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(54) INCLINED COOKER HOOD

(57) This application improves the inclined cooker hood. This application provides an inclined cooker hood, including a smoke inlet and an upper smoke guide plate (1), where the upper smoke guide plate (1) is adapted to switch between a close position and an opening position; when the upper smoke guide plate (1) is at the opening position, the bottom end of the upper smoke guide plate (1) extends outwards to form an eaves portion, to open the smoke inlet; and when the upper smoke guide plate (1) is at the close position, the upper smoke guide plate (1) closes the smoke inlet, further including a lower smoke guide plate (2) located below the upper smoke guide plate (1); and when the upper smoke guide plate (1) is at the close position, and an angle d between the upper smoke guide plate (1) and the lower smoke guide plate (2) is an obtuse angle. Therefore, this can improve smoke gathering effects of the inclined cooker hood in a working state.

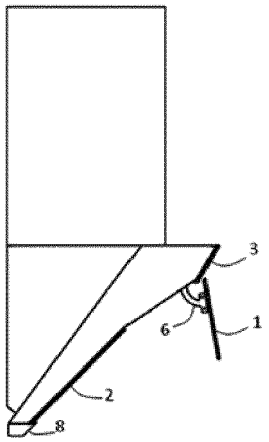

FIG. 3

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Description

BACKGROUND

Technical Field

[0001] This application relates to the field of inclined cooker hoods.

Related Art

[0002] Currently, inclined cooker hoods provided with a sealable smoke inlet already appear in the market. When the smoke inlet of the inclined cooker hood is in an open state, the smoke inlet allows oil smoke to flow through and flow into the inclined cooker hood. When the smoke inlet of the inclined cooker hood is in a sealed state, the inclined cooker hood is in a non-working state. Actually, the existing inclined cooker hood provided with the sealable smoke inlet has a monotonous structure and needs to be improved.

[0003] The prior art described herein does not indicate that it is recognized that the prior art is well known by a person of ordinary skill in the art of this application before the application date of this application, unless there are sufficient proofs.

SUMMARY

[0004] This application provides an improved inclined cooker hood provided with a sealable smoke inlet.

[0005] This application provides an inclined cooker hood, including a smoke inlet and an upper smoke guide plate, where the upper smoke guide plate is adapted to switch between a close position and an opening position; when the upper smoke guide plate is at the opening position, the bottom end of the upper smoke guide plate extends outwards to form an eaves portion, to open the smoke inlet; and when the upper smoke guide plate is at the close position, the upper smoke guide plate closes the smoke inlet. The inclined cooker hood further includes: a lower smoke guide plate located below the upper smoke guide plate. When the inclined cooker hood is in a standby mode, the upper smoke guide plate is at the close position, and an angle d between the upper smoke guide plate and the lower smoke guide plate is an obtuse angle. Therefore, this can improve smoke gathering effects of the inclined cooker hood in a working state.

[0006] Optionally, when the inclined cooker hood is in the standby mode, the lower smoke guide plate and the upper smoke guide plate are connected head-to-tail.

[0007] Optionally, when the upper smoke guide plate is at the opening position, the upper smoke guide plate forms an eaves portion, and an inner wall of the upper smoke guide plate is adapted to guide an air flow to flow into the smoke inlet.

[0008] Optionally, when the upper smoke guide plate is at the opening position, an outer wall of the lower smoke guide plate is adapted to guide an air flow to flow into the smoke inlet.

[0009] Optionally, a rear side of the lower smoke guide plate is provided with an air flow path communicating with the smoke inlet. This helps to ensure smooth air flows.

[0010] Optionally, the bottom of the lower smoke guide plate is hingedly connected to the inclined cooker hood; the lower smoke guide plate is adapted to switch between the initial position and the cleaning position; when the lower smoke guide plate is at the initial position and the upper smoke guide plate is at the close position, the lower smoke guide plate and the upper smoke guide plate are connected head-to-tail; and the lower smoke guide plat is adapted to rotate outwards around a hinged position to switch from the initial position to the cleaning position. Therefore, the lower smoke guide plate can be conveniently switched to the cleaning position to clean the interior of the inclined cooker hood.

[0011] Optionally, an air spring is further included, adapted to maintain the lower smoke guide plate at the initial position or the cleaning position.

[0012] Optionally, when the inclined cooker hood is in the standby mode, an angle a between the upper smoke guide plate and the horizontal plane is an acute angle, and an angle b between the lower smoke guide plate and the horizontal plane is an acute angle; and the angle a is less than the angle b. Therefore, this can improve smoke gathering effects of the inclined cooker hood in a working state.

[0013] Optionally, a control panel (3) is further included, located above the upper smoke guide plate; and when the inclined cooker hood is at the standby mode, the upper smoke guide plate and the control panel are connected head-to-tail.

[0014] Optionally, an angle c between the control panel and the horizontal plane is an acute angle; and the angle c is greater than the angle a.

[0015] Optionally, a lighting apparatus is further included; when the upper smoke guide plate is at the close position, the lighting apparatus is closed in the smoke inlet by the upper smoke guide plate; and when the upper smoke guide plate is at the opening position, a light ray emitted by the lighting apparatus emits from the opened smoke inlet. Therefore, when the inclined cooker hood is in a non-working state, the lighting apparatus can be hidden.

[0016] Optionally, the upper smoke guide plate and the lower smoke guide plate are both non-porous glass plates. Therefore, on one hand, this facilitates cleaning of the inclined cooker hood. On the other hand, when the upper smoke guide plate is at the close position, a light ray emitted by the lighting apparatus can pass through the upper smoke guide plate.

[0017] Optionally, a first electric drive apparatus is further included, adapted to drive the upper smoke guide plate to switch between the close position and the opening position.

[0018] Optionally, the bottom of the lower smoke guide plate is hingedly connected to the inclined cooker hood; the lower smoke guide plate is adapted to switch between the initial position and the inner flanging position; when the lower smoke guide plate is at the initial position and the upper smoke guide plate is at the close position, the lower smoke guide plate and the upper smoke guide plate are connected head-to-tail, and the angle d between the upper smoke guide plate and the lower smoke guide plate is an obtuse angle; and the lower smoke guide plate is adapted to rotate inwards around a hinged position to switch from the initial position to the inner flanging position.

[0019] Optionally, two lateral plates are further included, respectively disposed on the left side and the right side of the lower smoke guide plate; and when the lower smoke guide plate is at the initial position, outer surfaces of the two lateral plates and an outer surface of the lower smoke guide plate are in a same plane.

[0020] Optionally, when the lower smoke guide plate is at the inner flanging position, the angle between the lower smoke guide plate and the horizontal plane is an acute angle.

[0021] Optionally, when the lower smoke guide plate is at the inner flanging position, a smoke collection cavity adapted to guide an air flow to the smoke inlet is formed.

[0022] Optionally, the bottom of the lower smoke guide plate is hingedly connected to the inclined cooker hood; the lower smoke guide plate is adapted to switch between the initial position and the outer flanging position; when the lower smoke guide plate is at the initial position and the upper smoke guide plate is at the close position, the lower smoke guide plate and the upper smoke guide plate are connected head-to-tail, and the angle d between the upper smoke guide plate and the lower smoke guide plate is an obtuse angle; and the lower smoke guide plate is adapted to rotate outwards around a hinged position to switch from the initial position to the outer flanging position.

[0023] Optionally, the left end and the right end of the lower smoke guide plate are respectively provided with a sealing plate; and when the upper smoke guide plate is at the opening position and the lower smoke guide plate is at the outer flanging position, the smoke inlet is a unique air flow inlet of the inclined cooker hood.

[0024] Optionally, when the lower smoke guide plate is at the outer flanging position, lateral wind inlets are respectively formed on two sides of the lower smoke guide plate.

[0025] Optionally, a second electric drive apparatus is further included, adapted to drive the lower smoke guide plate to switch a position.

[0026] Optionally, there are two lower smoke guide plates, respectively disposed on the left side and the right side of the inclined cooker hood; and the two lower smoke guide plates are adapted to perform control independent from each other.

[0027] Herein, it should be noted that, orientation expressions such as "upper smoke guide plate", "lower smoke guide plate", "bottom end of", "bottom", "above", "below", "horizontal plane", "horizontal direction", "right in the front", "left side", "right side", and "rear side" in this application are based on common usage states of the inclined cooker hood, unless otherwise described.

[0028] Herein, it should be noted that, "first" and "second" in this application are only for description purpose, and are not used to indicate relative importance. In addition, "first" and "second" do not define a quantity of characteristics modified by "first" and "second" either. In addition, "first" and "second" do not define a logical relation or a sequence relation of characteristics modified by "first" and "second" either.

[0029] Content of the technical solution of this application is not used to describe all possible applications. Examples are listed for guidance in many places of the entire application, and the examples may be combined in various feasible manners.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] The disclosure will become more fully understood from the detailed description given herein below for illustration only, and thus are not limitative of the disclosure, and where:

The following accompanying drawings only exemplarily describe this application, and do not limit the scope of this application.

FIG. 1 is a schematic structural diagram showing that an upper smoke guide plate is at a close position and a lower smoke guide plate is at an initial position in an inclined cooker hood according to Embodiment 1 of this application;

FIG. 2 is another schematic structural diagram showing that an upper smoke guide plate is at a close position and a lower smoke guide plate is at an initial position in an inclined cooker hood according to Embodiment 1 of this application;

FIG. 3 is a schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an initial position in an inclined cooker hood according to Embodiment 1 of this application;

FIG. 4 is another schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an initial position in an inclined cooker hood according to Embodiment 1 of this application;

FIG. 5 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an inner flanging position in an inclined cooker hood accord-

ing to Embodiment 1 of this application;

FIG. 6 is a schematic structural diagram showing that an upper smoke guide plate is at an opening position and both lower smoke guide plates are at an inner flanging position in an inclined cooker hood according to Embodiment 2 of this application;

FIG. 7 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and both lower smoke guide plates are at an inner flanging position in an inclined cooker hood according to Embodiment 2 of this application;

FIG. 8 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and only the left one of two lower smoke guide plates is at an inner flanging position in an inclined cooker hood according to Embodiment 2 of this application;

FIG. 9 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and only the right one of two lower smoke guide plates is at an inner flanging position in an inclined cooker hood according to Embodiment 2 of this application;

FIG. 10 is a schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 3 of this application;

FIG. 11 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 3 of this application;

FIG. 12 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 4 of this application;

FIG. 13 is a schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 4 of this application;

FIG. 14 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 5 of this application;

FIG. 15 is a schematic structural diagram showing that an upper smoke guide plate is at an opening position and a lower smoke guide plate is at an outer flanging position in an inclined cooker hood according to Embodiment 5 of this application;

FIG. 16 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and only the right one of two lower smoke guide plates is at an outer flanging position in an inclined cooker hood according to Embodiment 6 of this application;

FIG. 17 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and only the left one of two lower smoke guide plates is at an outer flanging position in an inclined cooker hood according to Embodiment 6 of this application; and

FIG. 18 is a partial schematic structural diagram showing that an upper smoke guide plate is at an opening position and both lower smoke guide plates are at an outer flanging position in an inclined cooker hood according to Embodiment 6 of this application.

Reference numerals:

[0031] 1-upper smoke guide plate, 2-lower smoke guide plate, 3-control panel, 4-touch control display unit, 5-sealing plate, 6-turning arm, 7-filter net, 8-oil cup, 9-lighting apparatus, 10-lateral plate, and 11-housing piece.

DETAILED DESCRIPTION

[0032] To make the objectives, solutions, and beneficial effects of this application more comprehensible, the following further describes this application with reference to the accompanying drawings and preferred embodiment.

Embodiment 1

[0033] In Embodiment 1, this application provides an inclined cooker hood, including a fan, a sealable smoke inlet, a control panel 3, a filter net 7, an oil cup 8, a lighting apparatus 9, a lateral plate 10, a housing piece 11, a first electric drive apparatus, a second electric drive apparatus, an upper smoke guide plate 1, and a lower smoke guide plate 2 located below the upper smoke guide plate 1, as shown in FIG. 1 to FIG. 5. The control panel 3 is a glass plate. The control panel 3 is located above the upper smoke guide plate 1. The control panel 3 is provided with a touch control display unit 4. The upper smoke guide plate 1 and the lower smoke guide plate 2 are both non-porous glass plates. There are two lateral plates 10, and the two lateral plates 10 are separately disposed on the

left side and the right side of the lower smoke guide plate 2. The fan is mounted in the housing piece 11. The oil cup 8 is mounted below the lower smoke guide plate 2.

[0034] The upper smoke guide plate 1 is adapted to switch between a close position and an opening position. When the upper smoke guide plate 1 is at the opening position, the bottom end of the upper smoke guide plate 1 extends outwards, to open the smoke inlet, as shown in FIG. 3. The top edge of the lower smoke guide plate 2 is used as the bottom side edge of the smoke inlet, and in this case, the upper smoke guide plate 1 forms an eaves portion. When the upper smoke guide plate 1 is at the close position, the upper smoke guide plate 1 closes the smoke inlet, as shown in FIG. 1. When the upper smoke guide plate 1 is at the close position, the bottom end of the upper smoke guide plate 1 does not extend outwards, and the bottom end of the upper smoke guide plate 1 is connected to the top edge of the lower smoke guide plate 2. When the upper smoke guide plate 1 switches from the close position to the opening position, the upper smoke guide plate 1 rotates upwards and opens.

[0035] The lower smoke guide plate 2 is adapted to switch between the initial position and the inner flanging position. The bottom of the lower smoke guide plate 2 is hingedly connected to the housing piece 11. When the lower smoke guide plate 2 is at the initial position, the lower smoke guide plate 2 is adapted to rotate inwards around a hinged position to switch from the initial position to the inner flanging position. When the lower smoke guide plate 2 is at the initial position, outer surfaces of the two lateral plates 10 and an outer surface of the lower smoke guide plate 2 are in a same plane, as shown in FIG. 2. Besides, a rear side of the lower smoke guide plate 2 is provided with an air flow path communicating with the smoke inlet.

[0036] When the inclined cooker hood is in a standby mode, as shown in FIG. 1 and FIG. 2, the lower smoke guide plate 2 is at the initial position and the upper smoke guide plate 1 is at the close position, the lower smoke guide plate 2 and the upper smoke guide plate 1 are connected head-to-tail, and the upper smoke guide plate 1 and the control panel 3 are connected head-to-tail. An angle d between the upper smoke guide plate 1 and the lower smoke guide plate 2 is an obtuse angle; an angle a between the upper smoke guide plate 1 and the horizontal plane is an acute angle, and an angle b between the lower smoke guide plate 2 and the horizontal plane is an acute angle. The angle a is less than the angle b. An angle c between the control panel 3 and the horizontal plane is an acute angle. The angle c is greater than the angle a; and the angle c is greater than the angle b. The smoke inlet is a unique air flow inlet of the inclined cooker hood, and when the inclined cooker hood is in the standby mode, the smoke inlet is closed.

[0037] When the upper smoke guide plate 1 is at the opening position, as shown in FIG. 3 to FIG. 5, an inner wall of the upper smoke guide plate 1 is adapted to guide an air flow to flow into the smoke inlet, and an outer wall of the lower smoke guide plate 2 is adapted to guide an air flow to flow into the smoke inlet. When the upper smoke guide plate 1 is at the opening position, when a user stands right in front of the inclined cooker hood and looks at the inclined cooker hood along a horizontal direction, the inner wall of the upper smoke guide plate 1 is invisible.

[0038] The lighting apparatus 9 is disposed above the filter net 7. When the upper smoke guide plate 1 is at the close position, the lighting apparatus 9 is closed in the smoke inlet by the upper smoke guide plate 1. In this case, if the lighting apparatus 9 is started, a light ray emitted by the lighting apparatus 9 passes through the upper smoke guide plate 1, which helps to create a particular light ray atmosphere or light the control panel 3, so that a user performs a control operation. When the upper smoke guide plate 1 is at the opening position, a light ray emitted by the lighting apparatus 9 emits from the opened smoke inlet, and provides light for cooking.

[0039] When the lower smoke guide plate 2 is at the inner flanging position, the smoke collection cavity adapted to guide an air flow to the smoke inlet is formed, as shown in FIG. 5. In this case, the angle between the lower smoke guide plate 2 and the horizontal plane is an acute angle.

[0040] When the inclined cooker hood is in the standby mode, the control panel 3, the upper smoke guide plate 1, and the lower smoke guide plate 2 jointly block the housing piece 11. In this case, when a user stands right in front of the inclined cooker hood and looks at the inclined cooker hood along a horizontal direction, other parts of the housing piece 11 are all invisible except a part that is of the housing piece 11 and that is above the control panel 3 (that is, only the part that is of the housing piece 11 and that is above the control panel 3 is visible). This helps to clean the inclined cooker hood.

[0041] The first electric drive apparatus is adapted to drive the upper smoke guide plate 1 to switch between the close position and the opening position. The first electric drive apparatus includes a first motor and a hinged four-bar mechanism. The hinged four bar mechanism includes a first connecting rack bar, a second connecting rack bar, and a connecting bar. Specifically, the second connecting rack bar is a turning arm 6, as shown in FIG. 3 and FIG. 5. A rotating shaft of the first motor is fixedly connected to one end of the first connecting rack bar (when the first motor runs, driven by the rotating shaft of the first motor, the first connecting rack bar rotates around the rotating shaft of the first motor). The other end of the first connecting rack bar is hingedly connected to one end of the connecting bar, and the other end of the connecting bar is hingedly connected to the middle of the turning arm 6. One end of the turning arm 6 is hingedly connected to the housing piece 11, and the other end of the turning arm 6 is fixedly connected to the upper smoke guide plate 1.

[0042] The second electric drive apparatus is adapted

to drive the lower smoke guide plate 2 to switch a position. Specifically, the second electric drive apparatus includes an electric driven push-pull rod. When the electric driven push-pull rod contracts, the lower smoke guide plate 2 is driven to switch from the initial position to the inner flanging position. When the electric driven push-pull rod extends, the lower smoke guide plate 2 is driven to switch from the inner flanging position to the initial position.

[0043] When the inclined cooker hood is in the standby mode, if a user touches the touch control display unit 4 to enter a control instruction for running at a low speed, the first electric drive apparatus drives the upper smoke guide plate 1 to rotate upwards and switch to the opening position, as shown in FIG. 3 and FIG. 4. In this case, if the fan runs, some air flows flow into the smoke inlet and then directly flow to the filter net 7, and some air flows flow into the smoke inlet, and then flow into the air flow path behind the lower smoke guide plate 2 and flow to the filter net 7. Further, if a user touches the touch control display unit 4 to enter a control instruction for running at a high speed, the second electric drive apparatus drives the lower smoke guide plate 2 to switch to the inner flanging position, to form a smoke collection cavity, as shown in FIG. 5, and some air flows generated when the fan runs flow through the smoke collection cavity and flow into the smoke inlet. The air flows flowing into the smoke inlet flow through the filter net 7 and then flow to the fan.

[0044] The foregoing is only preferred embodiments of this application, and other embodiments may be further obtained by increasing, decreasing, modifying, or replacing some technical characteristics. For example, alternatively, the bottom of the lower smoke guide plate is hingedly connected to the inclined cooker hood; and the lower smoke guide plate is adapted to switch between the initial position and the cleaning position. When the lower smoke guide plate is at the initial position and the upper smoke guide plate is at the close position, the lower smoke guide plate and the upper smoke guide plate are connected head-to-tail. The lower smoke guide plate is adapted to rotate outwards around a hinged position to switch from the initial position to the cleaning position. To conveniently clean the interior of the inclined cooker hood, preferably, when the lower smoke guide plate is at the cleaning position, the lower smoke guide plate is approximately disposed horizontally. Further, an air spring is further included, adapted to maintain the lower smoke guide plate at the initial position or the cleaning position. Specifically, switching between the initial position and the cleaning position is implemented manually. For another example, compositions of the first electric drive apparatus and the second electric drive apparatus are not limited to this embodiment, and other feasible solutions already disclosed in the prior art may also be used. For example, alternatively, the top of the upper smoke guide plate is provided with a rotating shaft, and the first electric drive apparatus is adapted to drive the rotating shaft to rotate to drive the upper smoke guide plate to switch between the close position and the opening position. For another example, alternatively, the first electric drive apparatus and the second electric drive apparatus share a same motor. For another example, alternatively, the angle c is less than or equal to the angle b. For another example, alternatively, the lower smoke guide plate is disposed fixedly, and a position cannot be changed. For another example, alternatively, the touch control display unit may be replaced with another feasible human-computer interaction apparatus. For another example, alternatively, other feasible non-porous plates such as non-porous stainless steel plates may be used as the upper smoke guide plate and the lower smoke guide plate.

Embodiment 2

[0045] This application further provides Embodiment 2 of another inclined cooker hood. Embodiment 2 of the inclined cooker hood is obtained by further improving Embodiment 1 of the inclined cooker hood. A main difference between the inclined cooker hood in Embodiment 2 and the inclined cooker hood in Embodiment 1 is as follows: In Embodiment 2, the inclined cooker hood includes two lower smoke guide plates 2, respectively disposed on the left side and the right side of the inclined cooker hood, as shown in FIG. 6 to FIG. 9. The two lower smoke guide plates 2 are adapted to perform control independent from each other. Specifically, the two lower smoke guide plates 2 may be controlled according to an actual requirement. For example, alternatively, the lower smoke guide plate 2 on the left side is at the initial position, and the lower smoke guide plate 2 on the right side is at the inner flanging position, as shown in FIG. 9. Alternatively, the lower smoke guide plate 2 on the right side is at the initial position, and the lower smoke guide plate 2 on the left side is at the inner flanging position, as shown in FIG. 8. Alternatively, the lower smoke guide plate 2 on the left side and the lower smoke guide plate 2 on the right side are both at the initial position. Alternatively, the lower smoke guide plate 2 on the left side and the lower smoke guide plate 2 on the right side are both at the inner flanging position, as shown in FIG. 6 and FIG. 7. Moreover, the two lower smoke guide plates 2 may also be controlled automatically. For example, the two lower smoke guide plates 2 are controlled based on a detected oil smoke state. When oil smoke is detected only on the right side, the lower smoke guide plate 2 on the left side is controlled to be at the initial position and the lower smoke guide plate 2 on the right side is controlled to be at the inner flanging position. When oil smoke is detected only on the left side, the lower smoke guide plate 2 on the right side is controlled to be at the initial position and the lower smoke guide plate 2 on the left side is controlled to be at the inner flanging position. When oil smoke is detected on both the left side and the right side, the lower smoke guide plate 2 on the left side and the lower smoke guide plate 2 on the right side are both controlled to be at the inner flanging position.

[0046] For other structures and cooperation relationships of the inclined cooker hood in Embodiment 2, refer to the corresponding descriptions of the inclined cooker hood in Embodiment 1.

Embodiment 3

[0047] This application further provides Embodiment 3 of another inclined cooker hood. Embodiment 3 of the inclined cooker hood is obtained by further improving Embodiment 1 of the inclined cooker hood. A main difference between the inclined cooker hood in Embodiment 3 and the inclined cooker hood in Embodiment 1 is as follows: The lower smoke guide plate 2 of the inclined cooker hood in Embodiment 3 is adapted to switch between the initial position and the outer flanging position. The bottom of the lower smoke guide plate 2 is hingedly connected to the housing piece 11, and the lower smoke guide plate 2 is adapted to rotate outwards around a hinged position to switch from the initial position to the outer flanging position.

[0048] When the lower smoke guide plate 2 is at the initial position and the upper smoke guide plate 1 is at the close position, the lower smoke guide plate 2 and the upper smoke guide plate 1 are connected head-to-tail, and the angle d between the upper smoke guide plate 1 and the lower smoke guide plate 2 is an obtuse angle.

[0049] FIG. 10 and FIG. 11 are schematic structural diagrams showing that the upper smoke guide plate 1 is at the opening position and the lower smoke guide plate 2 is at the outer flanging position in the inclined cooker hood of Embodiment 3. In this case, side wind inlets are respectively formed on two sides of the lower smoke guide plate 2.

[0050] For other structures and cooperation relationships of the inclined cooker hood in Embodiment 3, refer to the corresponding descriptions of the inclined cooker hood in Embodiment 1.

Embodiment 4

[0051] This application further provides Embodiment 4 of another inclined cooker hood. Embodiment 4 of the inclined cooker hood is obtained by further improving Embodiment 3 of the inclined cooker hood. A main difference between the inclined cooker hood in Embodiment 4 and the inclined cooker hood in Embodiment 3 is as follows: The left end and the right end of the lower smoke guide plate 2 of the inclined cooker hood in Embodiment 4 are respectively provided with a sealing plate 5, to close the side wind inlets in Embodiment 3. That is, because the sealing plate 5 is provided, when the lower smoke guide plate 2 of the inclined cooker hood in Embodiment 4 is at the outer flanging position, no side wind inlet is formed. When the upper smoke guide plate 1 is at the opening position and the lower smoke guide plate 2 is at the outer flanging position, as shown in FIG. 12 and FIG. 13, the smoke inlet is a unique air flow inlet of the inclined cooker hood.

[0052] For other structures and cooperation relationships of the inclined cooker hood in Embodiment 4, refer to the corresponding descriptions of the inclined cooker hood in Embodiment 3.

Embodiment 5

[0053] This application further provides Embodiment 5 of another inclined cooker hood. Embodiment 5 of the inclined cooker hood is obtained by further improving Embodiment 3 of the inclined cooker hood. A main difference between the inclined cooker hood in Embodiment 5 and the inclined cooker hood in Embodiment 3 is as follows: The inclined cooker hood in Embodiment 5 is not provided with a lateral plate 10, and the length of the lower smoke guide plate 2 thereof is the same as that of the upper smoke guide plate 1 thereof. When the upper smoke guide plate 1 is at the opening position and the lower smoke guide plate 2 is at the outer flanging position, as shown in FIG. 14 and FIG. 15, side wind inlets are respectively formed on two sides of the lower smoke guide plate 2.

[0054] For other structures and cooperation relationships of the inclined cooker hood in Embodiment 5, refer to the corresponding descriptions of the inclined cooker hood in Embodiment 3.

Embodiment 6

[0055] This application further provides Embodiment 6 of another inclined cooker hood. Embodiment 6 of the inclined cooker hood is obtained by further improving Embodiment 5 of the inclined cooker hood. A main difference between the inclined cooker hood in Embodiment 6 and the inclined cooker hood in Embodiment 5 is as follows: In Embodiment 6, the inclined cooker hood includes two lower smoke guide plates 2, respectively disposed on the left side and the right side of the inclined cooker hood, as shown in FIG. 16 to FIG. 18. The two lower smoke guide plates 2 are adapted to perform control independent from each other. Specifically, the two lower smoke guide plates 2 may be controlled according to an actual requirement. For example, alternatively, the lower smoke guide plate 2 on the left side is at the initial position, and the lower smoke guide plate 2 on the right side is at the outer flanging position, as shown in FIG. 16. Alternatively, the lower smoke guide plate 2 on the right side is at the initial position, and the lower smoke guide plate 2 on the left side is at the outer flanging position, as shown in FIG. 17. Alternatively, the lower smoke guide plate 2 on the left side and the lower smoke guide plate 2 on the right side are both at the initial position. Alternatively, the lower smoke guide plate 2 on the left side and the lower smoke guide plate 2 on the right side are both at the outer flanging position, as shown in FIG. 18. Moreover, the two lower smoke guide plates 2 may also be controlled automatically. For example, the two lower smoke guide plates 2

are controlled based on a detected oil smoke state.

[0056] For other structures and cooperation relationships of the inclined cooker hood in Embodiment 6, refer to the corresponding descriptions of the inclined cooker hood in Embodiment 5.

[0057] It should also be noted that, this application shall not be understood as only being limited to the implementations described above, and instead, shall be understood as covering all possible implementations determined with reference to the claims of this application and the disclosures in the specification. Therefore, any simple alterations, and equivalent changes or modifications made to the above embodiments according to the technical essence of this application without departing from the content of this application shall fall within the scope of this application.

Claims

1. An inclined cooker hood, comprising a smoke inlet and an upper smoke guide plate (1), wherein the upper smoke guide plate (1) is adapted to switch between a close position and an opening position; when the upper smoke guide plate (1) is at the opening position, the bottom end of the upper smoke guide plate (1) extends outwards to form an eaves portion, to open the smoke inlet; and when the upper smoke guide plate (1) is at the close position, the upper smoke guide plate (1) closes the smoke inlet, **characterized in that**:

   further comprising a lower smoke guide plate (2) located below the upper smoke guide plate (1); and
   when the inclined cooker hood is in a standby mode, the upper smoke guide plate (1) is at the close position, and an angle d between the upper smoke guide plate (1) and the lower smoke guide plate (2) is an obtuse angle.

2. The inclined cooker hood according to claim 1, **characterized in that**:
   when the inclined cooker hood is in the standby mode, the lower smoke guide plate (2) and the upper smoke guide plate (1) are connected head-to-tail.

3. The inclined cooker hood according to claim 1 or 2, **characterized in that**:
   when the upper smoke guide plate (1) is at the opening position, an inner wall of the upper smoke guide plate (1) is adapted to guide an air flow to flow into the smoke inlet and/or an outer wall of the lower smoke guide plate (2) is adapted to guide an air flow to flow into the smoke inlet.

4. The inclined cooker hood according to any of the preceding claims, **characterized in that**:
   a rear side of the lower smoke guide plate (2) is provided with an air flow path communicating with the smoke inlet.

5. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

   the bottom of the lower smoke guide plate (2) is hingedly connected to the inclined cooker hood;
   the lower smoke guide plate (2) is adapted to switch between the initial position and the cleaning position;
   when the lower smoke guide plate (2) is at the initial position and the upper smoke guide plate (1) is at the close position, the lower smoke guide plate (2) and the upper smoke guide plate (1) are connected head-to-tail; and
   the lower smoke guide plate (2) is adapted to rotate outwards around a hinged position to switch from the initial position to the cleaning position.

6. The inclined cooker hood according to claim 5, **characterized in that**:
   further comprising an air spring, adapted to maintain the lower smoke guide plate (2) at the initial position or the cleaning position.

7. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

   when the inclined cooker hood is in the standby mode, an angle a between the upper smoke guide plate (1) and the horizontal plane is an acute angle, and an angle b between the lower smoke guide plate (2) and the horizontal plane is an acute angle;
   and the angle a is less than the angle b.

8. The inclined cooker hood according to claim 7, **characterized in that**:
   further comprising a control panel (3) located above the upper smoke guide plate (1); and when the inclined cooker hood is at the standby mode, the upper smoke guide plate (1) and the control panel (3) are connected head-to-tail.

9. The inclined cooker hood according to claim 8, **characterized in that**:

   an angle c between the control panel (3) and the horizontal plane is an acute angle;
   and the angle c is greater than the angle a.

10. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

    further comprising a lighting apparatus (9);

when the upper smoke guide plate (1) is at the close position, the lighting apparatus (9) is closed in the smoke inlet by the upper smoke guide plate (1); and
when the upper smoke guide plate (1) is at the opening position, a light ray emitted by the lighting apparatus (9) emits from the opened smoke inlet.

11. The inclined cooker hood according to any of the preceding claims, **characterized in that**:
the upper smoke guide plate (1) and the lower smoke guide plate (2) are both non-porous glass plates.

12. The inclined cooker hood according to any of the preceding claims, **characterized in that**:
further comprising a first electric drive apparatus, adapted to drive the upper smoke guide plate (1) to switch between the close position and the opening position and/or further comprising a second electric drive apparatus, adapted to drive the lower smoke guide plate (2) to switch a position.

13. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

the bottom of the lower smoke guide plate (2) is hingedly connected to the inclined cooker hood;
the lower smoke guide plate (2) is adapted to switch between the initial position and the inner flanging position;
when the lower smoke guide plate (2) is at the initial position and the upper smoke guide plate (1) is at the close position, the lower smoke guide plate (2) and the upper smoke guide plate (1) are connected head-to-tail, and the angle d between the upper smoke guide plate (1) and the lower smoke guide plate (2) is an obtuse angle; and
the lower smoke guide plate (2) is adapted to rotate inwards around a hinged position to switch from the initial position to the inner flanging position.

14. The inclined cooker hood according to claim 13, **characterized in that**:

further comprising two lateral plates (10), respectively disposed on the left side and the right side of the lower smoke guide plate (2); and
when the lower smoke guide plate (2) is at the initial position, outer surfaces of the two lateral plates (10) and an outer surface of the lower smoke guide plate (2) are in a same plane.

15. The inclined cooker hood according to claim 13 or 14, **characterized in that**:
when the lower smoke guide plate (2) is at the inner flanging position, the angle between the lower smoke guide plate (2) and the horizontal plane is an acute angle and/or a smoke collection cavity adapted to guide an air flow to the smoke inlet is formed.

16. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

the bottom of the lower smoke guide plate (2) is hingedly connected to the inclined cooker hood;
the lower smoke guide plate (2) is adapted to switch between the initial position and the outer flanging position;
when the lower smoke guide plate (2) is at the initial position and the upper smoke guide plate (1) is at the close position, the lower smoke guide plate (2) and the upper smoke guide plate (1) are connected head-to-tail, and the angle d between the upper smoke guide plate (1) and the lower smoke guide plate (2) is an obtuse angle; and
the lower smoke guide plate (2) is adapted to rotate outwards around a hinged position to switch from the initial position to the outer flanging position.

17. The inclined cooker hood according to claim 16, **characterized in that**:

the left end and the right end of the lower smoke guide plate (2) are respectively provided with a sealing plate (5); and
when the upper smoke guide plate (1) is at the opening position and the lower smoke guide plate (2) is at the outer flanging position, the smoke inlet is a unique air flow inlet of the inclined cooker hood.

18. The inclined cooker hood according to claim 16, **characterized in that**:
when the lower smoke guide plate (2) is at the outer flanging position, lateral wind inlets are respectively formed on two sides of the lower smoke guide plate (2).

19. The inclined cooker hood according to any of the preceding claims, **characterized in that**:

there are two lower smoke guide plates (2), respectively disposed on the left side and the right side of the inclined cooker hood; and
the two lower smoke guide plates (2) are adapted to perform control independent from each other.

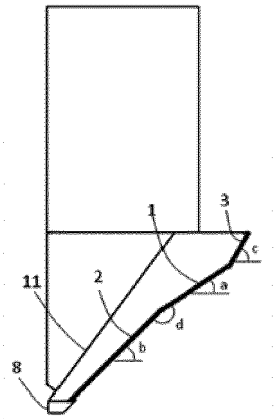

FIG. 1

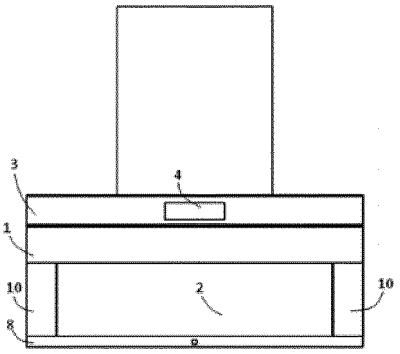

FIG. 2

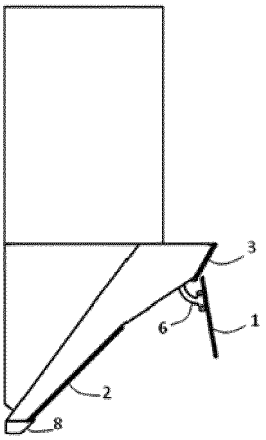

FIG. 3

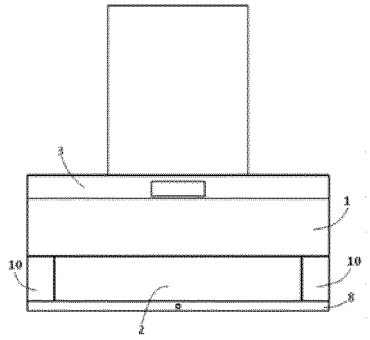

FIG. 4

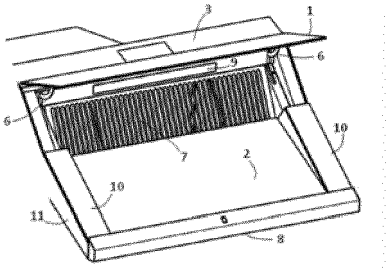

FIG. 5

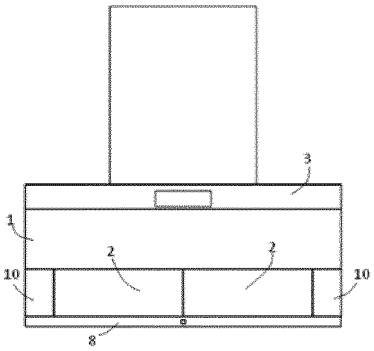

FIG. 6

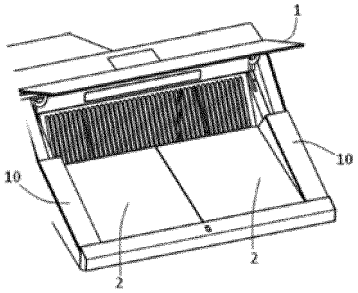

FIG. 7

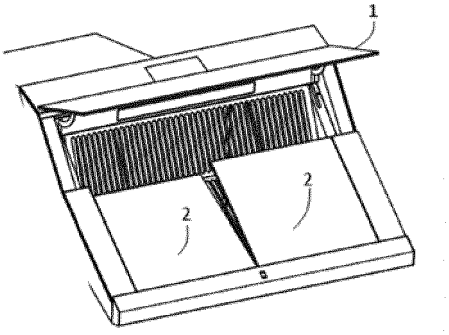

FIG. 8

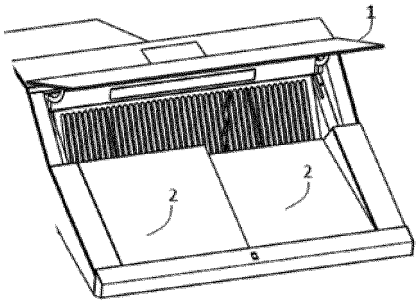

FIG. 9

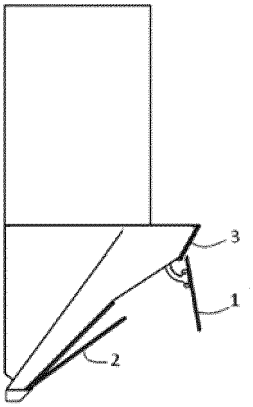

FIG. 10

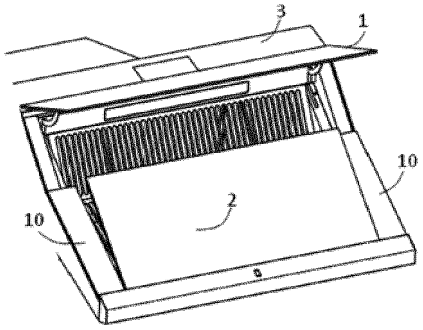

FIG. 11

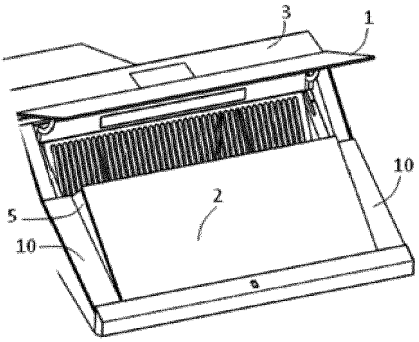

FIG. 12

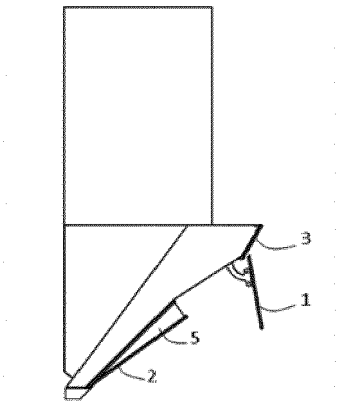

FIG. 13

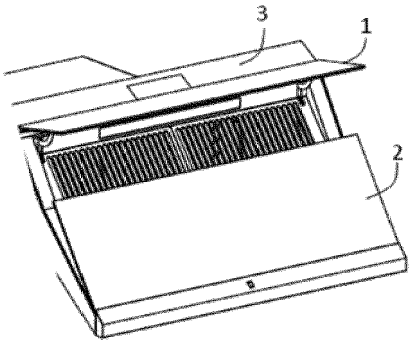

FIG. 14

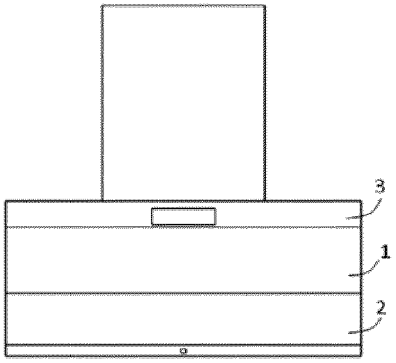

FIG. 15

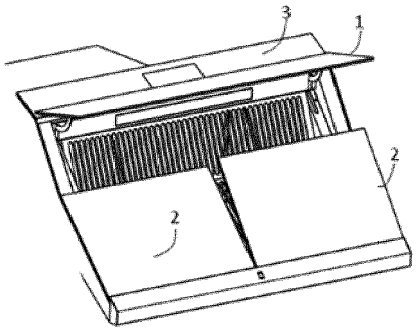

FIG. 16

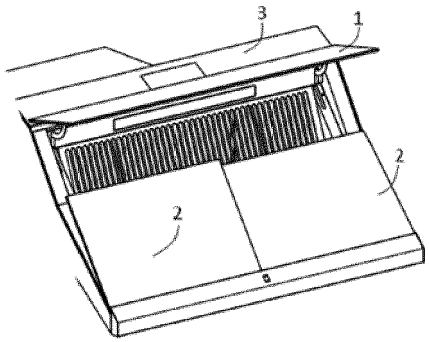

FIG. 17

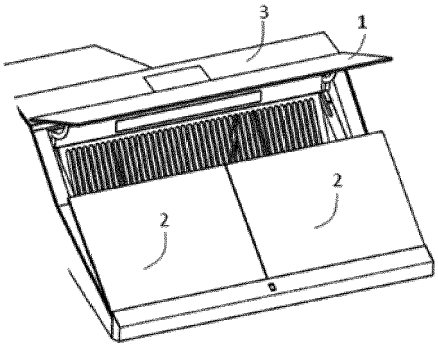

FIG. 18

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EUROPEAN SEARCH REPORT

Application Number
EP 18 16 9152

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	CN 202 267 104 U (TINGBEI LIU) 6 June 2012 (2012-06-06) * figures 1-2 *	1-19	
A	FR 3 009 605 A3 (TONGXIANG CITY JINGCHUANG MACHINERY EQUIPMENT CO LTD [CN]) 13 February 2015 (2015-02-13) * figure 1 *	1-19	TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	28 August 2018	Adant, Vincent

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 18 16 9152

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28-08-2018

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