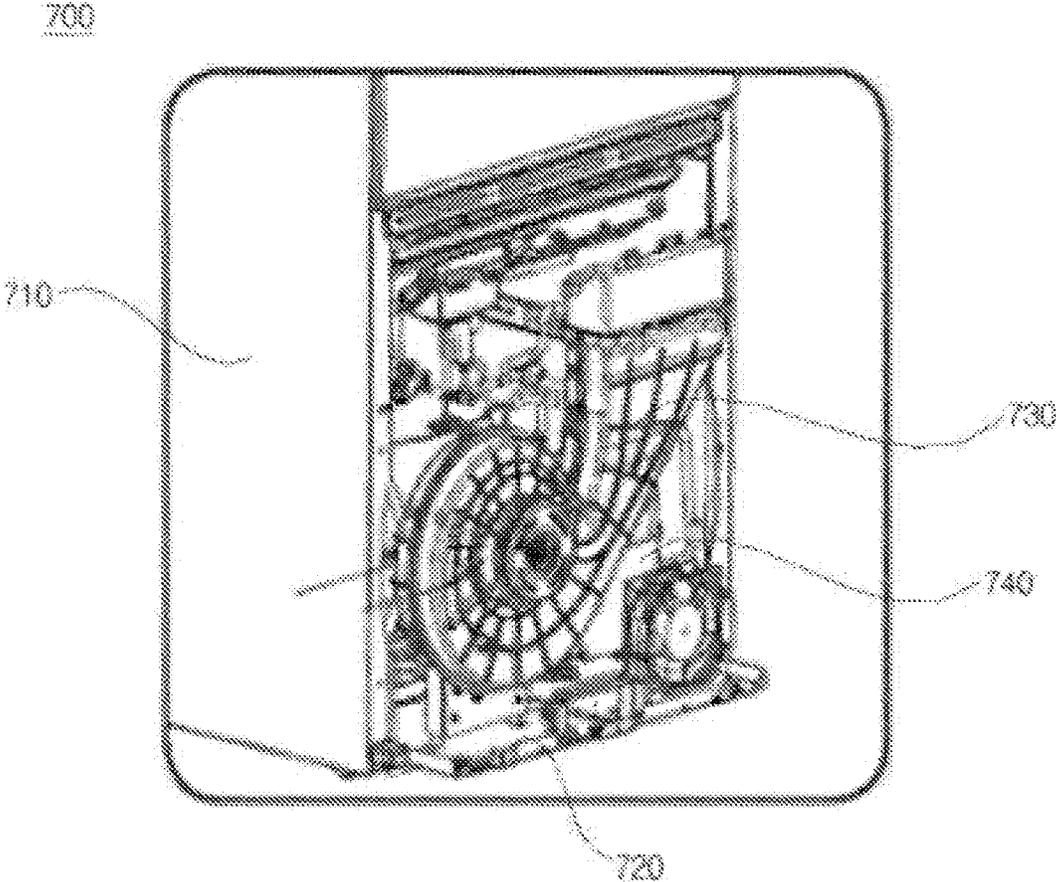


FIG. 6(b)



AMENDED FIG. 7



PRIOR ART

FABRIC TREATING APPARATUS

Matter enclosed in heavy brackets [] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue; a claim printed with strikethrough indicates that the claim was canceled, disclaimed, or held invalid by a prior post-patent action or proceeding.

CROSS-REFERENCE TO RELATED APPLICATION

This application is a Continuation of Reissue application Ser. No. 16/797,187 filed Feb. 21, 2020, which is a Reissue of U.S. Pat. No. 10,138,586, filed on Dec. 17, 2015 and issued on Nov. 27, 2108, which claims priority under 35 U.S.C. § 119 to Korean Patent Application No. 10-2014-0184787, filed on Dec. 19, 2014 in the Korean Intellectual Property Office, whose entire disclosure is incorporated herein by reference. More than one reissue application has been filed for the reissue of U.S. Pat. 10,138,586. The reissue application numbers are: U.S. patent application Ser. No. 16/797,187 (filed on Feb. 21, 2020 and issued as U.S. Pat. No. RE49,282); U.S. patent application Ser. No. 16/797,725 (filed on Feb. 21, 2020 and now issued as U.S. Pat. No. RE49,328); U.S. patent application Ser. No. 16/797,762 (filed on Feb. 21, 2020 and now issued as U.S. Pat. No. RE49,371); U.S. patent application Ser. No. 16/797,836 (filed on Feb. 21, 2020 and now issued as U.S. Pat. No. RE48,900); U.S. patent application Ser. No. 16/797,864 (filed on Feb. 21, 2020 and now issued as U.S. Pat. No. RE49,131); U.S. patent application Ser. No. 16/797,892 (filed on Feb. 21, 2020 and now issued as U.S. Pat. No. RE49,173); and U.S. patent application Ser. No. 17/956,038 (filed on Sep. 29, 2022).

FIELD

The present disclosure relates to a fabric treating apparatus.

BACKGROUND

A fabric treating apparatus refers to any device which is used at home or at a laundromat to manage clothes by washing, drying, and flattening the same.

For example, the fabric treating apparatus includes a washing machine, a drying machine, a washer-and-dryer, a refresher, a steamer for removing creases on fabric, and the like.

The refresher is designed to keep clothes in a clean and fresh condition, and, for this purpose, it sprays aroma to the fabric, prevents static electricity of the fabric, removes creases on the fabric, and the like.

A general iron removes creases on fabric by providing steam thereto. The steamer removes creases without heating the clothes.

A fabric treating apparatus having the functions of the refresher and the steamer is able to remove creases and unpleasant odors of fabric by using steam and heated air.

SUMMARY

According to an innovative aspect of the subject matter described in this application, a fabric treating apparatus includes a casing that includes a treating chamber that is

configured to receive clothes; and a machinery room that is located below the treating chamber; a base that is located at a bottom of the machinery room; a heat pump module that is configured to condition air supplied to the treating chamber; at least one supporter that is configured to support the heat pump module and that defines a space between the base and the heat pump module; a steam generating module that is located in the space and that is configured to generate steam and supply steam to the treating chamber; and a controller that is configured to control at least one of the heat pump module or the steam generating module, the controller being located in the space below the steam generating module.

The fabric treating apparatus may include one or more of the following optional features. The at least one supporter includes legs that are fixed to the base; and a shelf that is supported by the legs, where the heat pump module is supported by the shelf. The at least one supporter includes a supporter fixing tab that includes a surface that faces the base and that is located at a lower part of at least one of the legs, and the base includes a supporter fixing part that includes a supporter fastening hole that is configured to receive the supporter fixing tab. The supporter fixing tab is configured to slide into a pocket that is defined by the supporter fastening hole. A size of the pocket is about equal to a size of the supporter fixing tab. The fabric treating apparatus includes a first supporter that includes a first supporter fixing tab that is configured to slide into a first supporter fastening hole in a first direction; and a second supporter that includes a second supporter fixing tab that is configured to slide into a second supporter fastening hole in a second direction that is opposite the first direction.

The base includes a metal material, and the supporter fixing part includes a plastic material. The supporter fixing part is formed by cutting, about perpendicular to a direction in which the supporter fixing tab is configured to insert, a portion of the base having a predetermined length and then upwardly pressing a predetermined peripheral area of the cut portion. The supporter fastening hole is formed through plastic deformation of the cut portion. The fabric treating apparatus includes a fastening member that is configured to couple the base and the at least one supporter and that vertically penetrates the supporter fixing part and the supporter fixing tab.

The casing includes an opening that is located at a rear side of the casing and that is configured to receive the controller, the heat pump module is located above the controller, and the fabric treating apparatus further includes a blower that is configured to blow air into an interior of the heat pump module. The fabric treating apparatus includes a panel that is detachably coupled to the casing and that is configured to close the opening. The blower is located in front of the at least one supporter. The blower is coupled to the base. The base includes a blower installation tab that protrudes from the base and that is configured to couple to the blower. The fabric treating apparatus includes an air intake duct that is configured to guide air into the blower and that is located in front of the blower.

The air intake duct is fixed to at least one of the blower or the base. A steam generating module fixing tab is located at one of the steam generating module or the supporter, and an installation hole is configured to receive the steam generating module fixing tab and is located at another of the steam generating module or the supporter opposite the steam generating module fixing tab. The at least one supporter includes a pair of supporters that are spaced apart from each other and that are about perpendicular to a

front and rear direction of the base, the installation hole is located on one of the pair of the supporters, and the steam generating module is coupled, by the fastening member, to another one of the pair of the supporters opposite the installation hole, and the steam generating module fixing tab is inserted into the installation hole. The controller includes at least one controller fixing tab that is configured to slide into a controller fixing hole that is located at the base.

The subject matter described in this application aims to provide a fabric treating apparatus in which devices in a machinery room is configured to facilitate maintaining and repairing the devices.

In addition, the subject matter described in this application aims to provide a fabric treating apparatus that includes a machinery room that is arranged so that a user can remove a particular device without removing other devices.

Further, the subject matter described in this application aims to provide a fabric treating apparatus of which a controller, a steam generating module, and a heat pump module are capable of being independently removed from a machinery room

Moreover, the subject matter described in this application aims to provide a fabric treating device with improved space utilization of a machinery room.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view illustrating a fabric treating apparatus.

FIG. 2 is a diagram illustrating an example device assembly installed in an example machinery room.

FIG. 3 is an exploded perspective view illustrating an example device assembly.

FIGS. 4(a)-(h) show a procedure of how to assemble an example device assembly.

FIGS. 5(a) and (b) are diagrams illustrating an example structure in which a supporter is mounted on a base.

FIGS. 6(a) and (b) are diagrams illustrating an example installation structure of a heat pump module.

FIG. 7 is a diagram illustrating an example machinery room of an example fabric treating apparatus.

DETAILED DESCRIPTION

FIG. 1 illustrates an example fabric treating apparatus. FIG. 2 illustrates an example device assembly installed in an example machinery room. FIG. 3 illustrates an example device assembly. FIGS. 4(a)-(h) illustrate an example assembly of an example device assembly. FIGS. 5(a) and (b) illustrate an example structure in which a supporter is mounted on a base. FIGS. 6(a) and (b) illustrate an example installation structure of a heat pump module.

Referring to FIGS. 1 to 6, a fabric treating apparatus 1 includes a casing 10 forming an open front treating chamber 11 and a door 20 for closing the open front of the treating chamber 11.

A hanger rod 30 on which clothes hangers are to be hung is provided in an upper part of the treating chamber 11. The hanger rod 30 may be configured to move in a back and forth, up and down and/or right and left direction in the treating chamber 11 by a driving device, such as a motor. In some implementations, such movement is a reciprocating motion with a predetermined cycle.

A machinery room 12 may be provided outside the treating chamber 11 (e.g., below the treating chamber 11) within the casing 10, and various devices, such as a heat pump module 110, a controller 120, and a steam generating

module 130, may be disposed in the machinery room 12. In some implementations, the casing 10 may include a base 400 which defines a bottom of the machinery room 12. The base 400 may be formed with a metal sheet.

An air outlet 51 discharging air blown by a blower 140 into the treating chamber 11, and a steam outlet 52 discharging steam generated by a [stream] steam generating module 130 may be formed in the lower part of the treating chamber 11. In some implementations, the air outlet 51 and the steam outlet 52 are formed as one body on a low panel 50 which defines a lower part of the treating chamber 11.

The steam generating module 130 is a device which generates steam. The steam generating module 130 may include a heater for applying heat to water. Steam generated according to an operation of the heater may be guided to the steam outlet 52 via a predetermined steam supply path.

A water supply tank 41 for storing water to be supplied to the steam generating module 130 may be disposed in the lower part of the treating chamber 11. The water supply tank 41 may be detachably coupled to the casing 10. A user may fill the water supply tank 41 with water after detaching the water supply tank 41 from the casing 10.

A sump may be disposed in the machinery room 12 to collect condensed water which is generated while steam generated by the steam generating module 130 moves along the steam supply path. The sump may be connected to the treating chamber 11 via a path. In some implementations, the condensed water on the bottom of the treating chamber 11 may be gathered in the sump.

A water drain pump 182 may be mounted on a base 400 to discharge the condensed water from the sump to a drain container 42. The drain container 42 may be detachably coupled to the casing 10. A user may detach the drain container 42 from the casing 10 and empty the drain container 42. The sump may be disposed in an inner low part of an air intake duct 150, and a nozzle module 181 may be further provided to discharge the condensed water stored in the sump to the drain container 42 via the water drain pump 182.

On the base 400, a water supply pump 186 may be mounted to supply water stored in the water supply tank 41 to the steam generating module 130. The water supply pump 186 may be connected to the steam generating module 130 via a water supply hose 185.

The heat pump module 110 is provided for air conditioning. The conditioned air is supplied to the treating chamber 11. The heat pump module 110 may be connected to the compressor 160 via a refrigerant line. The heat pump module 110 may include a condenser, an expansion valve, and an evaporator through which refrigerant passes in order when transferred via the refrigerant line.

Referring to FIG. 3, the heat pump module 110 may include a housing 111 forming an inner space where the condenser is housed. An air inlet 110a and an air outlet 110b may be formed in the housing 111. The air inlet 110a introduces air into the space where the condenser is housed, and the air outlet 110b discharges air being heat exchanged with the condenser. Not only the condenser, but also the evaporator may be housed in the housing 111.

The blower 140 is an air blowing device, and may include a fan which is rotated by a motor. A vent 142 discharging air blown by the fan is connected to the air inlet 110a of the housing 111. Accordingly, the air blown by the blower 140 is supplied to the housing 111 through the air inlet 110a, and the supplied air is heated by heat exchanging with the condenser. And the heated air is discharged through the air outlet 110b of the housing 111. In some implementations, the

blower **140** is a centrifugal blower configured to guide the air, which is introduced through an opening **141** opened in an axial direction of the fan (e.g., centrifugal fan), toward the vent **142** via a scroll-type path embracing the surroundings of the fan.

The air intake duct **150** guiding air toward the opening **141** of the blower **140** may be disposed in front of the blower **140**. The air intake duct **150** may be fixed by the blower **140**. In some implementations, the duct **150** may be fixed by the base **400**.

A blower installation tab **420** may be formed in the base **400**. The blower installation tab **420** may be formed by cutting a portion of the base **400** and bending the cut portion in a vertical direction. The blower **140** may be coupled to the blower installation tab **420** by a fastening member, such as a bolt and a screw.

The air intake duct **150** may include an air inflow path through which air passes. For efficient use of the inner space of the machinery room **12**, the air intake duct **150** may be extended upward from the opening **141** of the blower **140**. The air inflow path may have a width in a front-and-rear direction, which is smaller than a width in a left-and-right direction. The air intake duct **150** may have an opening **151** formed on a top surface thereof, and an outlet connected the vent **142** of the blower **140**. Air inside the treating chamber **11** may be introduced through the opening **151**.

The supporter **170** supports the heat pump module **110**, and defines a predetermined space S below the heat pump module **110**. The space S may be formed between the support **170** and the base **400** below the heat pump module **110**. That is, as being supported by the supporter **170**, the heat pump module **110** is disposed in an upper side being spaced apart from the base **400**. The heat pump module **110** is spaced apart from the base **400**, thereby the space S is provided in the base **400**. Devices, for example, the steam generating module **130** and the controller **120**, are mounted in the space S.

A plurality of supporters **170** may be provided. In some implementations, a pair of supporters **170** are spaced apart from each other in a front-and-rear direction on the base **400**. The pair of supporters **170** may include supporter **170(1)**, **170(2)**. The supporter **170(1)** may locate further forward than the supporter **170(2)**.

Referring to FIG. 5, the supporter **170** may include at least two legs **171** and **172** which are fixed on the base **400**, and a shelf **173** which is extended in a lateral direction and supported by the legs **171** and **172**. A supporter fixing tab **174** having a surface facing the base **400** may be formed at a lower part of the legs **171** and **172**. As shown in (a) of FIG. 5, a supporter fixing part **410** may be formed in the base **400**. The supporter fixing part **410** has a fastening hole **411** into which the supporter fixing tab **174** is inserted in a front-and-rear direction of the fabric treating apparatus **1**.

The supporter fixing part **410** may be formed by cutting a portion having a predetermined length from the base **400** in a direction crossing a direction in which the supporter fixing tab **174** is inserted and then upwardly pressing a predetermined peripheral area **412** of the cut portion (e.g., the supporter fastening hole **411**).

With the supporter fixing tab **174** being inserted into the supporter fixing part **410** through the supporter fastening hole **411**, an upward movement of the supporter **170** is restrained as the supporter fixing tab **174** is retained by a bottom surface of the peripheral area **412** of the supporter fastening hole **411**.

At least two supporters **170** may be provided. In some implementations, as shown in FIG. 5, as the supporter

170(1) disposed in front part of the base **400** moves forward, the supporter fixing tab **174** may be inserted into the supporter fastening hole **411**. As the supporter **170(2)** disposed in rear part of the base **400** moves backward, the supporter fixing tab **[400] 174** may be inserted into the supporter fixing part **410** which is open toward the front direction. The base **400** and the supporter **170** may be coupled to each other by a fastening member, such as a screw or a bolt which penetrates the supporter fixing part **410** and the supporter fixing tab **174** in an up-and-down direction. The supporter **170** may be formed of a plastically deformable metal material. And the supporter fixing part may be formed by plastic working of the base.

By cutting and bending a metal plate according to a predetermined lay out, the supporter **170** may be formed to have the legs **171** and **172**, the supporter fixing tab **174**, and the shelf **173**, which are integrated in the supporter **170** as one body. In some implementations, the supporter **170** may be formed of a molded product of synthetic resin, or may be formed with two or more components coupled to one another.

The heat pump module **110** may be disposed on the shelf **173**. The shelf **173** may include a pair of side surfaces **173b** which faces front side and rear side, respectively, and a top surface **173a** connecting the pair of side faces **173b**. The shelf **173** may be formed by bending a metal plate at least twice.

Referring to FIG. 6, at least one connecting part **115** and **116** to be coupled to the shelf **173** may be formed in a lower part of the housing **111**. Referring to (a) of FIG. 6, the connecting part **115** may include a first contact surface **115a** which contacts the top surface **173a** of the shelf **173**. The first contact surface **115a** is substantially parallel with the top surface **173a**. After the first contact surface **115a** is put on the top surface **173a** of the shelf **173**, the first contact surface **115a** and the top surface **173a** of the shelf **173** may be coupled to each other by a fastening member.

Referring to (b) of FIG. 6, the connecting part **116** may have a second contact surface **116a** which contacts the side surface **173b** of the shelf **173**. In some implementations, the second contact surface **116a** is vertically disposed corresponding to the side surface **173b**, and may be coupled to the side surface **173b** of the shelf **173** by a fastening member. In some implementations, the first contact surface **115a** is secured to the top surface **173a** of the supporter **170(1)**, and the second contact surface **116a** is secured to the side surface **173b** of the supporter **170(2)**.

The controller **120** controls various devices composing the fabric treating apparatus **1**, and may include a circuit substrate and electric components mounted on the circuit substrate. The heat pump module **110**, the steam generating module **130**, the blower **140** and/or the compressor **160** may be controlled by the controller **120**.

The circuit substrate is accommodated in a body which defines an exterior of the controller **120**. The controller **120** may be disposed in the space S between the supporter **170** and the base **400**. In some implementations, the controller **120** is disposed on the base **400**.

Referring to FIGS. 3, 4, and 5, a controller fixing tab **121** may be formed in a body of the controller **120**, and a controller fixing hole **414** into which the controller fixing tab **121** is inserted may be formed on the base **400**. The controller fixing tab **121** may be a plate which is extended forward or backward. With the controller fixing tab **121** being inserted into the controller fixing hole **414**, upward

movement of the controller 120 may be restrained because the controller fixing tab 121 is retained by a bottom surface of the base 400.

In some implementations, the controller fixing tab 121 projects in a forward direction from the body of the controller 120, and may be inserted into or separated from the controller fixing hole 414 according to forward or backward movement of the controller 120 on the base 400.

An opening (see FIG. 7) may be formed on a rear side of the casing 10 allowing at least the controller 120 to pass through. In some implementations, the opening is formed to allow even the heat pump module 110 and the steam generating module 130 to pass through.

In some implementations, the casing 10 may include a panel closing the opening, and the panel may be detachably coupled to the casing 10.

When the controller 120 is installed in the base 400 or detached from the base 400 for maintenance, the controller 120 may be transferred into or from the machinery room 120 through the opening. In some implementations, where the heat pump module 110 is disposed above the controller 120 and the blower 140 is disposed in front of the controller 120, the blower 140 or the controller 120 may not cause a problem when an attempt is made to detach the controller 120, so that the controller 120 may be drawn out from the machinery room 12 without detaching the blower 140 from the device assembly 2, and thus, facilitating repairing or replacing the controller 120.

The steam generating module 130 may be disposed inside the space S, and, in some implementations, above the controller 120. The steam generating module 130 may be fixed by the supporter 170. One of the steam generating module 130 and the supporter 170 may have a steam generating module fixing tab formed thereon, the other one may have an installation hole 175 (see FIG. 5) into which the steam generating module fixing tab is inserted. The steam generating module installation hole 175 may be formed on at least one of a pair of the supporters 170. In some implementations, the installation hole 175 is formed on the supporter 170(1).

The steam generating module installation hole 175 may be formed on the side surface 173b of the shelf 173. With the steam generating module fixing tab being inserted into the steam generating module installation hole 175, the steam generating module 130 is temporarily installed in the supporter 170. Then, being temporarily installed in the supporter 170(1), the steam generating module 130 may be secured to the supporter 170(2) by a fastening member.

Hereinafter, referring to FIG. 4, there is a procedure of how to assemble the device assembly 2. In FIG. 4, a dotted line indicates a location and a direction in which a fastening member is secured. As shown in (a) of FIG. 4, when the compressor 160 is mounted on the base 400, the heat pump module 110 may be mounted on the supporter 170. The connection part 115 and 116 of the heat pump module 110 is fixed onto the shelf 173 by a fastening member. A refrigerant pipe which guides refrigerant may be connected between the compressor 160 and the heat pump module 110.

Referring to (b) of FIG. 4, the controller 120 may be inserted into the space S below the supporter 170 and mounted on the base 400. After the controller 120 is placed at a right position by inserting the controller fixing tab 121 into the controller fixing hole 414, the controller 120 and the base 400 may be secured by a fastening member.

Referring to (c) of FIG. 4, the blower 140 may be mounted in front of the supporter 170. The blower 140 may be secured to a blower installation tab 420 by a fastening member.

Referring to (d) of FIG. 4, a water drain pump 182 and a water supply pump 186 may be mounted on the base 400. One of the water drain pump 182 and the water supply pump 186 may be disposed on one side of the blower 140, and the other one may be disposed on the opposite side thereof.

Referring to (e) of FIG. 4, the air intake duct 150 may be mounted in front of the blower 140. A pin extended in a front-and-rear direction may be formed on any one of the blower 140 and the air intake duct 150, and a pin hole into which the pin is inserted may be formed on the other one. After the air intake duct 150 is placed in a right position due to insertion of the pin into the pin hole, the air intake duct 150 and the blower 140 may be coupled to each other by a fastening member.

Referring to (f) of FIG. 4, after the steam generating module 130 is inserted into the space S below the supporter 170, the steam generating module fixing tab formed on the steam generating module 130 is inserted into the installation hole 175, so that the steam generating module 130 may be placed at a right position and then the steam generating module 130 and the supporter 170 may be coupled to each other by a fastening member. The fastening member may be coupled to the supporter 170(2) so as to facilitate detaching the steam generating module 130 through an opening formed on the rear surface of the casing 10 for maintenance and repair.

Referring to (g) of FIG. 4, a noise filter 183 and a handle 184, which user holds to move the device assembly 2, may be mounted on the base 400. The noise filter 183 lets only necessary components in a signal input to the controller 120 to pass, and reduces noise components.

Referring to (h) of FIG. 4, the water supply hose 185 connecting the water supply pump 186 and the steam generating module 130, a nozzle module, a hose connecting the nozzle module 181 and a sump, a hose connecting the nozzle module 181 and the water drain pump 182, and any other various hoses may be connected to devices.

FIG. 7 is a diagram illustrating a machinery room of a conventional fabric treating apparatus. Referring to FIG. 7, a conventional fabric treating apparatus 700 has a machinery room below a casing 710, wherein various devices are installed in the machinery room. The devices to be installed in the machinery room includes not only a blower 730 and a compressor 740 which are shown in FIG. 7, but also a [stream] steam generating module, a heat pump module, and a controller which are shown in FIG. 3. Among them, the [stream] steam generating module, the heat pump module and/or the controller are not able to be drawn out from the machinery room for maintenance or repair without removing other devices, because the [stream] steam generating module, the heat pump module and/or the controller interfere with as the blower 730, the compressor 740, and the like, as shown in FIG. 7.

What is claimed is:

[1. A fabric treating apparatus comprising:

a casing that comprises:

a treating chamber that is configured to receive clothes; and

a machinery room that is located below the treating chamber;

a base that is located at a bottom of the machinery room; a heat pump module that is configured to condition air supplied to the treating chamber;

at least one supporter (a) that includes a shelf (i) that is supported by legs that are fixed to the base and (ii) that supports the heat pump module and that defines a space (i) between the base and the heat pump module and (ii) below the shelf and (b) that includes a first supporter fixing tab that includes a surface that faces the base and that is located at a lower part of at least one of the legs; a steam generating module that is located in the space and that is configured to generate steam and supply steam to the treating chamber; and a controller that is configured to control at least one of the heat pump module or the steam generating module, the controller being located in the space and below the steam generating module,

wherein the base includes a first supporter fixing part that includes a first supporter fastening hole that is configured to receive the first supporter fixing tab.]

[2. The fabric treating apparatus of claim 1, wherein the first supporter fixing tab is configured to slide into a pocket that is defined by the first supporter fastening hole.]

[3. The fabric treating apparatus of claim 2, wherein a size of the pocket is about equal to a size of the first supporter fixing tab.]

[4. The fabric treating apparatus of claim 1, wherein: the at least one supporter comprises:

a first supporter that includes a second supporter fixing tab; and

a second supporter that includes the first supporter fixing tab,

the base comprises:

a second supporter fixing part that defines a second supporter fastening hole that is configured to receive the second supporter fixing tab,

the second supporter fixing tab is configured to slide into the second supporter fastening hole in a first direction, and

the first supporter fixing tab is configured to slide into the first supporter fastening hole in a second direction that is opposite the first direction.]

[5. The fabric treating apparatus of claim 1, wherein: the base comprises a metal material, and the first supporter fixing part comprises a plastic material.]

[6. The fabric treating apparatus of claim 5, wherein the first supporter fixing part is formed by cutting, about perpendicular to a direction in which the first supporter fixing tab is configured to insert, a portion of the base having a predetermined length and then upwardly pressing a predetermined peripheral area of the cut portion.]

[7. The fabric treating apparatus of claim 6, wherein the first supporter fastening hole is formed through plastic deformation of the cut portion.]

[8. The fabric treating apparatus of claim 5, comprising a fastening member that is configured to couple the base and the at least one supporter and that vertically penetrates the first supporter fixing part and the first supporter fixing tab.]

[9. The fabric treating apparatus of claim 1, wherein: the casing includes an opening that is located at a rear side of the casing and that is configured to receive the controller,

the heat pump module is located above the controller, and the fabric treating apparatus further comprises a blower that is configured to blow air into an interior of the heat pump module.]

[10. The fabric treating apparatus of claim 9, further comprising:

a panel that is detachably coupled to the casing and that is configured to close the opening.]

[11. The fabric treating apparatus of claim 10, wherein the blower is located in front of the at least one supporter.]

[12. The fabric treating apparatus of claim 10, wherein the blower is coupled to the base.]

[13. The fabric treating apparatus of claim of claim 10, wherein the base comprises a blower installation tab that protrudes from the base and that is configured to couple to the blower.]

[14. The fabric treating apparatus of claim 12, further comprising:

an air intake duct that is configured to guide air into the blower and that is located in front of the blower.]

[15. The fabric treating apparatus of claim 14, wherein the air intake duct is fixed to at least one of the blower or the base.]

[16. The fabric treating apparatus of claim 1, wherein the controller includes at least one controller fixing tab that is configured to slide into a controller fixing hole that is located at the base.]

[17. A fabric treating apparatus comprising:

a casing that comprises:

a treating chamber that is configured to receive clothes; and

a machinery room that is located below the treating chamber;

a base that is located at a bottom of the machinery room; a heat pump module that is configured to condition air supplied to the treating chamber;

at least one supporter that includes a shelf (i) that is supported by legs that are fixed to the base and (ii) that supports the heat pump module and that defines a space (i) between the base and the heat pump module and (ii) below the shelf;

a steam generating module that is located in the space and that is configured to generate steam and supply steam to the treating chamber; and

a controller that is configured to control at least one of the heat pump module or the steam generating module, the controller being located in the space and below the steam generating module,

wherein a steam generating module fixing tab is located at one of the steam generating module or the at least one supporter, and

wherein the fabric treating apparatus defines an installation hole that is configured to receive the steam generating module fixing tab and that is located at another of the steam generating module or the at least one supporter opposite the steam generating module fixing tab.]

[18. The fabric treating apparatus of claim 17, wherein: the at least one supporter comprises a pair of supporters that are spaced apart from each other and that are about perpendicular to a front and rear direction of the base, the installation hole is located on one of the pair of the supporters, and

the steam generating module is coupled, by a fastening member, to another one of the pair of the supporters opposite the installation hole, and

the steam generating module fixing tab is inserted into the installation hole.]

19. A fabric treating apparatus comprising:

a casing that comprises:

an open front;

a treating chamber that is configured to receive clothes; and

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a machinery room that is located below the treating chamber;

a base that is located at a bottom of the machinery room; a blower that is located behind an air intake duct and is configured to suction the air in the treating room;

5 a heat pump module that is located in the machinery room, and is configured to condition the air supplied to the treating chamber, wherein the heat pump module includes a housing connected to the blower, and an air outlet protruded from a portion of an upper face of the housing to guide the air toward the treating chamber;

10 at least one supporter that includes a shelf (i) that is supported by legs that are fixed to the base and (ii) that supports the heat pump module and that defines a space (i) between the base and the heat pump module and (ii) below the shelf;

15 a steam generating module that is located in the space and that is configured to generate steam and supply steam to the treating chamber; and

a controller that is configured to control at least one of the heat pump module or the steam generating module, wherein a steam generating module fixing tab is located at one of the steam generating module or the at least one supporter,

20 wherein the fabric treating apparatus further comprises an installation hole that is configured to receive the steam generating module fixing tab, and

wherein the installation hole is located (i) at the steam generating module when the steam generating module fixing tab is located at the at least one supporter, or (ii) at the at least one supporter when the steam generating module fixing tab is located at the steam generating module.

20. The fabric treating apparatus of claim 19, wherein a length of the air outlet along a width direction of the cabinet is longer than a length of the air outlet along a front-rear direction of the cabinet.

21. The fabric treating apparatus of claim 19, wherein the air outlet is located closer to a rear portion of the housing than a front portion of the housing.

22. The fabric treating apparatus of claim 19, wherein the air outlet is provided higher than the blower.

23. The fabric treating apparatus of claim 19, wherein a protruded height of the air outlet is increased along a front-rear direction of the cabinet.

24. The fabric treating apparatus of claim 19, wherein the heat pump module further includes an air inlet formed at a front side of the housing to flow the air from the blower into the housing.

25. The fabric treating apparatus of claim 24, wherein the air outlet is located higher than the air inlet.

26. The fabric treating apparatus of claim 19, wherein the air intake duct is located in front of the blower in the machinery room and is configured to guide air in the treating room into the blower.

27. The fabric treating apparatus of claim 26, wherein the air intake duct includes:

an opening of the air intake duct to communicate with the treating chamber and guide toward the blower; and

an outlet of the air intake duct connected to the blower.

28. The fabric treating apparatus of claim 27, further comprising:

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an inlet port penetrated through a bottom of the treating chamber; and

an outlet port penetrated through the bottom of the treating chamber and located behind the inlet port, wherein the opening of the air intake duct is connected to the inlet port to suction the air in the treating chamber, and

wherein the air outlet is connected to the outlet port to discharge the air passing through the heat pump module toward the treating chamber.

29. The fabric treating apparatus of claim 27, wherein the blower includes:

an opening of the blower connected to the outlet of the air intake duct; and

a vent of the blower connected to the heat pump module to move the air from the blower to the heat pump module.

30. The fabric treating apparatus of claim 29, wherein the heat pump module further includes an air inlet formed at a front side of the housing and connected to the vent.

31. The fabric treating apparatus of claim 30, wherein the air inlet and the air outlet is arranged along a front-rear direction of the housing.

32. The fabric treating apparatus of claim 29, wherein the opening of the blower is located lower than the opening of the air intake duct, and

wherein the heat pump module is located higher than the opening of the blower.

33. The fabric treating apparatus of claim 29, wherein the vent is located higher than the opening of the blower to connect with the heat pump module.

34. The fabric treating apparatus of claim 29, wherein the heat pump module further includes an evaporator and a condenser located in the housing for exchanging heat with the air passing through the housing.

35. The fabric treating apparatus of claim 29, wherein the blower further includes a fan to suction the air in the treating chamber, and

wherein an axis of the fan is located along a front-rear direction of the cabinet.

36. The fabric treating apparatus of claim 35, wherein the heat pump module is located higher than the axis of the fan.

37. The fabric treating apparatus of claim 27, wherein a length of the air intake duct along a width direction of the cabinet is longer than a length of the air intake duct along a front-rear direction of the cabinet.

38. The fabric treating apparatus of claim 27, wherein an upper portion of the air intake duct is inclined.

39. The fabric treating apparatus of claim 19, wherein:

the at least one supporter comprises a pair of supporters that are spaced apart from each other and that are about perpendicular to a front and rear direction of the base,

the installation hole is located on one of the pair of the supporters, and

the steam generating module is coupled, by a fastening member, to another one of the pair of the supporters opposite the installation hole, and

the steam generating module fixing tab is inserted into the installation hole.

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