

BASE AND CLOTHING TREATMENT DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is based upon and claims the priority to Chinese Patent Application No. 202210540760.6, filed on May 17, 2022, and Chinese Patent Application No. 202221196807.3, filed on May 17, 2022, the contents of which are incorporated herein by reference in their entirety.

TECHNICAL FIELD

[0002] The application relates to the technical field of household appliances, and more particularly to a base and a laundry treatment apparatus.

BACKGROUND

[0003] In the related art, a cleaner has a weak ability of cleaning dust. Furthermore, in the related art, there is a laundry treatment apparatus, such as a type of the laundry treatment apparatus in which a robot vacuum cleaner is arranged below a washing machine. However, a base of the laundry treatment apparatus has a large dimension, and an assembly consisting of the laundry treatment apparatus and the base has an overlarge dimension, which occupies more space.

SUMMARY

[0004] In view of the above, the application provides a base and a laundry treatment apparatus to solve the technical problem of how to improve the structural compactness of the base and the laundry treatment apparatus.

[0005] The technical solution of the application is realized as follows.

[0006] An embodiment of the application provides a base, which includes a housing and a dust suction assembly. A cleaning cavity in which a cleaner is to be docked is arranged inside the housing. The dust suction assembly is arranged outside the cleaning cavity. The dust suction assembly is provided with a dust collecting port adapted to be in communication with the cleaner to suck dust in the cleaner, and the dust suction assembly is further provided with an air return port in communication with the cleaner to guide gas to the cleaner through the air return port.

[0007] In the above technical solution, the dust suction assembly includes an intake passage, a dust collector and an exhaust passage. One end of the intake passage is provided with the dust collecting port. The dust collector is connected to another end of the intake passage to filter the dust introduced from the dust collecting port. One end of the exhaust passage is connected to the dust collector, and another end of the exhaust passage is provided with the air return port, to guide the gas filtered by the dust collector to the cleaner.

[0008] In the above technical solution, the dust collecting port is closer to the dust collector than the air return port.

[0009] In the above technical solution, a front end of the cleaning cavity is provided with an opening, each of the dust collecting port and the air return port is arranged at a respective one of a left side and a right side of a rear end of the cleaning cavity, the dust collector is arranged at a right end of the cleaning cavity, and the exhaust passage extends from the rear end of the cleaning cavity to the right end of the cleaning cavity and is connected to the dust collector.

[0010] In the above technical solution, the intake passage is located between the cleaning cavity and the dust collector in a left-right direction.

[0011] In the above technical solution, a distance between the dust collecting port and the air return port in the left-right direction is greater than 0.5 times a dimension of the cleaning cavity in the left-right direction.

[0012] In the above technical solution, the dust collector includes a dust collecting box and a driving member. The dust collecting box is connected to the another end of the intake passage. One end of the driving member is connected to the dust collecting box,

and another end of the driving member is connected to the one end of the exhaust passage, to guide gas flow to flow from the dust collecting port to the air return port.

[0013] In the above technical solution, the dust collecting box includes a box body, a drawer and a filtering member. A first cavity is arranged inside the box body, and a front end of the first cavity is provided with an opening. A second cavity in communication with the dust collecting port and the air return port is arranged inside the drawer, and the drawer is arranged in the first cavity and movable in translation along a front-rear direction. The filtering member is arranged in the second cavity to filter the gas passing through the second cavity.

[0014] In the above technical solution, the driving member includes a power supply and a dust collecting motor. The power supply is arranged above the dust collecting box. A front end of the dust collecting motor is connected to the dust collecting box, and a rear end of the dust collecting motor is connected to the exhaust passage.

[0015] An embodiment of the application further provides a laundry treatment apparatus, which includes a body and the base according to any one of the above technical solutions. The base is arranged at a lower end of the body.

[0016] An embodiment of the application provides a base and a laundry treatment apparatus. The base includes a housing and a dust suction assembly. A cleaning cavity is arranged inside the housing. The dust suction assembly is provided with a dust collecting port and an air return port which are adapted to be in communication with a cleaner, and the dust collecting port is configured to suck dust in the cleaner. In the embodiment of the application, the dust suction assembly is provided with the dust collecting port and the air return port, and when the cleaner is docked in the cleaning cavity, each of the dust collecting port and the air return port is connected to the cleaner to allow a circulation passage to be formed between the dust suction assembly and the cleaner. In this way, gas continuously circulates between the dust suction assembly and the cleaner, and the dust in the cleaner may be transferred to the dust suction assembly following the circulating gas flow, to realize the dust removal of the cleaner. In the technology of improving the structural compactness of the base, the transfer of the dust may be realized by an internal circulation. A circulating gas path between the dust suction assembly and the cleaner has good airtightness, which improves the efficiency of the transfer of the dust. In addition,

in the embodiment of the application, the base is applied to the laundry treatment apparatus, which saves a storage space.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] FIG. 1 is a perspective view of a base according to an embodiment of the application.

[0018] FIG. 2 is a front view of a base according to an embodiment of the application.

[0019] FIG. 3 is a front view of a dust suction assembly according to an embodiment of the application.

[0020] FIG. 4 is a schematic diagram of a dust suction assembly according to an embodiment of the application.

[0021] FIG. 5 is a top view of a base according to an embodiment of the application.

[0022] FIG. 6 is a schematic diagram of a drying assembly according to an embodiment of the application.

[0023] FIG. 7 is a front view of a laundry treatment apparatus according to an embodiment of the application.

[0024] List of reference symbols:

[0025] 1. base; 2. housing; 22. cleaning cavity; 221. opening; 3. dust suction assembly; 31. dust collecting port; 32. air return port; 33. intake passage; 34. dust collector; 341. dust collecting box; 342. driving member; 3421. power supply; 3422. dust collecting motor; 35. exhaust passage; 4. cleaner; 5. body; 6. drying assembly; 61. air outlet; 611. first air outlet; 612. second air outlet; 62. fan; 63. ventilator; 631. first ventilator; 632. second ventilator.

DETAILED DESCRIPTION

[0026] In order to make objectives, technical solutions and advantages of the application more clear, the application will be further described in detail below in combination with the drawings and the embodiments. It should be understood that the specific embodiments described herein are only intended to explain the application and are not intended to limit the application.

[0027] The individual specific technical features described in the specific embodiments may be combined with each other in any suitable manner without conflict. For example, different embodiments and technical solutions may be formed by the combination of different specific technical features. In order to avoid unnecessary repetition, the various possible combinations of the individual specific technical features of the application are not described separately.

[0028] In the following description, the terms “first\second\...” are used only to distinguish different objects from each other, and do not represent that there are similarities or connections between the objects. It should be understood that the orientation descriptions “above”, “below”, “outside” and “inside” are all orientations in normal use state, and the “left” and “right” directions refer to the left and right directions indicated in the specific corresponding schematic diagrams, and may or may not be the left and right directions in normal use state.

[0029] It should be noted that the terms “including”, “include” or any other variation thereof are intended to encompass non-exclusive inclusion, so that a process, a method, an object or a device that includes a set of elements includes not only those elements but also other elements that are not explicitly listed, or also includes elements inherent to such the process, the method, the object or the device. In the absence of further limitations, an element defined by the phrase “includes a ...” does not preclude the existence of another identical element in the process, the method, the object or the device that includes the element. The term “a plurality of” represents more than or equal to two.

[0030] As shown in FIG. 1, an embodiment of the application provides a base 1 for a laundry treatment apparatus. A cleaner 4 is docked in the base 1, and may be configured to automatically clean dust, hair and the like on the ground. In a case that the cleaner 4 is provided with a mop, the cleaner 4 may mop the ground after cleaning the ground. The function of the cleaner of the embodiment of the application does not limit the structure

of the base. The functions of the base 1 of the embodiment of the application include, but are not limited to, charging, dust removal, cleaning, drying and disinfection of the cleaner 4.

[0031] It should be noted that the base 1 of the embodiment of the application is applied to the laundry treatment apparatus, which may include various forms, such as a washing machine, a spin-dryer and a laundry washer-dryer. The specific application scenario of the laundry treatment apparatus does not limit the structure of the base of the application.

[0032] As shown in FIG. 1 and FIG. 2, the base 1 of the embodiment of the application includes a housing 2 and a dust suction assembly 3. A cleaning cavity 22 in which the cleaner 4 is to be docked is arranged inside the housing 2, to realize operations such as the charging and the cleaning of the cleaner 4. Components related to the operations such as the charging and the cleaning of the cleaner 4 are mounted outside the cleaning cavity 22. The dust suction assembly 3 of the embodiment of the application is arranged outside the cleaning cavity 22. In a case that the cleaner 4 is docked in the cleaning cavity 22, the dust suction assembly 3 may suck garbage such as the dust stored in a dust storage space inside the cleaner 4, to vacate the dust storage space inside the cleaner 4, which facilitates the next dust removal operation of the cleaner 4.

[0033] As shown in FIG. 3, the dust suction assembly 3 is provided with a dust collecting port 31 adapted to be in communication with the cleaner 4, and the dust collecting port 31 is configured to suck the garbage such as the dust stored in the dust storage space of the cleaner 4. The dust suction assembly 3 is further provided with an air return port 32 in communication with the cleaning cavity 22, and the air return port 32 is configured to guide gas in the dust suction assembly 3 to the cleaner 4. As shown in FIG. 2, the dust storage space for storing the garbage such as the dust is arranged inside the cleaner 4, and a surface of the cleaner 4 is further provided with an inlet and an outlet which are in communication with the dust storage space. In a case that the cleaner 4 is docked in the cleaning cavity 22, the outlet of the cleaner 4 is connected to the dust collecting port 31 of the dust suction assembly 3, and the inlet of the cleaner 4 is connected to the air return port 32 of the dust suction assembly 3, to allow the dust storage space of the cleaner 4 and the dust suction assembly 3 to be in communication with each other and to be airtight relative to the exterior of the dust storage space of the cleaner 4 and the dust suction assembly 3. In this way, the gas may form a circulating gas path between the dust

storage space of the cleaner 4 and the dust suction assembly 3. That is, the gas may circulate between the dust storage space and the dust suction assembly 3 without flowing to the exterior of the cleaner 4 and the dust suction assembly 3. In addition, the external gas also does not flow to the interior of the cleaner 4 and the dust suction assembly 3.

[0034] It should be noted that the communication in the application may be a direct communication, for example, the dust collecting port 31 is directly connected to the cleaner 4, to realize the communication. The communication in the application may also be an indirect communication, for example, the dust collecting port 31 is in communication with the cleaner 4 through other passages or auxiliary devices.

[0035] In the embodiment of the application, the dust collecting port 31 of the dust suction assembly 3 is connected to the outlet of the cleaner 4, and the air return port 32 of the dust suction assembly 3 is connected to the inlet of the cleaner 4, to allow the circulating gas path to be formed inside the dust suction assembly 3 and the cleaner 4. The dust suction assembly 3 suctions the dust from the dust storage space of the cleaner 4 through the dust collecting port 31, and then the dust suction assembly 3 filters the dust and guides the gas. The gas flows from the dust storage space to the dust suction assembly to generate a pressure difference, to allow a negative pressure to be generated in the dust storage space of the cleaner. The gas filtered by the dust suction assembly flows back to the dust storage space of the cleaner through the air return port under the action of the negative pressure. In this way, an internal circulation for the gas is formed between the dust suction assembly 3 and the cleaner, and the gas continuously passes through the dust storage space and brings the dust in the dust storage space into the dust suction assembly through the dust collecting port. The dust suction assembly continuously collects the dust and guides the filtered gas back to the dust storage space. The operations described above are repeated successively until the gas transfers all the dust in the dust storage space to the dust suction assembly, to realize the dust removal of the cleaner by the dust suction assembly.

[0036] An embodiment of the application provides a base 1, which includes a housing 2 and a dust suction assembly 3. A cleaning cavity 22 is arranged inside the housing 2. The dust suction assembly 3 is provided with a dust collecting port 31 and an air return port 32 which are adapted to be in communication with a cleaner 4, and the dust collecting port 31 is configured to suck dust in the cleaner 4. In the embodiment of the application, the

dust suction assembly 3 is provided with the dust collecting port 31 and the air return port 32, and when the cleaner 4 is docked in the cleaning cavity 22, each of the dust collecting port 31 and the air return port 32 is connected to the cleaner 4 to allow a circulation passage to be formed between the dust suction assembly 3 and the cleaner 4. In this way, gas continuously circulates between the dust suction assembly 3 and the cleaner 4, and the dust in the cleaner 4 may be transferred to the dust suction assembly 3 following the circulating gas flow, to realize the dust removal of the cleaner 4. In the technology of improving the structural compactness of the base, the transfer of the dust may be realized by an internal circulation. A circulating gas path between the dust suction assembly and the cleaner has good airtightness, which improves the efficiency of the transfer of the dust. In addition, in the embodiment of the application, the base is applied to a laundry treatment apparatus, which saves a storage space.

[0037] In some embodiments, the air return port 32 may be directly connected to the atmosphere, thus the gas in the atmosphere may flow to the air return port 32 and then be blown to the cleaner 4 through the air return port 32. It can be understood that the gas blown to the cleaner through the air return port 32 may be either cleaning gas after the dust is filtered by the dust suction assembly 3, or the gas in the atmosphere.

[0038] In some embodiments as shown in FIG. 4, the structure of the housing is omitted in FIG. 4 for ease of observation. The dust suction assembly 3 includes an intake passage 33, a dust collector 34 and an exhaust passage 35. The intake passage 33 is provided with two opposite ends in an extension direction thereof. One end of the two opposite ends of the intake passage 33 is provided with the dust collecting port 31, and another end of the two opposite ends of the intake passage 33 is connected to the dust collector 34. Herein, the intake passage 33 may be provided as a hose, to facilitate the cooperation of the intake passage 33 and other components during assembly. Certainly, the intake passage 33 may also be directly formed by the housing. In some embodiments, a rubber member may be arranged at the dust collecting port 31 of the intake passage 33, and the rubber member is arranged around the dust collecting port 31. The arrangement of the rubber member may increase the airtightness of the connection between the dust collecting port and the cleaner, which improves the efficiency of transferring the dust in the cleaner to the dust collector 34. The dust collector 34 of the embodiment of the application is configured to filter the dust introduced from the dust collecting port 31. As shown in FIG.

4, one end of the exhaust passage 35 is connected to the dust collector 34, and another end of the exhaust passage 35 is provided with the air return port 32. The exhaust passage 35 is configured to guide the gas filtered by the dust collector 34 to the cleaner. In some embodiments, the exhaust passage 35 may be provided as a soft passage, to facilitate the cooperation of the exhaust passage 35 and other components during assembly. A rubber member may be arranged at the air return port 32 of the exhaust passage 35, and the rubber member is arranged around the air return port 32. The arrangement of the rubber member may increase the airtightness of the connection between the air return port and the cleaner, which improves the efficiency of transferring the dust in the cleaner to the dust collector 34.

[0039] As shown in FIG. 4, an internal circulation for the gas is formed between the cleaner 4 and the dust suction assembly 3. The gas passes through the cleaner 4, the dust in the cleaner 4 flows from the intake passage 33 to the dust collector 34 following the gas, and the dust collector 34 may filter the gas passing therethrough. That is, the dust collector 34 collects the dust passing therethrough and guides the gas flowing therethrough, the gas flows from the dust collector 34 to the exhaust passage 35, the gas flows back to the cleaner 4 through the exhaust passage, and then the gas takes away the dust in the cleaner 4 again. The operations described above are repeated successively to realize the transfer of the dust in the cleaner 4 to the dust collector 34. In the embodiment of the application, the dust suction assembly is arranged to include the intake passage, the dust collector and the exhaust passage, the intake passage and the exhaust passage may be easily assembled with other components by cooperating therewith, which reduces the assembly difficulty of the dust collector, improves the space utilization rate of the base and reduces an assembly dimension of the base.

[0040] In some embodiments, as shown in FIG. 4, the dust collecting port 31 is closer to the dust collector 34 than the air return port 32. It can be understood that the dust collecting port 31 is arranged between the air return port 32 and the dust collector 34, to allow a length of the intake passage 33 to be less than a length of the exhaust passage 35. In the embodiment of the application, the fact that the length of the intake passage 33 is arranged to be shorter shortens a path of the dust flowing from the cleaner to the dust collector 34. In this way, the risk that the dust is left in the intake passage 33 is reduced, the fluency of the intake passage 33 is increased, and the dust suction efficiency of the

dust collector is further improved.

[0041] In some embodiments, as shown in FIG. 5, a front end of the cleaning cavity 22 is provided with an opening 221. As shown in FIG. 2, the opening 221 is in communication with the cleaning cavity 22. It should be noted that the opening 221 refers to an opening with a larger cross-sectional dimension. The opening 221 is arranged at the cleaning cavity 22, to facilitate the movement of the cleaner 4 into the cleaning cavity 22 via the opening 221. The exhaust passage 35 extends from a rear end of the cleaning cavity 22 to a right end of the cleaning cavity 22 and is connected to the dust collector 34. It should be noted that in the embodiment of the application, the front end of the cleaning cavity 22 may be regarded as one end close to the user, and one end away from the user may be regarded as the rear end of the cleaning cavity 22. The intake passage 33 and the dust collector 34 are also arranged at the right end of the cleaning cavity 22.

[0042] In the embodiment of the application, the fact that the dust suction assembly is dispersed in two directions by being distributed at the rear end and the right end of the cleaning cavity reduces the dimension of the dust suction assembly in one direction. The side by side arrangement of the dust suction assembly and the cleaning cavity reduces an overall height of the base. The transverse arrangement of the intake passage, the exhaust passage and the dust collector reduces the risk that impurities with high gravity may not be suctioned upward into the dust collector due to a longitudinal arrangement of the intake passage, the exhaust passage and the dust collector, and also reduces the risk that residual dust in the passage (intake passage or exhaust passage) falls out of the passage and into the dust collector when the user takes out the dust collector.

[0043] In some embodiments, as shown in FIG. 4, the intake passage 33 is located between the cleaning cavity 22 and the dust collector 34 in a left-right direction. The intake passage 33 may be provided as a bent-shaped structure, and the intake passage 33 may extend along a front-rear direction. The dust collecting port 31 of the intake passage 33 is located at the rear end of the cleaning cavity 22, and the another end of the intake passage 33 is connected to the dust collector 34. The intake passage is arranged to extend substantially along the front-rear direction, which reduces an assembly dimension of the whole dust suction assembly on the premise of meeting the shorter length of the intake passage and improves a structural dimension of the whole base.

[0044] In some embodiments, as shown in FIG. 3, the dust collecting port 31 and the air return port 32 are spaced apart from each other in the left-right direction. The spacing means that a distance between the dust collecting port 31 and the air return port 32 in the left-right direction is greater than a certain value. The gas enters into the cleaner from the air return port, and then flows to the dust collecting port through the cleaner. The dust collecting port and the air return port are spaced apart from each other, which increases a flow path of the gas flow in the cleaner. In this way, the gas may take away the dust in the cleaner as much as possible, to reduce the risk of the dust residue in the cleaner, and improve the dust removal efficiency of the cleaner by the dust suction assembly.

[0045] In some embodiments, as shown in FIG. 3, the distance L1 between the dust collecting port 31 and the air return port 32 in the left-right direction is greater than 0.5 times a dimension L2 of the cleaning cavity 22 in the left-right direction. In the embodiment of the application, because the dimension of the cleaning cavity in the left-right direction substantially conforms to a dimension of the cleaner, the dimension relationship of the dust collecting port, the air return port and the cleaner in the left-right direction may be further defined by defining the relationship of the distance between the dust collecting port and the air return port and the dimension of the cleaning cavity, which prolongs the flow path of the gas flow in the cleaner. In this way, the gas may take away the dust in the cleaner as much as possible, to improve the dust removal effect of the cleaner by the dust suction assembly.

[0046] In some embodiments, as shown in FIG. 3, each of the dust collecting port 31 and the air return port 32 is arranged at a respective one of two opposite sides of the cleaning cavity 22 in the left-right direction. In the embodiment of the application, the arrangement of each of the dust collecting port and the air return port at a respective one of the two opposite sides of the cleaning cavity 22 allows the gas to flow from one side of the cleaner in the left-right direction to another side of the cleaner in the left-right direction. In this way, on the premise of a certain dimension of the cleaning cavity, the flow path of the gas in the cleaning cavity is improved, the efficiency of the gas taking away the dust in the cleaner is improved, and the dust removal effect of the dust suction assembly is improved.

[0047] In some embodiments, as shown in FIG. 4, the dust collector 34 includes a dust collecting box 341 and a driving member 342. The dust collecting box 341 is

connected to the another end of the intake passage 33, herein, the another end of the intake passage 33 refers to one end away from the dust collecting port 31. The dust collecting box 341 is configured to collect the dust introduced from the intake passage 33 and filter the gas introduced from the intake passage 33. In some embodiments, the another end of the intake passage 33 is connected to a side of the dust collecting box 341, in which the side refers to a position of the dust collecting box 341 around an up-down direction. The dust collecting box 341 is provided with two opposite ends in the up-down direction. In the embodiment of the application, the two opposite ends of the dust collecting box 341 in the up-down direction are defined as a top end and a bottom end of the dust collecting box, and a part for connecting the top end and the bottom end is defined as the side of the dust collecting box. In the embodiment of the application, the manner in which the another end of the intake passage 33 is connected to the side of the dust collecting box has the following advantages that the dust in the gas needs to overcome less gravity during the flow thereof, to reduce the risk of the dust accumulation in the intake passage, compared to the manner in which the another end of the intake passage is connected to the top end or the bottom end of the dust collecting box.

[0048] As shown in FIG. 4, one end of the driving member 342 is connected to the dust collecting box 341, and another end of the driving member 342 is connected to the one end of the exhaust passage 35. The driving member 342 is configured to guide the gas flow to flow from the dust collecting port 31 to the air return port 32. The driving member 342 of the embodiment of the application may be configured to disturb the flow of the gas in the intake passage 33 or the exhaust passage 35, to allow the gas to flow from the intake passage 33 to the exhaust passage 35. When the cleaner is connected to the dust suction assembly, the driving member may drive the gas between the cleaner and the dust suction assembly to realize the internal circulation.

[0049] In some embodiments, as shown in FIG. 4, the driving member 342 includes a power supply 3421 and a dust collecting motor 3422. The power supply 3421 and the dust collecting box 341 are stacked onto one another in the up-down direction. In the embodiment of the application, the up-down direction may be used to refer to a vertical direction in the absolute coordinate system, and a plane formed by the front-rear direction and the left-right direction may be used to refer to a direction of a horizontal

plane in the absolute coordinate system. The power supply 3421 of the embodiment of the application may be configured to convert alternating current in the laundry treatment apparatus into direct current, to supply various devices such as the dust collecting motor in the base. As shown in FIG. 4, one end of the dust collecting motor 3422 in the front-rear direction is connected to the dust collecting box 341, and another end of the dust collecting motor 3422 in the front-rear direction is connected to the exhaust passage 35. That is, each of the inlet passage and the exhaust passage is connected to a respective one of two opposite sides of the dust collecting motor in the front-rear direction. In the embodiment of the application, the arrangement of the inlet passage, the exhaust passage and the dust collecting motor in a horizontal direction reduces the assembly dimension of the base in the vertical direction, and reduces the overall height of the base.

[0050] In some embodiments, the dust collecting box includes a box body, a drawer and a filtering member. A first cavity is arranged inside the box body, and one end of the first cavity in the front-rear direction is provided with an opening. A second cavity in communication with the dust collecting port and the air return port is arranged inside the drawer, and the drawer is arranged in the first cavity and movable in translation along the front-rear direction. When the drawer is arranged in the first cavity, the drawer may close the opening, to allow the first cavity and the second cavity to form a sealed cavity. The filtering member is arranged in the second cavity, and the filtering member is configured to filter the gas passing through the second cavity and collect the dust passing through the second cavity. The filtering member is detachably arranged in the second cavity. When the dust in the filtering member is full, the filtering member may be detached and replaced with a new filtering member.

[0051] Certainly, in other embodiments, the structure of the dust collecting box includes, but is not limited to, the embodiment described above. For example, the dust collecting box may be in communication with a drain passage of the laundry treatment apparatus, and water flow in the drain passage passes through the dust collecting box and flushes out the dust in the dust collecting box to a drain port of the laundry treatment apparatus. In this way, the dust in the dust collecting box may be directly discharged to the exterior of the laundry treatment apparatus, the operation of the user is simplified, and the experience of the user is improved.

[0052] As shown in FIG. 1, the base 1 of the embodiment of the application further

includes a drying assembly 6. The drying assembly 6 is arranged outside the cleaning cavity. As shown in FIG. 3, the drying assembly 6 is provided with an air outlet 61 in communication with the cleaning cavity 22. The air outlet 61 is configured to guide the gas flow to the cleaning cavity 22. The gas flow is blown to the cleaning cavity 22 through the air outlet 61, is blown to a wet mop of the cleaner 4 docked in the cleaning cavity 22, and takes away the moisture in the mop to allow the mop to be dried. As shown in FIG. 6, a portion of the drying assembly 6 is located at an end of the cleaning cavity 22 in the front-rear direction, and another portion of the drying assembly 6 is located at an end of the cleaning cavity 22 in the up-down direction. In the embodiment of the application, the fact that the drying assembly 6 is dispersed in two directions by being distributed at the end of the cleaning cavity in the front-rear direction and the end of the cleaning cavity in the up-down direction reduces the dimension of the drying assembly in one direction. The side by side arrangement of a portion of the drying assembly with the cleaning cavity in the front-rear direction reduces the overall height of the base.

[0053] In some embodiments, as shown in FIG. 6, an end of the cleaning cavity 22 in the front-rear direction is provided with an opening 221, and an end of the cleaning cavity 22 in the up-down direction is regarded as a top end of the cleaning cavity 22. A portion of the drying assembly 6 is arranged at an end of the cleaning cavity 22 in the up-down direction, that is, said portion of the drying assembly 6 is arranged at the top end of the cleaning cavity 22. Another portion of the drying assembly 6 may be arranged at an end of the cleaning cavity 22 in the front-rear direction, that is, the drying assembly 6 may be arranged at the rear end of the cleaning cavity 22. In the embodiment of the application, the distribution of the drying assembly around the cleaning cavity reduces an assembly space of the drying assembly in one direction, and reduces the assembly dimension of the whole base.

[0054] In some embodiments, the drying assembly 6 includes a fan 62 and a ventilator 63. The function of the fan 62 is to increase a pressure of the gas by the mechanical energy. Herein, the fan 62 is arranged at an end of the cleaning cavity 22 in the up-down direction, that is, the fan 62 is arranged at the top end of the cleaning cavity 22. As shown in FIG. 6, one end of the ventilator 63 is in communication with the fan 62, and another end of the ventilator 63 is provided with an air outlet 61 (see FIG. 3). The interior of the

ventilator 63 is hollow, and the ventilator 63 is arranged at the rear end of the cleaning cavity 22. The ventilator 63 may be configured to guide the gas flow generated by the fan 62 and guide the gas flow in the fan 62 to the cleaning cavity 22. In the embodiment of the application, the drying assembly is arranged in the form of the fan and the ventilator, the drying assembly does not need to be arranged on one side of the cleaning cavity in a concentrated manner, and the drying assembly may be distributed on different sides of the cleaning cavity, which reduces the overall height of the base and reduces the assembly difficulty of the drying assembly.

[0055] In some embodiments, as shown in FIG. 6, a dimension of the fan 62 in the front-rear direction is greater than a dimension of the fan 62 in the up-down direction. In the normal use state of the fan, the dimension of the fan 62 in the vertical direction is greater than the dimension of the fan 62 in the horizontal direction. The fan 62 of the embodiment of the application is arranged horizontally, that is, the dimension of the fan 62 in the vertical direction is less than the dimension of the fan 62 in the horizontal direction, which reduces a space occupied by the fan in the vertical direction and reduces a dimension of the base in the vertical direction.

[0056] In some embodiments, as shown in FIG. 6, an extension direction of the ventilation member 63 is parallel to the up-down direction. It should be noted that the extension direction of the ventilator 63 refers to a length direction of the ventilator 63. The coincidence of the length direction of the ventilator with the up-down direction reduces a space occupied by the ventilator in the front-rear direction, improves the assembly compactness of various components inside the housing, and improves the space utilization rate of the housing.

[0057] In some embodiments, as shown in FIG. 6, a plurality of ventilators 63 are provided. An upper end of each of the plurality of ventilators 63 is in communication with the fan 62, that is, the gas flow generated by the fan 62 is dispersed to the plurality of ventilators 63. Lower ends of the plurality of ventilators 63 are spaced apart from each other in the left-right direction. The gas flow is blown from the another end of each of the plurality of ventilators 63 to the cleaning cavity, to allow the gas flow to be blown to the different positions of the cleaner 4, and to improve the drying efficiency of the cleaner.

[0058] In some embodiments, as shown in FIG. 6, the plurality of ventilators 63 include a first ventilator 631 and a second ventilator 632. One end of the first ventilator 631 is in communication with the fan 62, and another end of the first ventilator 631 is a first air outlet 611. One end of the second ventilator 632 is in communication with the fan 62, and another end of the second ventilator 632 is a second air outlet 612. In some embodiments, the cleaner 4 may be provided with two mops, and the two mops are arranged side by side in the left-right direction. As shown in FIG. 3, in the embodiment of the application, a distance L3 between the first air outlet 611 and the second air outlet 612 in the left-right direction is greater than or equal to a first dimension and less than or equal to a second dimension. The first dimension is 0.2 times the dimension L2 of the cleaning cavity 22 in the left-right direction, and the second dimension is 0.6 times the dimension L2 of the cleaning cavity in the left-right direction. In the embodiment of the application, the distance between the first air outlet and the second air outlet is defined in a certain range, to allow the gas flow derived from the first air outlet and the second air outlet to be evenly blown to the mops of the cleaner, and to improve the drying efficiency of the cleaner. In some embodiments, as shown in FIG. 6, the first air outlet 611 and the second air outlet 612 are symmetrically arranged with respect to a center line of the cleaning cavity 22 in the left-right direction. In the embodiment of the application, the symmetrical arrangement of the first air outlet and the second air outlet in the left-right direction improves the drying efficiency of the gas flow to the cleaner in the cleaning cavity.

[0059] In some embodiments, as shown in FIG. 6, a portion of the first ventilator 631 close to the fan 62 extends along the left-right direction, and a portion of the first ventilator 631 close to the first air outlet 611 extends along the up-down direction. A portion of the second ventilator 632 close to the fan 62 extends along the left-right direction, and a portion of the second ventilator 632 close to the second air outlet 612 extends along the up-down direction. That is, one end of the first ventilator 631 close to the fan 62 and one end of the second ventilator 632 close to the fan 62 are connected to the fan 62 and extend along the horizontal direction. A portion of the first ventilator 631 away from the fan 62 and a portion of the second ventilator 632 away from the fan 62 are spaced apart from each other in the left-right direction and extend along the up-down direction. In this way, the first air outlet 611 and the second air outlet 612 are spaced apart from each other in the left-right direction, and the one end of the first ventilator

631 is in communication with the one end of the second ventilator 632, to allow the gas flow to be dispersed and guided to a bottom of the cleaning cavity, to allow the gas flow to be evenly dispersed to the positions of the two mops of the cleaner, and to improve the drying efficiency of the cleaner.

[0060] In some embodiments, as shown in FIG. 3, the air outlet 61 is close to the bottom end of the cleaning cavity 22 in the up-down direction. The up-down direction may refer to the vertical direction of the base in the normal use state, and a lower end shown in FIG. 3 refers to the bottom end of the cleaning cavity 22. It should be noted that the expression “close to” in the embodiment of the application means that a distance between the air outlet 61 and the bottom end of the cleaning cavity 22 is less than or equal to 0.4 times a dimension of the cleaning cavity 22 in the up-down direction. In the embodiment of the application, the arrangement of the air outlet close to the bottom end of the cleaning cavity in the up-down direction reduces a distance between the air outlet and the mop of the cleaner and allows wind derived from the air outlet to be directly blown to the mop. In this way, the dissipation of the gas flow is reduced, and the drying efficiency of the cleaner is further improved.

[0061] In some embodiments, the drying assembly also includes a heating member. The heating member is arranged in the ventilator, and the heating member is configured to heat the gas flow passing through the ventilator. The gas flow is heated by the heating member, to allow the temperature of the gas flow to increase. When the gas flow at the high temperature is blown to a surface of the mop of the cleaner, the gas flow at the high temperature conducts heat with the mop, to allow the temperature of the mop to increase, and to accelerate the evaporation of the moisture in the mop. The moisture in the mop is taken away by the air flow, to realize the rapid drying of the mop.

[0062] An embodiment of the application also provides a laundry treatment apparatus, which includes a body 5 and the base 1 according to any one of the above embodiments, as shown in FIG. 7. The body 5 is configured to perform operations such as soaking, washing and drying the laundry, and the base 1 is arranged at one end of the body 5 in the up-down direction. Herein, the up-down direction represents the vertical direction in the absolute coordinate system, that is, the base 1 is arranged at a bottom of the laundry treatment apparatus. When the laundry treatment apparatus is placed on the ground, the base 1 is closer to the ground than the body 5, to allow the cleaner to be moved into the

cleaning cavity 22 through the opening.

[0063] What described above are merely preferable embodiments of the application, and are not intended to limit the scope of protection of the application.

CLAIMS

1. A base, comprising:

a housing, wherein a cleaning cavity in which a cleaner is to be docked is arranged inside the housing; and

a dust suction assembly arranged outside the cleaning cavity, wherein the dust suction assembly is provided with a dust collecting port adapted to be in communication with the cleaner to suck dust in the cleaner, and the dust suction assembly is further provided with an air return port in communication with the cleaner to guide gas to the cleaner through the air return port.

2. The base according to claim 1, wherein the dust suction assembly comprises:

an intake passage, wherein one end of the intake passage is provided with the dust collecting port;

a dust collector connected to another end of the intake passage to filter the dust introduced from the dust collecting port; and

an exhaust passage, wherein one end of the exhaust passage is connected to the dust collector, and another end of the exhaust passage is provided with the air return port, to guide the gas filtered by the dust collector to the cleaner.

3. The base according to claim 2, wherein the dust collecting port is closer to the dust collector than the air return port.

4. The base according to claim 3, wherein a front end of the cleaning cavity is provided with an opening, each of the dust collecting port and the air return port is arranged at a respective one of a left side and a right side of a rear end of the cleaning cavity, the dust collector is

arranged at a right end of the cleaning cavity, and the exhaust passage extends from the rear end of the cleaning cavity to the right end of the cleaning cavity and is connected to the dust collector.

5. The base according to claim 4, wherein the intake passage is located between the cleaning cavity and the dust collector in a left-right direction.

6. The base according to claim 5, wherein a distance between the dust collecting port and the air return port in the left-right direction is greater than 0.5 times a dimension of the cleaning cavity in the left-right direction.

7. The base according to any one of claims 2 to 6, wherein the dust collector comprises:

a dust collecting box connected to the another end of the intake passage; and

a driving member, wherein one end of the driving member is connected to the dust collecting box, and another end of the driving member is connected to the one end of the exhaust passage, to guide gas flow to flow from the dust collecting port to the air return port.

8. The base according to claim 7, wherein the dust collecting box comprises:

a box body, wherein a first cavity is arranged inside the box body, and a front end of the first cavity is provided with an opening;

a drawer, wherein a second cavity in communication with the dust collecting port and the air return port is arranged inside the drawer, and the drawer is arranged in the first cavity and movable in translation along a front-rear direction; and

a filtering member arranged in the second cavity to filter the gas passing through the second cavity.

9. The base according to claim 8, wherein the driving member comprises:

a power supply arranged above the dust collecting box; and

a dust collecting motor, wherein a front end of the dust collecting motor is connected to the dust collecting box, and a rear end of the dust collecting motor is connected to the exhaust passage.

10. A laundry treatment apparatus, comprising:

a body; and

the base according to any one of claims 1 to 9, wherein the base is arranged at a lower end of the body.