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Inventor(s)

PARK; Yonghwan et al.

STAND FOR DISPLAY APPARATUS AND DISPLAY APPARATUS INCLUDING SAME

Abstract

A stand for a display apparatus includes: a stand body configured to be coupled to a display module; a base detachably coupled to the stand body by sliding relative to the stand body and configured to support the stand body and the display module; and a coupling plate coupled to the stand body and rotatable between a first position, at which the coupling plate is coupled to the base, and a second position, at which the coupling plate is separated from the base, and configured to restrict the sliding of the base relative to the stand body in a state in which the coupling plate is at the first position.

Inventors: PARK; Yonghwan (Suwon-si, KR), KIM; Minchul (Suwon-si, KR), YOON; Taeyoun (Suwon-si, KR), SHIN; Jinyoung (Suwon-si, KR), HAN; Songhee (Suwon-si, KR)

Applicant: SAMSUNG ELECTRONICS CO., LTD. (Suwon-si, KR)

Family ID: 1000008602776

Assignee: SAMSUNG ELECTRONICS CO., LTD. (Suwon-si, KR)

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Background/Summary

CROSS-REFERENCE TO RELATED APPLICATIONS [0001] This application is a continuation application of International Application No. PCT/KR2023/016479, filed on Oct. 23, 2023, in the Korean Intellectual Property Receiving Office, which claims priority to Korean Patent Application No. 10-2022-0182348, filed on Dec. 22, 2022, in the Korean Intellectual Property Office, the disclosures of which are incorporated by reference herein in their entireties.

BACKGROUND

1. Field

[0002] The disclosure relates to a stand for a display apparatus and the display apparatus including the same.

2. Description of Related Art

[0003] A display apparatus is an output apparatus that converts obtained or stored electrical information into visual information and displays the visual information to a user, and the display apparatus is used in various fields, such as home or workplace.

[0004] The display apparatus may include a display module that displays a screen, and a support device that supports the display module. The display module may include a display panel, and a display case that supports the display panel.

[0005] The display module may include a self-luminous display panel, such as an organic light-emitting diode (OLED), or a non-self-luminous display panel, such as a liquid crystal display (LCD).

[0006] The support device may be provided to support the display module so that a front surface of the display panel, on which the screen is displayed, faces a viewer. When a user stands the display module up on the floor, a stand may be used as the support device. In addition, when a user hangs the display module on a wall, a wall mount device that is fixed to the wall may be used as the support device.

SUMMARY

[0007] According to an aspect of the present disclosure, a stand for a display apparatus includes: a stand body configured to be coupled to a display module; a base detachably coupled to the stand body by sliding relative to the stand body and configured to support the stand body and the display module; and a coupling plate coupled to the stand body and rotatable between a first position, at which the coupling plate is coupled to the base, and a second position, at which the coupling plate is separated from the base, and configured to restrict the sliding of the base relative to the stand body in a state in which the coupling plate is at the first position.

[0008] The base may be configured to be coupled to the stand body by sliding in a first direction relative to the stand body and configured to be separated from the stand body by sliding in a second direction opposite to the first direction relative to the stand body. The coupling plate may be configured to restrict a movement of the base in the second direction relative to the stand body in a state in which the coupling plate is at the first position.

[0009] The base may include an engaging portion on one surface of the base facing the coupling

plate. The coupling plate may include a sliding-locking portion on a path along which the engaging portion slides in the second direction and configured to block the engaging portion from sliding in the second direction relative to the coupling plate in a state in which the coupling plate is at the first position.

[0010] The coupling plate may include an opening, the sliding-locking portion may be disposed on an edge of the opening, and the engaging portion may protrude from the one surface of the base and at least a portion of the engaging portion may penetrate the opening in a state in which the coupling plate is at the first position.

[0011] In a state in which the coupling plate is at the first position, the base may be configured to slide relative to the coupling plate and the stand body between a locking position that restricts a movement of the coupling plate from the first position to the second position and an unlocking position that allows the movement of the coupling plate from the first position to the second position. The engaging portion may be engaged with the coupling plate at the locking position.

[0012] In a state in which the coupling plate is at the first position, the sliding-locking portion may be engaged with the engaging portion at the locking position and spaced apart in the first direction from the engaging portion at the unlocking position.

[0013] The engaging portion may include: a protrusion body protruding from one side of the base; and a flange portion extending outward from one end of the protrusion body. The flange portion may have a diameter greater than a diameter of the protrusion body. The flange portion at the locking position may be engaged with the sliding-locking portion at the first position in a direction different from the first direction.

[0014] The coupling plate may further include an engaging groove configured to allow at least a portion of the flange portion to be inserted and engaged at the locking position in a state in which the coupling plate is at the first position. The engaging groove may be concavely recessed in the sliding-locking portion.

[0015] The base may be configured to be coupled to the stand body by sliding in a first direction relative to the stand body. The stand body may include a sliding guide configured to guide the sliding of the base relative to the stand body. The base may include a sliding protrusion protruding from one side of the base. The sliding protrusion may be insertable into the sliding guide along the first direction.

[0016] The sliding protrusion may be configured to be engaged with the sliding guide to prevent the base from moving in a direction perpendicular to the first direction relative to the stand body in a state in which the sliding protrusion is inserted into the sliding guide.

[0017] The sliding guide may include: a first guide portion having a width in a direction perpendicular to the first direction and decreasing toward a direction in which the sliding protrusion is inserted into the sliding guide in the first direction; and a second guide portion extending from the first guide portion to the direction in which the sliding protrusion is inserted into the sliding guide in the first direction and having a constant width in the direction perpendicular to the first direction.

[0018] The sliding protrusion may include: a body portion extending from the base and configured to penetrate the sliding guide; and a head portion on one side of the body portion in a direction extending from the base. The head portion may have a width wider than a width of the second guide portion in the direction perpendicular to the first direction.

[0019] The coupling plate may include a magnetic body. The magnetic body may be configured to fix the coupling plate to the base by magnetic force between the magnetic body and the base in a state in which the coupling plate is at the first position.

[0020] The stand body may include a coupling portion configured to be coupled to the base. The coupling plate may be rotatably coupled to the coupling portion.

[0021] The coupling portion may cover a portion of the base. The coupling plate may cover another portion of the base in a state in which the coupling plate is at the first position.

[0022] According to one or more embodiments, a stand for a display apparatus may be easily assembled by sliding a stand body and a base without a separate fastening process, and components of the stand may be simplified.

[0023] According to one or more embodiments, a stand for a display apparatus may be easily assembled into a stand body and a base using a coupling plate, and components of the stand may be simplified.

[0024] According to one or more embodiments, a stand for a display apparatus may restrict a movement of a stand body and a base relative to each other by using a coupling plate, and may firmly fix each component.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] The above and other aspects, features, and advantages of certain embodiments of the present disclosure will be more apparent from the following detailed description, taken in conjunction with the accompanying drawings, in which:

[0026] FIG. 1 is a view illustrating a display apparatus according to one or more embodiments of the present disclosure;

[0027] FIG. 2 is a rear view of the display apparatus according to one or more embodiments of the present disclosure;

[0028] FIG. 3 is an exploded view of a control device of the display apparatus according to one or more embodiments of the present disclosure;

[0029] FIG. 4 is an exploded view of some components of the display apparatus according to one or more embodiments of the present disclosure;

[0030] FIG. 5 is an exploded view of some components of a stand of the display apparatus according to one or more embodiments of the present disclosure;

[0031] FIG. 6 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure;

[0032] FIG. 7 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure;

[0033] FIG. 8 is a view illustrating a state in which the stand of the display apparatus according to one or more embodiments of the present disclosure is assembled;

[0034] FIG. 9 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure;

[0035] FIG. 10 is a view illustrating the stand of the display apparatus according to one or more embodiments of the present disclosure;

[0036] FIG. 11 is a view illustrating a state before the stand is assembled to a display module;

[0037] FIG. 12 is an enlarged view of part A in FIG. 11;

[0038] FIG. 13 is a cross-sectional view taken along line B-B' of FIG. 12;

[0039] FIG. 14 is a view illustrating a state in which a base is moved relative to a stand body and a coupling plate in the stand of FIG. 12;

[0040] FIG. 15 is a cross-sectional view taken along line C-C' of FIG. 14;

[0041] FIG. 16 is an enlarged cross-sectional view of a portion of a stand in a display apparatus according to one or more embodiments of the present disclosure;

[0042] FIG. 17 is an enlarged cross-sectional view of a portion of a stand in a display apparatus according to one or more embodiments of the present disclosure;

[0043] FIG. 18 is an enlarged view of some components of a stand of a display apparatus according to one or more embodiments of the present disclosure;

[0044] FIG. 19 is an enlarged view of some components of the stand of the display apparatus

according to one or more embodiments of the present disclosure; and
[0045] FIG. **20** is an enlarged cross-sectional view taken along line D-D' of FIG. **19**.
DETAILED DESCRIPTION

[0046] Embodiments described in the disclosure and configurations shown in the drawings are merely examples of the embodiments of the disclosure, and may be modified in various different ways at the time of filing of the present application to replace the embodiments and drawings of the disclosure.

[0047] In addition, the same reference numerals or signs shown in the drawings of the disclosure indicate elements or components performing substantially the same function.

[0048] Also, the terms used herein are used to describe the embodiments and are not intended to limit and/or restrict the disclosure. The singular forms “a,” “an” and “the” are intended to include the plural forms as well, unless the context clearly indicates otherwise. In this disclosure, the terms “including”, “having”, and the like are used to specify features, numbers, steps, operations, elements, components, or combinations thereof, but do not preclude the presence or addition of one or more of the features, numbers, steps, operations, elements, components, or combinations thereof.

[0049] It will be understood that, although the terms first, second, third, etc., may be used herein to describe various elements, but elements are not limited by these terms. These terms are only used to distinguish one element from another element. For example, without departing from the scope of the disclosure, a first element may be termed as a second element, and a second element may be termed as a first element. The term of “and/or” includes a plurality of combinations of relevant items or any one item among a plurality of relevant items.

[0050] Meanwhile, the terms “up and down direction”, “lower side”, and “front and rear direction” used in the following description are defined based on the drawing, and the shape and position of each component are not limited by these terms. For example, the terms “front” and “rear” below may mean front and rear in the X direction based on the drawing, respectively. The terms “upper” and “lower” below may mean upper and lower in the Z direction based on the drawing, respectively. The terms “up and down direction” below may mean the Z direction based on the drawing, and “horizontal direction” may mean the X direction or the Y direction or all directions along the X-Y plane based on the drawing.

[0051] The disclosure will be described more fully hereinafter with reference to the accompanying drawings.

[0052] FIG. **1** is a view illustrating a display apparatus according to one or more embodiments of the present disclosure.

[0053] Referring to FIG. **1**, a display apparatus **1** according to one or more embodiments of the present disclosure may include a display module **10** and a stand **100**. The stand **100** may be provided to support the display module **10**. The display module **10** may be supported on a floor surface by the stand **100**.

[0054] The display module **10** is a device that processes an image signal received from an outside and visually displays the processed image. Hereinafter a case in which the display module **10** is a television is exemplified, but the present disclosure is not limited thereto. For example, the display module **10** may be implemented in various forms, such as a monitor, a portable multimedia device, and a portable communication device, which are a type of computer output device, and the display module **10** is not limited in its shape as long as visually displaying an image.

[0055] FIG. **1** illustrates a flat display module with a flat screen as an example of the display module **10**, but the present disclosure is not limited thereto. Therefore, the display module according to the present disclosure may be applied to a curved display module or a bendable or flexible display module in which a flat state and a curved state are variable. Further, a configuration of the present disclosure may be applied to a display module of various shapes regardless of a screen size or ratio of the display module.

[0056] The display module **10** may receive content data including video signals and audio signals

from various content sources, and output video and audio corresponding to the video signals and the audio signals. For example, the display module **10** may receive content data through a broadcast reception antenna or cable, receive content data from a content playback device, or receive content data from a content providing server of a content provider.

[0057] The display module **10** may display an image corresponding to video data and output sound corresponding to audio data. For example, the display apparatus **1** may restore a plurality of image frames included in video data and continuously display the plurality of image frames. Further, the display module **10** may restore an audio signal included in the audio data and continuously output sound according to the audio signal.

[0058] The display module **10** may be configured to display a screen. Particularly, the display module **10** may include a display panel **11** that displays an image in the front (front side in the X direction based on the drawing).

[0059] A plurality of pixels may be formed on the display panel **11**. A screen displayed on the display panel **11** may be formed by a combination of light emitted from the plurality of pixels. For example, a single screen may be formed by combining light emitted from the plurality of pixels as a mosaic.

[0060] Each of the plurality of pixels may emit different brightness and different color of light. Particularly, the plurality of pixels may include sub-pixels, respectively, and the sub-pixels may include a red sub pixel emitting red light, a green sub pixel emitting green light, and a blue sub pixel emitting blue light. By combining the red light of the red sub pixel, the green light of the green sub pixel, and the blue light of the blue sub pixel, each of the plurality of pixels may emit different brightness and different color of light.

[0061] The display panel **11** may have a substantially rectangular shape. Particularly, the display panel **11** may have a shape in which a length of the horizontal side and a length of the vertical side are different from each other. That is, the display panel **11** may be provided to have a long side and a short side. The display panel **11** may be provided in a rectangular plate shape. However, the present disclosure is not limited thereto, and the display panel **11** may be provided in the shape of a square plate in which the lengths of the long and short sides are approximately equal.

[0062] The display panel **11** may be provided in various sizes. The ratio between the long side and the short side of the display panel **11** is not limited to general cases such as 16:9 and 4:3, but may be provided at any ratio.

[0063] For example, the display panel **11** may be composed of a non-self-luminous display such as a liquid crystal display (LCD).

[0064] When the display panel **11** is an LCD panel, the display panel **11** may include a thin film transistor substrate in which thin film transistors (TFTs) are formed in a matrix form, a color filter substrate coupled in parallel with the thin film transistor substrate, and a liquid crystal injected between the thin film transistor substrate and the color filter substrate and having optical properties that vary depending on changes in voltage or temperature.

[0065] The non-self-luminous display module **10** may include a backlight unit (BLU). The backlight unit may be configured to emit light toward the display panel **11** from the rear of the display panel **11**. In this case, the display panel **11** may block or transmit light emitted from the backlight unit.

[0066] However, the type of display panel in the display apparatus according to the present disclosure is not limited thereto, and the display panel **11** may be composed of a self-luminous display type panel such as an organic light-emitting diode (OLED) or a micro-LED.

[0067] A cable configured to transmit image data to the display panel **11**, and a display driver integrated circuit (DDI) configured to process digital image data and output an analog image signal may be provided at one side of the display panel **11**.

[0068] The display module **10** may include a display case **12** supporting the display panel **11**. The display case **12** may support a front surface, side surface, or rear surface of the display panel **11**.

The display case **12** may form the outer shape of the display module **10**. Components for displaying images or performing various functions of the display module **10**, such as the display panel **11**, may be accommodated inside the display case **12**.

[0069] FIG. **1** illustrates that the display case **12** has a flat plate shape, but the shape of the display case in the display apparatus according to the present disclosure is not limited thereto. For example, the display case may have a curved plate shape corresponding to the shape of the display panel. Alternatively, the display case may be provided to allow the flat state and the curved state to be changed, and thus may be applied to a bendable or flexible display apparatus.

[0070] The display case **12** may include a top chassis supporting front and side surfaces of the display panel **11**, a bottom chassis that is positioned at the rear of the display panel **11**, and a rear cover that is coupled to the rear of the bottom chassis to form a rear surface of the display module **10**.

[0071] The display case **12** may include the top chassis supporting the front and side surfaces of the display panel **11**. The top chassis may be provided in a quadrangle frame shape on the front of the display apparatus **1**. The top chassis may form a bezel that is arranged to face the front of the display apparatus **1** to support the front of the display panel **11**. However, when the display module **10** is a bezel-less type display module with a very narrow bezel or no bezel, the top chassis may be provided to support only the side surface of the display panel **11**. Further, when the bottom chassis supports the side surface of the display panel **11**, the display module **10** may not include the top chassis.

[0072] The display module **10** may include the bottom chassis supporting the rear side of the display panel **11**. The bottom chassis may cover the rear side of the display panel **11**. The bottom chassis may be coupled to the rear side of the top chassis. The bottom chassis may support various components of the display module **10**, such as a backlight unit, a printed circuit board assembly (PBA) on which various electronic components are mounted, and the like. The bottom chassis may be formed to have a substantially flat plate shape, but is not limited thereto. The bottom chassis may be configured to include a material having high thermal conductivity so as to dissipate heat generated inside the display module **10** to the outside. For example, the bottom chassis may be configured to include a metal material such as aluminum or stainless steel, or a plastic material such as Acrylonitrile Butadiene Styrene.

[0073] When the backlight unit is provided in the display module **10**, the bottom chassis may be disposed at the rear of the backlight unit. The display case **12** may include a middle mold disposed between the top chassis and the bottom chassis, and the middle mold may be provided to support the backlight unit.

[0074] The display module **10** may include the rear cover forming the rear exterior of the display apparatus **1**. The rear cover may be disposed at the rear of the bottom chassis and may cover the bottom chassis and various components mounted at the rear of the bottom chassis.

[0075] Meanwhile, unlike FIG. **1**, the display case of the display apparatus according to the present disclosure may not include some of the components of the top chassis, the middle mold, and the bottom chassis. For example, the display panel of the display apparatus according to the present disclosure may be a self-luminous display panel such as an OLED panel, and in this case, because the display apparatus is not provided with a backlight unit, the middle mold for supporting the backlight unit may not be provided either.

[0076] The configuration of the display module **10** described above with reference to FIG. **1** is merely an example for describing the display module of the display apparatus according to the present disclosure, and the present disclosure is not limited thereto. The display module of the display apparatus according to the present disclosure may be provided to include various configurations for performing a function of displaying a screen.

[0077] The stand **100** of the display apparatus **1** may be provided to support the display module **10**. The stand **100** may be disposed on a floor surface to support the display module **10**, and the display

module **10** may be supported on the floor surface by the stand **100**. That is, the display module **10** may be supported in a standing manner by the stand **100**.

[0078] The stand **100** may be coupled to the display module **10**. For example, as shown in FIGS. **1** and **2**, the stand **100** may be coupled to the rear surface of the display module **10** and may support the rear side of the display module **10**. The rear surface of the display module **10** means the rear cover of the display case **12**.

[0079] Specific features of the stand **100** are described below.

[0080] FIG. **2** is a rear view of the display apparatus according to one or more embodiments of the present disclosure. FIG. **3** is an exploded view of a control device of the display apparatus according to one or more embodiments of the present disclosure. FIG. **4** is an exploded view of some components of the display apparatus according to one or more embodiments of the present disclosure.

[0081] Referring to FIGS. **2** to **4**, the display apparatus **1** may include a control device **30**. The control device **30** may be configured to perform various functions, such as providing a content signal to the display module **10** or supplying power to the display module **10**.

[0082] The control device **30** may be electrically connected to the display module **10**. For example, the control device **30** may receive content signals from various content sources and transmit the content signals to the display module **10**. For example, the control device **30** may receive power from an external power source and supply power to the display module **10**.

[0083] As illustrated in FIG. **2**, the control device **30** may be electrically connected to the display module **10** via a cable **20**. The cable **20** may be connected to the display module **10** via a cable connecting portion **12b** of the display module **10**. The cable connecting portion **12b** may include an input terminal to which the cable **20** is connected, and the display module **10** may receive an electrical signal received from the control device **30** or power supplied from the control device **30** via the input terminal of the cable connecting portion **12b**. For example, the cable connecting portion **12b** may be provided on the rear cover of the display case **12**.

[0084] The control device **30** may be formed to have a substantially hexahedron box shape. The control device **30** may include a control device body **31** having an open shape on one side, a main board **32** accommodated in the control device body **31**, and a control device cover **34** covering one surface of the control device body **31**.

[0085] The control device body **31** may include a surface **31b** formed in a plate shape, and a rim **31c** formed along an edge of the surface **31b**. The rim **31c** of the control device body **31** may be formed approximately perpendicular to a surface of the control device body **31**. In the control device body **31**, an accommodation space for accommodating the main board **32** may be formed by the surface **31b** and the rim **31c**.

[0086] The control device body **31** may include an opening **31a** formed on a surface opposite to the surface **31b** of the control device body **31**. The opening **31a** of the control device body **31** may be covered by the control device cover **34**.

[0087] The control device **30** may include a plurality of cooling holes **31d** formed to allow heat generated by the main board **32** to be discharged to the outside of the control device body **31**. The plurality of cooling holes **31d** may be formed on at least one surface of the rim **31c** of the control device body **31**.

[0088] The control device **30** may include at least one porthole **31e** provided to allow the cable **20** to be connected. The porthole **31e** may be formed on at least one surface of the rim **31c** of the control device body **31**.

[0089] The control device **30** may include a terminal connected to a connector (not shown) of the cable **20a** and/or a terminal connected to a power cable (not shown) which are provided to correspond to the porthole **31e** of the control device body **31**.

[0090] The main board **32** may be disposed inside the control device **30**. The main board **32** may be provided with at least one substrate **32a** and an input terminal **32b** provided on the at least one

substrate **32a**. Various components such as a light source driver, a power driver, a transceiver, and a temperature sensor may be provided inside the control device **30**.

[0091] The control device **30** may include a heat dissipation sheet **33**. The heat dissipation sheet **33** may be provided on the inner side of the control device cover **34**. The heat dissipation sheet **33** is provided so as to efficiently dissipate heat generated from the main board **32** or the substrate **32a**. The heat dissipation sheet **33** may include a high thermal conductivity radiation sheet or a thin metal plate. For example, the heat dissipation sheet **33** may be provided to include a PET material. The heat dissipation sheet **33** may be provided with an adhesive on at least one surface thereof. The heat dissipation sheet **33** provided with an adhesive may be adhered to one surface of the control device cover **34**.

[0092] The control device **30** described above is only an example of the control device included in the display apparatus according to the present disclosure, and the present disclosure is not limited thereto.

[0093] As illustrated in FIG. 2, the control device **30** may be supported on the stand **100**. That is, the control device **30** may be supported on the stand **100** by being detachably mounted on the stand **100** rather than being disposed separately from the display apparatus **1**. In this case, the control device **30** may be covered by the stand **100** when viewed from the front (the X direction), and the cable **20** connecting the control device **30** and the display module **10** may also be covered by the display module **10** when viewed from the front. In this case, the appearance quality provided to a user when the display apparatus **1** is installed in a use space may be improved.

[0094] Particularly, the control device **30** may be coupled to a stand body **200** of the stand **100** to be described later. For example, the control device **30** may be removably mounted on the stand body **200** by various methods. For example, the control device **30** may be fixed to the stand body **200** by screw fastening, etc. The present disclosure is not limited thereto, and the control device **30** may be mounted on the stand body **200** by various methods.

[0095] For example, the stand body **200** may be formed to have a size corresponding to or at least larger than that of the control device **30**.

[0096] For example, the stand body **200** may be positioned to have a predetermined inclination with respect to the ground to allow the control device **30** to be stably supported. The predetermined inclination may mean an angle less than 90 degrees with respect to the ground.

[0097] However, the present disclosure is not limited thereto, and the control device **30** may not be mounted on the stand **100**, but may be separately placed on the floor surface or other installation space. In addition, the display apparatus **1** according to one or more embodiments of the present disclosure has been described based on the assumption that the display apparatus **1** includes the control device **30**. Alternatively, the display apparatus according to the present disclosure may not include the above-mentioned control device.

[0098] The stand **100** of the display apparatus **1** may include the stand body **200** and a base **300**. The stand body **200** may support the display module **10** to allow the display module **10** to stand relative to the floor surface. The stand body **200** may be provided to allow the display module **10** to be positioned spaced apart from the floor surface by a predetermined height. The base **300** may be supported on the floor surface. The base **300** may be provided so as to support the stand body **200** and the display module **10**.

[0099] The base **300** may be formed to have a substantially flat plate shape so as to be stably placed on the floor surface.

[0100] The stand body **200** may be provided to be coupled to the display module **10**. The stand body **200** may be coupled to the display module **10** and the base **300**, respectively, to connect the display module **10** and the base **300**. Particularly, the stand body **200** may be provided to be coupled to the rear surface of the display module **10**, that is, the rear cover of the display case **12**.

[0101] For example, the stand **100** may further include a support bracket **500** for coupling the stand body **200** to the display module **10**.

[0102] The support bracket **500** may include a case coupling portion **510** provided to be coupled to the display module **10** and a stand coupling portion **520** provided to be coupled to the stand body **200**. Particularly, the case coupling portion **510** may be provided to be coupled to the rear cover of the display case **12**. In addition, the stand coupling portion **520** may be provided to be coupled to a support plate **210** of the stand body **200**, which will be described later. The case coupling portion **510** and the stand coupling portion **520** may be connected to each other.

[0103] For example, a bracket fastening hole **12a** may be provided in the rear cover of the display case **12**. The case coupling portion **510** may be fastened to the display case **12** by a screw penetrating the bracket fastening hole **12a**. However, the present disclosure is not limited thereto, and the case coupling portion **510** may be fastened to the display case **12** by various methods.

[0104] For example, the support plate **210** of the stand body **200** may include a bracket coupling hook **211**. The stand coupling portion **520** may include a hook structure **521** formed to be interlocked with the bracket coupling hook **211**, and the stand coupling portion **520** and the stand body **200** may be coupled by the bracket coupling hook **211** and the hook structure **521** of the stand coupling portion **520**.

[0105] In addition, a screw hole **212** may be provided in the support plate **210** of the stand body **200**. A hole corresponding to the screw hole **212** may be formed in the stand coupling portion **520**. The stand coupling portion **520** and the stand body **200** may be fastened by a screw penetrating the screw hole **212**.

[0106] However, the present disclosure is not limited thereto, and the stand body **200** and the stand coupling portion **520** may be coupled in various ways.

[0107] The stand body **200** may be arranged to have a predetermined inclination with respect to the floor surface as described above. However, because the rear cover of the display module **10** generally is arranged in a direction perpendicular to the ground, it may not be easy for the stand body **200** to be directly coupled to the display module **10**. In the support bracket **500**, the case coupling portion **510** may be provided parallel to the rear cover of the display module **10**, and the stand coupling portion **520** may be provided parallel to the support plate **210** of the stand body **200**. That is, the support bracket **500** may be formed to allow the case coupling portion **510** and the stand coupling portion **520** to have a predetermined angle.

[0108] For example, the case coupling portion **510** may be formed to have a substantially flat plate shape. For example, the stand coupling portion **520** may be formed to have a substantially flat plate shape. Alternatively, the support bracket **500** may have various shapes depending on the shapes of the stand body **200** and the display case **12**.

[0109] As the stand body **200** is connected to the display module **10** via the support bracket **500**, the stand body **200** may be supported more stably on the display module **10**.

[0110] However, the present disclosure is not limited thereto, and the stand body **200** may be configured to be directly coupled to the display module **10**.

[0111] The stand body **200** and the base **300** may be configured to be coupled to each other. The stand body **200** and the base **300** may be removably coupled to each other. The stand body **200** and the base **300** may be configured to be coupled to each other so as to support the display module **10** in a standing manner.

[0112] FIG. 5 is an exploded view of some components of a stand of the display apparatus according to one or more embodiments of the present disclosure. FIG. 6 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure. FIG. 7 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure. FIG. 8 is a view illustrating a state in which the stand of the display apparatus according to one or more embodiments of the present disclosure is assembled. FIG. 9 is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure. FIG. 10 is a view illustrating the stand of the display apparatus according to one

or more embodiments of the present disclosure.

[0113] Referring to FIGS. 5 to 10, the stand body 200 and the base 300 may be detachably coupled to each other.

[0114] As illustrated in FIGS. 5 to 10, the stand 100 for the display apparatus according to one or more embodiments of the present disclosure may be transported to a user with the stand body 200 and base 300 separated from each other, thereby improving the convenience of transporting the product.

[0115] Meanwhile, the stand 100 may be provided in such a way that a process of assembling the stand body 200 and the base 300 is required after being transported to a user, and thus the convenience of assembly may be required. In addition, it may be required to transport the stand 100 again after the assembly process, and thus convenience of a process of separating the stand body 200 and the base 300, which are already assembled, again may also be required.

[0116] The stand body 200 and the base 300 may be provided to be coupled in a sliding manner. Particularly, the stand body 200 may include a coupling portion 220 provided to be coupled to the base 300, and the base 300 may be provided to be coupled to the coupling portion 220 in a sliding manner.

[0117] The stand body 200 may include the support plate 210 coupled to the display module 10, and the coupling portion 220 connected to the support plate 210 and coupled to the base 300. The coupling portion 220 may be arranged parallel to the base 300, and may be arranged parallel to the floor surface. The stand body 200 may be formed to allow the support plate 210 and the coupling portion 220 to have a predetermined angle.

[0118] The coupling portion 220 may be provided at a lower portion of the stand body 200. The base 300 may be coupled to the lower portion of the stand body 200.

[0119] For example, the base 300 may be coupled to the coupling portion 220 from the upper side in the Z direction. That is, the base 300 and the coupling portion 220 may be coupled in such a way that a lower surface of the base 300 faces an upper surface of the coupling portion 220.

[0120] The support plate 210 may be formed to have a substantially flat plate shape. The coupling portion 220 may be formed to have a substantially flat plate shape. The coupling portion 220 may be formed to be bent and extended from one end of the support plate 210. The one end of the support plate 210 may mean one end, which is adjacent to the floor surface between two ends in the Z direction, of the support plate 210 i.e., a lower end.

[0121] The support plate 210 and the coupling portion 220 may be formed integrally. For example, the stand body 200 may be formed by bending and processing a portion corresponding to the coupling portion 220 from a flat plate-shaped base material. However, the present disclosure is not limited thereto, and the support plate 210 and the coupling portion 220 may also be formed as separate components.

[0122] The stand body 200 may be composed of various materials having sufficient rigidity to support the display module 10, such as a metal alloy.

[0123] Hereinafter an example of a configuration in which the coupling portion 220 of the standing body 200 and the base 300 are coupled in a sliding manner is described.

[0124] As illustrated in FIGS. 5 to 7, the base 300 may be configured to slide in one direction relative to the stand body 200 and be coupled to the stand body 200. According to FIGS. 5 to 7, the base 300 may be configured to slide along the X direction relative to the stand body 200, and one direction in which the base 300 moves when coupled to the stand body 200 may be a direction opposite to the X direction based on the drawing (in other words, a direction opposite to a direction indicated by the X direction based on the drawing). The X direction may be a front and rear direction of the stand 100 and the display apparatus 1, and the one direction, in which the base 300 moves when coupled to the stand body 200, may be a rearward direction of the stand 100 and the display apparatus 1.

[0125] However, the present disclosure is not limited thereto, and the base 300 may be configured

to slide in various directions, such as the Y direction, with respect to the stand body **200**, and be coupled to the stand body **200**.

[0126] For convenience of description, the following description will be based on one or more embodiments in which the base **300** is configured to slide in the X direction on the drawing relative to the stand body **200** and configured to slide in the direction opposite to the X direction so as to be coupled to the stand body **200**.

[0127] The stand body **200** may include sliding guides **221** and **222** provided to guide the sliding of the base **300** with respect to the stand body **200**. The sliding guides **221** and **222** may be provided at the coupling portion **220**.

[0128] The base **300** may include a sliding protrusion **310**. The sliding protrusion **310** may be formed to protrude from one side of the base **300**. The sliding protrusion **310** may be formed to correspond to the sliding guides **221** and **222**.

[0129] The sliding protrusion **310** may be formed on one surface of the base **300** facing the coupling portion **220**. For example, the sliding protrusion **310** may be formed on the lower surface of the base **300** and may be formed to protrude downward.

[0130] The sliding guides **221** and **222** may be provided to guide the sliding protrusion **310** to slide along the X direction (hereinafter referred to as “a direction opposite to the one direction”) or the direction opposite to the X direction (hereinafter referred to as “the one direction”). The sliding protrusion **310** may be provided to be insertable into the sliding guides **221** and **222** along the one direction. When the sliding protrusion **310** is inserted into the sliding guides **221** and **222** along the one direction, the base **300** may be coupled to the coupling portion **220**. The sliding protrusion **310** may be provided to be detachable from the sliding guides **221** and **222** by moving along the direction opposite to the one direction with respect to the sliding guides **221** and **222**. When the sliding protrusion **310** is separated from the sliding guides **221** and **222** in the direction opposite to the one direction, the base **300** may be separated from the coupling portion **220**.

[0131] For example, the sliding guides **221** and **222** may be formed to have the shape of a hole through which the coupling portion **220** passes. Particularly, the sliding guides **221** and **222** may be formed to have the shape of a hole through which the coupling portion **220** passes in the Z direction.

[0132] The sliding guides **221** and **222** may be provided in plurality. The sliding protrusion **310** may be provided in multiple numbers to correspond to the number of sliding guides **221** and **222**.

[0133] Particularly, the sliding guides **221** and **222** may include a first sliding guide **221** and a second sliding guide **222**. Some of the plurality of sliding protrusions **310** may be provided to correspond to the first sliding guide **221**, and other some of the plurality of sliding protrusions **310** may be provided to correspond to the second sliding guide **222**. In other words, the first sliding guide **221** may be provided to guide the sliding of some of the plurality of sliding protrusions **310**, and the second sliding guide **222** may be provided to guide the sliding of other some of the plurality of sliding protrusions **310**. Some of the plurality of sliding protrusions **310** may be provided to be inserted in the one direction into the first sliding guide **221**, and other some of the plurality of sliding protrusions **310** may be provided to be inserted in the one direction into the second sliding guide **222**.

[0134] For example, the first sliding guide **221** may be provided at the other end, which is opposite to one end adjacent to the support plate **210**, of the coupling portion **220**. The second sliding guide **222** may be provided between one end, which is adjacent to the support plate **210**, of the coupling portion **220**, and the other end opposite to the one end. In this case, the first sliding guide **221** may be positioned forward in the X direction relative to the second sliding guide **222**.

[0135] The first sliding guide **221** and the second sliding guide **222** may be arranged parallel to each other along one direction. That is, the first sliding guide **221** and the second sliding guide **222** may be arranged parallel to each other along the front and rear direction parallel to the X direction. However, the present disclosure is not limited thereto, and the first sliding guide **221** and the

second sliding guide **222** may be arranged in various ways.

[0136] The first sliding guide **221** may include a first guide portion **221a** and a second guide portion **221b**. The first guide portion **221a** and the second guide portion **221b** may each be provided to guide the sliding of the sliding protrusion **310**.

[0137] When the sliding protrusion **310** slides in the one direction and is inserted into the first sliding guide **221**, the sliding protrusion **310** may move sequentially along the first guide portion **221a** and the second guide portion **221b**. The second guide portion **221b** may be positioned in the one direction with respect to the first guide portion **221a**.

[0138] The second guide portion **221b** may extend in a direction in which the sliding protrusion **310** is inserted in the one direction from the first guide portion **221a**. Particularly, the second guide portion **221b** may extend in the one direction (rearwardly, based on the drawing) from one end of the first guide portion **221a** (rear end of the first guide portion **221a** based on the drawing).

[0139] The first guide portion **221a** may be formed to allow an end opposite to the second guide portion **221b** to be open in the one direction. The second guide portion **221b** may be formed to allow an end opposite to the first guide portion **221a** to be closed in the one direction. That is, the first sliding guide **221** may be formed in such a way that one of two ends parallel to the one direction is open and the other end is closed. The sliding protrusion **310** may move in the one direction and enter the first guide portion **221a**, and when the sliding protrusion **310** reaches the end of the second guide portion **221b** opposite to the first guide portion **221a**, the insertion of the sliding protrusion **310** into the first sliding guide **221** may be completed.

[0140] The first guide portion **221a** may be formed to allow a width in the direction perpendicular to the one direction to become less toward the direction in which the sliding protrusion **310** is inserted into the first sliding guide **221** in the one direction. The width in the direction perpendicular to the one direction may mean a width in the Y direction based on the drawing. When the sliding protrusion **310** is inserted while moving along the first guide portion **221a**, the sliding protrusion **310** may be guided to move toward the approximate center of the first sliding guide **221**.

[0141] The second guide portion **221a** may be formed to allow a width in the direction perpendicular to the one direction to be approximately constant. The width in the direction perpendicular to the one direction may mean a width in the Y direction based on the drawing.

[0142] With this configuration, a width of an entrance portion of the first sliding guide **221** in which the sliding protrusion **310** begins to be inserted may be formed to be greater than an average width of the first sliding guide **221** or a width of an inner portion of the first sliding guide **221**.

Accordingly, when a user positions the sliding protrusion **310** at the entrance portion of the first sliding guide **221** to insert the sliding protrusion **310** into the first sliding guide **221**, the convenience may be improved.

[0143] However, the present disclosure is not limited thereto, and the first sliding guide **221** may be formed to have various shapes for guiding the sliding protrusion **310**.

[0144] The second sliding guide **222** may include a first guide portion **222a**, a second guide portion **222b**, and a guide entrance **222c**. The sliding protrusion **310** may enter or exit the second sliding guide **222** through the guide entrance **222c**. In a process of inserting the sliding protrusion **310** into the second sliding guide **222**, the guide entrance **222c** may be an initial position at which the sliding protrusion **310** enters the second sliding guide **222**. The first guide portion **222a** and the second guide portion **222b** may be provided to guide the sliding of the sliding protrusion **310**, respectively.

[0145] When the sliding protrusion **310** is inserted into the second sliding guide **222** while sliding in the one direction, the sliding protrusion **310** may move sequentially along the guide entrance **222c**, the first guide portion **222a**, and the second guide portion **222b**. The first guide portion **222a** may be disposed in the one direction with respect to the guide entrance **222c**. The second guide portion **222b** may be disposed in the one direction with respect to the first guide portion **222a**.

[0146] The first guide portion **222a** may extend in a direction, in which the sliding protrusion **310** is inserted in the one direction, from the guide entrance **222c**. Particularly, the first guide portion **222a** may extend in the one direction (rearwardly, based on the drawing) from one end of the guide entrance **222c** (rear end of the guide entrance **222c** based on the drawing).

[0147] The second guide portion **222b** may extend from the first guide portion **222a** in a direction in which the sliding protrusion **310** is inserted in the one direction. Particularly, the second guide portion **222b** may extend in the one direction (rearwardly, based on the drawing) from one end of the first guide portion **222a** (rear end of the first guide portion **222a** based on the drawing).

[0148] The guide entrance **222c** may be formed to allow an end opposite to the first guide portion **222a** to be blocked in the one direction. The second guide portion **222b** may be formed to allow the end opposite to the first guide portion **222a** to be blocked in the one direction. That is, the second sliding guide **222** may be formed in a shape in which two ends in a direction parallel to the one direction are closed. The sliding protrusion **310** may move in a direction perpendicular to the one direction (a direction opposite to the Z direction based on the drawing) and may enter the second sliding guide **222** by passing through the guide entrance **222c**, and when the sliding protrusion **310** reaches an end, which is opposite to the first guide portion **222a**, of the second guide portion **222b**, the insertion of the sliding protrusion **310** into the second sliding guide **222** may be completed.

[0149] The first guide portion **222a** may be formed to allow a width in the direction perpendicular to the one direction to become less toward the direction in which the sliding protrusion **310** is inserted into the second sliding guide **222** in the one direction. The width in the direction perpendicular to the one direction may mean a width in the Y direction based on the drawing. When the sliding protrusion **310** is inserted while moving along the first guide portion **222a**, the sliding protrusion **310** may be guided to move toward the approximate center of the second sliding guide **222**.

[0150] The second guide portion **222a** may be formed to allow a width in the direction perpendicular to the one direction to be approximately constant. The width in the direction perpendicular to the one direction may mean a width in the Y direction based on the drawing.

[0151] The guide entrance **222c** may be formed to allow at least a portion thereof to have a width that is approximately equal to or similar to a maximum width in the Y direction of the first guide portion **222a**.

[0152] With this configuration, a width of the guide entrance **222c** in which the sliding protrusion **310** begins to be inserted may be formed to be greater than an average width of the second sliding guide **222** or a width of an inner portion of the second sliding guide **222**. Accordingly, when a user positions the sliding protrusion **310** at the guide entrance **222c** to insert the sliding protrusion **310** into the second sliding guide **222**, the convenience may be improved.

[0153] However, the present disclosure is not limited thereto, and the second sliding guide **222** may be formed to have various shapes for guiding the sliding protrusion **310**.

[0154] The first sliding guide **221** may be provided in plurality. Similarly, the sliding protrusion **310** corresponding to the first sliding guide **221** may be provided in plurality. The plurality of first sliding guides **221** may be arranged symmetrically with respect to a center line of the coupling portion **220**. The center line of the coupling portion **220** means a line located in the middle along the Y direction. However, the number of first sliding guides provided on the stand of the display apparatus according to the present disclosure is not limited thereto.

[0155] The second sliding guide **222** may be provided in plurality. Similarly, the sliding protrusion **310** corresponding to the second sliding guide **222** may be provided in plurality. The plurality of second sliding guides **222** may be arranged symmetrically with respect to the center line of the coupling portion **220**. The center line of the coupling portion **220** means a line located in the middle along the Y direction. However, the number of second sliding guides provided on the stand of the display apparatus according to the present disclosure is not limited thereto.

[0156] The first sliding guide **221** and the second sliding guide **222** described above is merely an

example of sliding guides provided to guide the sliding of the sliding protrusion of the base in the stand of the display apparatus according to the present disclosure, and the stand of the display apparatus according to the present disclosure may include various types of sliding guides.

[0157] The sliding protrusion **310** may be engaged with the sliding guides **221** and **222** to prevent the base **300** from moving in a direction perpendicular to the one direction relative to the stand body **200** (e.g., Y direction or Z direction) when the sliding protrusion **310** is inserted into the sliding guides **221** and **222**.

[0158] Particularly, when the sliding protrusion **310** is inserted into the sliding guides **221** and **222**, the sliding protrusion **310** may penetrate the sliding guides **221** and **222** in the Z direction, and may be engaged with the sliding guides **221** and **222** in the Z direction while penetrating the sliding guides **221** and **222**.

[0159] The sliding protrusion **310** may include a body portion **311** (refer to FIG. **14**) and a head portion **312**. The body portion **311** may extend from the base **300** to penetrate the sliding guides **221** and **222**. The head portion **312** may be provided on one side of the body portion **311**.

Particularly, the head portion **312** may be provided on one side of the body portion **311** with respect to a direction in which the body portion **311** extends from the base **300**. As illustrated in FIGS. **5** to **10**, the body portion **311** may extend downward from the base **300**, and the head portion **312** may be provided on a lower side of the body portion **311**.

[0160] In order to penetrate the sliding guides **211** and **222**, the body portion **311** may be formed to allow a width in a direction perpendicular to the one direction (a width in the Y direction based on the drawing) to be less than or at least the same as that of the sliding guides **221** and **222**.

[0161] The width of the body portion **311** in the direction perpendicular to the one direction (a width in the Y direction based on the drawing) may be substantially the same as or similar to a width of the second guide portions **221b** and **222b** in the direction perpendicular to the one direction (a width in the Y direction based on the drawing). With this configuration, when the body portion **311** reaches the second guide portions **221b** and **222b**, the sliding protrusion **310** may be prevented from moving in a direction opposite to the X direction relative to the sliding guides **221** and **222**, and also from moving in the Y direction and the opposite direction thereto. Accordingly, when the sliding protrusion **310** is completely inserted into the sliding guides **221** and **222**, the base **300** and the stand body **200** may be fixed so as not to move with respect to each other.

[0162] The head portion **312** may be formed to allow a width in the direction perpendicular to the one direction (a width in the Y direction based on the drawing) to be greater than that of the second guide portions **221b** and **222b**. With this configuration, when the sliding protrusion **310** is in a position inserted into the second guide portions **221b** and **222b**, the head portion **312** may be engaged with the second guide portions **221b** and **222b** of the sliding guides **221** and **222**. When the sliding protrusion **310** is arranged to penetrate the second guide portion **221b** and **222b**, the head portion **312** may be restrained from moving in the Z direction by the other surface opposite to one surface, which faces the base **300**, of the coupling portion **220**.

[0163] Meanwhile, in order to allow the sliding protrusion **310** to enter the guide entrance **222c**, at least the guide entrance **222c** may be provided to allow the width in the direction perpendicular to the one direction (the width in the Y direction based on the drawing) to be greater than the width of the head portion **312** in the direction perpendicular to the one direction.

[0164] With the above-mentioned configuration, the base **300** may slide in the one direction relative to the stand body **200**, and the base **300** and the stand body **200** may be coupled in a sliding manner.

[0165] However, the present disclosure is not limited thereto, and the stand body **200** and the base **300** may include various structures for allowing the base **300** to be coupled to the stand body **200** in a sliding manner. For example, in the stand of the display apparatus according to the present disclosure, a sliding guide provided on the stand body may be formed to have a shape of a groove that is concavely recessed on one surface facing the base. Alternatively, in the stand of the display

apparatus according to the present disclosure, a sliding protrusion may be provided on the stand body, and a sliding guide may be provided on the base.

[0166] When the sliding connection between the coupling portion **220** and the base **300** is completed, the coupling portion **220** may cover at least a portion of the base **300** from on one side, as illustrated in FIG. **8**.

[0167] As illustrated in FIG. **8**, when the sliding connection between the stand body **200** and the base **300** is completed, the base **300** may be restricted from moving in the Y direction and the opposite direction thereof with respect to the stand body **200**. In addition, the base **300** may be restricted from moving in the Z direction and the opposite direction thereof with respect to the stand body **200**.

[0168] However, in the case as shown in FIG. **8**, the base **300** is not restricted from moving in a direction opposite to the one direction, in which the base **300** slides and is coupled to the stand body **200**, that is, in the X direction based on the drawing. In such a case, the base **300** may be in a state in which the base **300** is separated from the stand body **200** by sliding relative to the stand body **200** in the X direction (i.e. first direction) due to various causes.

[0169] To prevent the difficulty, the stand **100** may include a coupling plate **400**. The coupling plate **400** may be provided to restrict the sliding of the base **300** with respect to the stand body **200**. When the movement of the base **300** with respect to the stand body **200** in the X direction is restricted by the coupling plate **400**, the assembly of the stand body **200** and the base **300** may be completed.

[0170] The coupling plate **400** may be provided to be movable between a first position (refer to FIG. **10**) that locks the base **300** from sliding in a direction opposite to the one direction relative to the stand body **200**, and a second position (refer to FIGS. **8** and **9**) that unlocks the sliding of the base **300** in a direction opposite to the one direction relative to the stand body **200**.

[0171] Particularly, the coupling plate **400** may be coupled to the stand body **200** so as to be rotatable between the first position coupled to the base **300** and the second position separated from the base **300**. The coupling plate **400** may be provided so as to be rotatable around a rotating shaft **224** (refer to FIG. **13**, etc.).

[0172] The coupling plate **400** may restrict the sliding of the base **300** relative to the stand body **200** when coupled to the base **300**. Particularly, the coupling plate **400** may be provided to restrict the movement of the base **300** in a direction opposite (i.e. second direction) to the one direction relative to the stand body **200** when coupled to the base **300**.

[0173] The coupling plate **400** may be rotatably coupled to the coupling portion **220**. The rotating shaft **224** may be coupled to the coupling portion **220**, and the coupling plate **400** may rotate around the rotating shaft **224** coupled to the coupling portion **220**. For example, the coupling plate **400** may include a rotating shaft coupling portion **410** coupled to the rotating shaft **224** fixed to the coupling portion **220**, and the rotating shaft coupling portion **410** may be coupled to the rotating shaft **224** so as to be rotatable around the rotating shaft **224**. The rotating shaft coupling portion **410** may be provided to surround an outer surface of the rotating shaft **224**. The rotating shaft coupling portion **410** may be formed to allow an outer surface thereof to have a curved shape.

[0174] As illustrated in FIG. **8**, the rotating shaft **224** of the coupling plate **400** may extend along a direction (Y direction based on the drawing) that is perpendicular to the one direction and parallel to the base **300**. However, the present disclosure is not limited thereto, and the coupling plate **400** may be configured to be rotatable around a rotating shaft extending along the X direction on the drawing.

[0175] With this configuration, the coupling plate **400** may be configured to be rotatable between the first position and the second position.

[0176] The coupling plate **400** at the first position may cover one side of the base **300**. The coupling plate **400** at the first position may cover at least a portion of one side of the base **300**. Particularly, one side of the base **300** covered by the coupling plate **400** at the first position may be

identical to one side of the base **300** covered by the coupling portion **220**. As illustrated in FIG. 8, the coupling portion **220** may cover the lower side of the base **300**, and the coupling plate **400** may also cover the lower side of the base **300**.

[0177] The coupling plate **400** may be formed to have a substantially flat plate shape. The coupling plate **400** may be formed to have a thickness that substantially corresponds to the coupling portion **220**.

[0178] The coupling portion **220** may include a cut portion **223**. The cut portion **223** may be formed by being cut out from the other end opposite to one end connected to the support plate **210** toward the one end. In other words, the cut portion **223** may be formed by being cut out along the one direction from the other end opposite to the support plate **210**. A portion of the base **300** corresponding to the cut portion **223** may not be covered by the coupling portion **220**.

[0179] The coupling plate **400** may be provided to cover a portion of the base **300** corresponding to the cut portion **223** when the coupling plate **400** is at the first position. The coupling plate **400** may be configured to be rotatable with respect to the cut portion **223**. The coupling plate **400** may be configured to open and close the cut portion **223** as the coupling plate **400** rotates between the first position and the second position. When the coupling plate **400** is at the second position, a portion of the base **300** corresponding to the cut portion **223** of the coupling portion **220** may be not covered by the coupling plate **400**, and when the coupling plate **400** is at the first position, a portion of the base **300** corresponding to the cut portion **223** of the coupling portion **220** may be covered by the coupling plate **400**.

[0180] The coupling portion **220** may cover a portion of the base **300**, and the coupling plate **400** may cover another portion of the base **300** at the first position.

[0181] The rotating shaft **224** of the coupling plate **400** may be provided in the cut portion **223**. For example, the rotating shaft **224** may be arranged adjacent to one end of the cut portion **223** adjacent to the support plate **210**. In other words, the rotating shaft **224** may be arranged adjacent to one end of the cut portion **223** in the one direction (the direction opposite to the X direction based on the drawing). In this case, when the base **300** slides to be coupled to or separated from the coupling portion **220**, an engaging portion **320** to be described later may be prevented from interfering with the coupling plate **400**. However, the present disclosure is not limited thereto, and the rotating shaft **224** of the coupling plate **400** may be provided in a portion of the coupling portion **220** other than the cut portion **223**.

[0182] When the stand body **200** and the base **300** are separated from each other, the coupling plate **400** may still be rotatable with respect to the coupling portion **220**. At this time, the coupling plate **400** may rotate beyond one side of the cut portion **223** covered by the base **300**, which may cause inconvenience to a user.

[0183] To prevent this, the coupling plate **400** may include a rotation prevention portion **470**, and the cut portion **223** may include a coupling plate support **223a** corresponding to the rotation prevention portion **470**.

[0184] When the coupling plate **400** is at the first position, the rotation prevention portion **470** may be supported in the Z direction by the coupling plate support **223a**, and may prevent the coupling plate **400** from rotating in a direction opposite to the direction in which the coupling plate **400** rotates from the first position to the second position.

[0185] The coupling plate **400** may be required to remain fixed at the first position in order to maintain a state in which the sliding of the base **300** relative to the stand body **200** is restricted.

[0186] Accordingly, the coupling plate **400** may be arranged to be fixed to the base **300** when the coupling plate **400** is at the first position.

[0187] For example, the coupling plate **400** may be provided to be fixed to the base **300** by a magnetic force. The coupling plate **400** may include a magnetic body **450**. The base **300** may be configured to have an attractive force due to a magnetic force applied between the base **300** and the magnetic body **450**. For example, the base **300** may be provided to include a metal material having

magnetism, such as an iron alloy material. The magnetic body **450** may be provided to be fixed to the base **300** by a magnetic force between the magnetic body **450** and the base **300** when the coupling plate **400** is at the first position.

[0188] The coupling plate **400** may include a magnetic body holder **460** supporting the magnetic body **450**. The magnetic body **450** may be fixed to the magnetic body holder **460**. For example, the magnetic body holder **460** may be provided to include a magnetic metal material, such as an iron alloy material, and may be provided to fix the magnetic body **450** by a magnetic force acting between the magnetic body holder **460** and the magnetic body **450**. Further, not only the magnetic body holder **460** but also the coupling plate **400** may be provided to include a magnetic metal material as a whole.

[0189] With this configuration, the coupling plate **400** may stably maintain a position thereof at the first position, and ultimately effectively restrict the sliding of the base **300** relative to the stand body **200**. However, the present disclosure is not limited thereto, and the coupling plate **400** and the base **300** may be provided to include various configurations to allow the coupling plate **400** to be detachably fixed to the base **300** when the coupling plate **400** is at the first position.

[0190] Hereinafter an example of a configuration in which the coupling plate **400** is provided to restrict the sliding of the base **300** relative to the stand body **200** at the first position is described in detail.

[0191] As illustrated in FIG. **10**, when the coupling plate **400** is at the first position, a portion of the base **300** may face a portion of the coupling plate **400** with respect to the one direction, and thus the base **300** may be restricted from moving in the one direction relative to the stand body **200**.

[0192] Particularly, the base **300** may include the engaging portion **320**, and the coupling plate **400** may include a sliding-locking portion **430**. The sliding-locking portion **430** may be provided to lock the base **300** from sliding relative to the stand body **200** when the coupling plate **400** is at the first position. The engaging portion **320** may be provided to be engaged with the sliding-locking portion **430** at the first position when the base **300** slides relative to the stand body **200** and the coupling plate **400** at the first position.

[0193] When the coupling plate **400** is at the first position, the sliding-locking portion **430** may be positioned on a path along which the engaging portion **320** slides in a direction opposite to the one direction (the X direction based on the drawing). When the coupling plate **400** is at the first position, the sliding-locking portion **430** may be positioned in a direction opposite to the one direction with respect to the engaging portion **320**. When the coupling plate **400** is at the first position, the sliding-locking portion **430** may face the engaging portion **320** with respect to a direction parallel to the one direction. When the coupling plate **400** is at the first position, the sliding-locking portion **430** may be positioned at a position at which the sliding-locking portion **430** comes into contact with the engaging portion **320** when the base **300** moves in a direction opposite to the one direction. With this configuration, the sliding-locking portion **430** may be provided to block the engaging portion **320** from sliding in a direction opposite to the one direction with respect to the coupling plate **400** when the coupling plate **400** is at the first position.

[0194] The engaging portion **320** may be provided on one surface of the base **300** facing the coupling plate **400**. The engaging portion **320** may protrude from one surface of the base **300**. That is, the engaging portion **320** may be formed in a protrusion shape protruding from a flat plate shape of the base **300**. As shown in FIGS. **5** to **10**, the engaging portion **320** may be formed to protrude downward from the lower surface of the base **300**.

[0195] The engaging portion **320** may protrude from one side of the base **300** and may face the locking portion **430** of the coupling plate **400**, which is at the first position, with respect to the one direction.

[0196] The coupling plate **400** may include an opening **420**. The opening **420** may be formed to be penetrated in an up and down direction based on the coupling plate **400** being at the first position.

[0197] The engaging portion **320** of the base **300** may be provided to allow at least a portion of the

engaging portion **320** to pass through the opening **420** when the coupling plate **400** is at the first position. When the coupling plate **400** is at the first position, the engaging portion **320** may pass through the opening **420** to allow a portion of the engaging portion **320** to be arranged on the inside of the opening **420**, and an edge of the opening **420** may be provided to surround a portion of the engaging portion **320** in a horizontal direction (a direction parallel to the X-Y plane based on the drawing).

[0198] At this time, the sliding-locking portion **430** may be provided on the edge of the opening **420**. Particularly, the sliding-locking portion **430** may be defined at a portion of the edge of the opening **420** that faces the engaging portion **320** with respect to the one direction when the coupling plate **400** is at the first position. That is, when the coupling plate **400** is at the first position, the engaging portion **320** may pass through the opening **420**, and the sliding of the engaging portion **320** may be restricted by the sliding-locking portion **430** provided on the edge of the opening **420**. In other words, when the coupling plate **400** is at the first position, the engaging portion **320** may pass through the opening **420** so as to restrict the sliding of the base **300** relative to the coupling plate **400**.

[0199] The engaging portion **320** may be provided in plurality. The plurality of engaging portions **320** may be arranged symmetrically with respect to the center line of the base **300**. The center line of the base **300** means a line located in the middle along the Y direction. However, the number of engaging portions provided on the stand of the display apparatus according to the present disclosure is not limited thereto.

[0200] With the above-mentioned configuration, when the coupling plate **400** is at the first position, the coupling plate **400** may restrict the sliding of the base **300** relative to the stand body **200**, and the movement of the base **300** relative to the stand body **200** in all directions may be restrained. Accordingly, the stand body **200** and the base **300** may be firmly fixed to each other. The coupling plate **400** may be provided to couple the stand body **200** and the base **300** at the first position. As illustrated in FIG. **10**, when the coupling plate **400** is moved from the second position to the first position, the coupling process of the stand body **200** and the base **300** may be completed.

[0201] As the description described with reference to FIGS. **5** to **10**, the stand **100** for the display apparatus according to one or more embodiments of the present disclosure may be assembled by coupling the stand body **200** and the base **300** in a sliding manner and then rotating the coupling plate **400** to complete the assembly process of the components. A user can easily perform the assembly process of the stand **100** without using a separate fastening member such as a screw or an assembly tool such as a screw driver during the assembly process of the stand **100**. In addition, the stand **100** may be assembled through a simple structure, and thus the components of the stand **100** may be simplified.

[0202] However, the configuration of the engaging portion **320** and the sliding-locking portion **430** described above is only an example of a structure in which a coupling plate according to the present disclosure is provided to restrict the sliding of the base **300**, and the present disclosure is not limited thereto. For example, unlike FIGS. **5** to **10**, an engaging portion in the shape of a groove that is concavely recessed in one surface of the base included in the stand of the display apparatus may be provided, and a sliding-locking portion in the shape of a protrusion that is formed to be inserted into and engaged with the engaging portion may be provided in the coupling plate.

[0203] FIG. **11** is a view illustrating a state before the stand is assembled to a display module. FIG. **12** is an enlarged view of part A in FIG. **11**. FIG. **13** is a cross-sectional view taken along line B-B' of FIG. **12**. FIG. **14** is a view illustrating a state in which a base is moved relative to a stand body and a coupling plate in the stand of FIG. **12**. FIG. **15** is a cross-sectional view taken along line C-C' of FIG. **14**.

[0204] After the assembly process of the stand body **200** and the base **300** is completed, a user can move the stand body **200** and the base **300** to assemble the stand **100** to the display module **10** (or, to assemble the stand body **200** to the support bracket **500** assembled to the display module **10**).

For example, by holding the support plate **210** of the stand body **200**, a user can move the stand body **200** and the base **300**, which are assembled to each other, to an installation position of the display apparatus **1**.

[0205] At this time, the stand body **200** and the base **300** may be positioned as shown in FIGS. **11** to **15** (in FIG. **11**, G indicates the direction of gravity). For other reasons, the stand body **200** and the base **300** may be positioned as shown in FIGS. **11** to **15**. When the stand body **200** and the base **300** are positioned as shown in FIGS. **11** to **15**, an external force may be applied to the base **300** in a direction (the X direction based on the drawing), in which the base **300** is separated from the coupling portion **220**, by gravity G, which may not cause a difficulty in general cases because the coupling plate **400** at the first position restricts the movement of the base **300**. However, when the coupling plate **400** moves from the first position to the second position due to various causes, the restriction on the movement of the base **300** with respect to the stand body **200** may be released, and the base **300** may be separated from the stand body **200** and fall due to gravity G. This may result in the risk of damage to components of the stand **100**, damage to surrounding objects by collision with the fallen base **300**, or injury to users and other people nearby.

[0206] To ease the difficulty, referring to FIGS. **11** to **15**, the coupling plate **400** at the first position may be prevented from moving to the second position under certain conditions. Particularly, the engaging portion **320** of the base **300** may be provided at a certain position to prevent the coupling plate **400** from moving from the first position to the second position.

[0207] Particularly, when the coupling plate **400** is at the first position, the base **300** may be configured to slide relative to the coupling plate **400** and the stand body **200** between a locking position (refer to FIGS. **14** and **15**) for the coupling plate **400** and an unlocking position (refer to FIGS. **12** and **13**) for the coupling plate **400**. When the base **300** is at the unlocking position, the coupling plate **400** may be rotatable from the first position to the second position. When the base **300** is at the locking position, the coupling plate **400** may be prevented from rotating from the first position to the second position. In other words, when the base **300** is at the locking position, the base **300** may be provided to restrict the coupling plate **400** from moving from the first position to the second position, and when the base **300** is at the unlocking position, the base **300** may be provided to allow the coupling plate **400** to move from the first position to the second position.

[0208] The locking position of the base **300** may be a position in which the base **300** moves in a direction opposite to the one direction (the X direction based on the drawing) from the unlocking position. In other words, the unlocking position of the base **300** may be a position in which the base **300** moves in the one direction (a direction opposite to the X direction based on the drawing) from the locking position. In the process in which the assembly of the base **300** and the stand body **200** is completed by rotating the coupling plate **400** to the first position as illustrated in FIG. **10**, the base **300** is usually at the unlocking position. However, when the stand body **200** and the base **300**, which are assembled to each other, are positioned as illustrated in FIGS. **11** to **15**, the base **300** may slide from the unlocking position as illustrated in FIGS. **12** and **13** to the locking position as illustrated in FIGS. **14** and **15** due to gravity G.

[0209] Hereinafter a detailed description is given of an example of a configuration in which the base **300** at the locking position prevents the coupling plate **400** from moving from the first position to the second position.

[0210] When the base **300** is at the locking position, the engaging portion **320** of the base **300** may be engaged with the coupling plate **400** to prevent the coupling plate **400** from moving from the first position to the second position.

[0211] For example, when the base **300** is at the locking position, the engaging portion **320** may be engaged with the sliding-locking portion **430** of the coupling plate **400**. In other words, when the coupling plate **400** is at the first position, the sliding-locking portion **430** may be provide to be engaged with the engaging portion **320** at the locking position. When the base **300** is at the locking position, the sliding-locking portion **430** and the engaging portion **320** may be engaged with each

other and thus the coupling plate **400** may not be rotated to the second position. Conversely, when the coupling plate **400** is at the first position, the sliding-locking portion **430** may be provided to be spaced apart in the one direction from the engaging portion **320** at the unlocking position, and the engaging connection between the sliding-locking portion **430** and the engaging portion **320** may be released to allow the coupling plate **400** to be rotated to the second position.

[0212] The engaging portion **320** may include a protruding body **321** protruding from one side of the base **300** and a flange portion **322** extending outward from one end of the protruding body **321**. The flange portion **322** may be formed to have a wider width in the horizontal direction (in the direction parallel to the X-Y plane based on the drawing) than the protruding body **321**.

[0213] For example, the protrusion body **321** may be formed to have an approximately cylindrical shape. For example, the flange portion **322** may be formed to have an approximately disc shape. A diameter of the flange portion **322** may be formed to be greater than a diameter of the protrusion body **321**.

[0214] A portion, which corresponds to a stepped portion of the engaging portion **320** formed as the flange portion **322** extends outward from the protrusion body **321**, may be provided to be engaged with the sliding-locking portion **430** when the base **300** is at the locking position.

[0215] When the base **300** is at the locking position, the flange portion **322** may be engaged with the sliding-locking portion **430** in a direction different from the one direction. Particularly, when the base **300** is at the locking position, the flange portion **322** and the sliding-locking portion **430** may be engaged with each other in a direction perpendicular to the one direction (the Z direction based on the drawing). When the base **300** is at the locking position, the flange portion **322** and the sliding-locking portion **430** may be in contact with each other in the Z direction.

[0216] The coupling plate **400** may further include an engaging groove **431** that is concavely formed to allow at least a portion of the engaging portion **320** to be inserted and engaged when the base **300** is at the locking position. When the coupling plate **400** is at the first position and the base **300** is at the locking position, the engaging groove **431** may be provided to allow at least a portion of the flange portion **322** to be inserted and engaged.

[0217] Particularly, the engaging groove **431** may be provided in the sliding-locking portion **430**. The engaging groove **431** may be formed by being concavely recessed in the sliding-locking portion **430**.

[0218] The engaging groove **431**, to which the flange portion **322** is inserted, is provided in the coupling plate **400**, and thus when the base **300** is at the locking position, the engaging portion **320** may be more stably engaged with the coupling plate **400**.

[0219] The coupling plate **400** may include an engaging portion guide **440**. The engaging portion guide **440** may be provided to guide the engaging portion **320** to be engaged with the coupling plate **400** when the base **300** moves from the unlocking position to the locking position.

Particularly, the engaging portion guide **440** may be provided to guide the engaging portion **320** to allow at least a portion of the flange portion **322** to be inserted into the engaging groove **431**.

[0220] For example, when the coupling plate **400** is at the first position, the coupling plate **400** may be not accurately fixed to the base **300** due to foreign substances placed between the coupling plate **400** and the base **300**, or the engaging portion **320** may not be positioned at a position to be engaged with the engaging groove **431** due to an error in the specifications of the components.

[0221] For example, when the engaging portion **320** is in a position that is displaced in the Y direction with respect to the coupling plate **400** during the base **300** moves from the unlocking position to the locking position, the engaging portion guide **440** may be in contact with the protrusion body **321** to guide the engaging portion **320** to move to a position in which the engaging portion **320** is engaged with the engaging groove **431**.

[0222] With this configuration, even when the stand body **200** and the base **300**, which are assembled to each other, are positioned as shown in FIGS. **11** to **15**, the base **300** may be positioned at the locking position with respect to the coupling plate **400**, thereby preventing the coupling plate

400 from moving from the first position to the second position, and preventing that the restriction of the sliding of the base **300** caused by the coupling plate **400** is released.

[0223] FIG. **16** is an enlarged cross-sectional view of a portion of a stand in a display apparatus according to one or more embodiments of the present disclosure.

[0224] As for describing a stand for a display apparatus according to one or more embodiments of the present disclosure with reference to FIG. **16**, the same reference numerals may be given to the same configurations as those of the embodiments according to FIGS. **1** to **15**, and a description thereof may be omitted.

[0225] Referring to FIG. **16**, a coupling plate **400** of a stand **100** for a display apparatus according to one or more embodiments of the present disclosure may be coupled to a rotating shaft **224** by including a rotating shaft coupling portion **410** including a flat portion **410a**.

[0226] The flat portion **410a** may be provided on at least a portion of an outer surface of the rotating shaft coupling portion **410**. The flat portion **410a** may be formed to have a larger radius of curvature than other portions of the rotating shaft coupling portion **410**. In other words, the flat portion **410a** may be formed as a portion of the outer surface of the rotating shaft coupling portion **410** to have a smaller radius of curvature and to be relatively flat compared to other portions of the outer surface of the rotating shaft coupling portion **410**.

[0227] Particularly, the flat portion **410a** may be provided on a portion of the outer surface of the rotating shaft coupling portion **410** that comes into contact with the base **300** when the coupling plate **400** is at the first position. When the coupling plate **400** is at the first position, the flat portion **410a** may come into contact with the base **300**.

[0228] When the coupling plate **400** is at the first position, the flat portion **410a** in contact with the base **300** has a small curvature, and thus a frictional force generated at a contact surface with the base **300** may increase compared to other portions of the rotating shaft coupling portion **410**. Accordingly, the coupling plate **400** may be more effectively prevented from unintentionally moving from the first position to the second position due to the frictional force between the flat portion **410a** and the base **300**.

[0229] FIG. **17** is an enlarged cross-sectional view of a portion of a stand in the display apparatus according to one or more embodiments of the present disclosure.

[0230] As for describing a stand for a display apparatus according to one or more embodiments of the present disclosure with reference to FIG. **17**, the same reference numerals may be given to the same configurations as those of the embodiments according to FIGS. **1** to **15**, and a description thereof may be omitted.

[0231] Referring to FIG. **17**, a coupling plate **400** of a stand **100** for a display apparatus according to one or more embodiments of the present disclosure may be coupled to a rotating shaft **224** by including a rotating shaft coupling portion **410** including a rotating shaft protrusion **410b**.

[0232] The rotating shaft protrusion **410b** may be formed to protrude outwardly from the rotating shaft coupling portion **410**. A portion of an outer surface of the rotating shaft coupling portion **410**, on which the rotating shaft protrusion **410b** is provided, may have a longer length from a center of the rotating shaft **224** than another portion of the rotating shaft coupling portion **410**.

[0233] Particularly, the rotating shaft protrusion **410b** may be formed on a portion of the rotating shaft coupling portion **410** that comes into contact with the base **300** when the coupling plate **400** is at the first position. The rotating shaft protrusion **410b** may be provided to interfere with the base **300** when the coupling plate **400** rotates from the first position to the second position.

[0234] Referring to FIG. **17**, when a virtual line L is drawn from the center of the rotating shaft **224** toward the base **300** to be perpendicular to the base **300** while the coupling plate **400** is at the first position, and when other virtual line P is drawn by rotating the virtual line L by a predetermined angle in a direction opposite to the direction in which the coupling plate **400** rotates from the first position to the second position, the rotating shaft protrusion **410b** may be formed on the other virtual line P. The rotating shaft protrusion **410b** may be formed as a portion of the outer surface of

the rotating shaft coupling portion **410** protrudes in the direction of the virtual line P.

[0235] With this configuration, the rotating shaft protrusion **410b** may interfere with the base **300** when the coupling plate **400** rotates from the first position to the second position, and the coupling plate **400** may be more effectively prevented from unintentionally moving from the first position to the second position.

[0236] FIG. **18** is an enlarged view of some components of a stand of a display apparatus according to one or more embodiments of the present disclosure. FIG. **19** is an enlarged view of some components of the stand of the display apparatus according to one or more embodiments of the present disclosure. FIG. **20** is an enlarged cross-sectional view taken along line D-D' of FIG. **19**.

[0237] As for describing a stand for a display apparatus according to one or more embodiments of the present disclosure with reference to FIGS. **18** to **20**, the same reference numerals may be given to the same configurations as those of the embodiments according to FIGS. **1** to **17**, and a description thereof may be omitted.

[0238] Referring to FIGS. **18** to **20**, a stand **100** of a display apparatus **1** according to one or more embodiments of the present disclosure may include a stand body **200**, a base **300**, and a coupling plate **1400**.

[0239] The stand body **200** may include a support plate **210** and a coupling portion **1220**. The support plate **210** in the embodiments of FIGS. **18** to **20** may have features corresponding to the support plate **210** in the embodiments of FIGS. **1** to **17**, and a detailed description thereof will be omitted below.

[0240] The base **300** may be coupled to the stand body **200** in a sliding manner. Particularly, the base **300** may be provided to be movable in a sliding manner with respect to the coupling portion **1220** of the stand body **200**, and may be coupled to the coupling portion **1220** by sliding in the one direction (in the direction opposite to the X direction based on the drawing). The base **300** in the embodiments of FIGS. **18** to **20** may have features corresponding to the base **300** in the embodiments of FIGS. **1** to **17**, and a detailed description thereof will be omitted below.

[0241] In order to allow the base **300** to slide relative to the coupling portion **1220** in the embodiment of FIGS. **18** to **20**, the structures of the sliding protrusion **310** and the sliding guides **221** and **222** described with reference to FIGS. **1** to **17** may be provided on the base **300** and the coupling portion **1220** respectively. However, the present disclosure is not limited thereto, and the base **300** may be slidably coupled to the coupling portion **1220** by various structures.

[0242] The coupling plate **1400** may be provided to restrict the sliding of the base **300** relative to the coupling portion **1220**.

[0243] The coupling plate **1400** may be configured to be movable between a first position (refer to FIG. **19**) that locks the base **300** from sliding in a direction opposite to the one direction (the X direction based on the drawing) relative to the coupling portion **1200**, and a second position (refer to FIG. **18**) that unlocks the sliding of the base **300** in a direction opposite to the one direction relative to the coupling portion **1200**.

[0244] The coupling plate **1400** may be rotatably coupled to the coupling portion **1220**. The coupling plate **1400** may rotate around a rotating shaft **224** (the same as in FIG. **13**, etc.) coupled to the coupling portion **1220**. For example, the coupling plate **1400** may include a rotating shaft coupling portion **1410** coupled to the rotating shaft **224** fixed to the coupling portion **1220**, and the rotating shaft coupling portion **1410** may be coupled to the rotating shaft **224** so as to be rotatable around the rotating shaft **224**. The rotating shaft coupling portion **1410** may be provided to surround an outer surface of the rotating shaft **224**. The rotating shaft coupling portion **1410** may be formed to allow an outer surface thereof to have a curved shape.

[0245] FIG. **18** illustrates that the rotating shaft coupling portion **1410** of the coupling plate **1400** includes a rotating shaft protrusion **1410b** in the same manner as the embodiment of FIG. **17**, but is not limited thereto. The rotating shaft coupling portion **1410** of the coupling plate **1400** may include a flat portion in the same manner as in the embodiment of FIG. **16**, or may have a shape

with a uniform diameter in the same manner as in the embodiments of FIGS. 5 to 15.

[0246] With this configuration, the coupling plate **400** may be configured to be rotatable between the first position and the second position.

[0247] The coupling plate **1400** may cover one side of the base **300** at the first position. The coupling plate **1400** may cover at least a portion of one surface of the base **300** at the first position. Particularly, one side of the base **300** covered by the coupling plate **1400** at the first position may be identical to one side of the base **300** covered by the coupling portion **1220**. As illustrated in FIGS. **18** to **20**, the coupling portion **1220** may cover the lower side of the base **300**, and the coupling plate **1400** may also cover the lower side of the base **300**.

[0248] The coupling portion **1220** may include a cut portion **1223**. The coupling plate **1400** may be provided to cover a portion of the base **300** corresponding to the cut portion **1223** when the coupling plate **1400** is at the first position. The coupling plate **1400** may be configured to be rotatable with respect to the cut portion **1223**. The coupling plate **1400** may be configured to open and close the cut portion **1223** as the coupling plate **1400** rotates between the first position and the second position. When the coupling plate **1400** is at the second position, a portion of the base **300** corresponding to the cut portion **1223** of the coupling portion **1220** may be not covered by the coupling plate **1400**, and when the coupling plate **1400** is at the first position, a portion of the base **300** corresponding to the cut portion **1223** of the coupling portion **1220** may be covered by the coupling plate **1400**.

[0249] The coupling portion **1220** may cover a portion of the base **300**, and the coupling plate **1400** may cover another portion of the base **300** at the first position.

[0250] The rotating shaft **224** of the coupling plate **1400** may be provided in the cut portion **1223**.

[0251] The coupling plate **1400** may include a rotation prevention portion **1470**, and the cut portion **1223** may include a coupling plate support **1223a** corresponding to the rotation prevention portion **1470**. When the coupling plate **1400** is at the first position, the rotation prevention portion **1470** may be supported in the Z direction by the coupling plate support **1223a**, and may prevent the coupling plate **1400** from rotating in a direction opposite to the direction in which the coupling plate **1400** rotates from the first position to the second position.

[0252] FIGS. **18** and **19** illustrate that the rotation prevention portion **1470** is provided on only one side of the coupling plate **1400** and, similarly, the coupling plate **1223a** is provided on only one side of the cut portion **1223**. However, the present disclosure is not limited thereto, and as illustrated in FIGS. **5** to **15**, the rotation prevention portion **1470** may be provided on both sides of the coupling plate **1400**, and correspondingly, the coupling plate **1223a** may be provided on both sides of the cut portion **1223**.

[0253] The base **300** may include an engaging portion **320**, and the coupling plate **1400** may include a sliding-locking portion **1430**. The sliding-locking portion **1430** may be provided to lock the base **300** from sliding relative to the coupling portion **1220** of the stand body **200** when the coupling plate **1400** is at the first position. The engaging portion **320** may be provided to be engaged with the sliding-locking portion **1430** at the first position when the base **300** slides relative to the coupling portion **1220** of the stand body **200** and the coupling plate **1400** at the first position.

[0254] When the coupling plate **1400** is at the first position, the sliding-locking portion **1430** may be positioned in a direction opposite to the one direction (the X direction based on the drawing) with respect to the engaging portion **320**. When the coupling plate **1400** is at the first position, the sliding-locking portion **1430** may face the engaging portion **320** in a direction parallel to the one direction. When the coupling plate **1400** is at the first position, the sliding-locking portion **1430** may be positioned at a position at which the sliding-locking portion **1430** comes into contact with the engaging portion **320** when the base **300** moves in a direction opposite to the one direction. With this configuration, the sliding-locking portion **1430** may be provided to block the engaging portion **320** from sliding in a direction opposite to the one direction with respect to the coupling plate **1400** when the coupling plate **1400** is at the first position.

[0255] The coupling plate **1400** may include an opening **1420**. The opening **1420** may be formed to be penetrated in the up and down direction based on the coupling plate **1400** being at the first position.

[0256] The engaging portion **320** of the base **300** may be provided to allow at least a portion of the engaging portion **320** to pass through the opening **1420** when the coupling plate **1400** is at the first position. When the coupling plate **1400** is at the first position, the engaging portion **320** may pass through the opening **1420** to allow a portion of the engaging portion **320** to be arranged on the inside of the opening **1420**, and an edge of the opening **1420** may be provided so as to surround a portion of the engaging portion **320** in the horizontal direction (a direction parallel to the X-Y plane based on the drawing).

[0257] At this time, the sliding-locking portion **1430** may be provided on the edge of the opening **1420**. Particularly, the sliding-locking portion **1430** may be defined at a portion of the edge of the opening **1420** that faces the engaging portion **320** with respect to the one direction when the coupling plate **1400** is at the first position. That is, when the coupling plate **1400** is at the first position, the engaging portion **320** may pass through the opening **1420**, and the sliding of the engaging portion **320** may be restricted by the sliding-locking portion **1430** provided on the edge of the opening **1420**. In other words, when the coupling plate **1400** is at the first position, the engaging portion **320** may pass through the opening **1420** so as to restrict the sliding of the base **300** relative to the coupling plate **1400**.

[0258] The coupling plate **1400** may be required to remain fixed at the first position in order to maintain a state in which the sliding of the base **300** with respect to the coupling portion **1220** of the stand body **200** is restricted.

[0259] As illustrated in FIGS. **18** to **20**, the coupling plate **1400** may be provided to be fixed to the coupling portion **1220** of the stand body **200** when the coupling plate **1400** is at the first position. The coupling plate **1400** may be configured to be movable between the first position fixed to the coupling portion **1220** and the second position separated from the coupling portion **1220**.

[0260] Particularly, the coupling plate **1400** may be provided to be engaged and fixed to the coupling portion **1220**. The coupling plate **1400** may be engaged with the coupling portion **1220** at the first position. The coupling plate **1400** may be moved to the second position by releasing the engaging connection to the coupling portion **1220**. When the coupling plate **1400** is engaged with the coupling portion **1220**, the sliding of the base **300** with respect to the coupling portion **1220** may be restricted. When the coupling plate **1400** is engaged with the coupling portion **1220**, the engaging portion **320** and the sliding-locking portion **1430** may face each other in the one direction. When the coupling plate **1400** is engaged with the coupling portion **1220**, the engaging portion **320** may penetrate the opening **1420** of the coupling plate **1400**.

[0261] The coupling plate **1400** may be rotatably connected to the rotating shaft **224** on one side, and engaged with the coupling portion **1220** on the other side opposite to the side connected to the rotating shaft **224**.

[0262] The coupling plate **1400** may include a hook **1450** provided to be engaged with the coupling portion **1220**. The hook **1450** may be positioned adjacent to the edge of the coupling plate **1400**. Particularly, the hook **1450** may be positioned adjacent to an edge, which is adjacent to the cut portion **1223**, of the coupling plate **1400**.

[0263] The coupling portion **1220** may include an insertion groove **1224** into which at least a portion of the hook **1450** is inserted to prevent the rotation of the coupling plate **1400**. The insertion groove **1224** may be arranged at a position corresponding to the hook **1450**. The insertion groove **1224** may be arranged on the edge of the cut portion **1223**. Particularly, the insertion groove **1224** may be arranged at a position corresponding to the hook **1450** on the edge of the cut portion **1223**.

[0264] The insertion groove **1224** may be formed to be concavely recessed on one surface of the cut portion **1223** to allow at least a portion of the hook **1450** to be inserted therein. Particularly, when the coupling plate **1400** is at the first position, the insertion groove **1224** may be provided to cover

at least a portion of the hook **1450** inserted into the insertion groove **1224** from one side. Particularly, when the coupling plate **1400** is at the first position, the insertion groove **1224** may be provided to cover at least a portion of the hook **1450** from the lower side (in a direction opposite to the Z direction based on the drawing).

[0265] When the coupling plate **1400** is at the first position, the hook **1450** may be inserted into the insertion groove **1224** and engaged with the coupling portion **1220**, thereby preventing the coupling plate **1400** from rotating from the first position to the second position.

[0266] When the coupling plate **1400** is at the first position, the base **300** may be configured to slide relative to the coupling plate **1400** and the coupling portion **1220** between a locking position relative to the coupling plate **1400** and an unlocking position relative to the coupling plate **1400**. When the base **300** is at the unlocking position, the coupling plate **1400** may be rotatable from the first position to the second position. When the base **300** is at the locking position, the coupling plate **1400** may be prevented from rotating from the first position to the second position.

[0267] An example in which the base **300** moves between the locking position and the unlocking position is the same as the description described with reference to FIG. **11**, etc.

[0268] When the base **300** is at the locking position, the engaging portion **320** of the base **300** may be engaged with the coupling plate **1400** to prevent the coupling plate **1400** from moving from the first position to the second position.

[0269] When the base **300** is at the locking position, the flange portion **322** may be engaged with the sliding locking portion **1430** in a direction different from the one direction. Particularly, when the base **300** is at the locking position, the flange portion **322** and the sliding locking portion **1430** may be engaged with each other in a direction perpendicular to the one direction (the Z direction based on the drawing). When the base **300** is at the locking position, the flange portion **322** and the sliding locking portion **1430** may be in contact with each other in the Z direction. A portion, which corresponds to a stepped portion of the engaging portion **320** that is formed as the flange portion **322** extends outwardly from the protrusion body **321**, may be provided to be engaged with the sliding locking portion **1430** in the Z direction when the base **300** is at the locking position.

[0270] However, unlike the above-mentioned description, depending on a length of the protrusion body **321** of the engaging portion **320** protruding in the Z direction, a thickness of the flange portion **322** in the Z direction, and a thickness of a portion, which is adjacent to the sliding locking portion **1430**, of the engaging plate **400**, the engaging portion **320** may not perform a function in which the engaging portion **320** is engaged with the sliding-locking portion **1430** at the locking position so as to prevent the rotation of the coupling plate **1400**.

[0271] Alternatively, a configuration corresponding to the engaging groove **431** described with reference to FIGS. **5** to **15**, etc. but not shown in FIGS. **18** to **20**, may be provided in the sliding locking portion **1430** of FIGS. **18** to **20**.

[0272] The coupling plate **1400** may include an engaging portion guide **1440**. The engaging portion guide **1440** may be provided to guide the engaging portion **320** to be engaged with the coupling plate **1400** when the base **300** moves from the unlocking position to the locking position.

[0273] For example, when the engaging portion **320** is in a position that is displaced in the Y direction with respect to the coupling plate **1400** during the base **300** moves from the unlocking position to the locking position, the engaging portion guide **1440** may be in contact with the protrusion body **321** so as to guide the engaging portion **320** to move to a position in which the engaging portion **320** is engaged with the sliding locking portion **1430**.

[0274] FIGS. **18** to **20** illustrate an example in which the plurality of engaging portion guides **1440** is provided and the plurality of engaging portion guides **1440** is configured to guide the plurality of engaging portions **320**, respectively. However, the present disclosure is not limited thereto, and as illustrated in FIGS. **5** to **15**, a single engaging portion guide **1440** may be provided so as to guide the plurality of engaging portions **320**, simultaneously.

[0275] The coupling plate **1400** may include an inner surface plate **1480** disposed on an inner

surface of the coupling plate **1400** facing the base **300** at the first position.

[0276] The configuration such as the hook **1450** and the engaging portion guide **1440** of the coupling plate **1400** may be formed integrally with the inner surface plate **1480**. In this case, manufacturing convenience may be improved. However, the present disclosure is not limited thereto, and each component of the coupling plate **1400**, such as the hook **1450** and the engaging portion guide **1440** may be formed separately from each other. Alternatively, all components of the coupling plate **1400** may be formed integrally.

[0277] With the configuration described above with reference to FIGS. **1** to **20**, the display apparatus **1** according to one or more embodiments of the present disclosure may stably support the display module **10** using the stand **100**. The stand **100** may be provided in such a way that the stand body **200** and the base **300** are coupled to each other in a sliding manner and thus the convenience of assembly may be improved. In addition, as the stand **100** includes the coupling plate **400** or **1400**, the stand body **200** and the base **300** may be coupled more stably, and a user can easily fix the stand body **200** and the base **300** using the coupling plate **400** or **1400** without using a separate fastening member or assembly tool.

[0278] However, the present disclosure is not limited to the embodiments described with reference to FIGS. **1** to **20**.

[0279] For example, unlike FIGS. **1** to **20**, the base of the stand may be coupled to the lower side of the coupling portion of the stand body. That is, the coupling portion of the stand body may cover the upper side of the base.

[0280] For example, in FIGS. **1** to **20**, the description is illustrated based on the assumption that the stand body **200** has an overall bent shape as the support plate **210** and the coupling portion **220** or **1220** are connected at a predetermined angle, and the base **300** has an overall flat plate shape. Alternatively, the base of the stand may have an overall bent shape, and the stand body connected thereto may have an overall flat plate shape.

[0281] For example, unlike FIGS. **1** to **20**, the coupling plate of the stand may be rotatably coupled to the base rather than the stand body. The coupling plate may be configured to be rotatable between a first position in which the coupling plate is coupled to the base to restrict the sliding, and a second position rotated from the first position. In this case, a cut portion opened and closed by the coupling plate may be formed in the base.

[0282] In addition, unlike FIGS. **1** to **20**, the coupling plate may be provided as a separate configuration separated from the stand body and the base, respectively. In this case, the coupling plate may be provided to restrict the sliding of the base with respect to the stand body at a first position in which the coupling plate is simultaneously fixed to the stand body and the base, and to allow the sliding of the base with respect to the stand body at a second position in which the coupling plate is simultaneously separated from the stand body and the base. The coupling plate may be removably coupled to the stand body and the base, respectively, by various methods, such as coupling using a magnetic body or engaging using a hook.

[0283] While various embodiments have been described above with reference to the drawings, the present disclosure is not limited thereto, and any combination or substitution of components as appropriate is included within the scope of the present disclosure. In some embodiments, modifications such as combinations, changes in the order of processes, and various changes in design may be made on the basis of knowledge of a person skilled in the art, and such modified embodiments are within the scope of the present disclosure and the appended claims.

Claims

1. A stand for a display apparatus comprising: a stand body configured to be coupled to a display module; a base detachably coupled to the stand body by sliding relative to the stand body and configured to support the stand body and the display module; and a coupling plate coupled to the

stand body and rotatable between a first position, at which the coupling plate is coupled to the base, and a second position, at which the coupling plate is separated from the base, and configured to restrict the sliding of the base relative to the stand body in a state in which the coupling plate is at the first position.

2. The stand for the display apparatus of claim 1, wherein the base is configured to be coupled to the stand body by sliding in a first direction relative to the stand body and configured to be separated from the stand body by sliding in a second direction opposite to the first direction relative to the stand body, and wherein the coupling plate is configured to restrict a movement of the base in the second direction relative to the stand body in a state in which the coupling plate is at the first position.

3. The stand for the display apparatus of claim 2, wherein the base comprises an engaging portion on one surface of the base facing the coupling plate, and wherein the coupling plate comprises a sliding-locking portion on a path along which the engaging portion slides in the second direction and configured to block the engaging portion from sliding in the second direction relative to the coupling plate in a state in which the coupling plate is at the first position.

4. The stand for the display apparatus of claim 3, wherein the coupling plate further comprises an opening, wherein the sliding-locking portion is disposed on an edge of the opening, and wherein the engaging portion protrudes from the one surface of the base and at least a portion of the engaging portion penetrates the opening in a state in which the coupling plate is at the first position.

5. The stand for the display apparatus of claim 3, wherein in a state in which the coupling plate is at the first position, the base is configured to slide relative to the coupling plate and the stand body between a locking position that restricts a movement of the coupling plate from the first position to the second position and an unlocking position that allows the movement of the coupling plate from the first position to the second position, and wherein the engaging portion is engaged with the coupling plate at the locking position.

6. The stand for the display apparatus of claim 5, wherein in a state in which the coupling plate is at the first position, the sliding-locking portion is engaged with the engaging portion at the locking position and spaced apart in the first direction from the engaging portion at the unlocking position.

7. The stand for the display apparatus of claim 6, wherein the engaging portion comprises: a protrusion body protruding from one side of the base; and a flange portion extending outward from one end of the protrusion body, wherein the flange portion has a diameter greater than a diameter of the protrusion body, and wherein the flange portion at the locking position is engaged with the sliding-locking portion at the first position in a direction different from the first direction.

8. The stand for the display apparatus of claim 7, wherein the coupling plate further comprises an engaging groove configured to allow at least a portion of the flange portion to be inserted and engaged at the locking position in a state in which the coupling plate is at the first position, and wherein the engaging groove is concavely recessed in the sliding-locking portion.

9. The stand for the display apparatus of claim 1, wherein the base is configured to be coupled to the stand body by sliding in a first direction relative to the stand body, wherein the stand body comprises a sliding guide configured to guide the sliding of the base relative to the stand body, wherein the base comprises a sliding protrusion protruding from one side of the base, and wherein the sliding protrusion is insertable into the sliding guide along the first direction.

10. The stand for the display apparatus of claim 9, wherein the sliding protrusion is configured to be engaged with the sliding guide to prevent the base from moving in a direction perpendicular to the first direction relative to the stand body in a state in which the sliding protrusion is inserted into the sliding guide.

11. The stand for the display apparatus of claim 9, wherein the sliding guide comprises: a first guide portion having a width in a direction perpendicular to the first direction and decreasing toward a direction in which the sliding protrusion is inserted into the sliding guide in the first

direction; and a second guide portion extending from the first guide portion to the direction in which the sliding protrusion is inserted into the sliding guide in the first direction and having a constant width in the direction perpendicular to the first direction.

12. The stand for the display apparatus of claim 11, wherein the sliding protrusion comprises: a body portion extending from the base and configured to penetrate the sliding guide; and a head portion on one side of the body portion in a direction extending from the base, wherein the head portion has a width wider than a width of the second guide portion in the direction perpendicular to the first direction.

13. The stand for the display apparatus of claim 1, wherein the coupling plate comprises a magnetic body, and wherein the magnetic body is configured to fix the coupling plate to the base by magnetic force between the magnetic body and the base in a state in which the coupling plate is at the first position.

14. The stand for the display apparatus of claim 1, wherein the stand body comprises a coupling portion configured to be coupled to the base, and wherein the coupling plate is rotatably coupled to the coupling portion.

15. The stand for the display apparatus of claim 14, wherein the coupling portion covers a portion of the base, and wherein the coupling plate covers another portion of the base in a state in which the coupling plate is at the first position.
