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(54) **WATER RECEIVING TRAY ASSEMBLY AND AIR CONDITIONING**

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Description

Technical Field

[0001] The invention relates to a technical field of heat exchange, and in particular to two alternatives of a water receiving tray assembly and an air conditioner.

Background

[0002] At present, when a water receiving tray is applied to an air conditioner system, the water receiving tray may be configured to receive condensation water produced in use of an air duct component, and then the condensation water may be drained by the water receiving tray through a drain pipe connected with the water receiving tray. For the air conditioner system in use, it is necessary for the air duct component to be barrier-free when an air comes in and to prevent air leakage when the air goes out, thus guaranteeing the efficient operation of the air conditioner system.

[0003] However, for the existing cabinet air conditioner, an area below the air duct component opposite to the water receiving tray is a high-pressure area; and an area at the drain pipe opposite to the water receiving tray is a low-pressure area. During use, when the air goes out from the air duct component, a part of air is blown from the high-pressure area to the low-pressure area to cause the air leakage, and as a result, the air volume of the air duct component is obviously reduced.

[0004] Therefore, it is necessary to improve the structure of the existing water receiving tray, so that the water receiving tray can prevent the air from being blown from the high-pressure area to the low-pressure area while a received condensation water flows through and thus the reduction in the air volume of the air duct component is prevented.

[0005] An air conditioner is disclosed in the Document D1 (GB2561989A).

[0006] US 2015/308709 A1 discloses a water receiving tray assembly using valves to reduce gas leakage.

Summary

[0007] The invention provides two alternatives for a water receiving tray assembly and an air conditioner, which can prevent air from being blown from a high-pressure area to a low-pressure area when condensation water flows through and thus prevents the reduction in air volume of an air duct component. The invention is set out in the appended set of claims.

[0008] An embodiment of the present disclosure provides a water receiving tray assembly, which includes: a water receiving tray body and a first stopper; wherein the water receiving tray body includes a first area for receiving condensation water flowing from an air duct component, a second area communicating with a drain pipe, and a groove located between the first area and the sec-

ond area; and the first stopper has a first end and a second end, herein the first end is fixed on the water receiving tray body and the second end extends into the groove and is at a predetermined distance from a bottom surface of the groove; when a height of a condensation water in the groove is greater than the predetermined distance, the condensation water in the groove contacts with the first stopper to form a sealed windshield structure.

[0009] In an exemplary embodiment, a protruded transition portion is formed at a transition position between the second area and the groove, and an upper surface of the transition portion is not higher than a water-out position of the first area and is higher than the second end of the first stopper.

[0010] In an exemplary embodiment, the first area is provided with an upper surface for flowing through the condensation water; and the upper surface of the first area is provided with a downward predetermined inclination angle along a flowing direction of the condensation water.

[0011] In the first alternative of the invention, a clamping groove is formed at a position, opposite to the groove, of the water receiving tray body, and the first stopper is fixed on the water receiving tray body by the clamping groove.

[0012] In an exemplary embodiment, the first stopper and the water receiving tray body are of an integrally moulded structure.

[0013] In a second alternative embodiment of the invention, which can be combined with the first, a barrier layer is disposed on a surface of the second area.

[0014] In an exemplary embodiment, the water receiving tray assembly further includes a second stopper; the second stopper is located at a transition position between the groove and the second area; and the second stopper is in clearance fit with the water receiving tray body and the barrier layer.

[0015] An air conditioner includes the above-mentioned water receiving tray assembly.

[0016] According to the water receiving tray assembly and the air conditioner provided by the invention, the first stopper is disposed above the groove between the first area and the second area of the water receiving tray body, and the first stopper can extend into the groove and a predetermined distance is formed between the first stopper and the bottom surface of the groove; and when the height of the condensation water in the groove is greater than the predetermined distance in use, the condensation water in the groove contacts the first stopper to form the sealed windshield structure. Therefore, the water permeable and airtight effect is implemented, and while the condensation water is guaranteed to flow normally, the air is prevented from being blown from the high-pressure area to the low-pressure area and thus the air volume of the air duct component may be guaranteed.

Brief Description of the Drawings

[0017] The accompanying drawings are described here to provide a further understanding of the present disclosure. The schematic embodiments and description of the present disclosure are adopted to explain the present disclosure, and do not form improper limits to the present disclosure. In the drawings:

Fig. 1 illustrates a structural schematic diagram of a water receiving tray assembly in an embodiment of the present disclosure.

Fig. 2 illustrates a structural schematic diagram showing that a water receiving tray assembly is applied to an air conditioner in an embodiment of the present disclosure.

Numerals in the drawings:

[0018] 1. water receiving tray body; 2. first stopper; 3. air duct component; 11. first area; 12. second area; 13. groove; 14. transition portion; 4. second stopper; 5. barrier layer.

Detailed Description of the Embodiments

[0019] Details of the present disclosure can be understood more clearly in combination with accompanying drawings and description on the specific embodiments of the present disclosure. However, the specific embodiments of the present disclosure described here are merely for explaining the present disclosure and cannot be understood as limits to the present disclosure in any form. Under the teaching of the present disclosure, it may be conceivable for a technician to make any possible variation based on the present disclosure and all should be considered as the scope of the present disclosure.

[0020] It is to be noted that when an element is referred to as being "on" another element, it can be directly on the other element or intervening elements may be present therebetween. Also, when an element is referred to as being "connected to" another element, it can be directly connected to the element or intervening elements may be present therebetween. The terms "install", "connected with", "connected to" should be comprehended in a broad sense. For example, these terms may be comprehended as being mechanically connected or electrically connected, may also be comprehended as being communicated inside two elements, may be comprehended as being directly connected and may also be comprehended as being connected indirectly via intermediation. The specific meanings about the foregoing terms in the present application may be understood by those skilled in the art according to specific circumstances. The present disclosure will be described below in detail with reference to the accompanying drawings and in combination with the embodiments.

[0021] The embodiments of the present disclosure provide a water receiving tray assembly and an air conditioner capable of preventing air from being blown from a high-pressure area to a low-pressure area while condensation water flows through and thus preventing the reduction of the air volume of an air duct component.

[0022] Referring to Fig. 1, a water receiving tray assembly provided by the invention will include: a water receiving tray body 1 and a first stopper 2; the water receiving tray body 1 includes a first area 11 for receiving condensation water flowing from an air duct component 3, a second area 12 communicating with a drain pipe, and a groove 13 located between the first area 11 and the second area 12; and the first stopper 2 has a first end and a second end, wherein the first end is fixed on the water receiving tray body 1 and the second end extends into the groove 13 and a predetermined distance is formed between the second end and a bottom surface of the groove 13.

[0023] When a height of a condensation water in the groove 13 is greater than the predetermined distance, the condensation water in the groove 13 contacts with the first stopper 2 to form a sealed windshield structure.

[0024] In this embodiment, the water receiving tray body 1 is configured to receive the condensation water flowing from the air duct component 3 and guide the condensation water to the drain pipe connected therewith; and the condensation water is drained by the drain pipe. Specifically, the water receiving tray body 1 includes the first area 11 for receiving the condensation water flowing from the air duct component 3, the second area 12 communicating with the drain pipe, and the groove 13 located between the first area 11 and the second area 12, wherein an area where the first area 11 is located is a high-pressure area, and an area where the second area 12 is located is a low-pressure area.

[0025] In this embodiment, the first area 11 is located below the outflowed condensation water; and when the condensation water flows downward under an action of gravity, it can be completely flowed into the first area 11 of the water receiving tray body 1.

[0026] In an exemplary embodiment, the first area 11 is provided with an upper surface for flowing through the condensation water; and the upper surface of the first area is provided with a downward predetermined inclination angle along a flowing direction of the condensation water. Specifically, the predetermined inclination angle is formed on the upper surface of the first area 11 for receiving the condensation water. After the condensation water enters the first area 11, the condensation water flows downward along the upper surface of the first area 11 for receiving the condensation water under the action of the gravity, sequentially flows through the groove 13 and the second area 12 and at last is drained from the drain pipe, and is not accumulated in the first area 11.

[0027] In an exemplary embodiment, the predetermined inclination angle is formed during mould withdrawal of the water receiving tray body 1 and is the same as

a mould withdrawal angle. Certainly, the predetermined inclination angle may further be formed in other machining manners, and is not specifically defined by the present disclosure. Besides, the predetermined inclination angle may be selected as $2-10^{\circ}$, so that the condensation water can flow downward smoothly. Certainly, the magnitude of the predetermined inclination angle is not limited to the above example and is not specifically defined in the present disclosure.

[0028] In this embodiment, an overall surface height of the second area 12 is smaller than a surface height of the first area 11, and the second area 12 communicates with the drain pipe, so that the condensation water flows into the drain pipe for draining.

[0029] In the second alternative embodiment of the invention when the condensation water flows from the first area 11 corresponding to the high-pressure area to the second area 12 corresponding to the low-pressure area, the temperature of the condensation water is low. By providing a barrier layer 5 on the surface of the second area 12, the low-temperature condensation water is stopped from directly contacting the surface of the second area 12 and thus the condensation water is prevented from forming on a lower surface of the second area 12.

[0030] In an exemplary embodiment, the barrier layer 5 is made of foam. Certainly, the material of the barrier layer 5 is not limited to the above example, may further be other material and is not specifically defined in the present disclosure.

[0031] In this embodiment, the groove 13 is formed between the first area 11 and the second area 12, the first stopper 2 is disposed on the water receiving tray body 1 above the groove 13, and the first stopper 2 is cooperated with the condensation water in the groove 13 to form the windshield structure that is water permeable and airtight.

[0032] In the first alternative embodiment of the invention, the first stopper 2 is of a structure having one block piece and is provided with a first end and a second end that are opposite, wherein the first end is fixed on the water receiving tray body 1, and the second end extends into the groove 13, and a predetermined distance is formed between the second end and the bottom surface of the groove 13 to preserve a flowing port for the condensation water.

[0033] In this embodiment, the first stopper 2 is specifically cooperated with the receiving tray body in a clamping groove fixing manner.

[0034] Specifically, a clamping groove is formed at a position, opposite to the groove 13, of the water receiving tray body 1, and the first stopper 2 is fixed on the water receiving tray body 1 by the clamping groove.

[0035] The first stopper 2 may be fixed in the clamping groove in a clearance fit manner. At this moment, the first stopper 2 may be made of a rubber with elasticity. Certainly, the material of the first stopper 2 may further be other forms and is not specifically defined in the present disclosure.

[0036] When the first stopper 2 is made of the rubber and is clamped in the clamping groove in the clearance fit manner, the sealing property between the first stopper 2 and the water receiving tray body 1 in cooperation also can be guaranteed, and the air is prevented from being blown from the high-pressure area to the low-pressure area to affect the air volume of the air duct component 3.

[0037] In another specific embodiment, the first stopper 2 and the water receiving tray body 1 are of an integrally moulded structure.

[0038] In this embodiment, the first stopper 2 may be integrally moulded with the water receiving tray body 1. When the first stopper 2 is integrally moulded with the water receiving tray, the sealing property for the cooperative positions of the first stopper and the receiving tray body can also be guaranteed, and the air is prevented from being blown from the high-pressure area to the low-pressure area to affect the air volume of the air duct component 3.

[0039] In one embodiment, a protruded transition portion 14 is formed at a transition position between the second area 12 and the groove 13, and an upper surface of the transition portion 14 is not higher than a water-out position of the first area 11 and is higher than the second end of the first stopper 2.

[0040] In this embodiment, the protruded transition portion 14 is formed at the transition position between the second area 12 and the groove 13, and the upper surface of the transition portion 14 may be lower than the water-out position of the first area 11 or is flush with the water-out position of the first area 11. Specifically, the water-out position of the first area 11 may be referred to a position transited with the groove 13. In general, the water-out position of the first area 11 is a lowest position of the first area 11. When the upper surface of the transition portion 14 is not higher than a water-out position of the first area 11, the height to which the condensation water in the groove 13 can reach is determined by a height of the upper surface of the transition portion 14. Additionally, the upper surface of the transition portion 14 is higher than the second end of the first stopper 2, so it is ensured that when the condensation water is accumulated in the groove 13, the height of the condensation water can exceed the second end of the first stopper 2 to form a sealed windshield structure with the first stopper.

[0041] In an exemplary embodiment, the water receiving tray assembly further includes a second stopper 4, the second stopper 4 is located at a transition position between the groove 13 and the second area 12, and the second stopper 4 is in clearance fit with the water receiving tray body 1 and the barrier layer 5.

[0042] In this embodiment, the second stopper 4 is disposed at the transition position between the groove 13 and the second area 12, and the second stopper 4 may be in clearance fit with the water receiving tray body 1 and the barrier layer 5. In an exemplary embodiment, the second stopper 4 includes a top surface and a first side

surface and a second side surface disposed at two sides of the top surface, wherein the first side surface is abutted against a sidewall, transited with the groove 13, of the second area 12, and the second side surface may be abutted against the barrier layer 5. The top surface contacts the transition position between the groove 13 and the second area 12 as well as the barrier layer 5.

[0043] Certainly, the shape of the second stopper 4 may change correspondingly according to an actual application environment and is not specifically defined in the present disclosure.

[0044] When the second stopper 4 is in clearance fit with the water receiving tray body 1 and the barrier layer 5, the second stopper 4 may be made of a rubber with elasticity. Certainly, the material of the second stopper 4 may be in other forms and is not specifically defined in the present disclosure.

[0045] When the second stopper 4 is made of the rubber, the second stopper is coated out of the transition position between the groove 13 and the second area 12 as well as the barrier layer 5 in a clearance fit manner, so that the sealing property at the cooperative positions between the second stopper 4, the water receiving tray body 1 and the barrier layer 5 can be guaranteed and the condensation water is prevented from being leaked therefrom.

[0046] When the water receiving tray assembly of some embodiments of the present disclosure is used actually, the condensation water in the groove 13 contacts the first stopper 2 to form the sealed windshield structure. At this moment, the condensation water can flow into the second area 12 by the flowing port between the first stopper 2 and the groove 13 for draining, and the air cannot be penetrated through under a sealing action of the windshield structure. Therefore, the water receiving tray assembly can automatically form the sealed windshield structure in use to implement the water permeable and airtight effect; and while the condensation water is guaranteed to flow normally, the air is prevented from being blown from the high-pressure area to the low-pressure area, and thus the air volume of the air duct component 3 may be guaranteed.

[0047] According to the water receiving tray assembly in this embodiment of the present disclosure, the first stopper 2 is disposed above the groove 13 between the first area 11 and the second area 12 of the water receiving tray body 1, and the first stopper 2 can extend into the groove 13 and a predetermined distance is formed between the first stopper 2 and the bottom surface of the groove 13; and when the height of the condensation water in the groove 13 is greater than the predetermined distance in use, the condensation water in the groove 13 contacts the first stopper 2 to form the sealed windshield structure. Therefore, the water permeable and airtight effect is implemented, and while the condensation water is guaranteed to flow normally, the air is prevented from being blown from the high-pressure area to the low-pressure area and thus the air volume of the air duct compo-

nent 3 may be guaranteed.

[0048] Referring to Fig. 2, the embodiments of the present disclosure further provide an air conditioner including the water receiving tray assembly in the above-mentioned any embodiment.

[0049] When the air conditioner including the water receiving tray assembly in the present disclosure is used, after the startup of the air conditioner, condensation water is produced on an air duct component 3, and the condensation water flows into a first area 11 of a water receiving tray body 1 under an action of gravity and flows into a groove 13 along the first area. When the condensation water in the groove 13 contacts a first stopper 2, a sealed windshield structure is formed. At this moment, the condensation water can flow into a second area 12 by a flowing port between the first stopper 2 and the groove 13 for draining, and the air cannot be passed through under the sealing action of the windshield structure. Therefore, the water receiving tray assembly can automatically form the sealed windshield structure in use to implement the water permeable and airtight effect, and while the condensation water is guaranteed to flow normally, the air is prevented from being blown from a high-pressure area to a low-pressure area, and thus the air volume of the air duct component 3 is guaranteed.

[0050] In addition, the structure of the water receiving tray assembly and technical effects produced by the structural improvements correspondingly are corresponding to the embodiments of the water receiving tray assembly and will not be repeated herein.

[0051] Certainly, the above-mentioned water receiving tray assembly is not limited to be used in the air conditioner, and may further be used in the fields such as a refrigerator, which is not specifically defined in the present disclosure. Each embodiment of the present disclosure is described in a progressive manner, and the same or similar part in each embodiment may be referred to each other. The top priority in each embodiment is given to the difference from other embodiments.

Claims

1. A water receiving tray assembly, comprising: a water receiving tray body (1) and a first stopper (2), wherein

the water receiving tray body (1) comprises a first area (11) for receiving condensation water flowing from an air duct component (3), a second area (12) communicating with a drain pipe, and a groove (13) located between the first area (11) and the second area (12); and the first stopper (2) has a first end and a second end, wherein the first end is fixed on the water receiving tray body (1) and the second end extends into the groove (13) and is at a predetermined distance from a bottom surface of the groove (13); and when a height of a condensation water in the

- groove (13) is greater than the predetermined distance, the condensation water in the groove (13) contacts with the first stopper (2) to form a sealed windshield structure;
 wherein a clamping groove is formed at a position, opposite to the groove (13), of the water receiving tray body (1), and the first stopper (2) is fixed on the water receiving tray body (1) by the clamping groove.
2. The water receiving tray assembly as claimed in claim 1, wherein a protruded transition portion (14) is formed at a transition position between the second area (12) and the groove (13), and an upper surface of the transition portion (14) is not higher than a water-out position of the first area (11) and is higher than the second end of the first stopper (2).
3. The water receiving tray assembly as claimed in claim 1, wherein the first area (11) is provided with an upper surface for flowing through the condensation water, and the upper surface of the first area is provided with a downward predetermined inclination angle along a flowing direction of the condensation water.
4. The water receiving tray assembly as claimed in claim 1, wherein the first stopper (2) and the water receiving tray body (1) are of an integrally moulded structure.
5. The water receiving tray assembly as claimed in claim 1, wherein a barrier layer (5) is disposed on a surface of the second area (12).
6. The water receiving tray assembly as claimed in claim 5, wherein the water receiving tray assembly further comprises a second stopper (4), the second stopper (4) is located at a transition position between the groove (13) and the second area, and the second stopper (4) is in clearance fit with the water receiving tray body (1) and the barrier layer (5).
7. A water receiving tray assembly, comprising: a water receiving tray body (1) and a first stopper (2), wherein
 the water receiving tray body (1) comprises a first area (11) for receiving condensation water flowing from an air duct component (3), a second area (12) communicating with a drain pipe, and a groove (13) located between the first area (11) and the second area (12); and the first stopper (2) has a first end and a second end, wherein the first end is fixed on the water receiving tray body (1) and the second end extends into the groove (13) and is at a predetermined distance from a bottom surface of the groove (13); and when a height of a condensation water in the

groove (13) is greater than the predetermined distance, the condensation water in the groove (13) contacts with the first stopper (2) to form a sealed windshield structure;
 wherein a barrier layer (5) is disposed on a surface of the second area (12).

8. The water receiving tray assembly as claimed in claim 7, wherein the water receiving tray assembly further comprises a second stopper (4), the second stopper (4) is located at a transition position between the groove (13) and the second area, and the second stopper (4) is in clearance fit with the water receiving tray body (1) and the barrier layer (5).
9. An air conditioner, comprising the water receiving tray assembly as claimed in any one of claims 1 to 8.

Patentansprüche

1. Wasseraufnahmeschalenanordnung, umfassend: einen Wasseraufnahmeschalenkörper (1) und einen ersten Stopfen (2), wobei
 der Wasseraufnahmewannenkörper (1) einen ersten Bereich (11) zum Aufnehmen von Kondenswasser, das von einer Luftleitungskomponente (3) fließt, einen zweiten Bereich (12), der mit einem Abflussrohr in Verbindung steht, und eine Nut (13), die sich zwischen dem ersten Bereich (11) und dem zweiten Bereich (12) befindet, umfasst und der erste Stopfen (2) ein erstes Ende und ein zweites Ende hat, wobei das erste Ende an dem Wasseraufnahmeschalenkörper (1) befestigt ist und das zweite Ende sich in die Nut (13) erstreckt und in einem vorbestimmten Abstand von einer Bodenfläche der Nut (13) ist; und
 wenn eine Höhe eines Kondenswassers in der Nut (13) größer als der vorbestimmte Abstand ist, das Kondenswasser in der Nut (13) mit dem ersten Stopfen (2) in Kontakt kommt, um eine abgedichtete Windschutzstruktur zu bilden;
 wobei eine Klemmnut an einer der Nut (13) gegenüberliegenden Position des Wasseraufnahmeschalenkörpers (1) ausgebildet ist und der erste Stopfen (2) an dem Wasseraufnahmeschalenkörper (1) durch die Klemmnut befestigt ist.
2. Wasseraufnahmeschalenanordnung nach Anspruch 1, wobei ein vorstehender Übergangsabschnitt (14) an einer Übergangsposition zwischen dem zweiten Bereich (12) und der Nut (13) ausgebildet ist und eine obere Oberfläche des Übergangsabschnitts (14) nicht höher ist als eine Wasserauslassposition des ersten Bereichs (11) und höher ist

als das zweite Ende des ersten Stopfens (2).

3. Wasseraufnahmeschalenanordnung nach Anspruch 1, wobei der erste Bereich (11) mit einer oberen Oberfläche zum Durchströmen des Kondenswassers versehen ist und die obere Oberfläche des ersten Bereichs mit einem nach unten gerichteten vorbestimmten Neigungswinkel entlang einer Strömungsrichtung des Kondenswassers versehen ist.

4. Wasseraufnahmeschalenanordnung nach Anspruch 1, wobei der erste Stopfen (2) und der Wasseraufnahmeschalenkörper (1) eine einstückig geformte Struktur aufweisen.

5. Wasseraufnahmeschalenanordnung nach Anspruch 1, wobei eine Sperrschicht (5) auf einer Oberfläche des zweiten Bereichs (12) angeordnet ist.

6. Wasseraufnahmeschalenanordnung nach Anspruch 5, wobei die Wasseraufnahmeschalenanordnung ferner einen zweiten Stopfen (4) umfasst, wobei sich der zweite Stopfen (4) an einer Übergangsposition zwischen der Rille (13) und dem zweiten Bereich befindet und der zweite Stopfen (4) in Spielpassung mit dem Wasseraufnahmeschalenkörper (1) und der Sperrschicht (5) ist.

7. Wasseraufnahmeschalenanordnung, umfassend: einen Wasseraufnahmeschalenkörper (1) und einen ersten Stopfen (2), wobei

der Wasseraufnahmewannenkörper (1) einen ersten Bereich (11) zum Aufnehmen von Kondenswasser, das von einer Luftleitungskomponente (3) fließt, einen zweiten Bereich (12), der mit einem Abflussrohr in Verbindung steht, und eine Nut (13), die sich zwischen dem ersten Bereich (11) und dem zweiten Bereich (12) befindet, umfasst und der erste Stopfen (2) ein erstes Ende und ein zweites Ende hat, wobei das erste Ende an dem Wasseraufnahmeschalenkörper (1) befestigt ist und das zweite Ende sich in die Nut (13) erstreckt und in einem vorbestimmten Abstand von einer Bodenfläche der Nut (13) ist; und

wenn eine Höhe eines Kondenswassers in der Nut (13) größer als der vorbestimmte Abstand ist, das Kondenswasser in der Nut (13) mit dem ersten Stopfen (2) in Kontakt kommt, um eine abgedichtete Windschutzstruktur zu bilden; wobei eine Sperrschicht (5) auf einer Oberfläche des zweiten Bereichs (12) angeordnet ist.

8. Wasseraufnahmeschalenanordnung nach Anspruch 7, wobei die Wasseraufnahmeschalenanordnung ferner einen zweiten Stopfen (4) umfasst, wobei sich der zweite Stopfen (4) an einer Übergangs-

position zwischen der Rille (13) und dem zweiten Bereich befindet und der zweite Stopfen (4) in Spielpassung mit dem Wasseraufnahmeschalenkörper (1) und der Sperrschicht (5) ist.

9. Klimaanlage, die die Wasseraufnahmeschalenanordnung nach einem der Ansprüche 1 bis 8 umfasst.

10 Revendications

1. Ensemble bac de réception d'eau, comprenant : un corps de bac de réception d'eau (1) et un premier dispositif d'arrêt (2), dans lequel

le corps de bac de réception d'eau (1) comprend une première zone (11) destinée à recevoir l'eau de condensation qui s'écoule d'un composant conduit d'air (3), une seconde zone (12) qui communique avec une canalisation d'évacuation, et une rainure (13) située entre la première zone (11) et la seconde zone (12) ; et le premier dispositif d'arrêt (2) présente une première extrémité et une seconde extrémité, dans lequel la première extrémité est fixée sur le corps de bac de réception d'eau (1) et la seconde extrémité s'étend dans la rainure (13) et se situe à une distance prédéterminée à partir de la surface inférieure de la rainure (13) ; et lorsque la hauteur d'eau de condensation dans la rainure (13) est supérieure à la distance prédéterminée, l'eau de condensation dans la rainure (13) entre en contact avec le premier dispositif d'arrêt (2) pour former une structure de pare-brise étanche ; dans lequel une rainure de serrage est formée en une position, opposée à la rainure (13), du corps de bac de réception d'eau (1), et le premier dispositif d'arrêt (2) est fixé sur le corps de bac de réception d'eau (1) par la rainure de serrage.

2. Ensemble de plateau de réception d'eau selon la revendication 1, dans lequel une partie transition protubérante (14) est formée en une position de transition entre la seconde zone (12) et la rainure (13), et la surface supérieure de la partie transition (14) n'est pas plus haute que la position de sortie d'eau de la première zone (11) et est plus haute que la seconde extrémité du premier dispositif d'arrêt (2).

3. Ensemble de plateau de réception d'eau selon la revendication 1, dans lequel la première zone (11) est dotée d'une surface supérieure destinée à faire s'écouler l'eau de condensation, et la surface supérieure de la première zone est dotée d'un angle d'inclinaison vers le bas prédéterminé le long de la direction d'écoulement de l'eau de condensation.

4. Ensemble de plateau de réception d'eau selon la revendication 1, dans lequel le premier dispositif d'arrêt (2) et le corps de bac de réception d'eau (1) constituent une structure moulée d'une seule pièce. 5
5. Ensemble de plateau de réception d'eau selon la revendication 1, dans lequel une couche barrière (5) est disposée sur la surface de la seconde zone (12).
6. Ensemble de plateau de réception d'eau selon la revendication 5, dans lequel l'ensemble bac de réception d'eau comprend en outre un second dispositif d'arrêt (4), le second dispositif d'arrêt (4) se situe en une position de transition entre la rainure (13) et la seconde zone, et le second dispositif d'arrêt (4) présente un ajustement avec jeu avec le corps de bac de réception d'eau (1) et la couche barrière (5). 10 15
7. Ensemble bac de réception d'eau, comprenant : un corps de bac de réception d'eau (1) et un premier dispositif d'arrêt (2), dans lequel 20

le corps de bac de réception d'eau (1) comprend une première zone (11) destinée à recevoir l'eau de condensation qui s'écoule d'un composant conduit d'air (3), une seconde zone (12) qui communique avec une canalisation d'évacuation, et une rainure (13) située entre la première zone (11) et la seconde zone (12) ; et le premier dispositif d'arrêt (2) présente une première extrémité et une seconde extrémité, dans lequel la première extrémité est fixée sur le corps de bac de réception d'eau (1), et la seconde extrémité s'étend dans la rainure (13) et se situe à une distance prédéterminée à partir de la surface inférieure de la rainure (13) ; et lorsque la hauteur d'eau de condensation dans la rainure (13) est supérieure à la distance prédéterminée, l'eau de condensation dans la rainure (13) entre en contact avec le premier dispositif d'arrêt (2) pour former une structure de pare-brise étanche ; dans lequel une couche barrière (5) est disposée sur la surface de la seconde zone (12). 25 30 35 40 45
8. Ensemble de plateau de réception d'eau selon la revendication 7, dans lequel l'ensemble bac de réception d'eau comprend en outre un second dispositif d'arrêt (4), le second dispositif d'arrêt (4) se situe en une position de transition entre la rainure (13) et la seconde zone, et le second dispositif d'arrêt (4) présente un ajustement avec jeu avec le corps de bac de réception d'eau (1) et la couche barrière (5). 50
9. Climatiseur, comprenant l'ensemble bac de réception d'eau selon l'une quelconque des revendications 1 à 8. 55

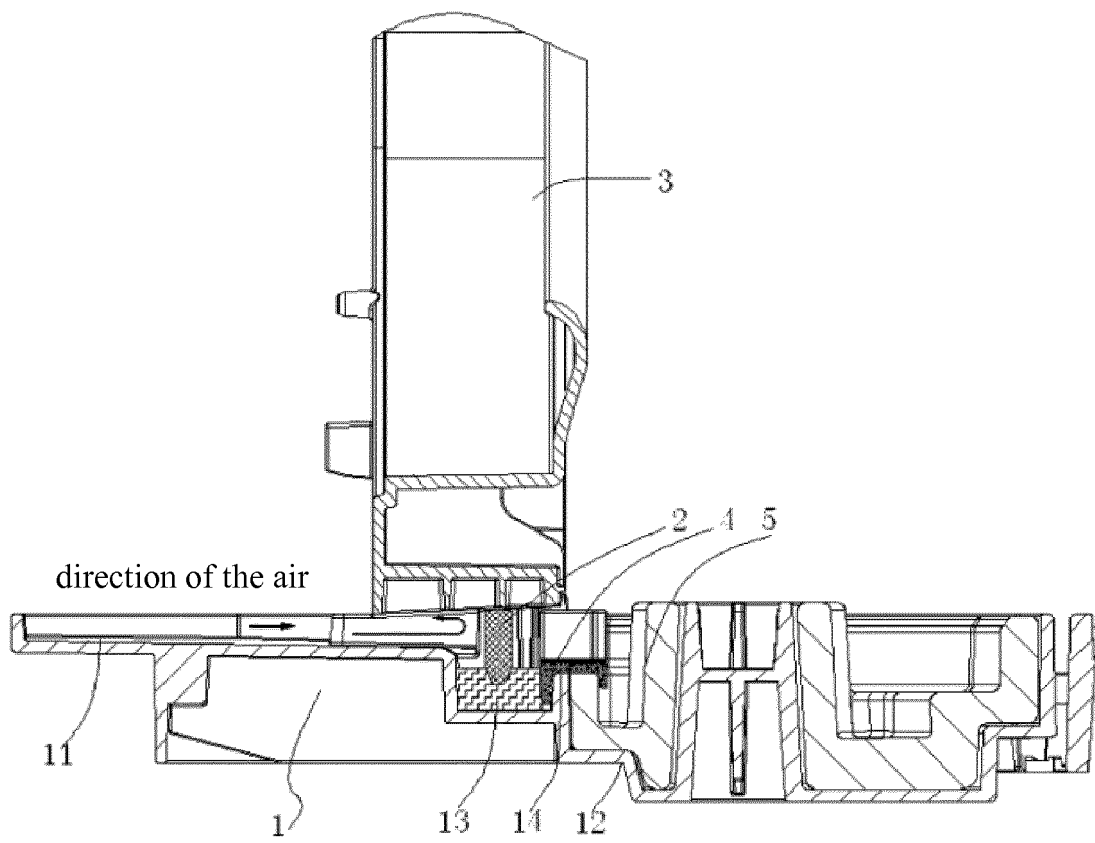


Fig. 1

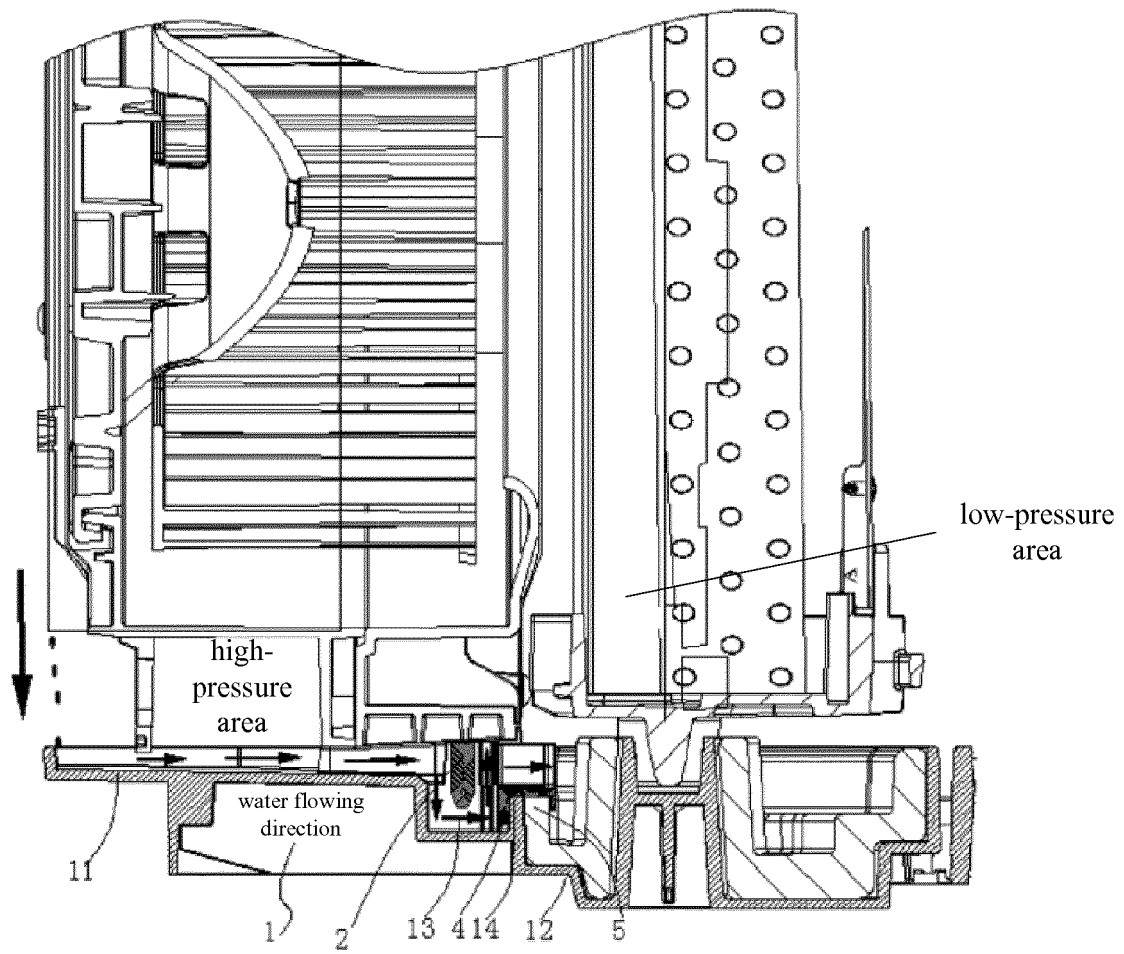


Fig. 2

REFERENCES CITED IN THE DESCRIPTION

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