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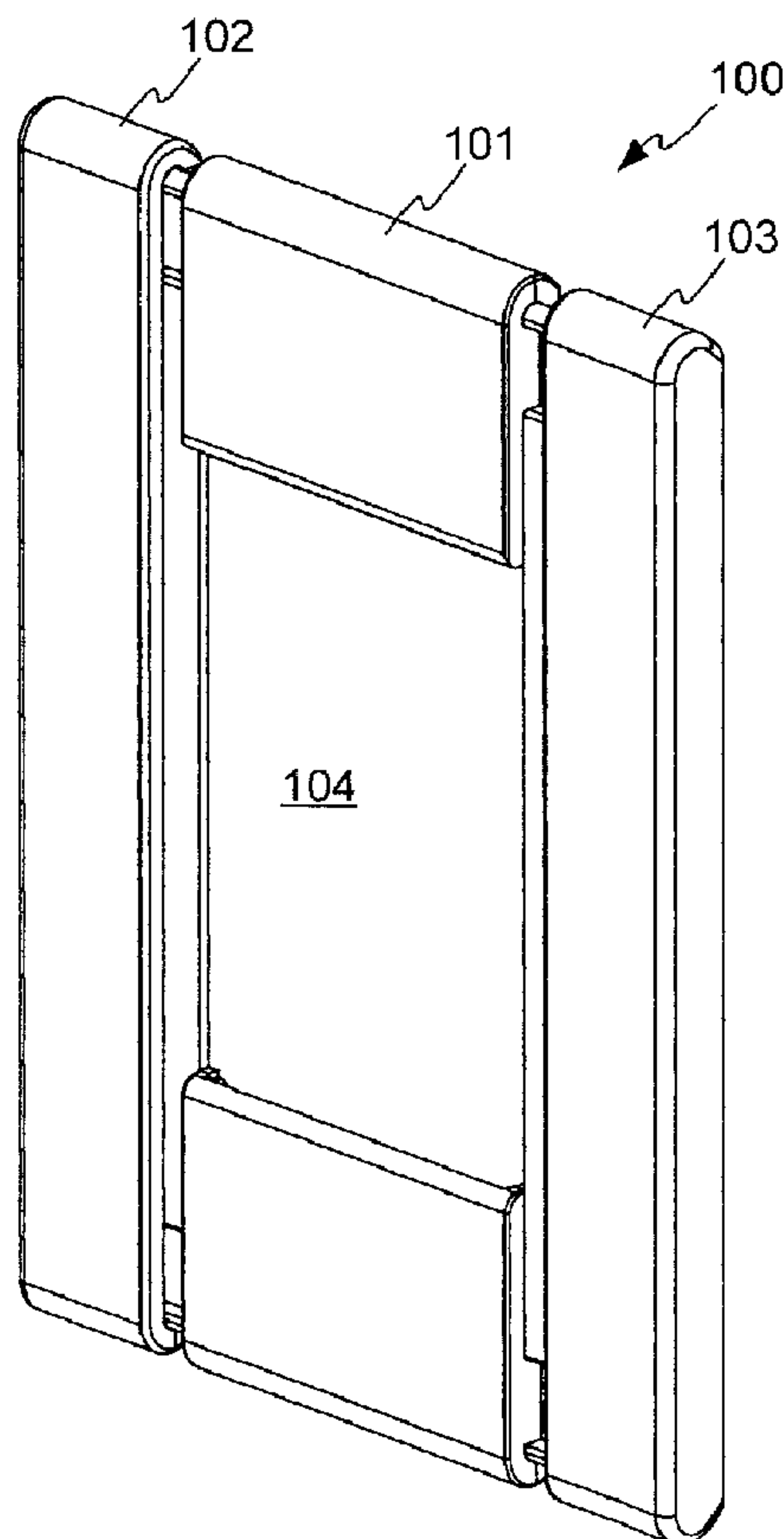
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(54) **Titre : SYSTEME DE PLAQUE MURALE**

(54) **Title: WALL PLATE SYSTEM**



(57) **Abrégé/Abstract:**

A wall plate and system for covering an electrical component in an electrical box. The wall plate includes a base plate having a central aperture, and two trim pieces that join at the sides of the base plate to complete the wall plate. The base plate may include

(57) Abrégé(suite)/Abstract(continued):

two side edges and wing portions extending from the side edges, and the trim pieces slide onto the respective side wing portions. The trim pieces may have features to engage a mounting plate attached to the electrical box or the electrical component, to capture the wall plate over the electrical box. A locking mechanism may be provided to lock the trim pieces in their inward positions against the base plate. The wall plate may be attachable without the use of tools or fasteners.

ABSTRACT

A wall plate and system for covering an electrical component in an electrical box. The wall plate includes a base plate having a central aperture, and two trim pieces that join at the sides of the base plate to complete the wall plate. The base plate may include two side edges and wing portions extending from the side edges, and the trim pieces slide onto the respective side wing portions. The trim pieces may have features to engage a mounting plate attached to the electrical box or the electrical component, to capture the wall plate over the electrical box. A locking mechanism may be provided to lock the trim pieces in their inward positions against the base plate. The wall plate may be attachable without the use of tools or fasteners.

WALL PLATE SYSTEM

[0001]

BACKGROUND OF THE INVENTION

[0002] Wall plates are positioned on a wall over light switches, outlets, controls, etc. to impart a polished appearance to the installation. A wall plate is typically mounted onto and over an exposed mounting plate connected to an electrical box in the wall. Wall plates have historically been mounted onto the mounting plates with screws or other mechanical fasteners, thus requiring tools both for their installation and removal/replacement. Wall plates have been designed that eliminate the need for unsightly mechanical fasteners. Rather, such plates snap-fit onto a mounting plate to secure the wall plate to the wall. However, a pry tool is still required for their removal. The required tool is an inconvenience to the user, and the process of prying the wall plate off of the mounting plate risks damaging the wall plate and/or the surrounding wall.

SUMMARY OF THE INVENTION

[0003] According to one aspect, a wall plate system for covering an electrical component in an electrical box comprises a base plate defining a central aperture and having two opposing side edges. At least one wing portion extends from each of the two side edges. The wall plate system further includes two trim pieces. Each of the two trim pieces is configured to slide respectively onto the at least one wing portion extending from one of the two opposing side edges of the base plate.

BRIEF DESCRIPTION OF THE INVENTION

[0004] FIG. 1 is a front perspective view of a wall plate in accordance with embodiments of the invention, in an open position.

[0005] FIG. 2 is a front perspective view of the wall plate of FIG. 1, in a closed position.

[0006] FIG. 3 is a rear perspective view of the wall plate of FIG. 1, in an open position.

[0007] FIG. 4 is a front perspective view of the wall plate of FIG. 1, partially disassembled.

- [0008] FIG. 5 is a rear perspective view of the wall plate of FIG. 1, partially disassembled.
- [0009] FIG. 6 is a perspective view of a mounting plate, in accordance with embodiments of the invention.
- [0010] FIG. 7 is a rear perspective view of the wall plate of FIG. 1 in position to mount to the mounting plate of FIG. 6.
- [0011] FIG. 8 is a rear perspective view of the wall plate of FIG. 1 mounted to the mounting plate of FIG. 6.
- [0012] FIG. 9 is a front perspective view of the wall plate of FIG. 1, installed on a wall.
- [0013] FIG. 10 is a front exploded perspective view of a wall plate system including a latch, in accordance with embodiments of the invention.
- [0014] FIG. 11 is a rear exploded perspective view of the wall plate system of FIG. 10.
- [0015] FIGS. 12-14 illustrate the operation of the latch of the wall plate of FIG. 10, in accordance with embodiments of the invention.
- [0016] FIGS. 15 and 16 illustrate additional details of the latch of FIGS. 12-14, in accordance with embodiments of the invention.

DETAILED DESCRIPTION OF THE DRAWINGS

- [0017] Embodiments of the present invention relate to a wall plate that may be installed on a wall without the use of tools and without the need for mechanical fasteners.
- [0018] **FIGS. 1-3** illustrate a wall plate **100** in accordance with embodiments of the invention. FIGS. 1 and 3 illustrate the wall plate **100** in an open position, and FIG. 2 illustrates the wall plate **100** in a closed position. The wall plate **100** includes a base plate **101** flanked on each side by a trim piece **102, 103** that is moveable relative to the base plate **101** in that the trim pieces **102, 103** can slide toward and away from the base plate **101**. For example, FIG. 1 shows the wall plate **100** in an “open” position, with the trim pieces **102** and **103** moved outward from the base plate **101**, and FIG. 2 shows the wall plate **100** in a “closed” position with the trim pieces **102, 103** moved inward toward the base plate **101**. A front face **105** of the base plate **101**

combines with front faces **106** and **107** of the trim pieces **102** and **103** to form a decorative front face of the wall plate **100**.

[0019] The base plate **101** includes a central aperture **104** that, in use, will align with the light switches, outlets, controls, etc. on a wall. See FIG. 9.

[0020] FIG. 4 shows the wall plate **100** partially disassembled. A side wing **401**, **402** extends from each side of the base plate **101** for engagement with one of the trim pieces **102** and **103**. The side wing **401**, **402** can be any geometry but preferably includes at least one cut-out **406** to receive a side tab of a mounting plate, as discussed below.

[0021] In the illustrated and non-limiting embodiment, each side wing **401**, **402** includes an upper wing portion **403**, a lower wing portion **404**, and a central wing portion **405**. The upper and lower wing portions **403** and **404** are separated from the central wing portion **405** by cut-outs **406**.

[0022] Each trim piece **102**, **103** has an upper edge **407** and a lower edge **408** that is shaped to receive the respective upper and lower edge **409**, **410** of the side wing **401**, **402** such that the trim piece **102**, **103** may not be easily lifted upwardly off of the base plate **101** but can slide relative to the base plate **101**. The upper and lower edges **407**, **408** of the trim piece **102**, **103** and the upper and lower edges **409**, **410** of the side wing **401**, **402** should complement each other to permit such sliding between the trim piece **102**, **103** and the base plate **101**. By way only of example, in some examples the upper and lower edge **407**, **408** of the trim piece **102**, **103** has a curved J-shaped channel that receives the curved upper and lower edges **409**, **410** of the side wing **401**, **402**. The upper and lower edges **407**, **408** of each trim piece **102**, **103** may match the shape of upper and lower edges **414** and **415** of the base plate **101**.

[0023] The trim pieces **102**, **103** may be prevented from sliding completely off of the base plate **101** using a variety of techniques, but preferably are held to the base plate **101** using a fastener-free method, such as a snap-fit connection. By way only of example, one or more hooks **411** provided on a base plate **101** side wing **401**, **402** may engage a least one tab provided on the trim piece **102**, **103**. FIG. 5 shows a back view of the partially-disassembled wall plate **100**, showing tabs **501** on the trim piece **103**, for engaging with the hook **411** (which is not visible in FIG. 5). Similar tabs may be provided on the other trim piece **102**.

[0024] When the trim piece **102, 103** is slid onto the base plate **101**, the hooks **411** clear or snap over the tabs **501** to hold the trim piece **102, 103** and base plate **101** together. The tabs **501** may include a sloped surface to facilitate this engagement. Similarly, the trim piece **102, 103** can be removed from the base plate **101** by lifting the upper and lower wing portions **403** and **404** so that the hooks **411** clear the tabs **501**. Relief slots **412** can be provided in the upper and lower wing portions **403** and **404** to facilitate this engagement and disengagement. The tab(s) **501** is preferably provided on the trim piece **102, 103** a distance from the outer side edge **506** of the trim piece **102, 103**. This permits relative sliding between the base plate **101** and trim piece **102, 103** to allow for opening and closing of the trim piece **102, 103** on the base plate **101**, but abutment of the hook(s) **411** and tab(s) **501** prevent disengagement between the two pieces.

[0025] The hooks **411** and tabs **501** are one example of a first retaining mechanism for attaching the trim pieces **102** and **103** to the base plate **101**. When the retaining mechanism is engaged, the respective trim piece **102, 103** is attached to the base plate **101** but is still able to slide inward and outward in a limited range between inward and outward positions on the respective wing portion **403, 404** of the base plate **101**. In this example, the retaining mechanism is a snap-fit connection.

[0026] Each central wing portion **405** of the base plate **101** may further include a raised lip **413** (see FIG. 4), and each of the trim pieces **102, 103** may include a ridge **502** on its back side (see FIG. 5). Positive engagement between the ridge **502** on the trim piece **102, 103** and the lip **413** on the central wing portion **405** helps retain the trim piece **102, 103** in the open and closed positions relative to the base plate **101**. For example, abutment of the ridge **502** and central wing portion **405** when the ridge **502** is positioned exterior the central wing portion **405** (see FIG. 5) helps to retain the trim piece **102, 103** in the open position while abutment of the ridge **502** and the central wing portion **405** when the ridge **502** is positioned interior the central wing portion **405** helps to retain the trim piece **102, 103** in the closed position. As the trim piece **102, 103** is pushed inward toward the base plate **101**, the lip **413** snaps over the ridge **502** to provide the positive engagement in the closed position.

[0027] The lips **413** and ridges **502** are an example of a second retaining mechanism that is engaged when each respective trim piece **102, 103** is moved to its inward position with respect to the base plate **101** to retain the respective trim piece **102, 103** in the inward (or closed) position. In this example, the retaining mechanism is a snap-fit connection.

[0028] Finally, at least one pocket **503** may be formed in each trim piece **102**, **103** (see FIGS. 3 and 5) and received in cut-outs **406** of the base plate **101** side wings **401**, **402**. The purpose of the pocket(s) **503** is discussed below.

[0029] One embodiment of a mounting plate **601** is illustrated in FIGS. 6-8. The mounting plate **601** includes at least one upper mounting tab **602** and at least one lower mounting tab **603**. At least one side tab **604** extends upwardly from each side of the mounting plate **601** (two are shown on each side in the figures). That is, each side tab **604** is offset from one of side portions **605** of the mounting plate **601**. The mounting plate **601** also defines a central aperture **607**, configured to coincide with the central aperture **104** of the base plate **101**.

[0030] In use, the mounting plate **601** is attached to the electrical box or to the electrical component in the electrical box (if not already attached) in a conventional manner. To secure the wall plate **100** onto the mounting plate **601**, the trim pieces **102**, **103** are slid outwardly relative to the base plate **101** into the open position. The upper edge **414** of the base plate **101** (which is shown as curved) is positioned over the upper mounting tab **602** of the mounting plate **601** (also shown as curved), after which the wall plate **100** is rotated downwardly so that the lower edge **415** of the base plate **101** is positioned over the lower mounting tab **603** of the mounting plate **601**. See FIG. 7. When this happens, the side tab(s) **604** extending from each side of the mounting plate **601** will be located in the cut-outs **504** provided along the side wings **401**, **402** of the base plate **101**. To lock the wall plate **100** onto the mounting plate **601**, the trim pieces **102**, **103** are slid inwardly so as to abut the base plate **101**. See FIG. 8. This movement results in the pocket(s) **503** on each trim piece **102**, **103** moving over and trapping or capturing the side tabs **604** of the mounting plate **601** to secure the wall plate **100** to the mounting plate **601**. Note that in some embodiments, there need be no engagement between the upper and lower edges **414**, **415** of the base plate **101** and the mounting plate **601**. Rather, the wall plate **100** can simply be directly positioned over the mounting plate **601** (i.e., without relative rotation between the wall plate **100** and mounting plate **601**) and the trim pieces **102**, **103** used to secure the wall plate **100** on the mounting plate **601** as described above.

[0031] The reverse process may be used to remove the wall plate **100** from the mounting plate **601**. Thus, when the trim pieces **102**, **103** are moved (easily by hand) to their open position, the wall plate **100** can be installed and removed freely; yet when the trim pieces **102**, **103** are closed (easily by hand), they secure the wall plate **100** to the mounting plate **601**. This design allows

removal of the wall plate **100** by simply sliding the trim pieces **102**, **103** to their open position and removing the wall plate **100** from the mounting plate **601**, thus preventing the need for a pry tool and the potential damage the prying process may do to the wall plate **100** or building surfaces. Thus, embodiments of the wall plate system represent a versatile design that allows for tool-less and intuitive installation and removal without any visible fasteners.

[0032] In some embodiments, the wall plate **100** may be positioned on the mounting plate **601** in either vertical orientation. However, it may be desirable in some instances to provide the wall plate **100** and/or mounting plate **601** such that the wall plate **100** may only be positioned and/or locked onto the mounting plate **601** in one orientation. In such instances, alignment features may be provided on either or both of the wall plate **100** and mounting plate **601**. In the illustrated embodiment, an off-center alignment aperture **606** is provided in the upper and lower mounting tabs **602**, **603** of the mounting plate **601**. See FIG. 6. Corresponding alignment tabs **505** are located on the base plate **101** of the wall plate **100**. See FIG. 5. In order to secure the wall plate **100** to the mounting plate **601**, the wall plate **100** must be oriented so that the alignment tabs **505** on the base plate **101** can seat in the alignment apertures **606** on the mounting plate **601**.

[0033] FIG. 9 shows a front view of the wall plate **100** in its installed configuration, mounted to a wall **901** and covering a multi-function switch **902** that has been mounted in the electrical box (not visible) behind the wall plate **100**. The multi-function switch **902** is but one example of an electrical component that can be mounted in an electrical box and covered by a wall plate in accordance with embodiments of the invention. For example, other electrical components with which the wall plate **100** may be used include, without limitation, mains power outlets, rocker switches, toggle switches, cable television outlets, telephone system connections, computer network connections, wireless switches, or other electrical components.

[0034] In some embodiments, for additional security the trim pieces **102**, **103** may be locked in position relative to the base plate **101**. By way only of example, FIGS. 10 and 11 illustrate a wall plate system **1000** in accordance with such an embodiment. Similar to the wall plate system described above, the wall plate system **1000** includes a base plate **1001** and two trim pieces **1002** and **1003**, and may include a mounting plate **1004**. In the illustrated embodiment, upstanding posts **1101** extend from the trim pieces **1002**, **1003** (in this case, but not necessarily, proximate the tabs **1105**). See FIG. 11. Latches **1005** are provided on the side wings **1008** of the base plate **1001**. See FIGS. 10 and 11. Each latch **1005** includes a partial disc **1006** connected to and

rotatable by an arm **1106**. See the magnified portions of FIGS. 10 and 11. Moreover, an ingress/egress slot **1007** is provided in the upper and lower side wings **1008** adjacent each latch **1005**. Rotation of the arm **1106** effectuates rotation of the partial disc **1006** so that the partial disc **1006** either blocks or opens access to the ingress/egress slot **1007**. See FIGS. 10 and 11.

[0035] FIGS. 12-14 illustrate the use of one of the latches **1005** in more detail. Part of the trim piece **1002** has been cut away in FIGS. 12-14, to expose the post **1101**. The trim piece **1002** is shown as completely detached from the base plate **1001** in FIG. 12, but in practice may typically be engaged with the base plate **1001** in the “open” position of the wall plate **1001**. When the trim pieces **1002**, **1003** are first positioned on the base plate **1001**, the latches **1005** are oriented so that the partial discs **1006** do not block the ingress/egress slots **1007**, thus permitting the posts **1101** on the trim pieces **1002**, **1003** to move through the ingress/egress slots **1007**. See FIG. 12. When the trim pieces **1002**, **1003** are moved into the closed position on the base plate **1001**, the latch arm **1106** is rotated (either by hand or with a tool) such that the partial discs **1006** block the ingress/egress slots **1007** and abut the posts **1101** to thereby prevent any relative movement between the base plate **1001** and the trim pieces **1002**, **1003**. FIG. 13 shows the trim piece **1002** moved into closed position against the base plate **1001**, before the partial disc **1006** is rotated to its locked position. FIG. 14 shows the partial disc **1006** rotated into its locked position, preventing removal of the trim piece **1002**.

[0036] Referring again to FIG. 11, portions **1107** of the trim pieces **1002**, **1003** may be relieved to provide access for a tool for actuating the arms **1106**. Preferably, the arms **1106** are not readily visible when the wall plate **1000** is installed on a wall.

[0037] FIGS. 15 and 16 are cutaway rear and front perspective views of a portion of the base plate **1001** and one of the latches **1005**, showing one example technique for assembly of the latches **1005** to the base plate **1001**. An opening **1501** is provided in a wing portion **1502** of the base plate **1001**. An arm **1106** may be inserted through the opening **1501**, facilitated by a beveled edge **1601** on the opening **1501** and a snap feature **1602** on the latch **1005**. Raised bumps **1503** on the latch **1005** may engage with depressions **1603** on the base plate **1001** (or vice versa) to provide detents at the locked and unlocked positions of the latch **1005**.

[0038] The illustrated embodiment is but one example of a security feature that may be added to the wall plate system. Other security features and methods are certainly contemplated herein.

[0039] The base plate and trim pieces of the wall plate may be fashioned out of a variety of different materials, including plastic and metal. Moreover, they can be produced in a variety of different colors and finishes to meet any designer's request.

[0040] It will be understood that a wall plate embodying the invention may be installed in any orientation, and that the terms "top", "bottom", and "side" used herein are not limiting to a particular orientation. For example the trim pieces may be above and below the base plate. In some embodiments, the trim pieces may slide inward and outward in a direction parallel to a long dimension of the base plate, rather than the direction parallel to the short dimension of the base plate as shown in the drawings. In addition, a wall plate system embodying the invention may have different proportions or dimensions than the examples depicted in the drawings. The invention may be embodied in a multi-gang wall plate.

[0041] Moreover, in some embodiments the trim pieces are identical such that they can be used on either side of the base plate. This versatility reduces the overall cost of the wall plate by doubling the production volume of a single part (the trim piece) and thus realizing economies of scale that result in a lower part cost.

[0042] The foregoing is provided for purposes of illustrating, explaining, and describing embodiments of the present invention. Further modifications and adaptations to these embodiments will be apparent to those skilled in the art and may be made without departing from the scope or spirit of the invention. Different arrangements of the components depicted in the drawings or described above, as well as components and steps not shown or described are possible. Similarly, some features and subcombinations are useful and may be employed without reference to other features and subcombinations. Embodiments of the invention have been described for illustrative and not restrictive purposes, and alternative embodiments will become apparent to readers of this patent. Accordingly, the present invention is not limited to the embodiments described above or depicted in the drawings, and various embodiments and modifications can be made without departing from the scope of the invention.

WHAT IS CLAIMED IS:

- 1 1. A wall plate system for covering an electrical component in an electrical
2 box, the wall plate system comprising:
3 a base plate defining a central aperture and having a first side edge, and a second
4 side edge opposite the first side edge, and at least one first wing portion extending from the first
5 side edge and at least one second wing portion extending from the second side edge;
6 first and second trim pieces, the first trim piece defining a first channel having a
7 shape complementary to the shape of part of the at least one first wing portion, the first trim
8 piece shaped and sized to slide onto the at least one first wing portion as the at least one first
9 wing portion is received into the first channel, and the second trim piece defining a second
10 channel having a shape complementary to the shape of part of the at least one second wing
11 portion, the second trim piece shaped and sized to slide onto the at least one second wing portion
12 as the at least one second wing portion is received into the second channel; and
13 a plurality of retaining mechanisms for attaching the two trim pieces to the base
14 plate, wherein each retaining mechanism comprises at least one feature on the respective trim
15 piece and at least one cooperating feature on the respective wing portion, wherein when the
16 cooperating features of each retaining mechanism are engaged, the respective trim piece is
17 attached to the base plate and is constrained to slide between an inward position and an outward
18 position on the respective wing portion of the base plate.
- 1 2. The wall plate system of claim 1, wherein the plurality of retaining
2 mechanisms is a plurality of first retaining mechanisms, the wall plate system further
3 comprising:
4 a plurality of second retaining mechanisms for retaining the two trim pieces in the
5 inward position relative to the base plate.
- 1 3. The wall plate system of claim 2, wherein, when the plurality of second
2 retaining mechanisms are engaged, a front face the base plate and front faces of the two trim
3 pieces combine to form a decorative front face of the wall plate system.
- 1 4. The wall plate system of claim 2, wherein the first and second retaining
2 mechanisms are snap-fit connections.

1 5. The wall plate system of claim 2, further comprising
2 a mounting plate defining a central aperture and having two generally flat side
3 portions extending from the central aperture;
4 wherein the mounting plate and the two trim pieces include complementary
5 features configured to engage when the base plate and trim pieces are placed on the mounting
6 plate and the trim pieces are moved to the inward positions, to retain the base plate and trim
7 pieces to the mounting plate.

1 6. The wall plate system of claim 5, wherein the complementary features
2 comprise (i) a plurality of tabs formed in outside edges of the two side portions of the mounting
3 plate, the tabs being offset from the side portions of the mounting plate and (ii) at least one
4 pocket provided in each of the two trim pieces, each pocket configured to receive a respective
5 one of the tabs of the mounting plate when the trim pieces are moved to the inward positions.

1 7. The wall plate system of claim 2, wherein the plurality of first retaining
2 mechanisms comprises at least one hook on each of the side wing portion extending from each of
3 the two side edges of the base plate and (ii) at least one tab on each of the two trim pieces,
4 wherein the at least one hook on each wing portion is configured to snap over the at least one tab
5 on the respective trim piece when the trim pieces are engaged with the base plate.

1 8. The wall plate system of claim 2, wherein the plurality of second retaining
2 mechanisms comprises (i) at least one lip on the side wing portions extending from each of the
3 two side edges of the base plate and (ii) at least one ridge on each of the two trim pieces, wherein
4 the at least one lip on each wing portion is configured to snap over the at least one ridge on the
5 respective trim piece when the trim pieces are moved to the inward positions.

1 9. The wall plate system of claim 1, further comprising at least one latch
2 actuatable between a locked position and an unlocked position, wherein when the at least one
3 latch is in the locked position one of the two trim pieces is locked to the base plate, and when the
4 at least one latch is in the unlocked position the one of the two trim pieces is movable outward
5 from the base plate.

1 10. The wall plate system of claim 9, wherein (i) a slot is defined in the at
2 least one wing portion extending from one of the side edges of the base plate, (ii) the at least one

3 latch includes a partial disc and an arm and (iii) the one of the two trim pieces includes a post
4 feature, wherein, when the latch is in the unlocked position, the post feature of the trim piece is
5 moveable through the slot to effectuate inward motion of the trim piece, and, when the latch is in
6 the locked position, the partial disk blocks motion of the post feature through the slot, preventing
7 outward motion of the trim piece.

1 11. The wall plate system of claim 10, further comprising at least one detent
2 feature for holding the at least one latch in the locked position and in the unlocked position.

1 12. A method of installing a wall plate over an electrical component in an
2 electrical box, the method comprising:

3 attaching a mounting plate to the electrical component or to the electrical box, the
4 mounting plate including tabs that engage with the wall plate;

5 providing the wall plate, the wall plate comprising a base plate having first side
6 edge with a first wing portion extending from the first side edge and having a second side edge
7 with a second wing portion extending from the second side edge and the wall plate including first
8 and second trim pieces, the first trim piece defining a first channel having a shape
9 complementary to the shape of part of the first wing portion and the first trim piece shaped and
10 sized to slide onto the first wing portion as the first wing portion is received into the first
11 channel, and the second trim piece defining a second channel having a shape complementary to
12 the shape of part of the second wing portion and the second trim piece shaped and sized to slide
13 onto the second wing portion as the second wing portion is received into the second channel, the
14 trim pieces movable inwardly and outwardly with respect to the base plate, and the trim pieces
15 including features for engaging with the mounting plate;

16 placing the wall plate over the mounting plate with the trim pieces in outward
17 positions with respect to the base plate; and

18 moving the two trim pieces to inward positions with respect to the base plate such
19 that the one or more features of the trim pieces engage with the one or more tabs of the mounting
20 plate.

1 13. The method of claim 12, wherein the features of the trim pieces for
2 engaging with the mounting plate are pockets formed in the trim pieces, and wherein moving the
3 trim pieces to the inward positions comprises capturing the tabs in the pockets.

1 14. The method of claim 12, wherein moving the trim pieces to the inward
2 positions comprises snapping the trim pieces to the base plate in the inward positions.

1 15. The method of claim 12, wherein the wall plate comprises at least one
2 latch for locking the trim pieces to the base plate, and wherein the method further comprises
3 actuating the at least one latch to lock the trim pieces to the base plate.

1 16. A wall plate for covering an electrical component in an electrical box, the
2 wall plate comprising:

3 a base plate defining a central aperture, the base plate having a first side edge and
4 a second side edge opposite the first side edge and at least one first wing portion extending from
5 the first side edge and at least one second wing portion extending from the second side edge;

6 first and second trim pieces, the first trim piece defining a first channel having a
7 shape complementary to the shape of part of the at least one first wing portion, the first trim
8 piece shaped and sized to slide onto the at least one first wing portion as the at least one first
9 wing portion is received into the first channel, and the second trim piece defining a second
10 channel having a shape complementary to the shape of part of the at least one second wing
11 portion, the second trim piece shaped and sized to slide respectively onto the at least one second
12 wing portion as the at least one second wing portion is received into the second channel, wherein
13 the first and second trim pieces slide between inward and outward positions with respect to the
14 two side edges respectively such that when the two trim pieces are in the inward positions
15 against the base plate, a front face the base plate and front faces of the two trim pieces combine
16 to form a front face of the wall plate; and

17 a plurality of retaining mechanisms for attaching the two trim pieces to the base
18 plate, wherein each retaining mechanism comprises at least one feature on the respective trim
19 piece and at least one cooperating feature on the respective wing portion wherein when the
20 cooperating features of each retaining mechanism are engaged, the respective trim piece is
21 attached to the base plate and is constrained to slide between an inward position and an outward
22 position on the respective wing portion of the base plate.

1 17. The wall plate of claim 16, wherein each of the trim pieces includes one or
2 more engagement features for engaging a mounting plate attached to the electrical box, and

3 wherein the engagement features capture the wall plate to the mounting plate when the trim
4 pieces are in the inward positions against the base plate.

1 18. The wall plate of claim 17, in combination with the mounting plate.

1 19. The wall plate of claim 17, wherein the plurality of retaining mechanisms
2 is a plurality of first retaining mechanisms, the wall plate further comprising:
3 a plurality of second retaining mechanisms that, when engaged, retain the trim
4 pieces in the inward position.

1 20. The wall plate of claim 19, further comprising at least one latch actuatable
2 between a locked position and an unlocked position, wherein when the at least one latch is in the
3 locked position the respective trim piece is locked to the base plate, and when the at least one
4 latch is in the unlocked position the respective trim piece is movable outward from the base
5 plate.

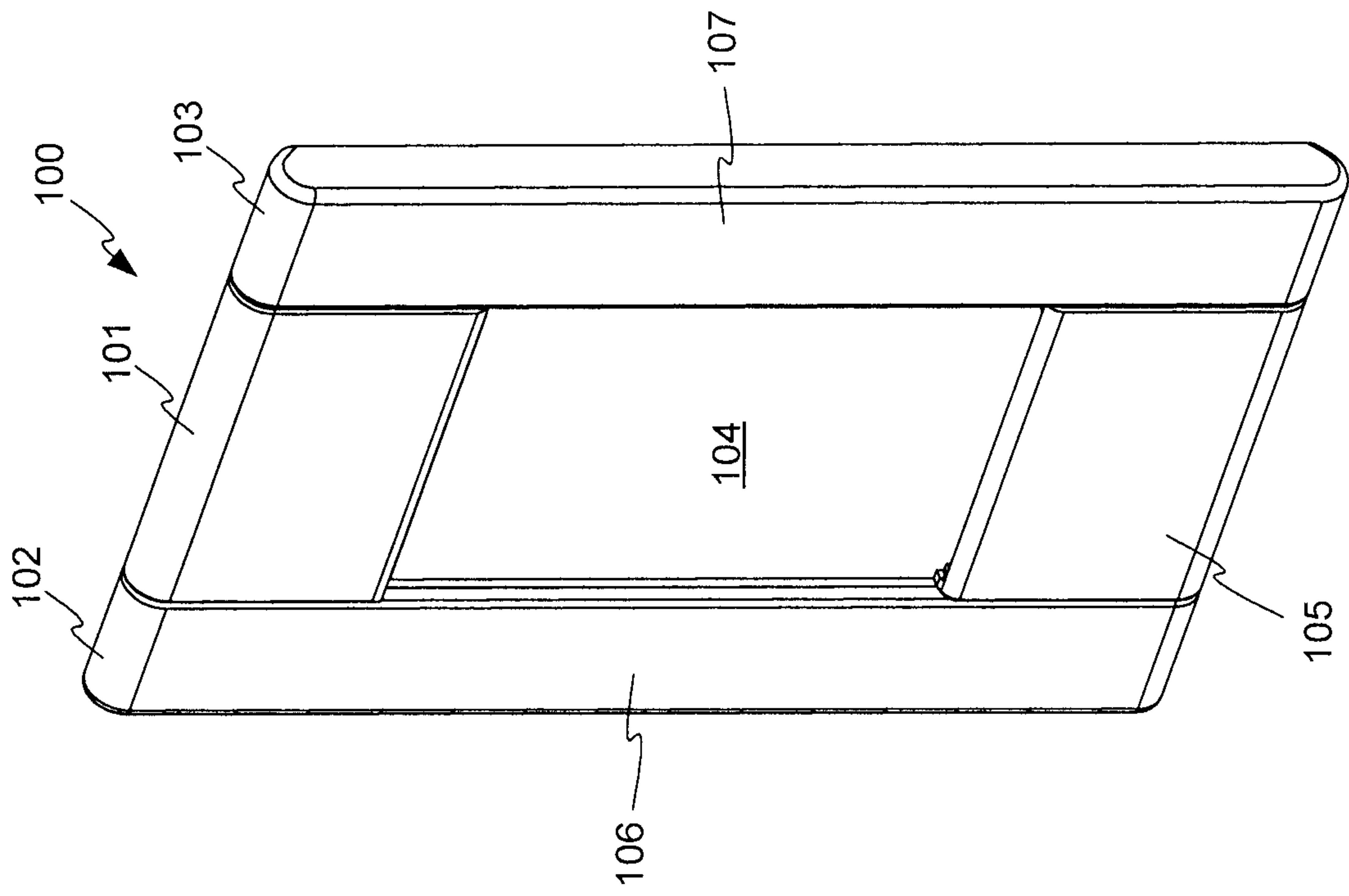


FIG. 1

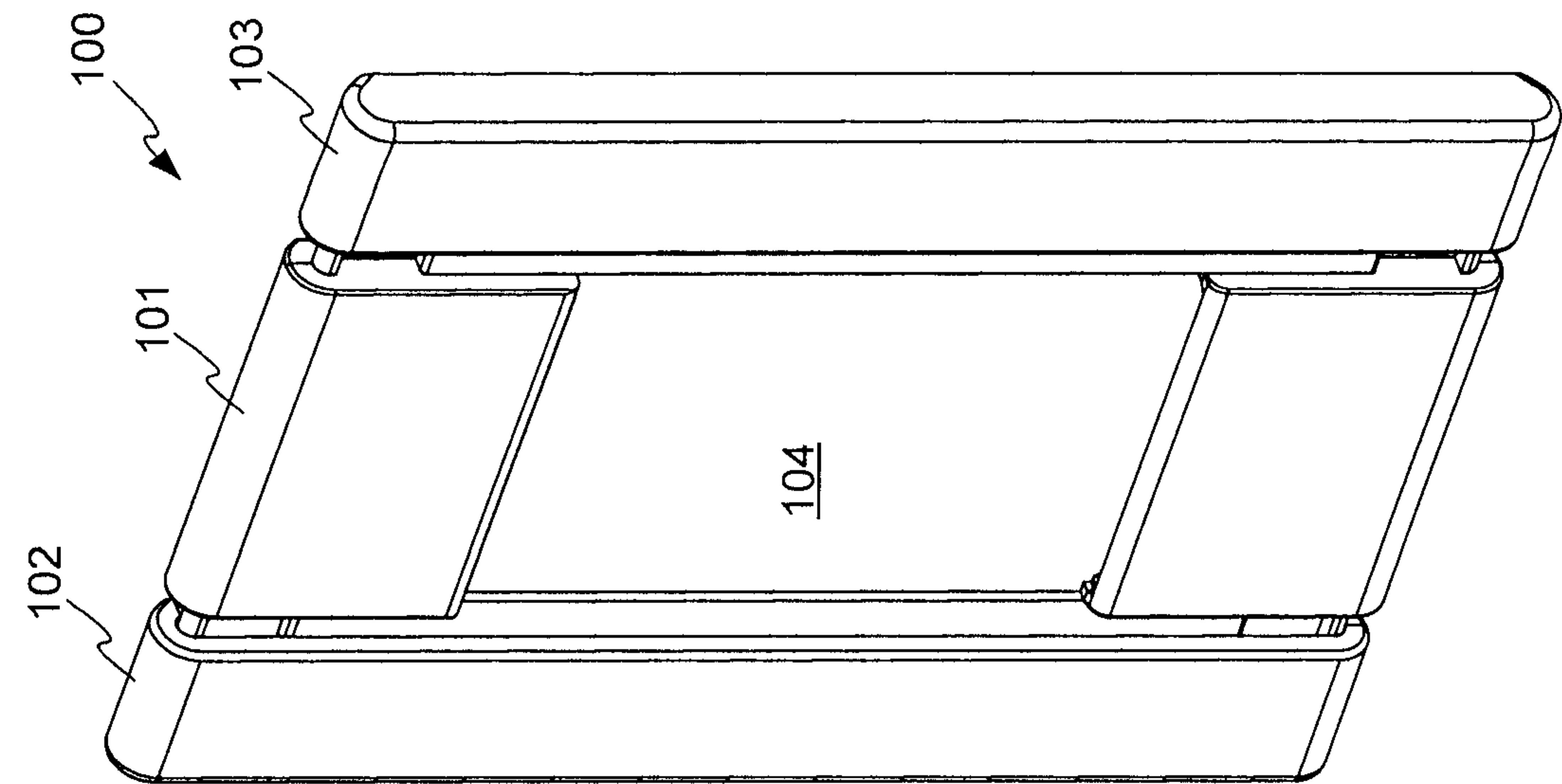


FIG. 2

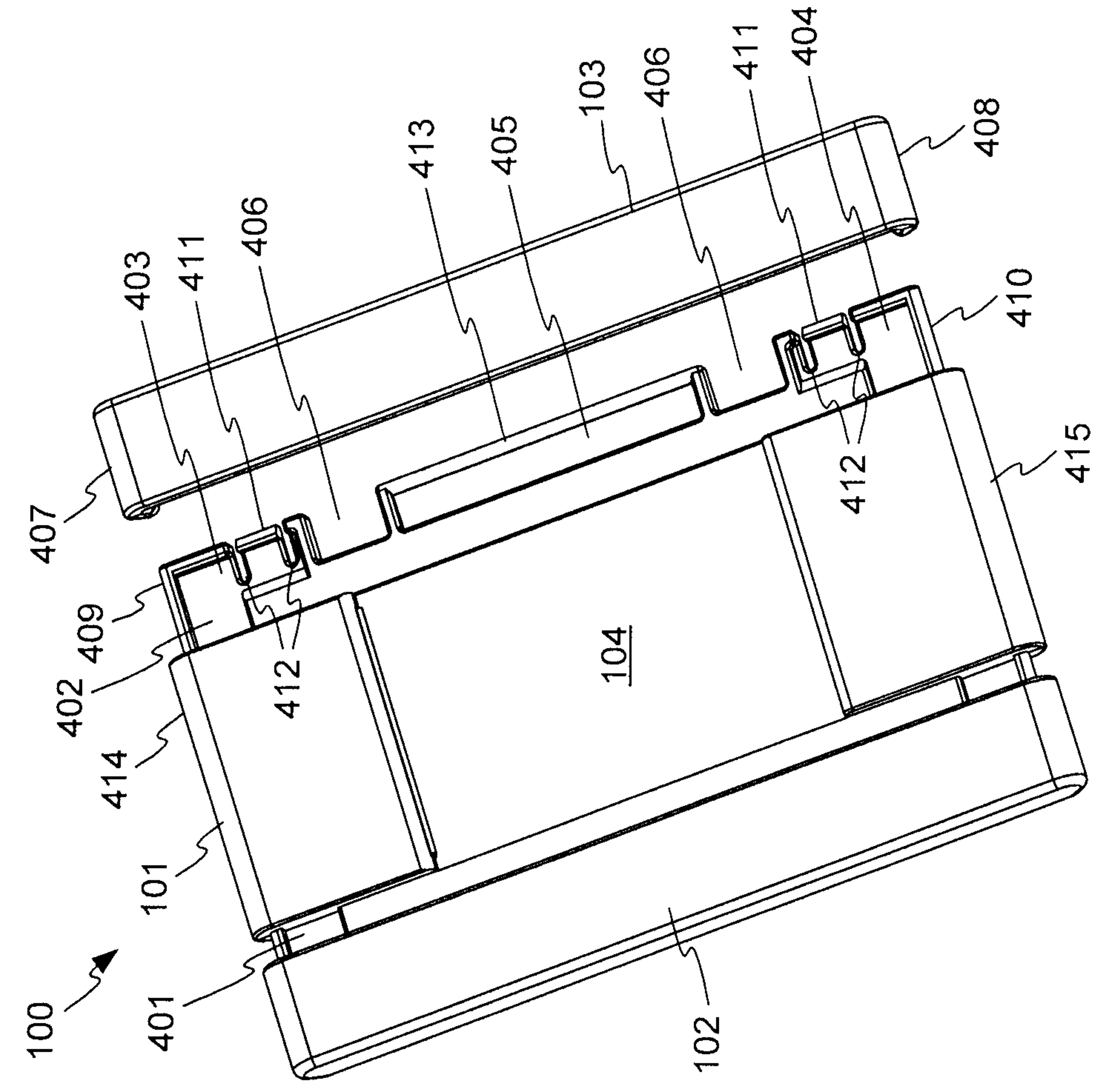


FIG. 3

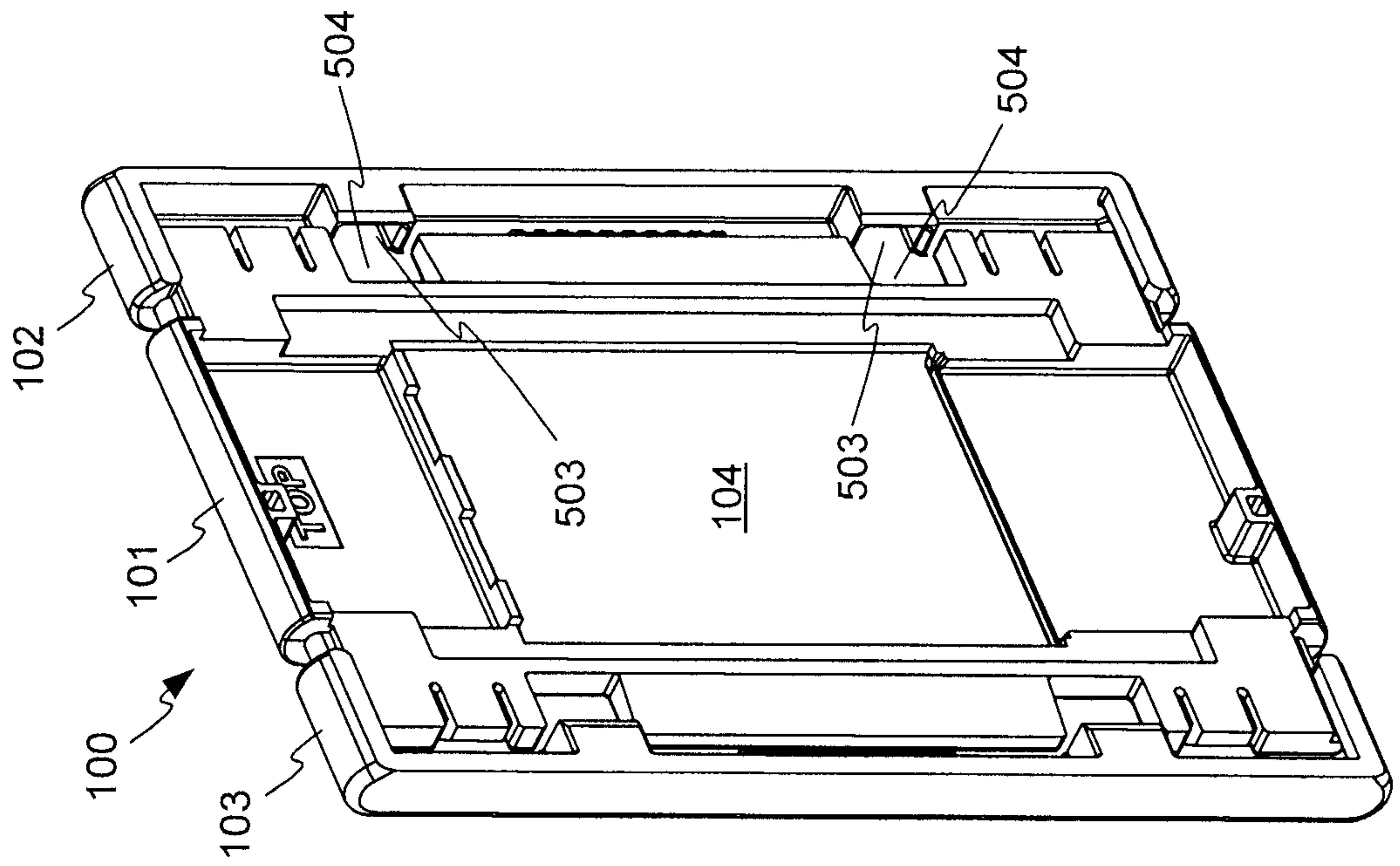


FIG. 4

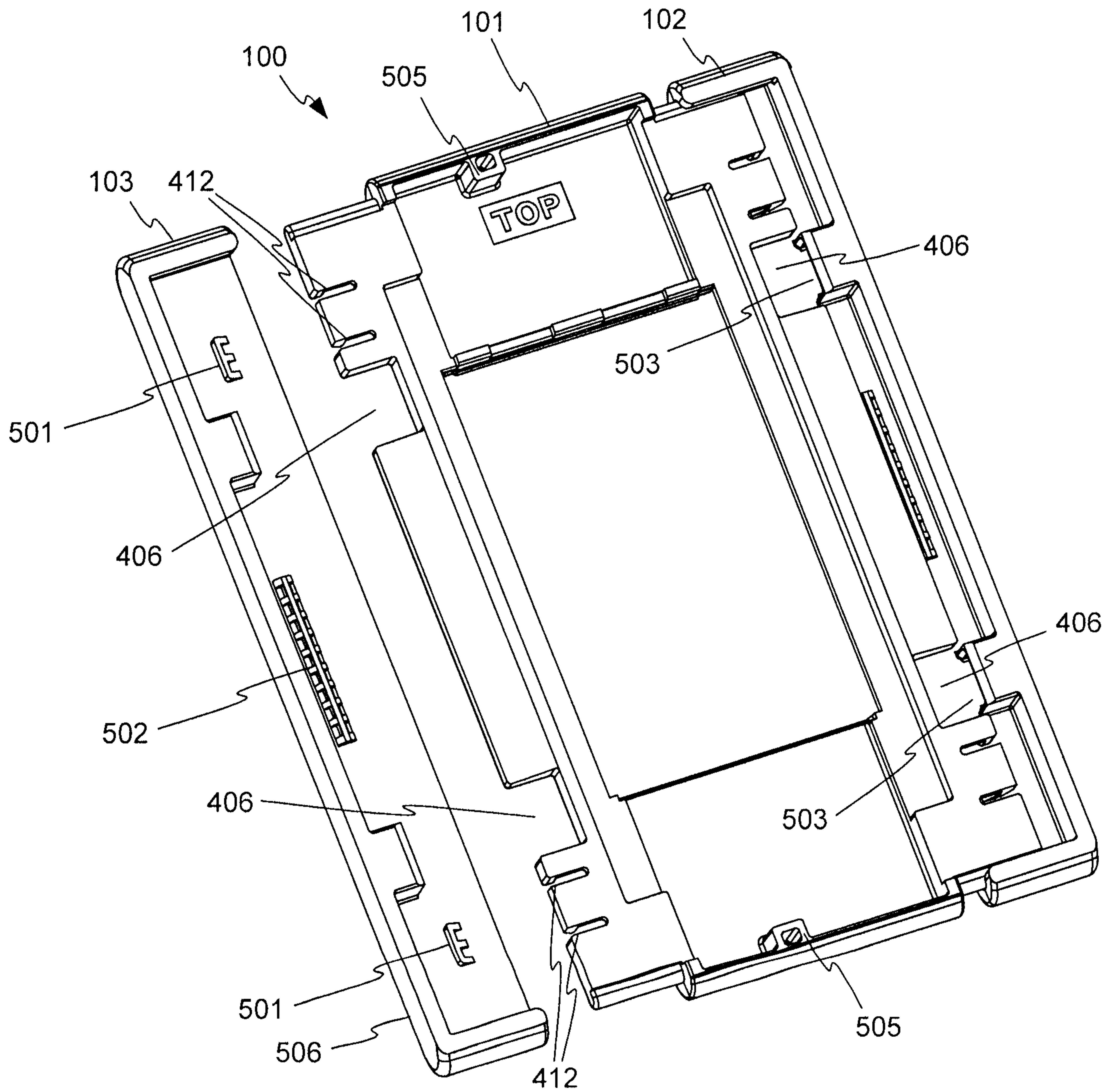


FIG. 5

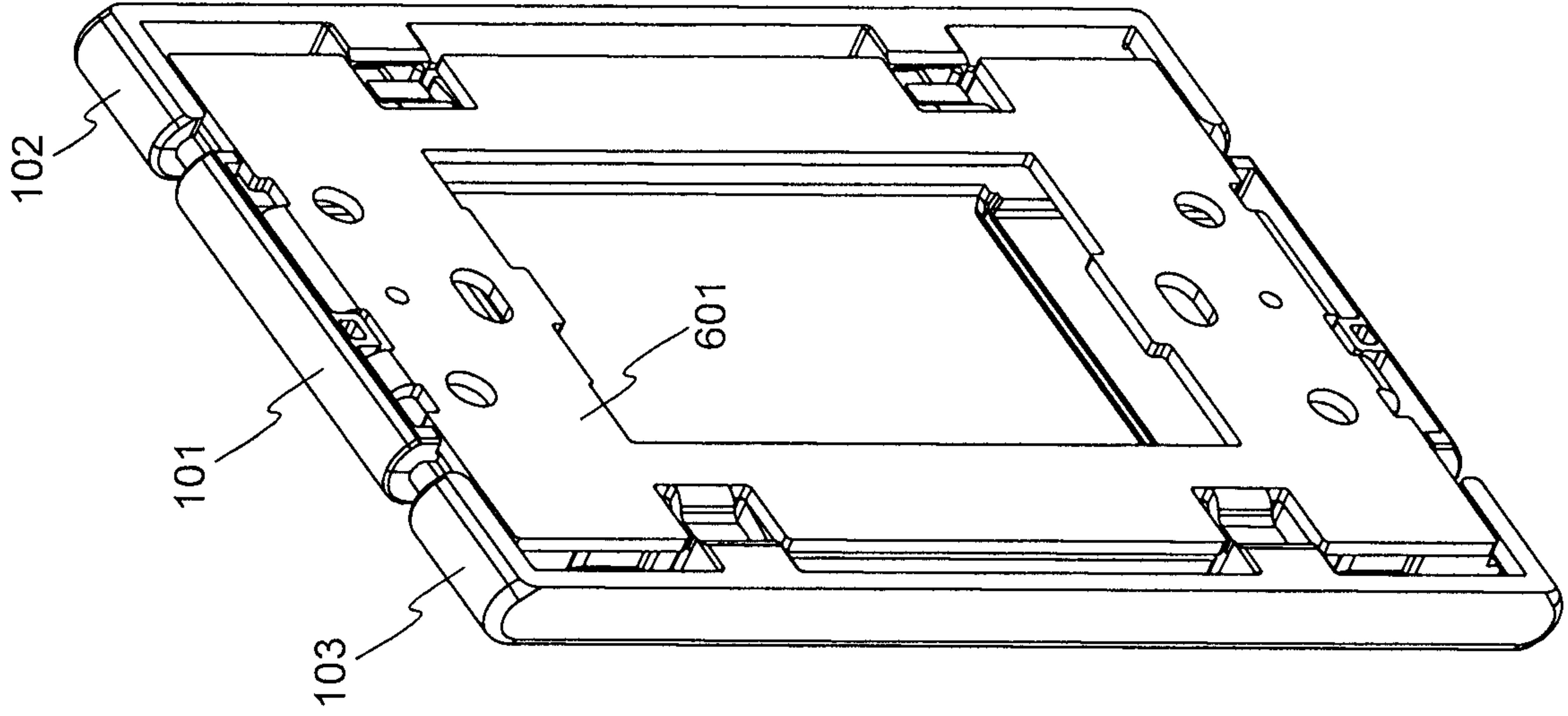


FIG. 7

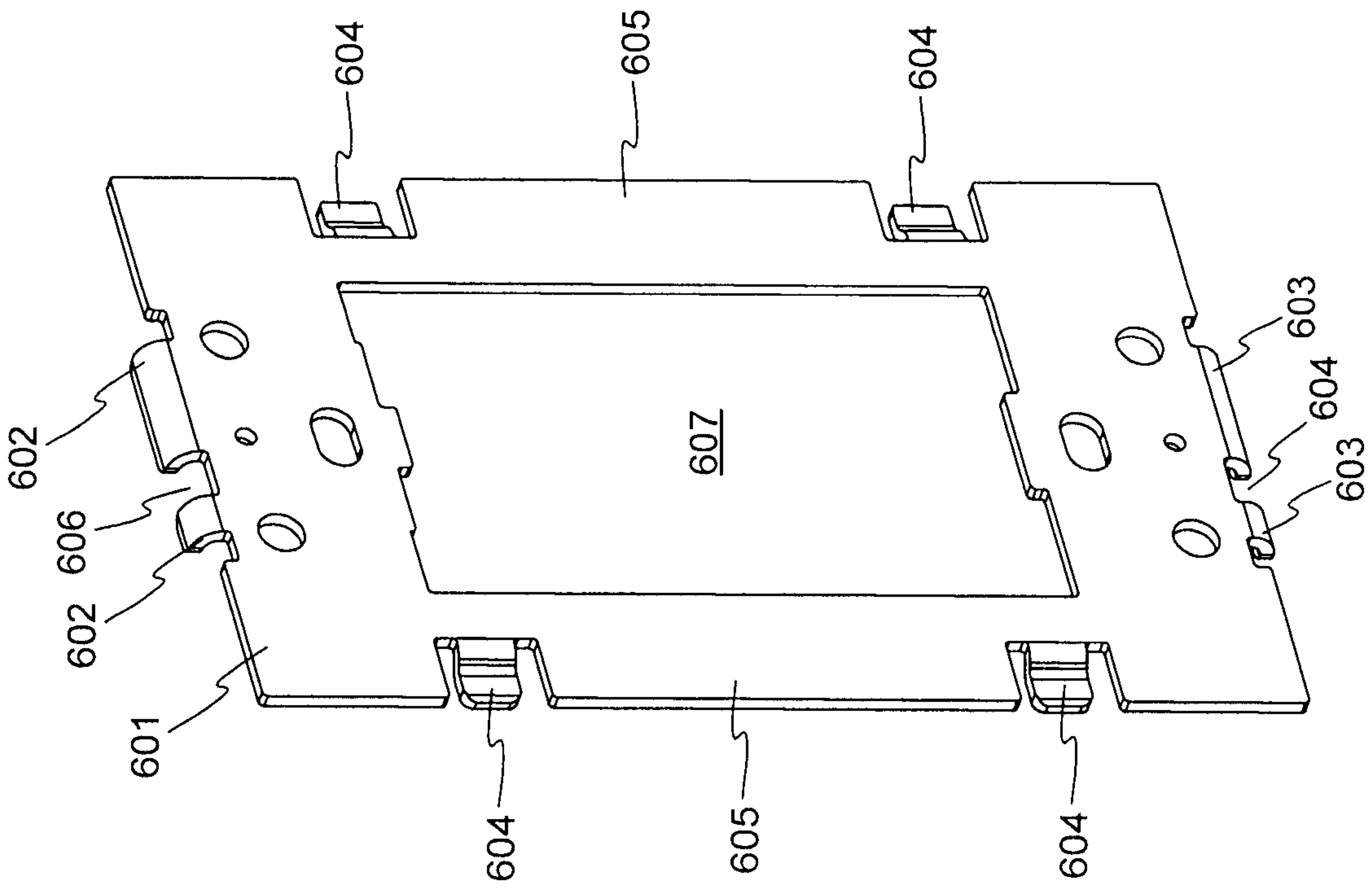
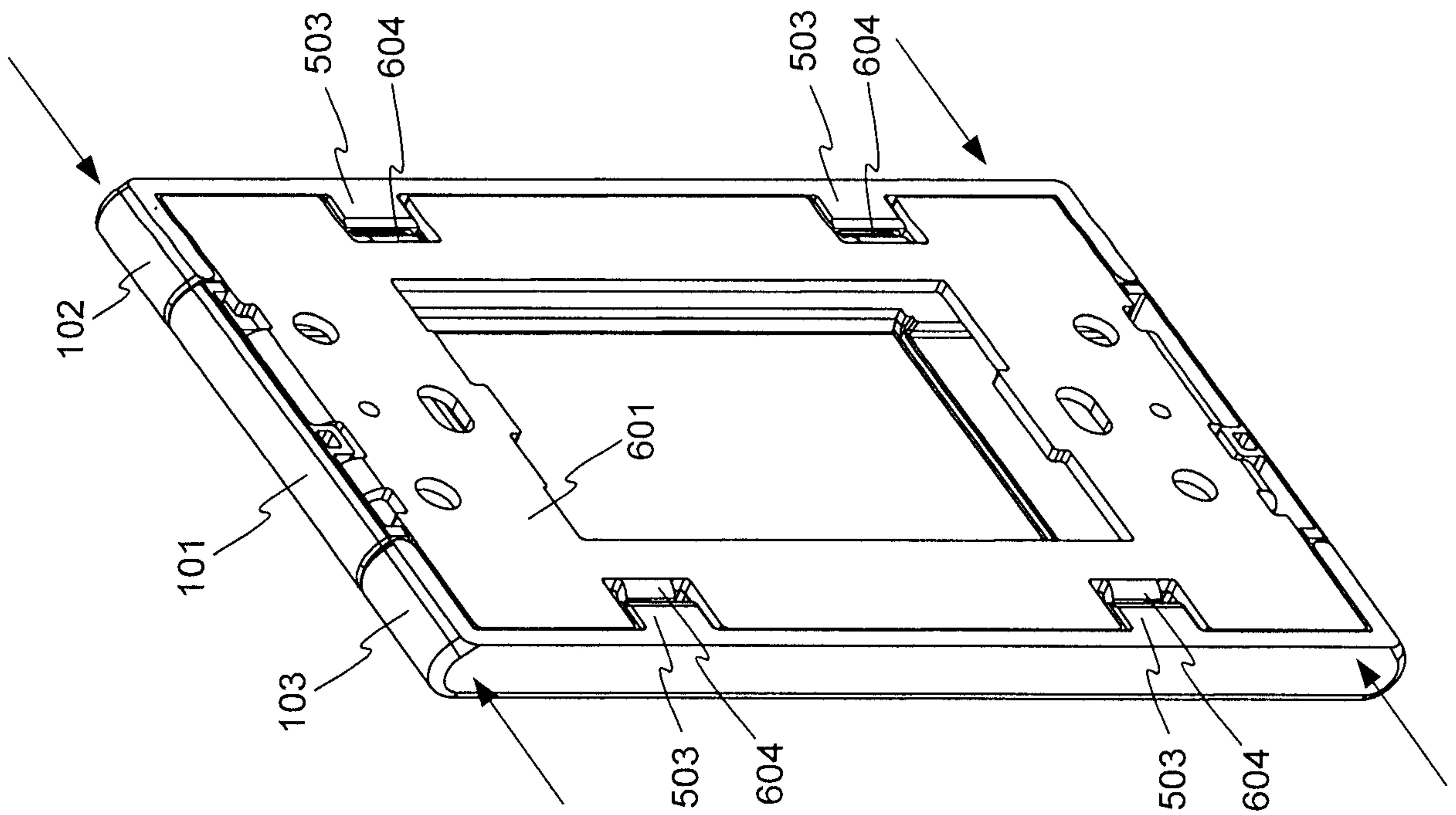
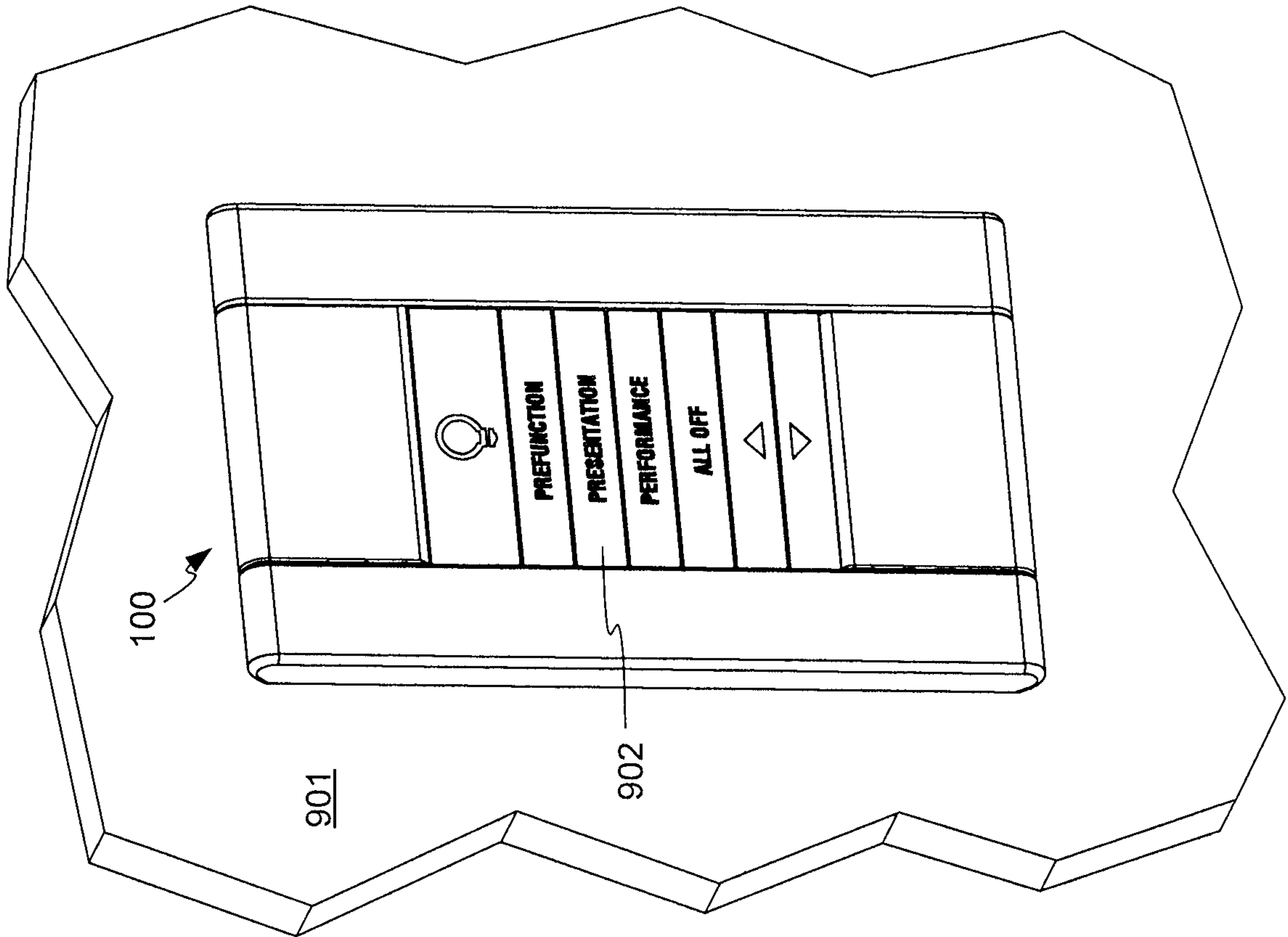


FIG. 6



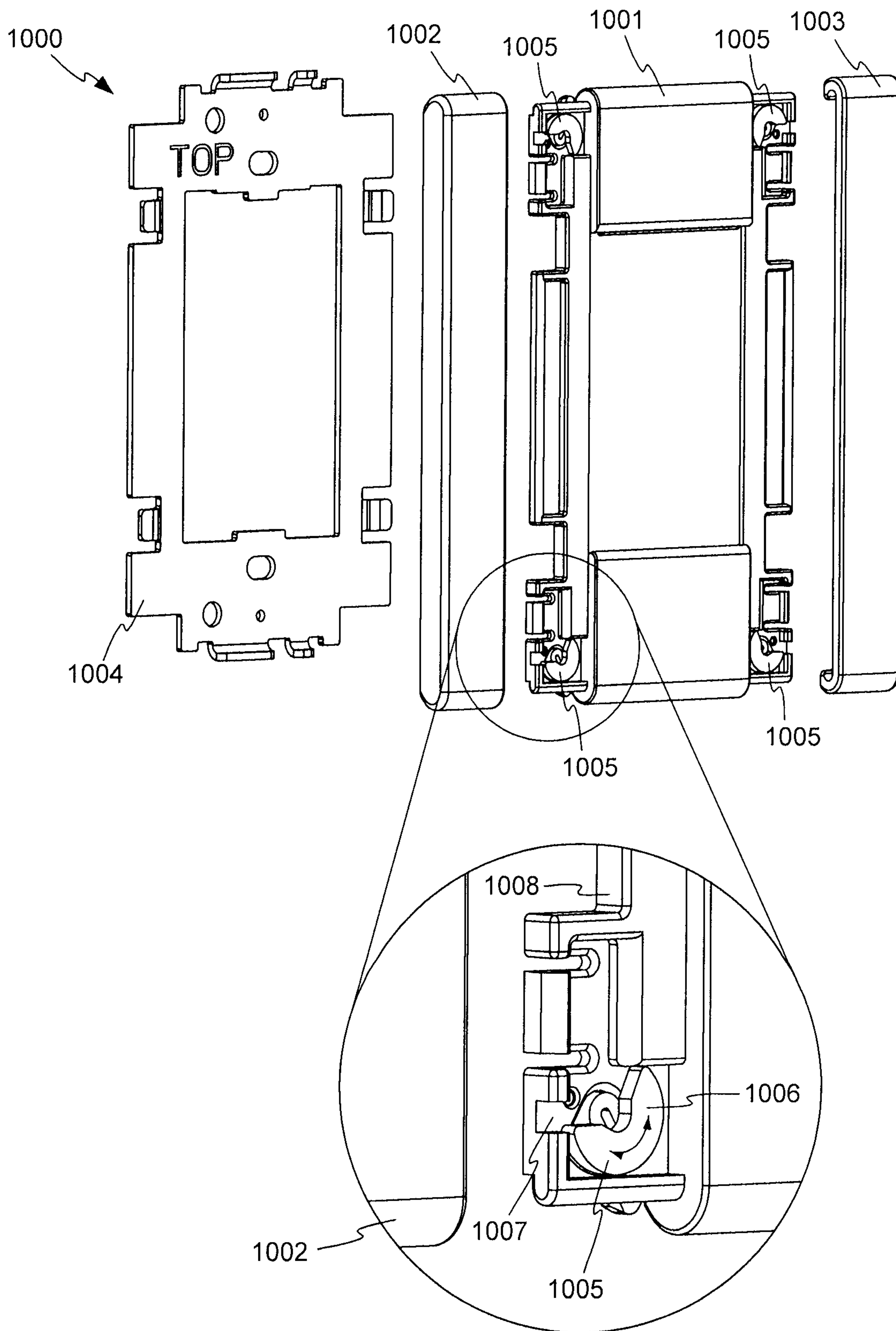


FIG. 10

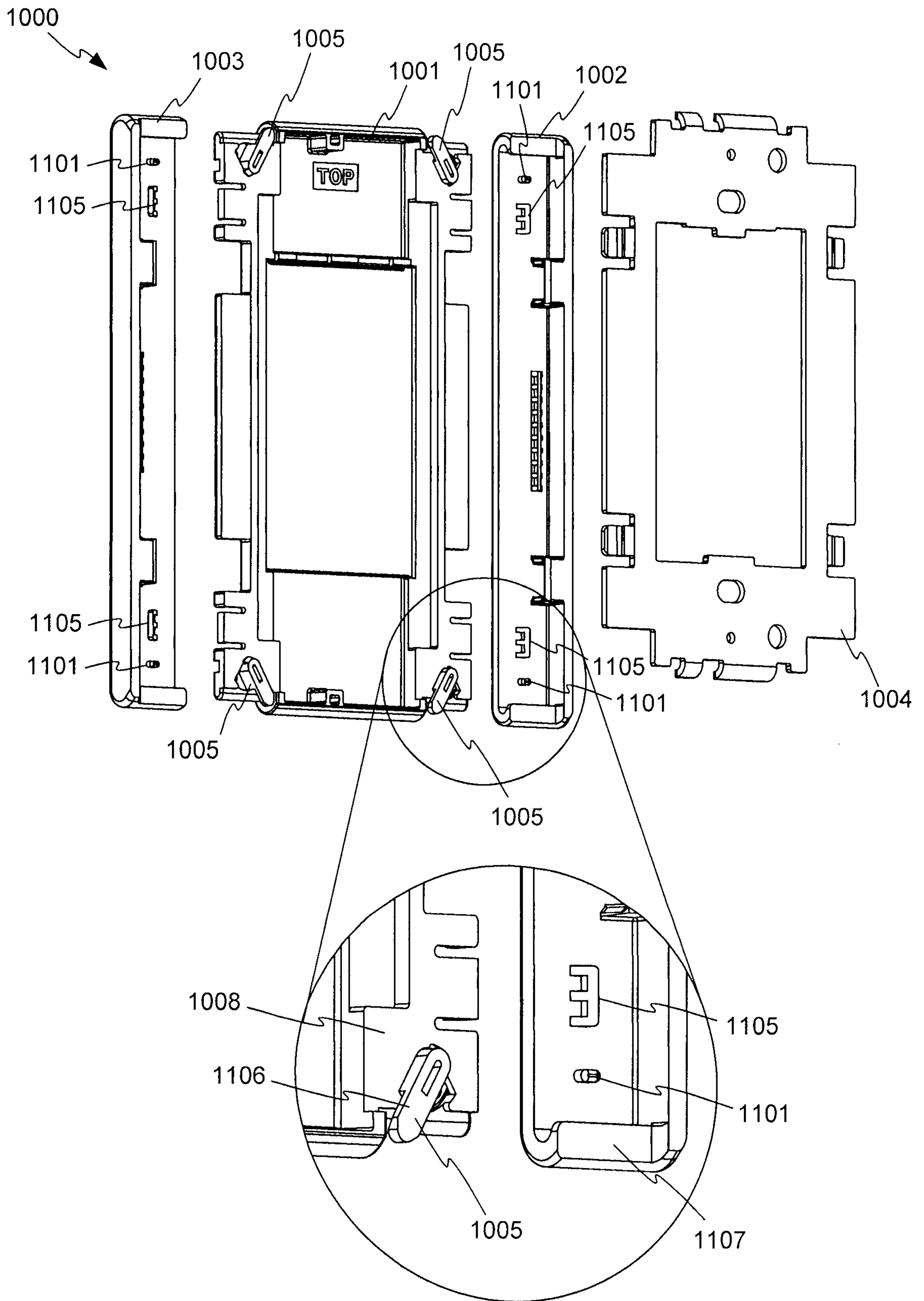


FIG. 11

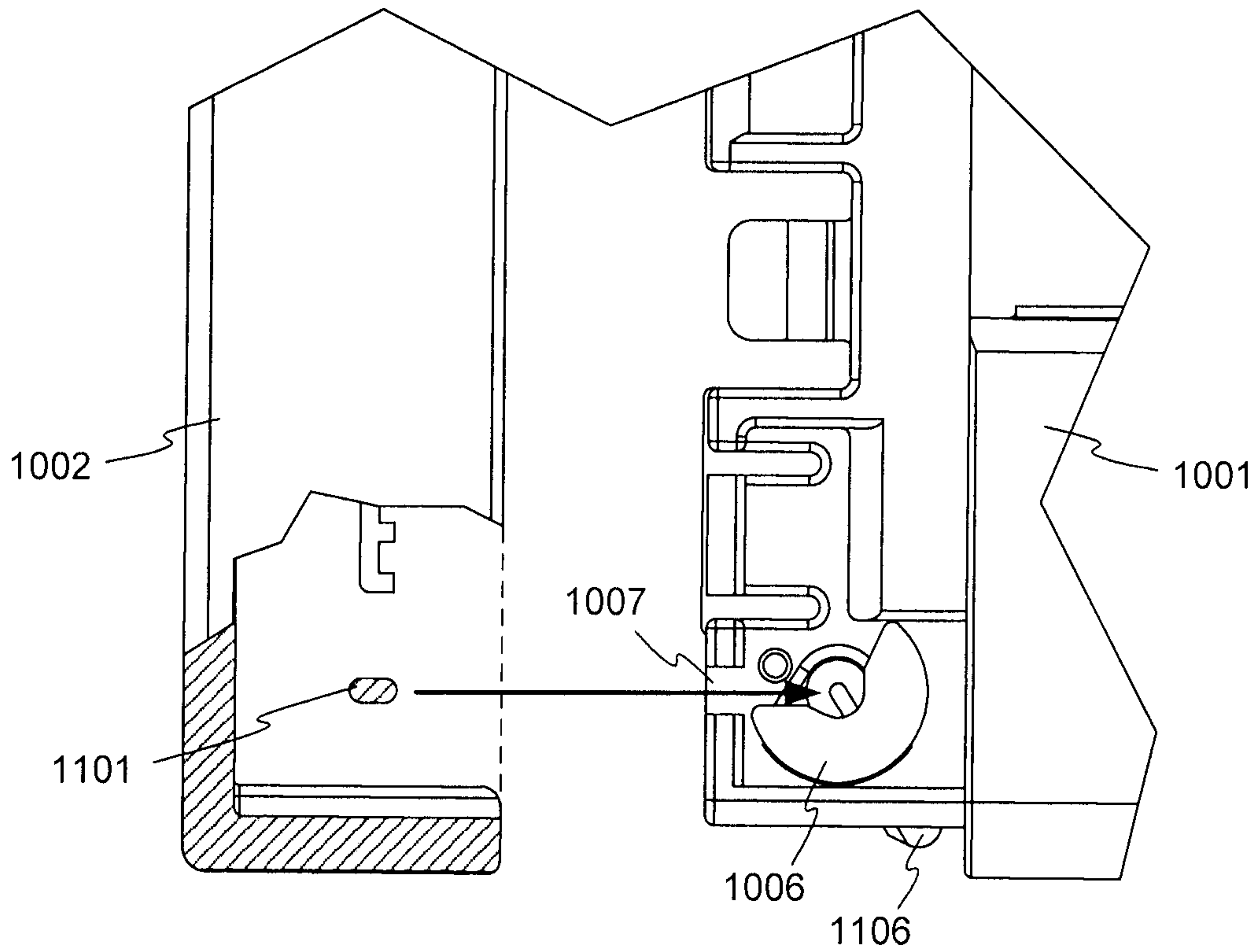


FIG. 12

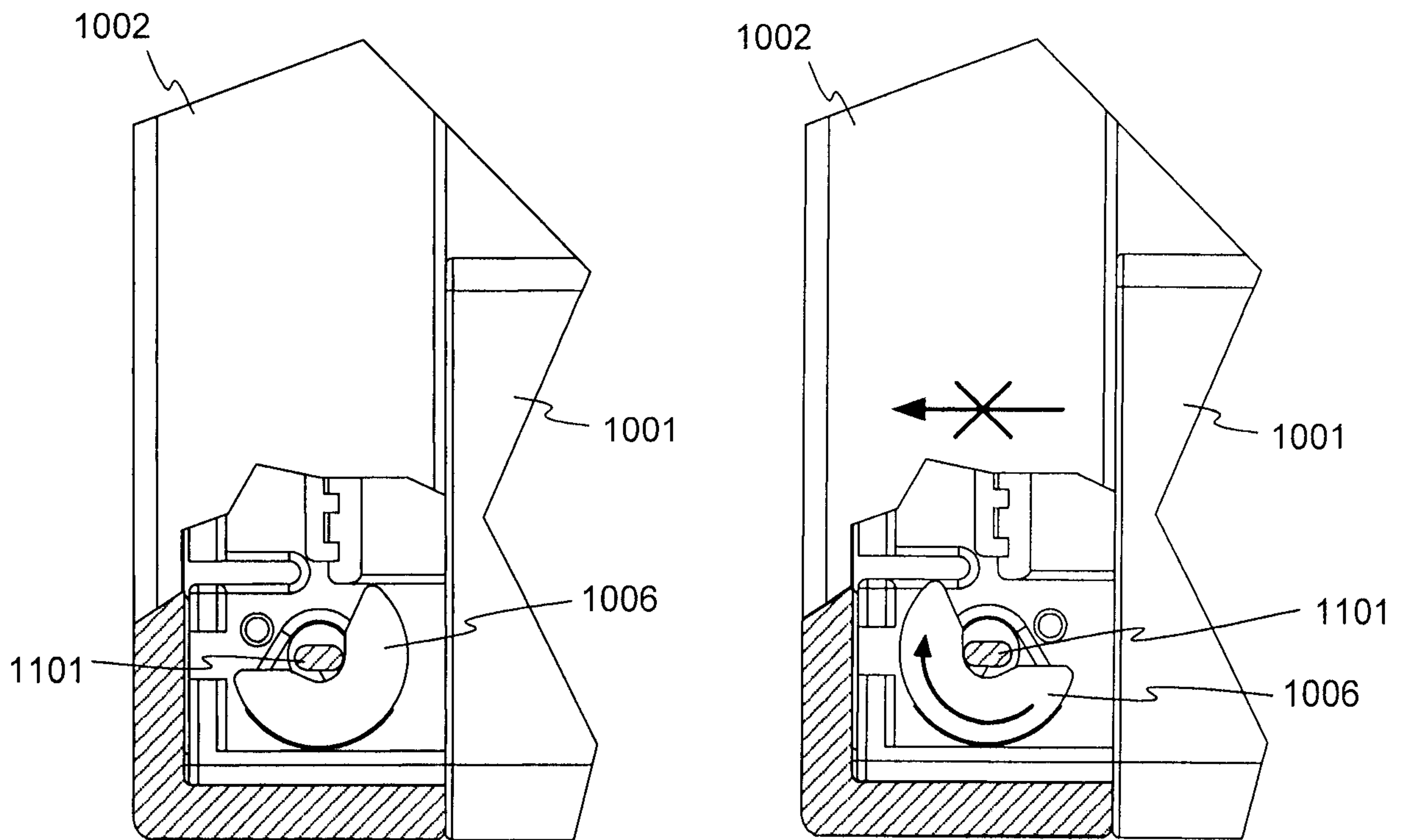


FIG. 13

FIG. 14

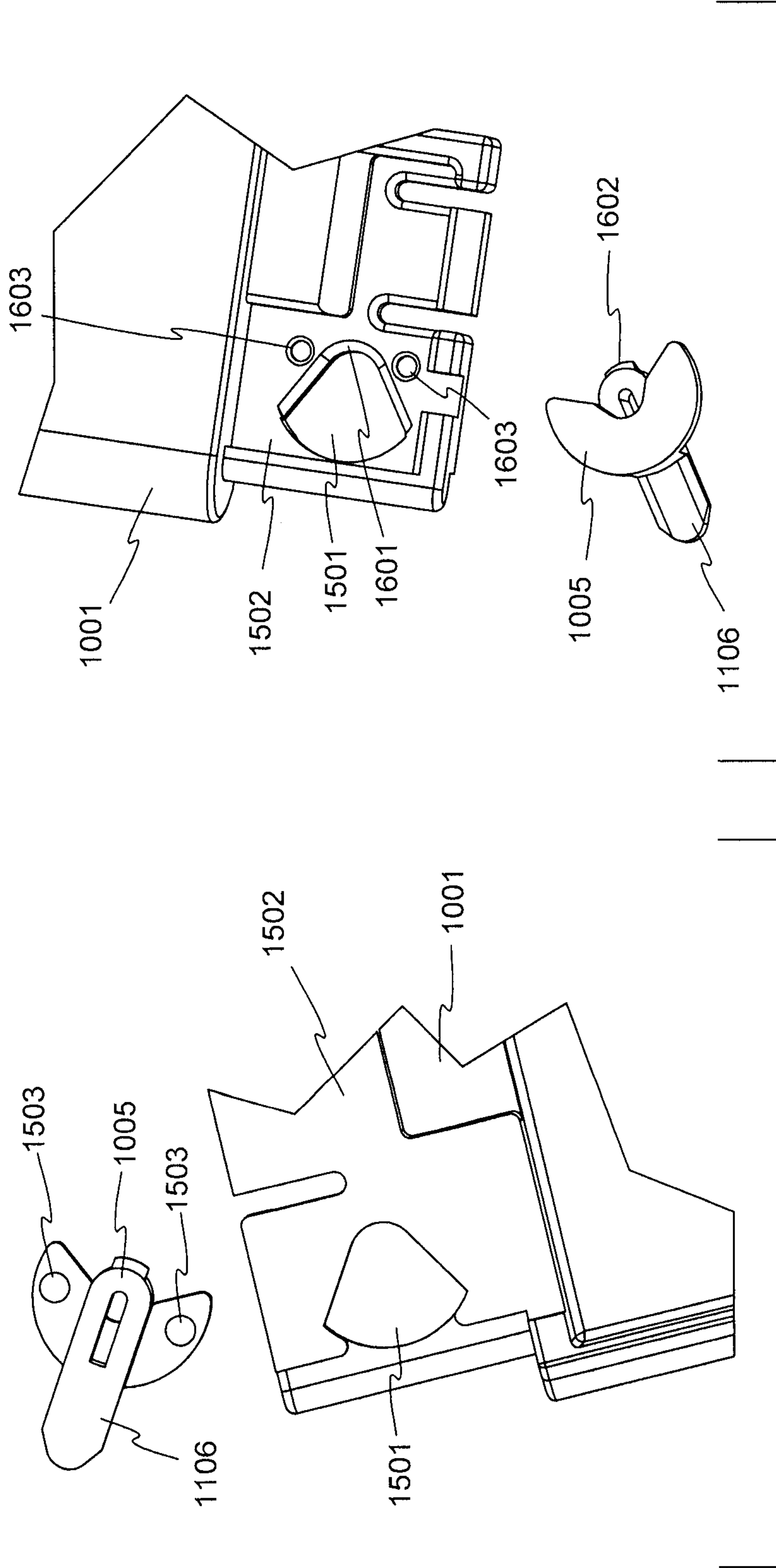


FIG. 16

FIG. 15

