(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 4 289 294 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
13.12.2023 Bulletin 2023/50

(21) Application number: **23170995.7**

(22) Date of filing: **02.05.2023**

(51) International Patent Classification (IPC):
A24F 40/30 *(2020.01)* ***A24F 40/40*** *(2020.01)*
A24F 40/10 *(2020.01)* *A24F 40/20* *(2020.01)*

(52) Cooperative Patent Classification (CPC):
A24F 40/30; A24F 40/40; A24F 40/10; A24F 40/20

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA
Designated Validation States:
KH MA MD TN

(30) Priority: **08.06.2022 CN 202210638675**

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(54) **VAPORIZATION ARRANGEMENT AND ELECTRONIC VAPORIZATION DEVICE**

(57) The present disclosure relates to an electronic vaporization device and a vaporization arrangement (100). The vaporization arrangement (100) includes: a vaporization main body (10) provided with a first accommodating cavity (15) for accommodating a solid aerosol-generating substrate and a second accommodating cavity (17) for accommodating a replacement component (30); and a locking member (50) arranged movably relative to the vaporization main body (10). The locking member (50) is provided with a lock position for opening an opening of the first accommodating cavity (15) and locking the replacement component (30) and the vaporization main body (10), and an unlock position for blocking the opening of the first accommodating cavity (15) while causing the locking member (50) to be separated from the replacement component (30). The user can lock and unlock the replacement component by operating the locking member, and thus the operation is easy and convenient.

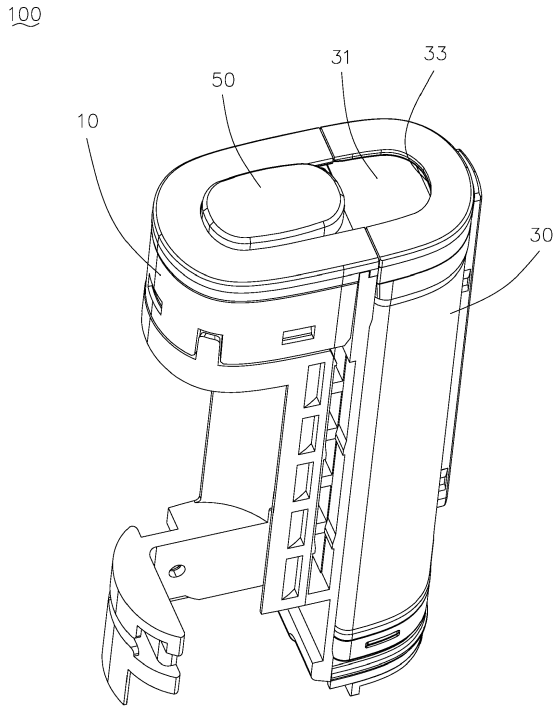

FIG. 1

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Description

TECHNICAL FIELD

[0001] The present disclosure relates to the field of vaporization technologies, and in particular, to a vaporization arrangement and an electronic vaporization device.

BACKGROUND

[0002] An aerosol is a colloidal dispersion system formed by dispersing small solid or liquid particles and suspending the particles in a gas medium. Since the aerosol can be absorbed by a human body through a respiratory system, users are provided with a new alternative absorption manner. For example, a vaporization device that can generate aerosols by baking and heating herbal or ointment aerosol-generating substrates is applied to different fields to deliver inhalable aerosols to the users, replacing conventional product forms and absorption manners.

[0003] Generally, an electronic vaporization device heats an aerosol-generating substrate, and the aerosol-generating substrate is a substrate material capable of generating an aerosol after being heated. In use, the users have different requirements for flavors or types of aerosol substrates. Some electronic vaporization devices have replacement components required to be replaced, and the replacement components are connected to and separated from vaporization main bodies through fixed devices. However, in the related art, the replacement components are generally required to be snapped off manually or replaced by using tools, which is cumbersome and not convenient enough for the users to use.

SUMMARY

[0004] Based on the above, there is a need to provide a vaporization arrangement and an electronic vaporization device with respect to the problem of inconvenient disassembly and assembly of the replacement component in the electronic vaporization device.

[0005] According to an aspect of the present disclosure, a vaporization arrangement is provided. The vaporization arrangement includes: a vaporization main body provided with a first accommodating cavity for accommodating a solid aerosol-generating substrate and a second accommodating cavity for accommodating a replacement component; and a locking member arranged movably relative to the vaporization main body. The locking member is provided with a lock position for opening an opening of the first accommodating cavity and locking the replacement component and the vaporization main body, and an unlock position for blocking the opening of the first accommodating cavity while causing the locking member to be separated from the replacement component.

[0006] In the vaporization arrangement, at the lock position, the locking member locks the replacement component and the vaporization main body, and fixes the replacement component to the vaporization main body. Moreover, the locking member opens the opening of the first accommodating cavity, and the solid aerosol-generating substrate can be loaded into the first accommodating cavity through the opening of the first accommodating cavity. In this way, at the lock position, the locking member fixes the replacement component in the second accommodating cavity and allows the solid aerosol-generating substrate to be inserted into the first accommodating cavity, and the vaporization main body can mix and vaporize a liquid aerosol-generating substrate in the replacement component and the solid aerosol-generating substrate in the first accommodating cavity.

[0007] When the replacement component is required to be removed, the user can operate the locking member to switch the locking member from the lock position to the unlock position, so that the locking member is separated from the replacement component to release the replacement component, and then the user can remove the replacement component from the vaporization main body. At the same time, the locking member at the unlock position blocks the opening of the first accommodating cavity to prevent entry of impurities into the first accommodating cavity during removing or fitting of the replacement component. In this way, the user can lock and unlock the replacement component by operating the locking member, which is easy to mount and remove the replacement component, and is easy and convenient to operate.

[0008] In an embodiment, the locking member is slidably arranged on the vaporization main body and operable to slide between the lock position and the unlock position.

[0009] In an embodiment, at the lock position, the locking member has a portion connected to the vaporization main body and another portion connected to the replacement component. At the unlock position, the locking member slides completely onto the vaporization main body.

[0010] In an embodiment, the vaporization main body and the replacement component are provided with a first sliding groove and a second sliding groove respectively. At the unlock position, the locking member slides completely into the first sliding groove. At the lock position, the first sliding groove and the second sliding groove communicates with each other, and the locking member has a portion located in the first sliding groove and connected to the vaporization main body and another portion located in the second sliding groove and connected to the replacement component.

[0011] In an embodiment, the first sliding groove has a sidewall provided with a first slot, and the second sliding groove has a sidewall provided with a second slot. The locking member includes a main body and a holding part arranged on and protruding from the main body. At the unlock position, the holding part is completely located in the first slot. At the lock position, the holding part has a

portion located in the first slot and another portion located in the second slot.

[0012] In an embodiment, the vaporization arrangement further includes a self-locking assembly arranged on the vaporization main body. When the second accommodating cavity is vacant, the self-locking assembly is in a first state where the locking member is blocked at the unlock position. When the second accommodating cavity is fitted with the replacement component, the self-locking assembly is in a second state where the locking member is allowed to switch from the unlock position to the lock position.

[0013] In an embodiment, the self-locking assembly includes a self-locking bracket liftably arranged on the vaporization main body. In the first state, the self-locking bracket is unconstrained by the replacement component and extends into a sliding path of the locking member. In the second state, the self-locking bracket exits the sliding path of the locking member under the action of the replacement component.

[0014] In an embodiment, the self-locking bracket includes a body and an abutment portion. The abutment portion at least partially protrudes from the vaporization main body. The abutment portion is adapted to be pushed by the replacement component fitted on the vaporization main body and then move in a direction away from the locking member, or the abutment portion is adapted to be released by the replacement component separated from the vaporization main body and then move in a direction close to the locking member.

[0015] In an embodiment, the self-locking bracket further includes a blocking part arranged on the body. The blocking part is capable of extending into or exiting the sliding path of the locking member.

[0016] In an embodiment, the self-locking assembly further includes an elastic member elastically abutting against the self-locking bracket and the vaporization main body and configured to store elastic potential energy that drives the self-locking bracket to extend into the sliding path of the locking member.

[0017] In an embodiment, the vaporization arrangement further includes an auxiliary assembly configured to fix the locking member at the unlock position and the vaporization main body and configured to fix the locking member at the lock position and the vaporization main body.

[0018] In an embodiment, the auxiliary assembly includes a first magnetic member, a second magnetic member, and a third magnetic member. The first magnetic member is arranged at an end of the vaporization main body close to the replacement component, and the second magnetic member and the third magnetic member are spaced apart on the locking member along a sliding direction of the locking member. When the locking member is at the unlock position, the second magnetic member is adsorbed to the first magnetic member. When the locking member is at the lock position, the third magnetic member is adsorbed to the first magnetic member.

[0019] According to another aspect of the present disclosure, an electronic vaporization device is provided. The electronic vaporization device includes a replacement component and the vaporization arrangement according to the above aspect. The replacement component is removably fitted in the second accommodating cavity.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020]

FIG. 1 is a schematic structural diagram illustrating an electronic vaporization device in an unlocked state according to an embodiment of the present disclosure.

FIG. 2 is a schematic structural diagram illustrating the electronic vaporization device shown in FIG. 1 in a locked state.

FIG. 3 is a schematic structural diagram illustrating the electronic vaporization device shown in FIG. 1 when not fitted with a replacement component.

FIG. 4 is a schematic exploded view of the electronic vaporization device shown in FIG. 1.

FIG. 5 is a schematic structural diagram illustrating a vaporization main body in the electronic vaporization device shown in FIG. 1.

FIG. 6 is a schematic structural diagram illustrating a replacement component in the electronic vaporization device shown in FIG. 1.

FIG. 7 is a schematic structural diagram illustrating cooperation between a locking member and a self-locking assembly in the electronic vaporization device shown in FIG. 7.

[0021] Reference signs:
100: vaporization arrangement; 10: vaporization main body; 11: first sliding groove; 13: first slot; 15: first accommodating cavity; 17: second accommodating cavity; 30: replacement component; 31: second sliding groove; 32: acting part; 33: second slot; 50: locking member; 52: main body; 54: holding part; 70: self-locking assembly; 72: self-locking bracket; 721: body; 723: abutment portion; 725: blocking part; 74: elastic member; 90: auxiliary assembly; 92: first magnetic member; 94: second magnetic member; and 96: third magnetic member.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0022] In order to make the above objectives, features, and advantages of the present disclosure more obvious and understandable, specific implementations of the present disclosure are described in detail below with reference to the accompanying drawings. In the following description, many specific details are set forth in order to fully understand the present disclosure. However, the present disclosure can be implemented in many other ways different from those described herein, and those

skilled in the art can make similar improvements without departing from the connotation of the present disclosure. Therefore, the present disclosure is not limited by the specific implementation disclosed below.

[0023] In the description of the present disclosure, it should be understood that the orientation or position relationships indicated by the terms "central", "longitudinal", "transverse", "length", "width", "thickness", "up", "down", "front", "back", "left", "right", "vertical", "horizontal", "top", "bottom", "inner", "outer", "clockwise", "counterclockwise", "axial", "radial", "circumferential", etc. are based on the orientation or position relationships shown in the accompanying drawings and are intended to facilitate the description of the present disclosure and simplify the description only, rather than indicating or implying that the device or element referred to must have a particular orientation or be constructed and operated in a particular orientation, and therefore are not to be interpreted as limiting the present disclosure.

[0024] In addition, the terms "first" and "second" are used for descriptive purposes only, which cannot be construed as indicating or implying a relative importance or implicitly specifying the number of the indicated technical features. Thus, the features defined with "first" and "second" may explicitly or implicitly include at least one feature. In the description of the present disclosure, "a plurality of" means at least two, such as two or three, unless specifically stated otherwise.

[0025] In the present disclosure, unless otherwise specifically stated and limited, the terms "mount," "join," "connect", "fix", etc. should be understood in a broad sense, such as, a fixed connection, a detachable connection, or an integral connection; a mechanical connection, or an electrical connection; a direct connection, an indirect connection through an intermediate medium, internal communication between two elements, or an interaction of two elements, unless otherwise expressly defined. For those of ordinary skill in the art, the specific meanings of the foregoing terms in the present disclosure can be understood on a case-by-case basis.

[0026] In the present disclosure, unless otherwise explicitly specified and defined, a first feature being "on" or "under" a second feature may be a case that the first feature is in direct contact with the second feature, or the first feature is in indirect contact with the second feature via an intermediate medium. Furthermore, the first feature being "over", "above" and "on top of" the second feature may be a case that the first feature is directly above or obliquely above the second feature, or only means that the level of the first feature is higher than that of the second feature. The first feature being "below", "underneath" or "under" the second feature may be a case that the first feature is directly underneath or obliquely underneath the second feature, or only means that the level of the first feature is lower than that of the second feature.

[0027] It should be noted that when one element is referred to as "fixed to" or "arranged on" another element, it may be directly disposed on the another element or an intermediate element may exist. When one element is considered to be "connected to" another element, it may be directly connected to the another element or an intermediate element may co-exist. The terms "vertical", "horizontal", "up", "down", "left", "right" and similar expressions used herein are for illustrative purposes only, and do not represent unique embodiments.

[0028] Referring to FIG. 1 to FIG. 3, in an embodiment of the present disclosure, an electronic vaporization device is provided, including a vaporization arrangement 100 and a replacement component 30. The vaporization arrangement 100 is configured to heat and vaporize an aerosol-generating substrate to form smoke for a user to use.

[0029] The vaporization arrangement 100 includes a vaporization main body 52. A first accommodating cavity 15 for accommodating a solid aerosol-generating substrate and a second accommodating cavity 17 for accommodating a replacement component 30 are formed on the vaporization main body 52, so as to removably mount the replacement component 30 on the vaporization arrangement 100 through the second accommodating cavity 17. During the use of the electronic vaporization device by the user, the replacement component 30 may accommodate a liquid aerosol-generating substrate, and the solid aerosol-generating substrate is arranged in the first accommodating cavity 15 of the vaporization main body 52. The replacement component 30 is arranged in the second accommodating cavity 17 of the vaporization main body 52. During operation of the vaporization main body 52, the solid aerosol-generating substrate and the liquid aerosol-generating substrate in the replacement component 30 are both heated and vaporized to form mixed smoke for the user to inhale.

[0030] Moreover, when the liquid aerosol-generating substrate in the replacement component 30 is used up, a further replacement component 30 may be replaced in the second accommodating cavity 17, so that the replacement component 30 can continue to cooperate the solid aerosol-generating substrate in the first accommodating cavity 15 for mixing and vaporization. Optionally, the replacement component 30 is a cartridge.

[0031] Further optionally, the replacement component 30 is removably mounted on the vaporization main body 52 along a first direction. That is, when the replacement component 30 is moved along the first direction, disassembly and assembly between the replacement component 30 and the vaporization main body 52 can be realized. As shown in FIG. 1, the first direction is a vertical direction, and when the replacement component 30 is moved upwards along the first direction, the replacement component 30 can be fitted on the vaporization main body 52. In addition, when the replaceable component 30 is required to be replaced, the replacement component 30 is moved downwards along the first direction, and a required replacement component 30 can be fitted on the vaporization main body 52.

[0032] In some embodiments, the vaporization arrangement 100 further includes a locking member 50, and the locking member 50 is arranged movably relative to the vaporization main body 52. The locking member 50 is provided with a lock position for opening an opening of the first accommodating cavity 15 and locking the replacement component 30 and the vaporization main body 52, and an unlock position for blocking the opening of the first accommodating cavity 15 while causing the locking member to be separated from the replacement component 30. In other words, at the lock position, the locking member 50 locks the replacement component 30 and the vaporization main body 52, and fixes the replacement component 30 to the vaporization main body 52. Moreover, the locking member 50 opens the opening of the first accommodating cavity 15, and the solid aerosol-generating substrate can be loaded into the first accommodating cavity 15 through the opening of the first accommodating cavity 15. In this way, at the lock position, the locking member 50 fixes the replacement component 30 in the second accommodating cavity 17 and allows the solid aerosol-generating substrate to be inserted into the first accommodating cavity 15, and the vaporization main body 52 can mix and vaporize a liquid aerosol-generating substrate in the replacement component 30 and the solid aerosol-generating substrate in the first accommodating cavity 15.

[0033] When the replacement component 30 is required to be removed, the user can operate the locking member 50 to switch the locking member 50 from the lock position to the unlock position, so that the locking member 50 is separated from the replacement component 30 to release the replacement component 30, and then the user can remove the replacement component 30 from the vaporization main body 52. At the same time, the locking member 50 at the unlock position blocks the opening of the first accommodating cavity 15 to prevent entry of impurities into the first accommodating cavity 15 during removing and fitting of the replacement component 30. In this way, the user can lock and unlock the replacement component 30 by operating the locking member 50, which is easy to mount and remove the replacement component 30, and is easy and convenient to operate.

[0034] Further, the locking member 50 is slidably arranged on the vaporization main body 52 and operable to slide between the lock position and the unlock position. "The locking member 50 is slidably arranged on the vaporization main body 52" means that the locking member 50 can slide on the vaporization main body 52 and can partially slide out of the vaporization main body 52. In this way, the locking member 50 is slidably arranged on the vaporization main body 52, and the user can lock and unlock the replacement component 30 by sliding the locking member 50.

[0035] Furthermore, at the lock position, the locking member 50 has a portion connected to the vaporization main body 52 and another portion connected to the replacement component 30, so as to lock the replacement component 30 onto the vaporization main body 52. At the unlock position, the locking member 50 slides completely onto the vaporization main body 52, and then is completely separated from the replacement component 30 to release the replacement component 30, allowing the replacement component 30 to be removed from the vaporization main body 52.

[0036] Specifically, in this embodiment, the locking member 50 is slidably arranged along a second direction intersecting with the first direction. When sliding along the second direction, the locking member 50 may be connected to or separated from the replacement component 30, thereby locking or unlocking the replacement component 30. As shown in FIG. 1, the second direction is a horizontal direction.

[0037] In some embodiments, the vaporization main body 52 and the replacement component 30 are provided with a first sliding groove 11 and a second sliding groove 31 respectively. At the unlock position, the locking member 50 slides completely into the first sliding groove 11. That is, the locking member 50 slides completely onto the vaporization main body 52 and then can be separated from the replacement component 30 to release the replacement component 30, allowing the replacement component 30 to move relative to the vaporization main body 52 to achieve disassembly. At the lock position, the locking member 50 has a portion located in the first sliding groove 11 and connected to the vaporization main body 52 and another portion located in the second sliding groove 31 and connected to the replacement component 30. That is, a portion of the locking member 50 is located on the vaporization main body 52 and connected to the vaporization main body 52, and another portion of the locking member 50 is located on the replacement component 30 and connected to the replacement component 30. The replacement component 30 and the vaporization main body 52 are connected by using the locking member 50, preventing separation of the replacement component 30 from the vaporization main body 52.

[0038] Further, the first sliding groove 11 has a sidewall provided with a first slot 13, and the second sliding groove 31 has a sidewall provided with a second slot 33. The locking member 50 includes a main body 52 and a holding part 54 arranged on and protruding from the main body 52. At the unlock position, the holding part 54 is completely located in the first slot 13, so that the locking member 50 is connected to the vaporization main body 52 through the holding part 54 arranged in the first slot 13. At the lock position, the holding part 54 has a portion located in the first slot 13 and another portion located in the second slot 33. In this way, the locking member 50 is not only connected to the vaporization main body 52, but also connected to the replacement component 30, thereby realizing the connection between the replacement component 30 and the vaporization main body 52, preventing separation of the replacement component 30 from the vaporization main body 52.

[0039] Referring to FIG. 4 to FIG. 7, in some embodiments, the vaporization arrangement 100 further includes a self-locking assembly 70 arranged on the vaporization main body 52. When the second accommodating cavity 17 is vacant, the replacement component 30 is separated from the vaporization main body 52, and the self-locking assembly 70 is in a first state where the locking member 50 is blocked at the unlock position. When the second accommodating cavity 17 is fitted with the replacement component 30, the self-locking assembly 70 is in a second state where the locking member 50 is allowed to switch from the unlock position to the lock position.

[0040] In this way, when the second accommodating cavity 17 is vacant, the replacement component 30 is separated from the vaporization main body 52, the locking member 50 has switched to the unlock position, and the locking member 50 is located on the vaporization main body 52. In this case, the self-locking assembly 70 in the first state can block and limit the locking member 50, thereby preventing separation of the locking member 50 from the vaporization main body 52. When the replacement component 30 is fitted on the vaporization main body 52, the replacement component 30 is accommodated in the second accommodating cavity 17 of the vaporization main body 52. The self-locking assembly 70 switches to the second state to allow the locking member 50 to slide to switch the position, and then the user can switch the locking member 50 from the unlock position to the lock position, and complete the fitting of the replacement component 30 by connecting and fixing the replacement component 30 and the vaporization main body 52 through the locking member 50.

[0041] The first sliding groove 11 and the second sliding groove 31 are each provided with an abutment opening. When the replacement component 30 is fitted on the vaporization main body 52, the abutment openings of the first sliding groove 11 and the second sliding groove 31 abut against each other and communicates with each other, and then the first sliding groove 11 and the second sliding groove 31 communicates with each other. After the replacement component 30 is removed from the vaporization main body 52, the abutment opening of the first sliding groove 11 is open to communicate with the external environment. In this case, the locking member 50 in the first sliding groove 11 is easy to fall off from the first sliding groove 11. In order to prevent this situation, after the replacement component 30 is separated from the vaporization main body 52, in the present application, the locking member 50 at the unlock position is limited and blocked on the vaporization main body 52 by the self-locking assembly 70 to prevent falling off of the locking member 50 from the first sliding groove 11.

[0042] In other words, the self-locking assembly 70 in the first state blocks the locking member 50 in the first sliding groove 11 of the vaporization main body 52 to prevent separation of the locking member 50 from the vaporization main body 52 through the abutment opening of the first sliding groove 11.

[0043] Further, the self-locking assembly 70 includes a self-locking bracket 72, and the self-locking bracket 72 is liftably arranged on the vaporization main body 52. In the first state, the self-locking bracket 72 is unconstrained by the replacement component 30 and extends into a sliding path of the locking member 50. In the second state, the self-locking bracket 72 exits the sliding path of the locking member 50 under the action of the replacement component 30. When the replacement component 30 is fitted on the vaporization main body 52, the replacement component 30 applies force to the self-locking bracket 72, so that the self-locking bracket 72 descends to exit the sliding path of the locking member 50, allowing the locking member 50 to move from the unlock position to the lock position to fix the replacement component 30 to the vaporization main body 52. When the replacement component 30 is separated from the vaporization main body 52, the self-locking bracket 72 ascends to extend into the sliding path of the locking member 50 to block the locking member 50 and prevent the locking member 50 from sliding to be detached from the vaporization main body 52.

[0044] Specifically, the self-locking bracket 72 includes a body 721 and an abutment portion 723. The abutment portion 723 at least partially protrudes from the vaporization main body 52. The abutment portion 723 is adapted to be pushed by the replacement component 30 fitted on the vaporization main body 52 and then move in a direction away from the locking member 50, to drive the self-locking bracket 72 to exit the sliding path of the locking member 50. Alternatively, the abutment portion 723 is adapted to be released by the replacement component 30 separated from the vaporization main body 52 and then move in a direction close to the locking member 50, to drive the self-locking bracket 72 to be blocked on the sliding path of the locking member 50. That is, when fitted on the vaporization main body 52, the replacement component 30 cooperates with the abutment portion 723 to press down the abutment portion 723 and the self-locking bracket 72, so that the self-locking bracket 72 descends to exit the sliding path of the locking member 50, allowing the locking member 50 to switch to the lock position.

[0045] Optionally, an acting part 32 protrudes from an outer sidewall of the replacement component 30. When the replacement component 30 is fitted on the vaporization main body 52, the acting part 32 is supported on the abutment portion 723 of the self-locking bracket 72, and the self-locking bracket 72 is pressed down.

[0046] More specifically, the self-locking bracket 72 further includes a blocking part 725 arranged on the body 721. The blocking part 725 can enter or exit the sliding path of the locking member 50 to block or release the locking member 50 through the blocking part 725. Optionally, two blocking parts 725 are provided. The two blocking parts 725 ascend and descend synchronously, which can block the locking member 50 more effectively.

[0047] In some embodiments, the self-locking assem-

bly 70 further includes an elastic member 74. The elastic member 74 elastically abutts against the self-locking bracket 72 and the vaporization main body 52 and configured to store elastic potential energy that drives the self-locking bracket 72 to extend into the sliding path of the locking member 50. When the self-locking bracket 72 is pushed by the replacement component 30 to descend, the elastic member 74 is compressed and stores elastic potential energy. After the replacement component 30 is separated from the vaporization main body 52, the self-locking bracket 72 is no longer constrained, and the elastic member 74 releases its own elastic potential energy and drives the self-locking bracket 72 to rise to extend into the sliding path of the locking member 50, so that the locking member 50 is limited and blocked on the vaporization main body 52.

[0048] In some embodiments, the vaporization arrangement 100 further includes an auxiliary assembly 90. The auxiliary assembly 90 is configured to fix the locking member 50 at the unlock position and the vaporization main body 52 to fix the locking member 50 to the unlock position and configured to fix the locking member 50 at the lock position and the vaporization main body 52. In this way, when the locking member 50 is at the unlock position, the auxiliary assembly 90 can fix the locking member 50 to the vaporization main body 52 to prevent deviation of the locking member 50 from the unlock position. When the locking member 50 switches to the lock position, the auxiliary assembly 90 can also fix the locking member 50 to the vaporization main body 52 to prevent deviation of the locking member 50 from the lock position.

[0049] Further, the auxiliary assembly 90 includes a first magnetic member 92, a second magnetic member 94, and a third magnetic member 96. The first magnetic member 92 is arranged at an end of the vaporization main body 52 close to the replacement component 30, and the second magnetic member 94 and the third magnetic member 96 are spaced apart on the locking member 50 along a sliding direction of the locking member 50. When the locking member 50 is at the unlock position, the second magnetic member 94 is adsorbed to the first magnetic member 92 to fix the locking member 50 to the unlock position. When the locking member 50 is at the lock position, the third magnetic member 96 is adsorbed to the first magnetic member 92 to fix the locking member 50 to the lock position. When the locking member 50 switches between the unlock position and the lock position, the first magnetic member 92 moves with the locking member 50 to be misaligned with the second magnetic member 94 and the third magnetic member 96, and the locking member 50 is no longer subjected to magnetic adsorption force and can freely switch the position.

[0050] In an embodiment of the present disclosure, the vaporization arrangement 100 is provided. The vaporization arrangement 100 further includes a vaporization main body 52 and a locking member 50, and the locking member 50 is arranged movably relative to the vaporization main body 52. The locking member 50 is provided with a lock position for opening an opening of the first accommodating cavity 15 and locking the replacement component 30 and the vaporization main body 52, and an unlock position for blocking the opening of the first accommodating cavity 15 while causing the locking member to be separated from the replacement component 30. In other words, at the lock position, the locking member 50 locks the replacement component 30 and the vaporization main body 52, and fixes the replacement component 30 to the vaporization main body 52. Moreover, the locking member 50 opens the opening of the first accommodating cavity 15, and the solid aerosol-generating substrate can be loaded into the first accommodating cavity 15 through the opening of the first accommodating cavity 15. In this way, at the lock position, the locking member 50 fixes the replacement component 30 in the second accommodating cavity 17 and allows the solid aerosol-generating substrate to be inserted into the first accommodating cavity 15, and the vaporization main body 52 can mix and vaporize a liquid aerosol-generating substrate in the replacement component 30 and the solid aerosol-generating substrate in the first accommodating cavity 15.

[0051] When the replacement component 30 is required to be removed, the user can operate the locking member 50 to switch the locking member 50 from the lock position to the unlock position, so that the locking member 50 is separated from the replacement component 30 to release the replacement component 30, and then the user can remove the replacement component 30 from the vaporization main body 52. At the same time, the locking member 50 at the unlock position blocks the opening of the first accommodating cavity 15 to prevent entry of impurities into the first accommodating cavity 15 during removing and fitting of the replacement component 30. In this way, the user can lock and unlock the replacement component 30 by operating the locking member 50, which is easy to mount and remove the replacement component 30, and is easy and convenient to operate.

[0052] The technical features in the above embodiments may be randomly combined. For concise description, not all possible combinations of the technical features in the above embodiments are described. However, all the combinations of the technical features are to be considered as falling within the scope described in this specification provided that they do not conflict with each other.

[0053] The above embodiments only describe several implementations of the present disclosure, and their description is specific and detailed, but cannot therefore be understood as a limitation. It should be noted that those of ordinary skill in the art may further make variations and improvements without departing from the conception of the present disclosure.

Claims

1. A vaporization arrangement (100), comprising:

   a vaporization main body (10) provided with a first accommodating cavity (15) for accommodating a solid aerosol-generating substrate and a second accommodating cavity (17) for accommodating a replacement component (30); and
   a locking member (50) arranged movably relative to the vaporization main body (10);
   wherein the locking member (50) is provided with a lock position for opening an opening of the first accommodating cavity (15) and locking the replacement component (30) and the vaporization main body (10), and an unlock position for blocking the opening of the first accommodating cavity (15) while causing the locking member (50) to be separated from the replacement component (30).

2. The vaporization arrangement (100) according to claim 1, wherein the locking member (50) is slidably arranged on the vaporization main body (10) and operable to slide between the lock position and the unlock position.

3. The vaporization arrangement (100) according to claim 2, wherein at the lock position, the locking member (50) has a portion connected to the vaporization main body (10) and another portion connected to the replacement component (30); and
   wherein at the unlock position, the locking member (50) slides completely onto the vaporization main body (10).

4. The vaporization arrangement (100) according to claim 3, wherein the vaporization main body (10) and the replacement component (30) are provided with a first sliding groove (11) and a second sliding groove (31) respectively; and
   wherein at the unlock position, the locking member (50) slides completely into the first sliding groove (11), and at the lock position, the first sliding groove (11) and the second sliding groove (31) communicates with each other, and the portion of the locking member (50) is located in the first sliding groove (11) and connected to the vaporization main body (10) and the another portion of the locking member (50) is located in the second sliding groove (31) and connected to the replacement component (30).

5. The vaporization arrangement (100) according to claim 4, wherein the first sliding groove (11) has a sidewall provided with a first slot (13), and the second sliding groove (31) has a sidewall provided with a second slot (33);
   wherein the locking member (50) comprises a main body (52) and a holding part (54) arranged on and protruding from the main body (52); and
   wherein at the unlock position, the holding part (54) is completely located in the first slot (13), and at the lock position, the holding part (54) has a portion located in the first slot (13) and another portion located in the second slot (33).

6. The vaporization arrangement (100) according to any one of claims 2 to 5, further comprising a self-locking assembly (70) arranged on the vaporization main body (10),
   wherein when the second accommodating cavity (17) is vacant, the self-locking assembly (70) is in a first state where the locking member is blocked at the unlock position, and when the second accommodating cavity (17) is fitted with the replacement component (30), the self-locking assembly (70) is in a second state where the locking member (50) is allowed to switch from the unlock position to the lock position.

7. The vaporization arrangement (100) according to claim 6, wherein the self-locking assembly (70) comprises a self-locking bracket (72) liftably arranged on the vaporization main body (10); and
   wherein in the first state, the self-locking bracket (72) is unconstrained by the replacement component (70) and extends into a sliding path of the locking member (50), and in the second state, the self-locking bracket (72) exits the sliding path of the locking member (50) under the action of the replacement component (70).

8. The vaporization arrangement (100) according to claim 7, wherein the self-locking bracket (72) comprises a body (721) and an abutment portion (723), the abutment portion (723) at least partially protruding from the vaporization main body (10), and
   wherein the abutment portion (723) is adapted to be pushed by the replacement component (30) fitted on the vaporization main body (10) and then move in a direction away from the locking member (50), or the abutment portion (723) is adapted to be released by the replacement component (30) separated from the vaporization main body (10) and then move in a direction close to the locking member (50).

9. The vaporization arrangement (100) according to claim 8, wherein the self-locking bracket (72) further comprises a blocking part (725) arranged on the body (723), the blocking part being capable of extending into or exiting the sliding path of the locking member (50).

10. The vaporization arrangement (100) according to claim 7, wherein the self-locking assembly (70) further comprises an elastic member (74) elastically

abutting against the self-locking bracket (70) and the vaporization main body (10), and configured to store elastic potential energy that drives the self-locking bracket (70) to extend into the sliding path of the locking member (50).

11. The vaporization arrangement (100) according to any one of claims 2 to 5, further comprising an auxiliary assembly (90) configured to fix the locking member (50) at the unlock position and the vaporization main body (10), and configured to fix the locking member (50) at the lock position and the vaporization main body (10).

12. The vaporization arrangement (100) according to claim 11, wherein the auxiliary assembly (90) comprises a first magnetic member (92), a second magnetic member (94), and a third magnetic member (96), the first magnetic member (92) being arranged at an end of the vaporization main body (10) close to the replacement component (30), the second magnetic member (94) and the third magnetic member (96) being spaced apart on the locking member (50) along a sliding direction of the locking member (50); and
wherein when the locking member (50) is at the unlock position, the second magnetic member (94) is adsorbed to the first magnetic member (92), and when the locking member (50) is at the lock position, the third magnetic member (96) is adsorbed to the first magnetic member (92).

13. An electronic vaporization device, comprising a replacement component (30) and the vaporization arrangement (100) according to any one of claims 1 to 12, the replacement component (100) being removably fitted in the second accommodating cavity (17).

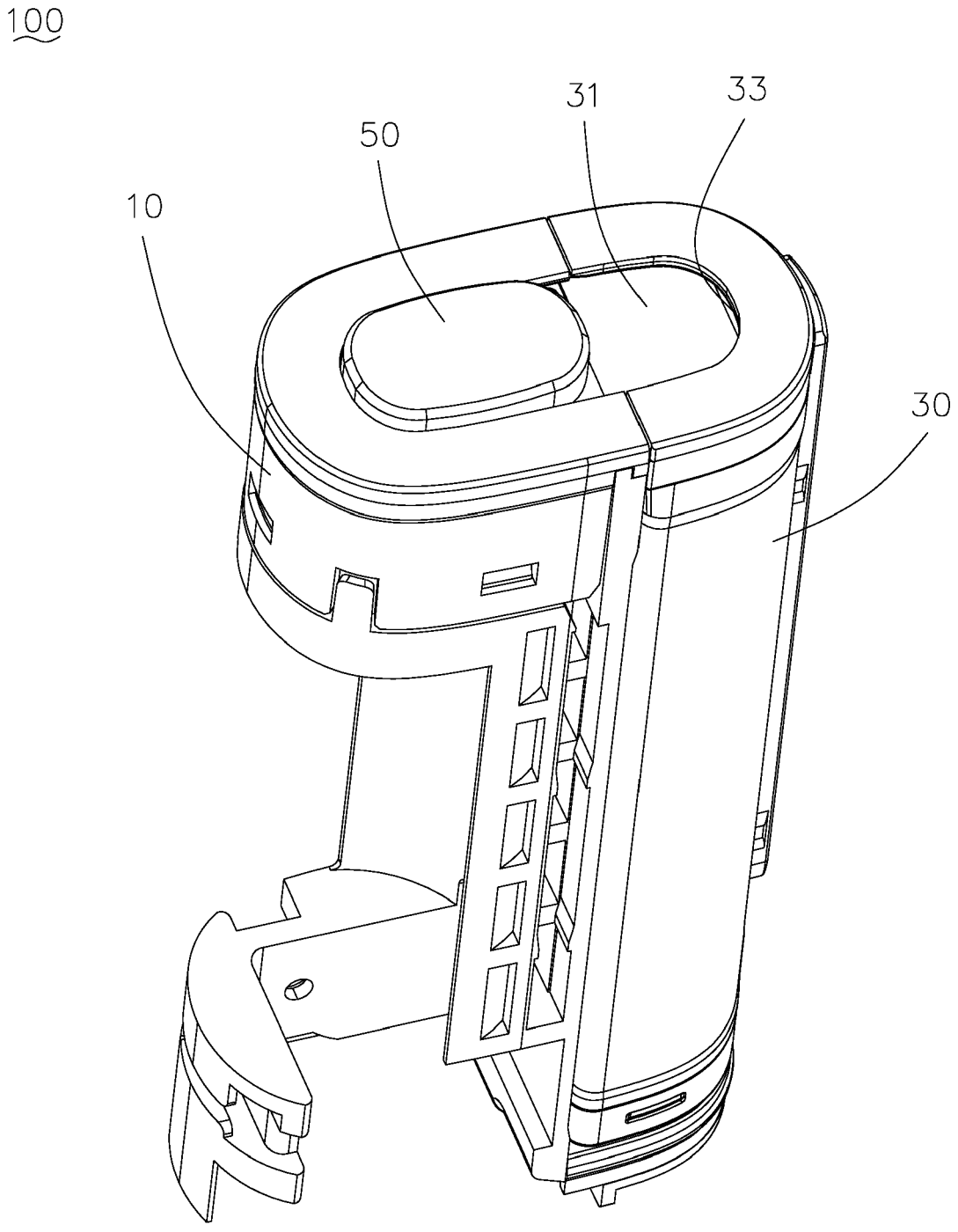

FIG. 1

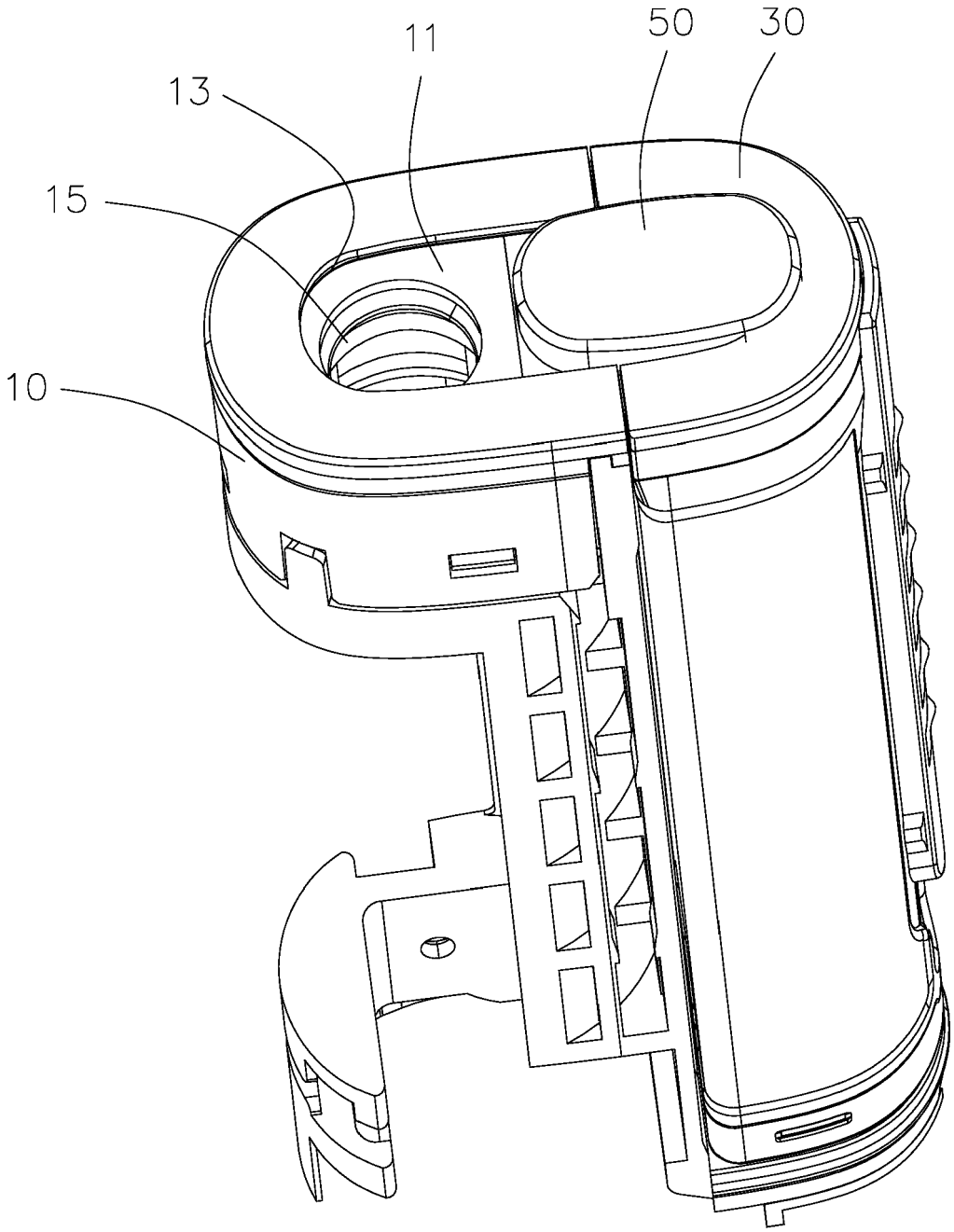

FIG. 2

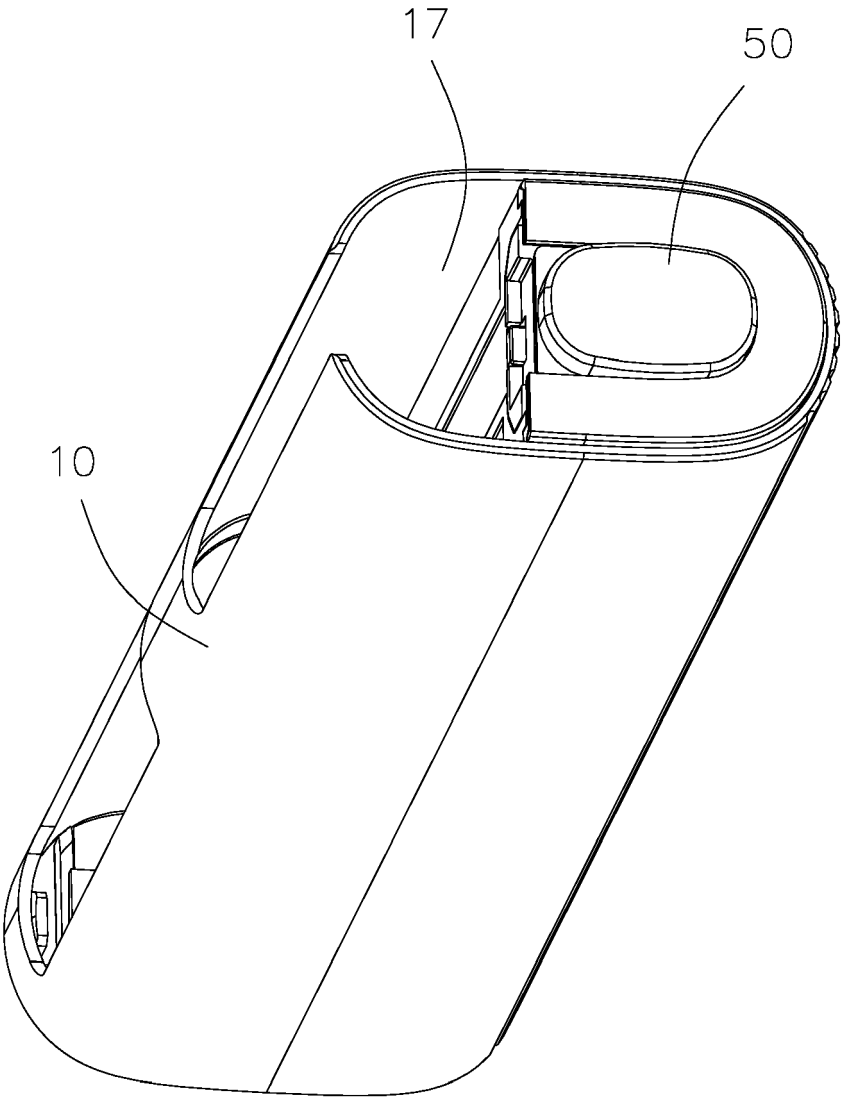

FIG. 3

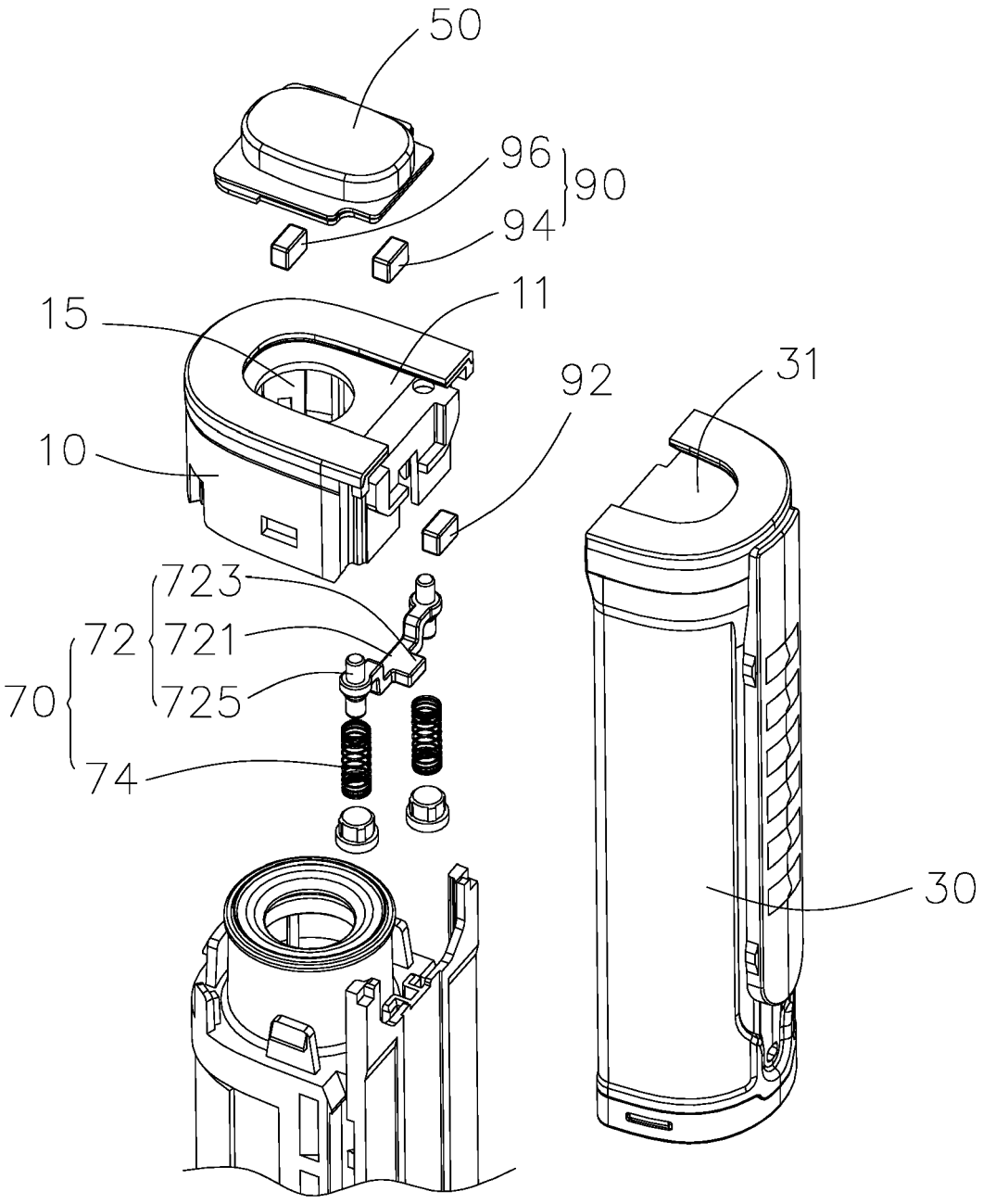

FIG. 4

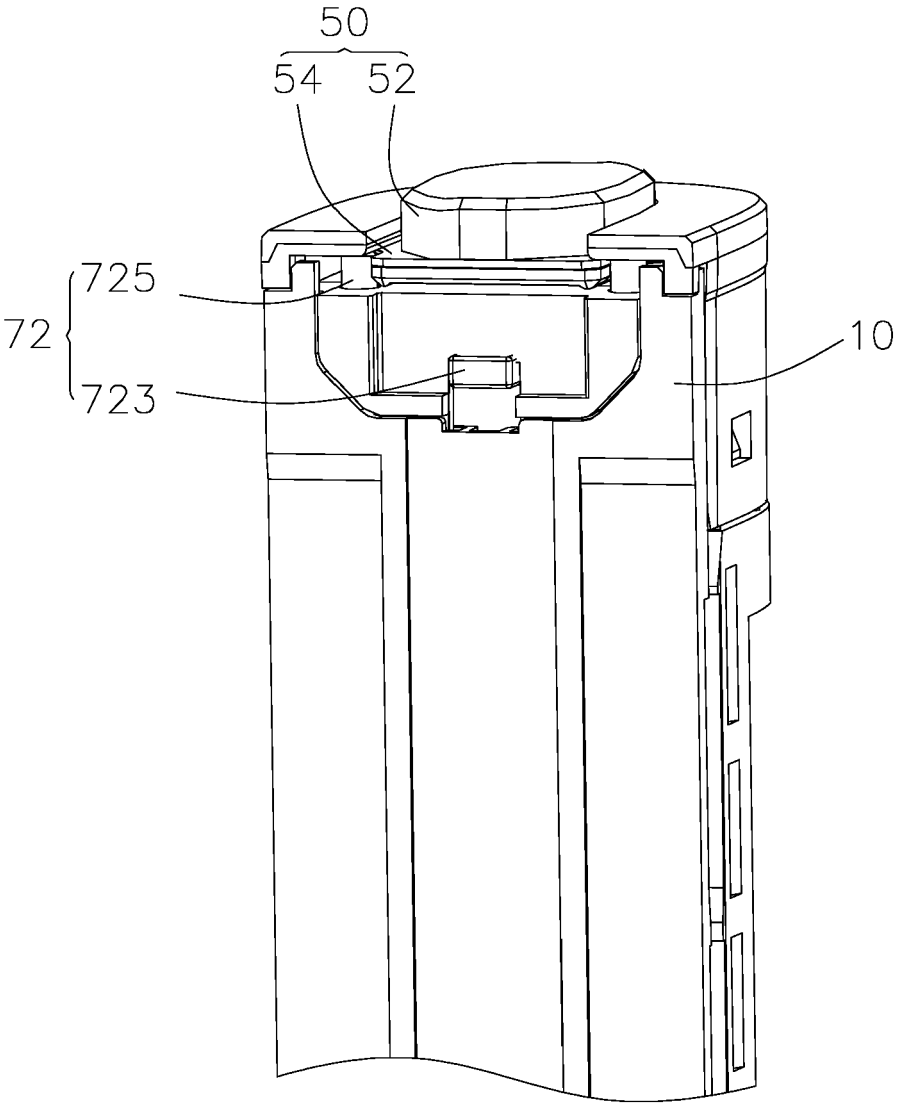

FIG. 5

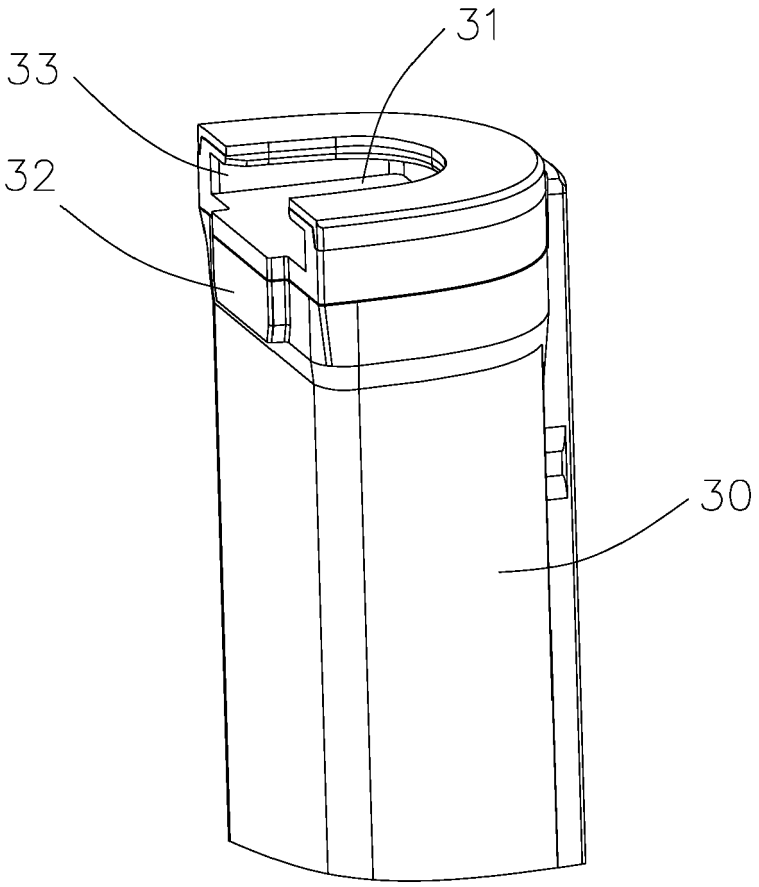

FIG. 6

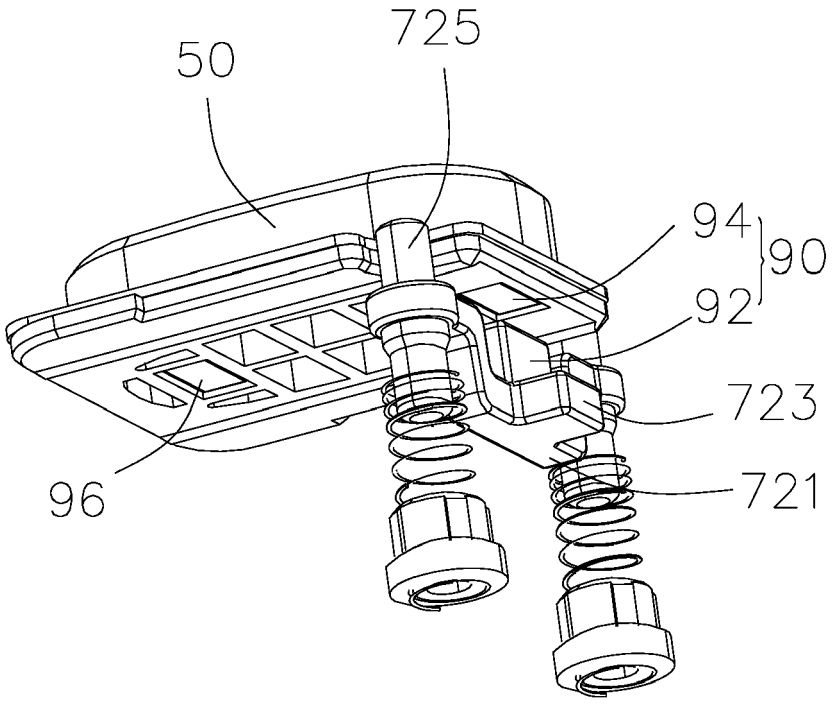

FIG. 7

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EUROPEAN SEARCH REPORT

Application Number
EP 23 17 0995

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A24F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	31 October 2023	Alaguero, Daniel

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