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(54) **BAKING SMOKING TOOL**

(57) The present invention relates to a baked smoking device, which comprises a body, a heating assembly, and a sliding button. The body is provided with an accommodating cavity, and the heating assembly is disposed in the accommodating cavity. The heating assembly is provided with an insertion hole for inserting a cigarette. The sliding button is disposed on the body and cooperated with the heating assembly, configured to slide along a second stroke to push the heating assembly out of the accommodating cavity. The sliding button is slided to different positions, to push out the cigarette and the heating assembly respectively. Therefore, the cigarette can be conveniently replaced, and the disassembly of the heating assembly and a power supply assembly such as a power source of the body can be conveniently implemented, which facilitates the replacement of the heating assembly and clean of the interior of the heating assembly.

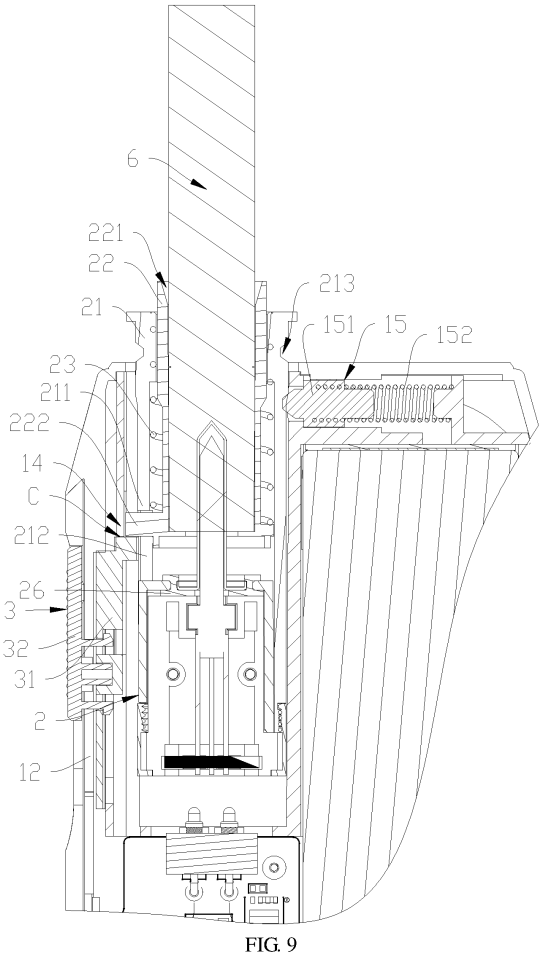


FIG. 9

EP 3 777 580 A1

Description

TECHNICAL FIELD

[0001] The present invention relates to the field of cigarette substitutes, in particular to a baked smoking device.

BACKGROUND

[0002] Dozens of cancer-causing chemicals, such as tar, are found in the smoke produced by the burning of conventional cigarettes, and these chemicals will cause great harm to human health. In addition, the smoke diffuses in the air to form secondhand smoke (SHS), which will also cause harm to the health of people around after inhalation.

[0003] With the advancement of science and technology and the pursuit of people on healthy life, a low-temperature baked smoking device appeared on the market, which heats and bakes solid smoking substance such as tobacco to generate smoke. The heating process is controlled in a relatively low temperature range, and the tobacco does not need to be burned, which effectively reduces the production of harmful chemicals.

[0004] A typical low-temperature baked smoking device in the prior art includes a power supply and a heating assembly. Conventionally, the power supply and the heating assembly are integrally arranged and cannot be disassembled. As a result, the heating assembly cannot be replaced separately. Besides, it is not easy to clean the inside of the heating assembly.

SUMMARY

[0005] A technical problem to be solved by the present invention is to provide a baked smoking device.

[0006] A technical solution of the present invention adopted for solving the technical problem is to provide a baked smoking device including a body, a heating assembly and a sliding button, wherein;

the body is provided with an accommodating cavity, and the heating assembly is disposed in the accommodating cavity;

the heating assembly is provided with an insertion hole for inserting a cigarette;

the sliding button is disposed on the body and cooperated with the heating assembly, configured to slide along a second stroke to push the heating assembly out of the accommodating cavity.

[0007] Preferably, the sliding button further is configured to slide along a first stroke to push the cigarette in the heating assembly out of the insertion hole.

[0008] Preferably, the first stroke and the second stroke are two continuous strokes.

[0009] Preferably, the heating assembly includes a sleeve and a push tube;

an inner hole of the push tube is defined as the insertion hole for inserting the cigarette; the sleeve is sleeved outside the push tube; the sliding button abuts against the push tube; the sliding button is able to drive the push tube and the cigarette to move together in the first stroke from a first position adjacent to an inner end of the insertion hole to a second position adjacent to an outer end of the insertion hole.

[0010] Preferably, a reposition member is provided between the sleeve and the push tube to provide a force for resetting the push tube to the first position.

[0011] Preferably, the sleeve is provided with a first limiting portion for limiting the push tube when the push tube moves to the second position; and when the sliding button continues to move to a third position adjacent to the outside of the accommodating cavity, the first limiting portion is able to drive the heating assembly to move towards the outside of the accommodating cavity to complete the second stroke of the heating assembly.

[0012] Preferably, the push tube is provided with an abutting portion that extends laterally outwards; a side wall of the sleeve is axially provided with a sliding groove; the abutting portion is clamped into the sliding groove, and the sliding button abuts against the abutting portion.

[0013] Preferably, a side of the sliding groove adjacent to the outside of the accommodating cavity defines the first limiting portion.

[0014] Preferably, a second limiting portion is provided on the body, for limiting the sliding button when the sliding button drives the heating assembly to move towards the outside of the accommodating cavity to the third position.

[0015] Preferably, the heating assembly further includes a heating element extending from the bottom of the insertion hole to an outer end opening of the insertion hole.

[0016] Preferably, the heating assembly further includes a protective cover detachably sleeved on the heating element;

the heating assembly includes a clamping seat configured to be clamped and fixed with the protective cover;

the clamping seat is annular and is sleeved on the heating element; an inner clamping groove is provided on a side wall of an inner periphery of the clamping seat; an outer periphery of an inner end of the protective cover is provided with a retaining ring that is clamped with the inner clamping groove; an outer periphery of the retaining ring is provided with an surrounding plate extending in a direction of the outer end opening of the insertion hole.

[0017] Preferably, the heating assembly further includes a heat insulation seat for mounting the heating element; a thermal conductivity of the heat insulation seat is lower than that of the heating element;

the heating assembly further includes a support assembly and a lock sleeve; the support assembly includes a first clamping member, a second clamping member and a support sleeve;

the first clamping member and the second clamping member clamp the heat insulation seat; two sides of the first clamping member and the second clamping member

towards each other are respectively provided with a positioning groove for being clamped with the heat insulation seat; the heating element extends outward from the heat insulation seat;
the support sleeve is sleeved outside the first clamping member and the second clamping member; a positioning ring is provided on an inner periphery of one end of the support sleeve, for abutting the first clamping member and the second clamping member to limit axial positions thereof; an outer periphery of the clamping seat is provided with an outer clamping groove that is clamped with the positioning ring;
one end of the sliding groove away from the accommodating cavity extends to an end of the sleeve; the support assembly is mounted into the sleeve via an end of the sleeve where the sliding groove is located; the lock sleeve is connected with the end of the sleeve where the sliding groove is located, to lock the support assembly in the sleeve.

[0018] Preferably, a side wall of the body is provided with a mounting hole for the sliding button to slide back and forth; the sliding button includes an inner sliding member and an outer sliding member respectively located on inner and outer sides of the side wall of the body; the outer sliding member extends through the mounting hole to be clamped and fixed with the inner sliding member; a sliding rail for the sliding button to slide is provided inside the body.

[0019] Preferably, the body is provided with a locking structure for positioning and fixing the inserted heating assembly.

[0020] Preferably, the locking structure includes a lock head; the lock head retractably extends from a side wall surface of the accommodating cavity into the accommodating cavity; an outer wall surface of the heating assembly is provided with a lock groove for the lock head to be snapped into.

[0021] Preferably, an end of the lock head towards the accommodating cavity is tapered or round; a side wall surface of the lock groove is an inclined surface or an arc surface.

[0022] Preferably, the lock groove is circumferentially provided on an outer surface of the heating assembly.

[0023] Preferably, the locking structure further includes an elastic member for providing an elastic force to keep the lock head extending into the accommodating cavity.

[0024] The baked smoking device of the present invention has the following beneficial effects: The sliding button is slided to different positions, to push out the cigarette and the heating assembly respectively. Therefore, the cigarette can be conveniently replaced, and the disassembly of the heating assembly and a power supply assembly such as a power source of the body can be conveniently implemented, which facilitates the replacement of the heating assembly and clean of the interior of the heating assembly.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] The present invention is described in further detail below with reference to the accompanying drawings and embodiments.

FIG. 1 is a structural view of a baked smoking device when a cigarette is inserted according to an embodiment of the present invention.
FIG. 2 is a partial cross-sectional view of the baked smoking device with the cigarette shown in FIG. 1.
FIG. 3 is a three-dimensional structural view of a heating assembly of the baked smoking device shown in FIG. 1.
FIG. 4 is a sectional view of the baked smoking device shown in FIG. 3.
FIG. 5 is a sectional view showing the engagement of a protective cover and a clamping seat in FIG. 4.
FIG. 6 is a sectional view showing that a push tube of the heating assembly with the cigarette as shown in FIG. 2 is in a first position.
FIG. 7 is a sectional view showing that a sliding button of the baked smoking device with the cigarette pushes the push tube of the heating assembly to a second position.
FIG. 8 is a sectional view showing that the push tube of the heating assembly shown in FIG. 7 is in the second position.
FIG. 9 is a sectional view showing that the sliding button of the baked smoking device with the cigarette pushes the heating assembly to a third position.

DETAILED DESCRIPTION

[0026] In order to describe the technical features, objectives and effects of the present invention more clearly, the specific implementations of the present invention are described in detail below with reference to the accompanying drawings.

[0027] As shown in FIGS. 1 and 2, a baked smoking device in a preferred embodiment of the present invention includes a body 1, a heating assembly 2, a sliding button 3, a power source 4 and a control board 5.

[0028] The body 1 includes a casing. The body 1 is provided with an accommodating cavity 11, and the heating assembly 2 is inserted in the accommodating cavity 11. The heating assembly 2 is provided with an insertion hole 221 for inserting a cigarette 6.

[0029] The sliding button 3 is mounted on the body 1 and mounted to the heating assembly 2. The sliding button 3 is cooperated with the heating assembly 2, and configured to slide along a first stroke to push the cigarette 6 in the heating assembly 2 out of the insertion hole 221 and to slide along a second stroke to push the heating assembly 2 out of the accommodating cavity 11.

[0030] The sliding button 3 is slided to different positions, to push out the cigarette 6 and the heating assembly 2 respectively. Therefore, the cigarette 6 can be con-

veniently replaced, and the disassembly of the heating assembly 2 and a power supply assembly such as the power source 4 of the body 1 can be conveniently implemented, which facilitates the replacement of the heating assembly 2 and clean of the interior of the heating assembly 2.

[0031] A side wall of the body 1 is provided with a mounting hole 12 for the sliding button 3 to slide back and forth. The sliding button 3 includes an inner sliding member 31 and an outer sliding member 32 respectively located on inner and outer sides of the side wall of the body 1. The outer sliding member 32 extends through the mounting hole 12 to be clamped and fixed with the inner sliding member 31. A sliding rail 13 for the sliding button 3 to slide is provided inside the body 1. In other embodiments, the sliding button 3 may alternatively be an integrated structure that is able to slide on the body 1.

[0032] As shown in FIGS. 2 to 9, in some embodiments, the heating assembly 2 includes a sleeve 21, a push tube 22, a reposition member 23, a heating element 24, a protective cover 25, a clamping seat 26, a heat insulation seat 27, a support assembly 28 and a lock sleeve 29.

[0033] An inner hole of the push tube 22 is defined as the insertion hole 221 for inserting the cigarette 6. The sleeve 21 is sleeved outside the push tube 22. The sliding button 3 abuts against the push tube 22, and the sliding button 3 is able to drive the push tube 22 and the cigarette 6 to move together in the first stroke from a first position A adjacent to an inner end of the insertion hole 221 to a second position B adjacent to an outer end of the insertion hole 221.

[0034] The reposition member 23 is provided between the sleeve 21 and push tube 22 to provide a force for resetting the push tube 22 to the first position A. Preferably, the reposition member 23 is a spring sleeved outside the push tube 22, and two ends of the spring respectively abut against the sleeve 21 and the push tube 22. The reposition member 23 can provide a force to the push tube 22 towards an inner end of the accommodating cavity 11. When the cigarette 6 is pushed out, and the sliding button 3 is released, the push tube 22 will move to the first position A automatically. In other embodiments, the push tube 22 may alternatively be pushed to the first position A manually.

[0035] In order to facilitate the control of the stroke range, the sleeve 21 is provided with a first limiting portion 211 for limiting the push tube 22 when the push tube 22 moves to the second position B. When the sliding button 3 continues to move to a third position C adjacent to the outside of the accommodating cavity 11, the first limiting portion 211 is able to drive the heating assembly 2 to move simultaneously towards the outside of the accommodating cavity 11 to complete the second stroke of the heating assembly 2.

[0036] Preferably, the first stroke and the second stroke are two continuous strokes. If only the cigarette 6 needs to be pushed out, the push tube 22 moves to the second position B. If the heating assembly 2 needs to be pushed out, the push tube 22 is continuously pushed outward from the second position B to the third position C, so that the heating assembly 2 moves towards the outside of the accommodating cavity 11. In this way, the heating assembly 2 can be removed for maintenance.

[0037] In some embodiments, the push tube 22 is provided with an abutting portion 222 that extends laterally outwards, and a side wall of the sleeve 21 is axially provided with a sliding groove 212. The abutting portion 222 is clamped into the sliding groove 212, and the abutting portion 222 is able to move in the sliding groove 212. The sliding button 3 abuts against the abutting portion 222, and applies a force to the abutting portion 222 to drive the push tube 22 to move towards the outside of the accommodating cavity 11. The sliding button 3 may alternatively abut against a structure such as a positioning hole on an end or a side wall of the push tube 22, to force the push tube 22 to move outward.

[0038] Preferably, a side of the sliding groove 212 adjacent to the outside of the accommodating cavity 11 defines the first limiting portion 211. In other embodiments, the first limiting portion 211 may alternatively be separately provided on the sleeve 21.

[0039] Further, a second limiting portion 14 is provided on the body 1 for limiting the sliding button 3 when the sliding button 3 drives the heating assembly 2 to move towards the outside of the accommodating cavity 11 to the third position C. A distance between the second position B and the third position C is not limited, as long as the heating assembly 2 is pushed outward for a certain distance so that a user can pull the heating assembly 2 out of the accommodating cavity 11. Of course, the sliding button 3 may alternatively rely on the mounting hole 12 to limit a moving range thereof. When the sliding button 3 moves to a boundary of a side of the mounting hole 12, the heating assembly 2 is just moved to the third position C.

[0040] The heating element 24 is disposed on the heat insulation seat 27. The heating element 24 extends from the bottom of the insertion hole 221 to an outer end opening of the insertion hole 221. The protective cover 25 is detachably sleeved on the heating element 24. When the heating assembly 2 is removed from the accommodating cavity 11, the protective cover 25 can be removed for replacement or cleaning.

[0041] A thermal conductivity of the heat insulation seat 27 is lower than that of the heating element 24, which can prevent the heat on the heating element 24 from being transferred to the support assembly 28, a circuit board and a guide, etc., so as to reduce the safety risk.

[0042] An end of the protective cover 25 towards an outer end of the insertion hole 221 is a closed pointed structure. When the cigarette 6 is inserted into the insertion hole 221, the closed pointed structure facilitates the insertion of the protective cover 25 into the cigarette 6, and also prevents chemicals generated when the cigarette 6 is heated from entering the protective cover 25.

[0043] Generally, the heating element 24 has a cylin-

drical or sheet shape. An inner surface of the protective cover 25 may be closely fit with or spaced apart from the heating element 24, as long as the heat can be transferred to the protective cover 25 to heat the cigarette 6.

[0044] As shown in FIGS. 3 and 4, in some embodiments, the support assembly 28 includes a first clamping member 281, a second clamping member 282 and a support sleeve 283. The first clamping member 281 and the second clamping member 282 clamp the heat insulation seat 27. Two sides of the first clamping member 281 and the second clamping member 282 towards each other are respectively provided with a positioning groove 2811 for engaging the heat insulation seat 27, to facilitate positioning.

[0045] The heating element 24 extends outward into the insertion hole 221 from the heat insulation seat 27. Preferably, an abutting wall 223 is provided at the bottom of the insertion hole 221. The abutting wall 223 is able to abut and position an inner end of the cigarette 6, and the abutting wall 223 is provided with a through hole 224 for the heating element 24 to extend through. The abutting wall 223 and the push tube 22 are of an integrated structure, or alternatively be two separate components that are relatively fixed in position.

[0046] The support sleeve 283 is sleeved outside the first clamping member 281 and the second clamping member 282. A positioning ring 2831 is provided on an inner periphery of one end of the support sleeve 283 adjacent to the insertion hole 221, for abutting the first clamping member 281 and the second clamping member 282 to limit axial positions thereof. In other embodiments, the positioning ring 2831 may alternatively be located on an inner periphery of one end of the support sleeve 283 away from the insertion hole 221.

[0047] Preferably, one end of the sliding groove 212 away from the accommodating cavity 11 extends to an end of the sleeve 21. The support assembly 28 is mounted into the sleeve 21 via an end of the sleeve 21 where the sliding groove 212 is located. Meanwhile, the abutting portion 222 is mounted into the sliding groove 212 via an open end of the sliding groove 212. The lock sleeve 29 is connected with the end of the sleeve 21 where the sliding groove 212 is located, to lock the support assembly 28 in the sleeve 21.

[0048] Preferably, the clamping seat 26 is located on a side of the through hole 224 opposite to the insertion hole 221, and the clamping seat 26 is configured to be clamped and fixed with the protective cover 25. In some embodiments, the clamping seat 26 is annular and is sleeved on the heating element 24.

[0049] As shown in FIG. 5, an inner clamping groove 261 is provided on a side wall of an inner periphery of the clamping seat 26, and an outer periphery of an inner end of the protective cover 25 is provided with a retaining ring 251 that is clamped with the inner clamping groove 261. Further, an outer periphery of the clamping seat 26 is provided with an outer clamping groove 262 that is clamped with the positioning ring 2831 of the support sleeve 283. In this way, both the inner and outer peripheries of the clamping seat 26 are positioned and fixed. In other embodiments, the protective cover 25 may be clamped with only the inner or outer periphery of the clamping seat 26.

[0050] Preferably, the clamping seat 26 is made of a soft material, which is convenient for the protective cover 25 to squeeze the clamping seat 26 and snap into the inner clamping groove 261, and is also convenient for the clamping seat 26 to be disassembled. When the protective cover 25 is removed, the clamping seat 26 may also be removed simultaneously for cleaning.

[0051] An outer size of the through hole 224 is smaller than a size of the inner periphery of the clamping seat 26, which facilitates the abutment of the clamping seat 26 and prevents the protective cover 25 from being pulled out of the through hole 224.

[0052] Preferably, an outer periphery of the retaining ring 251 is provided with a surrounding plate 252 extending in a direction of the outer end opening of the insertion hole 221. The surrounding plate 252 and the retaining ring 251 form a container outside the protective cover 25, which is used to contain an impurity falling from the protective cover 25 during use, so as to prevent contamination of other components. Preferably, a gap is defined between an inner periphery of the through hole 224 and an outer wall surface of the protective cover 25, so that the impurity on the protective cover 25 is able to fall from between the through hole 224 and the protective cover 25 to the container formed by the surrounding plate 252 and the retaining ring 251.

[0053] Further, as shown in FIGS. 2, 7, and 8, the body 1 is provided with a locking structure 15 for positioning and fixing the inserted heating assembly 2. As the heating assembly 2 is fixed in position, it will not shake and loosen during use.

[0054] In some embodiments, the locking structure 15 includes a lock head 151. The lock head 151 retractably extends from a side wall surface of the accommodating cavity 11 into the accommodating cavity 11. An outer wall surface of heating assembly 2 is provided with a lock groove 213 for the lock head 151 to be snapped into. When the lock head 151 is snapped into the lock groove 213, the heating assembly 2 is prevented from leaving the accommodating cavity 11.

[0055] Preferably, an end of the lock head 151 towards the accommodating cavity 11 is tapered or round, and a side wall surface of the lock groove 213 is an inclined surface or an arc surface, enabling the heating assembly 2 to overcome a locking force of the lock head 151 under the push by the sliding button 3 to let the lock head 151 be retracted, so that the heating assembly 2 is removed from the accommodating cavity 11. In other embodiments, when the heating assembly 2 needs to be removed from the accommodating cavity 11, the lock head 151 may alternatively be retracted manually, so that the lock of the lock head 151 is released.

[0056] Generally, the locking structure 15 further in-

cludes an elastic member 152 that provides an elastic force to keep the lock head 151 extending into the accommodating cavity 11. The elastic member 152 is a spring. Further, in this embodiment, the lock groove 213 is circumferentially provided on an outer surface of the sleeve 21, so that a circumferential position of the heating assembly 2 when mounting into the accommodating cavity 11 can be neglected.

[0057] Understandably, the above technical features can be arbitrarily combined without limitation.

[0058] The above described are merely the embodiments of the present invention and are not intended to constitute a limitation to the scope of the patent of the present invention. Any equivalent structure or process change made based on the specification and accompanying drawings of the present invention, or direct or indirect application thereof in other related technical fields, should fall in the protection scope of the patent of the present invention.

Claims

1. A baked smoking device, comprising a body (1), a heating assembly (2) and a sliding button (3), wherein;
   the body (1) is provided with an accommodating cavity (11), and the heating assembly (2) is disposed in the accommodating cavity (11);
   the heating assembly (2) is provided with an insertion hole (221) for inserting a cigarette (6);
   the sliding button (3) is disposed on the body (1) and cooperated with the heating assembly (2), configured to slide along a second stroke to push the heating assembly (2) out of the accommodating cavity (11).

2. The baked smoking device according to claim 1, wherein the sliding button (3) further is configured to slide along a first stroke to push the cigarette (6) in the heating assembly (2) out of the insertion hole (221).

3. The baked smoking device according to claim 2, wherein the first stroke and the second stroke are two continuous strokes.

4. The baked smoking device according to claim 2, wherein the heating assembly (2) comprises a sleeve (21) and a push tube (22);
   an inner hole of the push tube (22) is defined as the insertion hole (221) for inserting the cigarette (6); the sleeve (21) is sleeved outside the push tube (22); the sliding button (3) abuts against the push tube (22), and the sliding button (3) is able to drive the push tube (22) and the cigarette (6) to move together in the first stroke from a first position (A) adjacent to an inner end of the insertion hole (221) to a second position (B) adjacent to an outer end of the insertion hole (221) .

5. The baked smoking device according to claim 4, wherein a reposition member (23) is provided between the sleeve (21) and the push tube (22) to provide a force for resetting the push tube (22) to the first position (A).

6. The baked smoking device according to claim 4, wherein the sleeve (21) is provided with a first limiting portion (211) for limiting the push tube (22) when the push tube (22) moves to the second position (B); and when the sliding button (3) continues to move to a third position (C) adjacent to the outside of the accommodating cavity (11), the first limiting portion (211) is able to drive the heating assembly (2) to move towards the outside of the accommodating cavity (11) to complete the second stroke of the heating assembly (2).

7. The baked smoking device according to claim 6, wherein the push tube (22) is provided with an abutting portion (222) that extends laterally outwards; a side wall of the sleeve (21) is axially provided with a sliding groove (212);
   the abutting portion (222) is clamped into the sliding groove (212), and the sliding button (3) abuts against the abutting portion (222).

8. The baked smoking device according to claim 7, wherein a side of the sliding groove (212) adjacent to the outside of the accommodating cavity (11) defines the first limiting portion (211).

9. The baked smoking device according to claim 6, wherein a second limiting portion (14) is provided on the body (1), for limiting the sliding button (3) when the sliding button (3) drives the heating assembly (2) to move towards the outside of the accommodating cavity (11) to the third position (C).

10. The baked smoking device according to any one of claims 1 to 9, wherein a side wall of the body (1) is provided with a mounting hole (12) for the sliding button (3) to slide back and forth; the sliding button (3) comprises an inner sliding member (31) and an outer sliding member (32) respectively disposed on inner and outer sides of the side wall of the body (1); the outer sliding member (32) extends through the mounting hole (12) to be clamped and fixed with the inner sliding member (31); a sliding rail (13) for the sliding button (3) to slide is provided inside the body (1).

11. The baked smoking device according to any one of claims 1 to 9, wherein the body (1) is provided with a locking structure (15) for positioning and fixing the

inserted heating assembly (2).

12. The baked smoking device according to claim 11, wherein the locking structure (15) comprises a lock head (151); the lock head (151) retractably extends from a side wall surface of the accommodating cavity (11) into the accommodating cavity (11); an outer wall surface of the heating assembly (2) is provided with a lock groove (213) for the lock head (151) to be snapped into; an end of the lock head (151) towards the accommodating cavity (11) is tapered or round; a side wall surface of the lock groove (213) is an inclined surface or an arc surface.

13. The baked smoking device according to claim 12, wherein the lock groove (213) is circumferentially provided on an outer surface of the heating assembly (2); the locking structure (15) further comprises an elastic member (152) for providing an elastic force to keep the lock head (151) extending into the accommodating cavity (11).

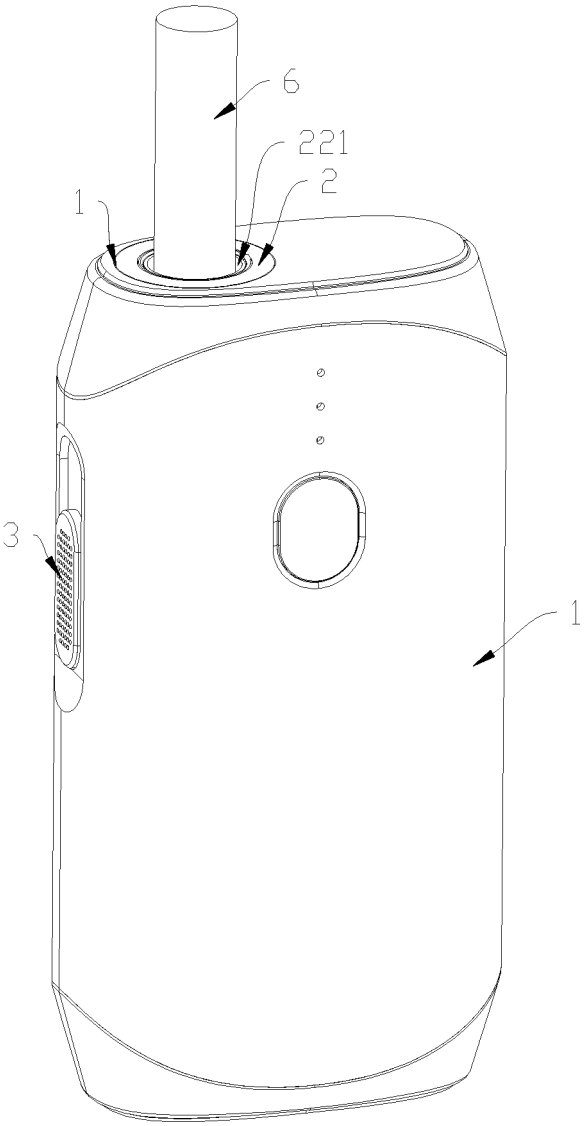


FIG. 1

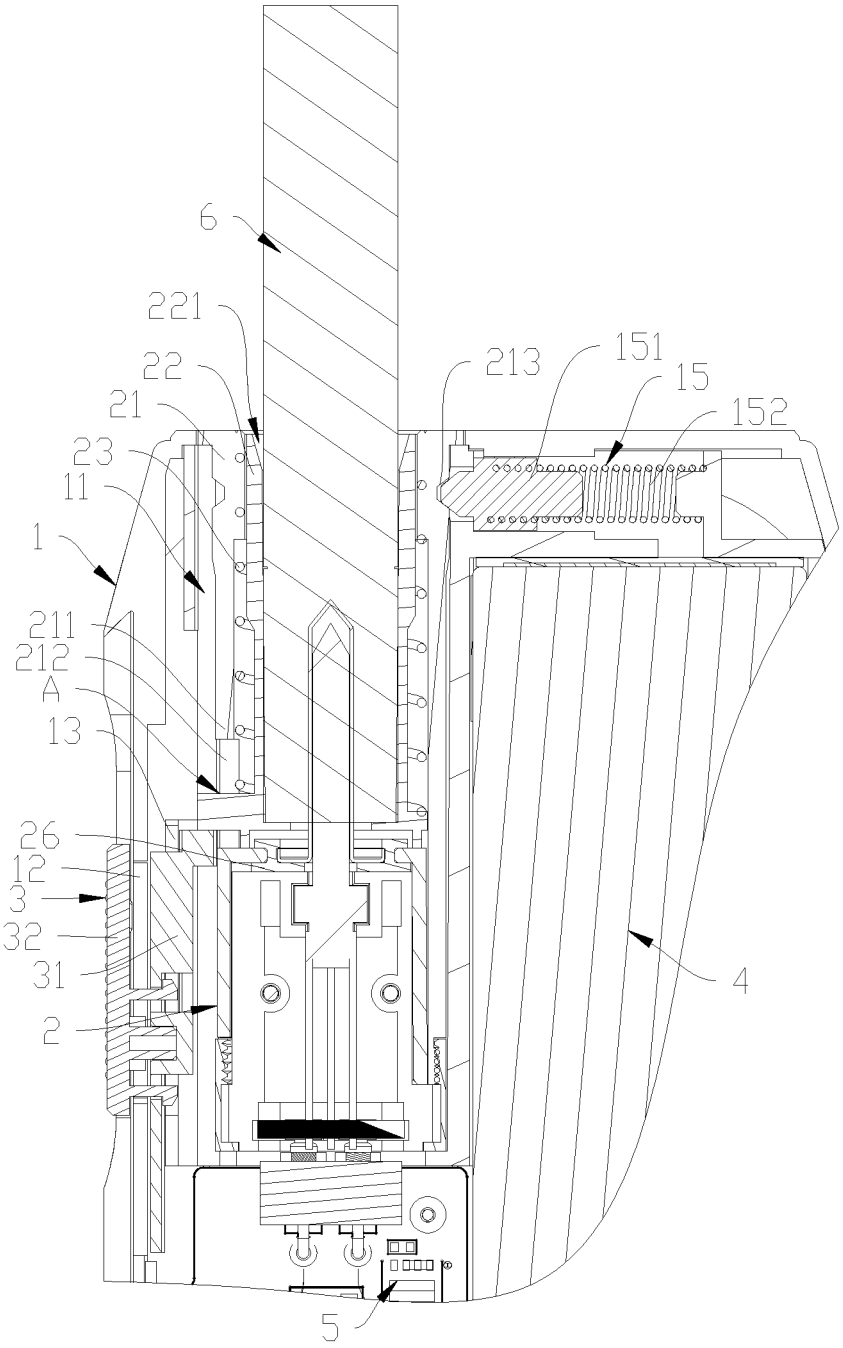


FIG. 2

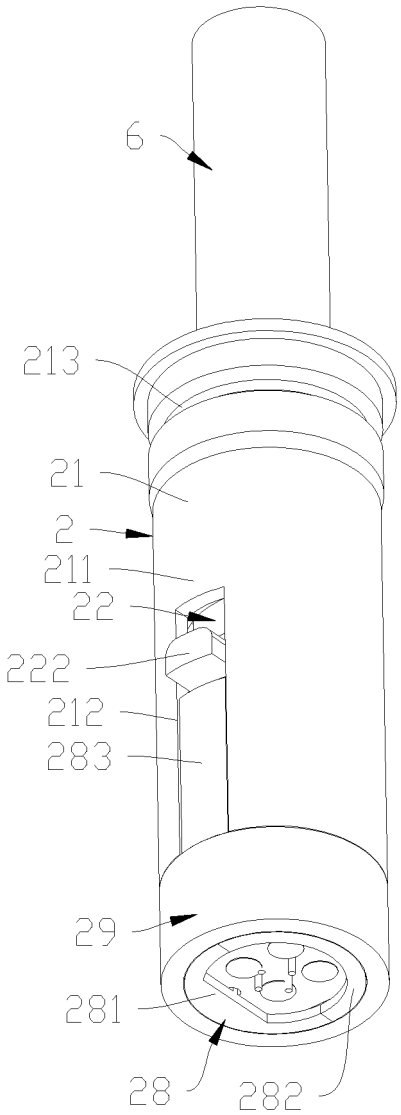


FIG. 3

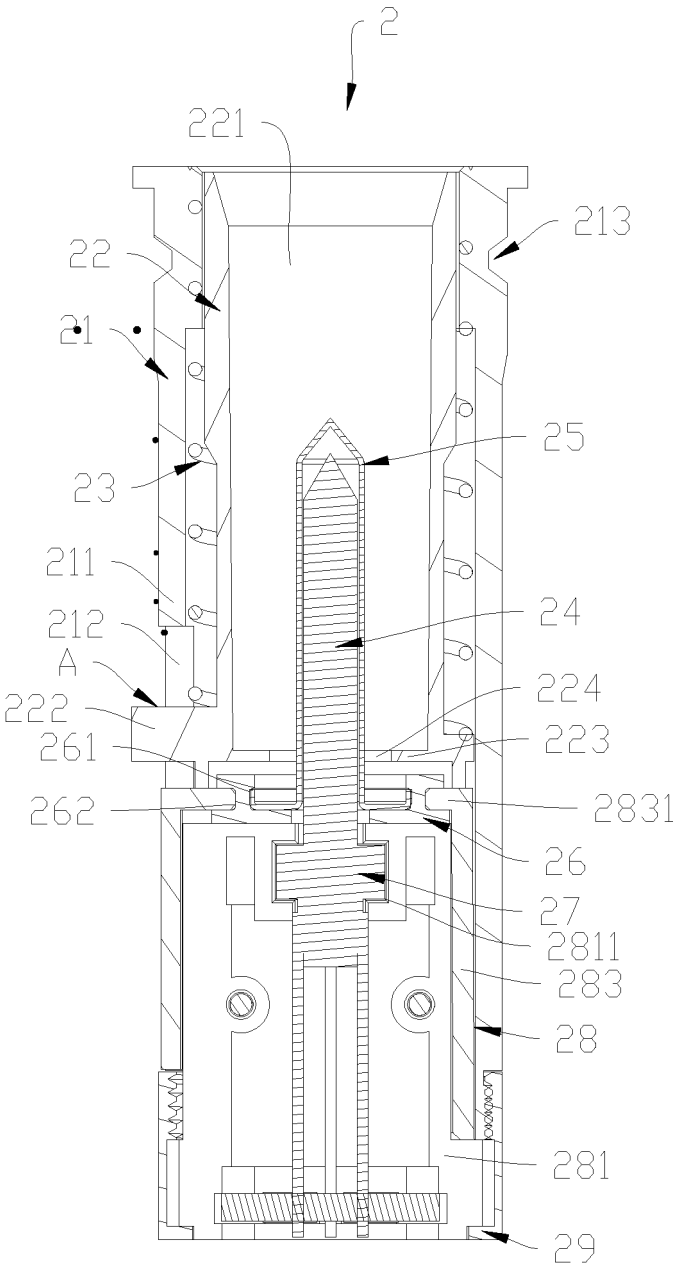

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221
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FIG. 4

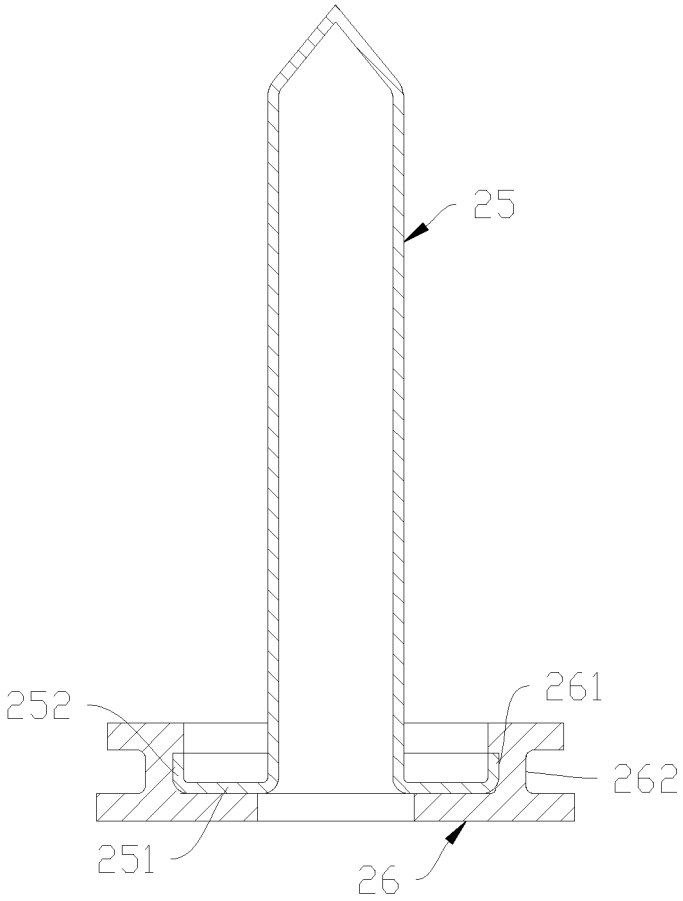


FIG. 5

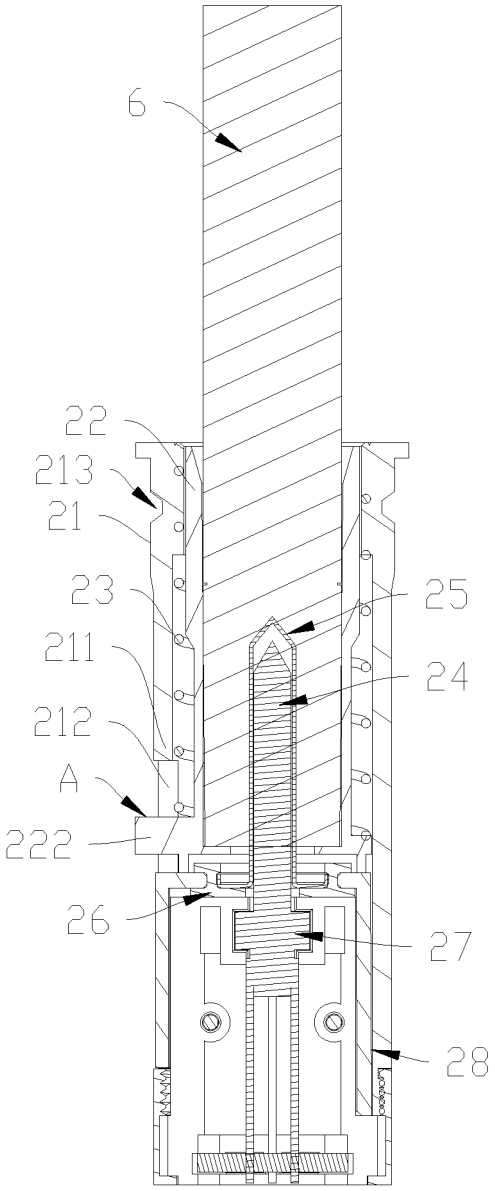


FIG. 6

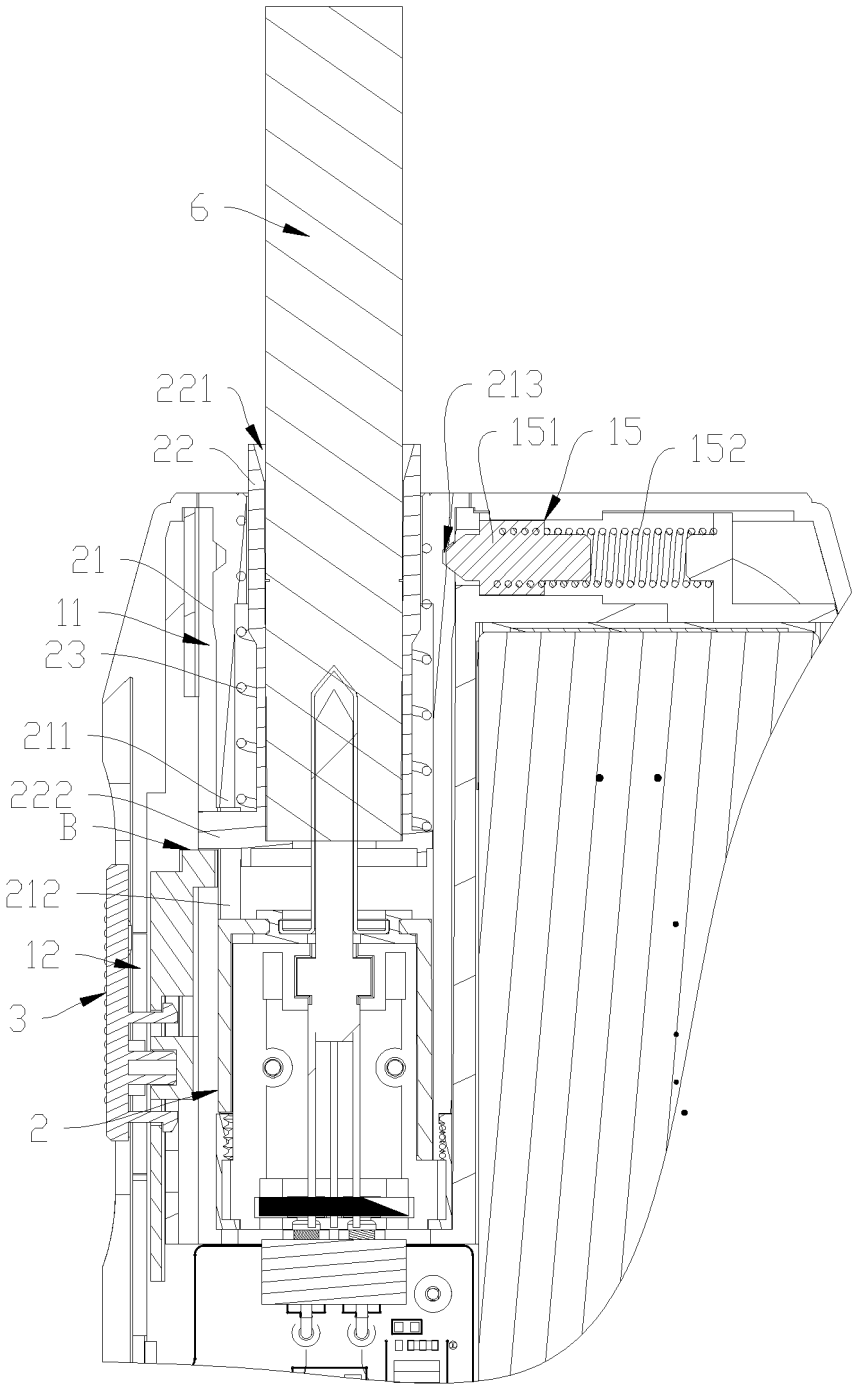


FIG. 7

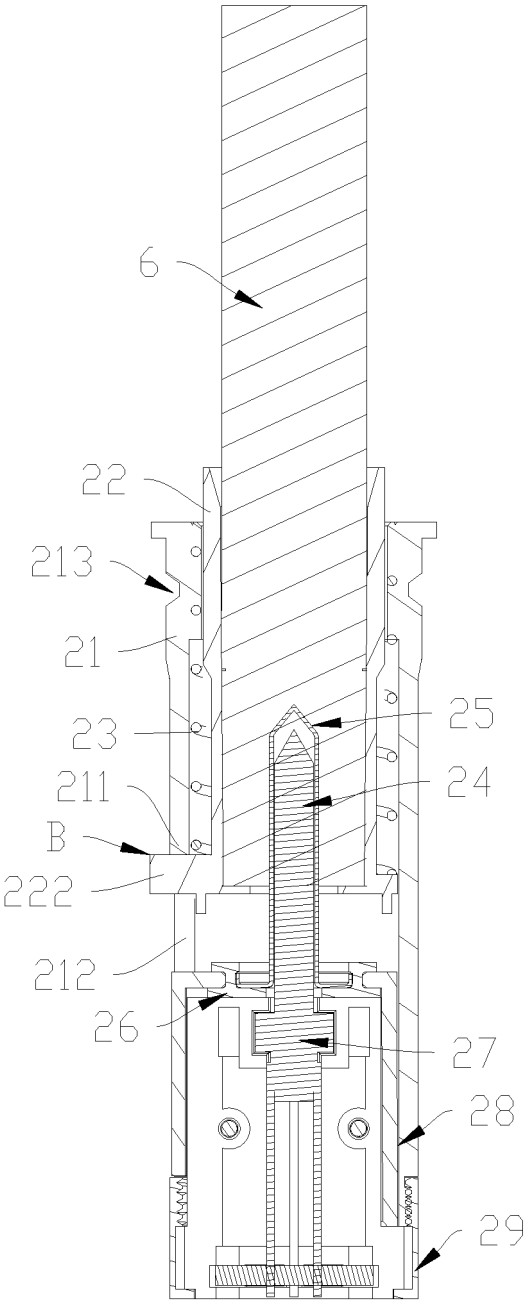


FIG. 8

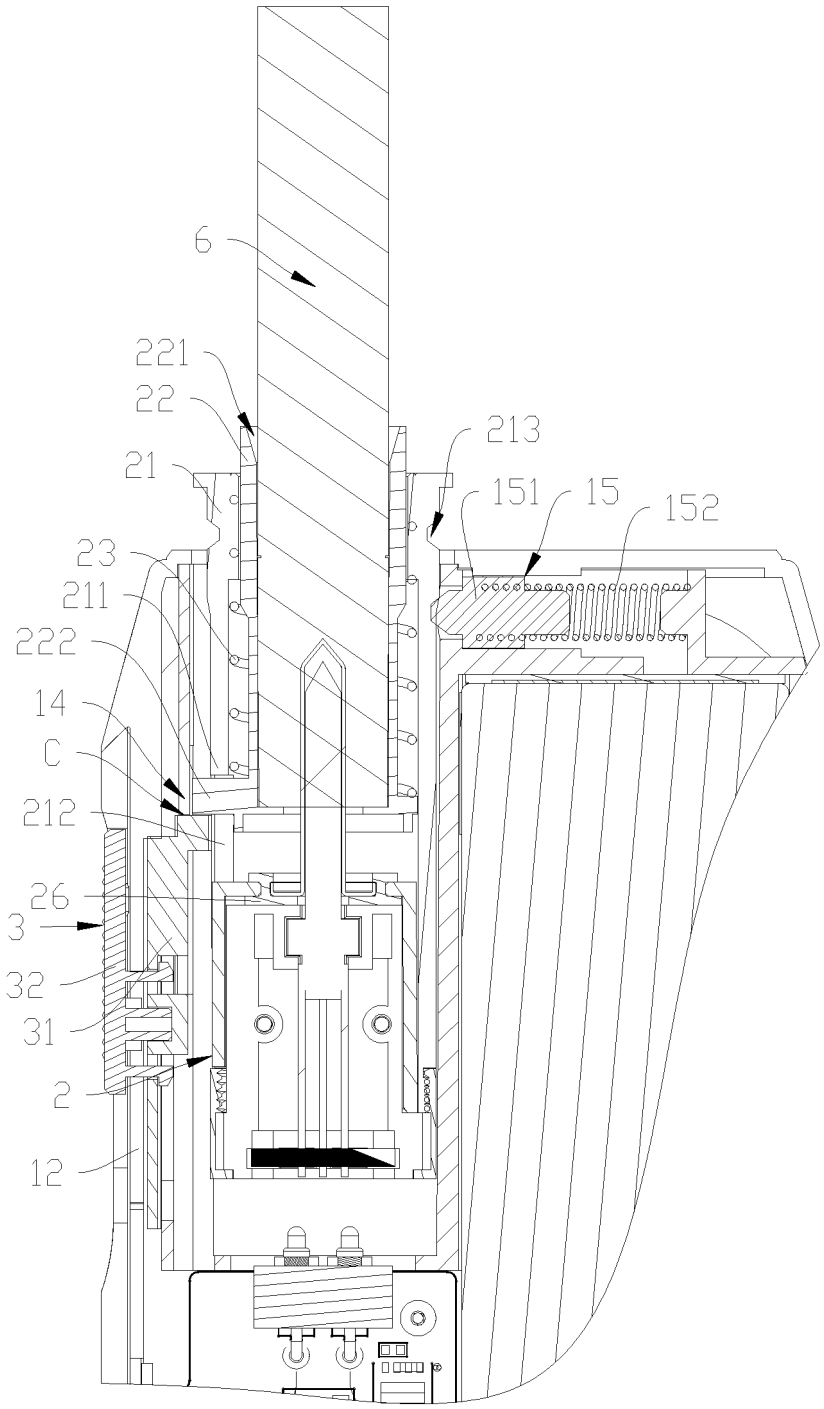


FIG. 9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2018/088023

A. CLASSIFICATION OF SUBJECT MATTER

A24F 47/00(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNABS, VEN, SIPOABS, CNTXT, WOTXT, EPTXT: 烘烤, 加热, 发热, 滑块, 凸块, 推块, 滑钮, 钮, 烟, SMOK+, BAKING, HEAT+, CIGARET+, INSERT+, SLID+, PUSH+, ROAST+

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 206687163 U (CHINA TOBACCO YUNNAN INDUSTRIAL CO., LTD.) 01 December 2017 (2017-12-01) description, paragraphs 22-39, and figures 1-5	1, 10-13
Y	CN 206687163 U (CHINA TOBACCO YUNNAN INDUSTRIAL CO., LTD.) 01 December 2017 (2017-12-01) description, paragraphs 22-39, and figures 1-5	2-13
Y	CN 107319640 A (SHENZHEN BUDDY TECHNOLOGY DEVELOPMENT CO., LTD.) 07 November 2017 (2017-11-07) description, paragraphs 17-24, and figures 1-2	2-13
Y	CN 207220157 U (SHENZHEN BUDDY TECHNOLOGY DEVELOPMENT CO., LTD.) 13 April 2018 (2018-04-13) description, paragraphs [0022]-[0030], and figures 1-3	2-13
A	CN 108056502 A (CHINA TOBACCO HENAN INDUSTRIAL CO., LTD.) 22 May 2018 (2018-05-22) entire document	1-13

☐ Further documents are listed in the continuation of Box C. ☑ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
09 July 2018	**20 July 2018**
Name and mailing address of the ISA/CN **State Intellectual Property Office of the P. R. China** **No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088** **China** Facsimile No. **(86-10)62019451**	Authorized officer Telephone No.

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2018/088023

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
CN 206687163 U	01 December 2017	None	
CN 107319640 A	07 November 2017	CN 207100519 U	16 March 2018
CN 207220157 U	13 April 2018	None	
CN 108056502 A	22 May 2018	None	

Form PCT/ISA/210 (patent family annex) (January 2015)