

Bibliographic data

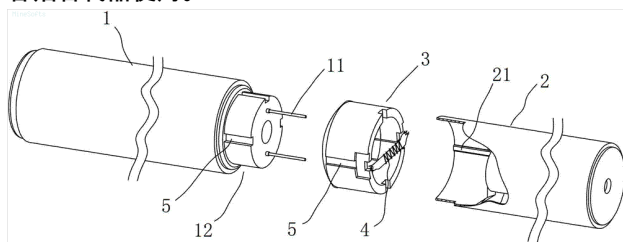
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<u>Titles</u> [MT] Electronic cigarettes assembled by plugging [ZH] 采用插接方式组装的电子烟

Abstract

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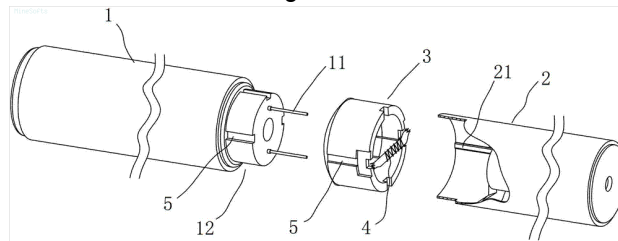
ZH

本实用新型公开了一种采用插接方式组装的电子烟，包括电子烟杆、雾化器以及在电子烟杆和雾化器之间的连接座，连接座内设有发热丝，电子烟杆后端装有作为电源输出端的连接针，连接座的前端设有两个与所述连接针位置对应、供连接针插入的连接孔，发热丝的两端亦分别接入到所述的两个连接孔中，使连接针与发热丝电联接；雾化器的前端中空，形成容纳连接座和电子烟杆的后端嵌入的安装段，连接座和电子烟杆后端这二者的外壁上均设有卡槽，安装段的内壁上设有卡座。连接针插入到连接孔中后，可以给发热丝供电使其发热，卡槽卡座可以给插接动作提供定位、导向与止转的功能。本实用新型插接组装方便，部件少，生产成本低，可作为香烟替代品使用。



MT

The utility model discloses an electronic cigarette assembled in a plug-in mode, which comprises an electronic cigarette rod, an atomizer and a connecting seat between the electronic cigarette rod and the atomizer, a heating wire is arranged in the connecting seat, and the electronic cigarette rod The rear end is equipped with a connecting pin as a power output end, and the front end of the connecting seat is provided with two connecting holes corresponding to the positions of the connecting pins for insertion of the connecting pins, and the two ends of the heating wire are respectively connected to the two In the connecting hole, the connecting pin is electrically connected with the heating wire; the front end of the atomizer is hollow, forming a mounting section for accommodating the connecting seat and the rear end of the electronic cigarette rod, and on the outer wall of the connecting seat and the rear end of the electronic cigarette rod Card slots are all provided, and a card seat is provided on the inner wall of the installation section. After the connecting pin is inserted into the connecting hole, it can supply power to the heating wire to make it generate heat, and the card slot and card holder can provide positioning, guiding and anti-rotation functions for the plugging action. The utility model has the advantages of convenient insertion and assembly, few parts and low production cost, and can be used as a substitute for cigarettes.



Claims

[ZH]	[MT]
1.采用插接方式组装的电子烟，包括位于前段的、具有电源输出端的电子烟杆（1）、位于后段的雾化器（2）以及在电子烟杆（1）和雾化器（2）之间的连接座（3），连接座（3）内设有发热丝（4），其特征在于：所述电源输出端为两支位于电子烟杆（1）后端的连接针（11），连接座（3）的前端设有两个与所述连接针（11）位置对应、供连接针（11）插入的连接孔（31），所述发热丝（4）的两端亦分别接入到所述的两个连接孔（31）中，使连接针（11）与发热丝（4）电联接；雾化器（2）的前端中空，形成容纳连接座（3）和电子烟杆（1）的后端嵌入的安装段，连接座（3）和电子烟杆（1）后端这二者的外壁上均设有卡槽（5），安装段的内壁上设有凸出的、嵌到卡槽（5）内的卡座（21）。	1. An electronic cigarette assembled in a plug-in manner, including an electronic cigarette rod (1) with a power output end in the front section, an atomizer (2) in the rear section, and an electronic cigarette rod (1) and atomizer (2) between the connecting seat (3), the connecting seat (3) is provided with a heating wire (4), and it is characterized in that: the output end of the power supply is two connecting pins (11) located at the rear end of the electronic cigarette rod (1), the front end of the connection seat (3) is provided with two connection holes (31) corresponding to the position of the connection needle (11) for insertion of the connection needle (11), and the two ends of the heating wire (4) are also respectively Connected to the two connection holes (31) to electrically connect the connection needle (11) to the heating wire (4); the front end of the atomizer (2) is hollow to form a housing for the connection seat (3) and the electronic cigarette The installation section embedded in the rear end of the rod (1), the outer wall of the connecting seat (3) and the rear end of the electronic cigarette rod (1) are both provided with a card slot (5), and the inner wall of the installation section is provided with a protrusion The card seat (21) embedded in the card slot (5).
2.根据权利要求1所述的采用插接方式组装的电子烟，其特征在于：所述电子烟杆（1）包括本体以及装在本体后端的连接头（12），连接针（11）与连接头（12）连接，所述电子烟杆（1）后端上的卡槽（5）即设在连接头（12）上。	2. The electronic cigarette assembled by plugging according to claim 1, characterized in that: the electronic cigarette rod (1) includes a main body and a connector (12) mounted on the rear end of the main body, the connecting pin (11) and the The connector (12) is connected, and the slot (5) on the rear end of the electronic cigarette rod (1) is set on the connector (12).
3.根据权利要求1所述的采用插接方式组装的电子烟，其特征在于：连接座（3）上的卡槽（5）至少有两道，与电子烟杆（1）同轴；连接头（12）上的卡槽（5）亦至少有两道，与连接座（3）上的卡槽（5）互相平行并一一对应；同一直线上的前后两道卡槽（5），共用同一个卡座（21）。	3. The electronic cigarette assembled by plugging according to claim 1, characterized in that: there are at least two slots (5) on the connecting seat (3), which are coaxial with the electronic cigarette rod (1); There are also at least two draw-in grooves (5) on the head (12), parallel to each other and one-to-one correspondence with the draw-in grooves (5) on the connecting seat (3); the front and back two draw-in grooves (5) on the same straight line, Share the same deck (21).
4.根据权利要求1~3任一项所述的采用插接方式组装的电子烟，其特征在于：所述连接座（3）整体为硅胶构件，连接孔（31）的孔径小于其对应的连接针（11）的直径。	4. The electronic cigarette assembled by plugging according to any one of claims 1 to 3, characterized in that: the connecting seat (3) is a silicone member as a whole, and the diameter of the connecting hole (31) is smaller than its corresponding The diameter of the connection pin (11).

Description

[ZH]	[MT]
技术领域	technical field
本实用新型涉及一种电子烟。	The utility model relates to an electronic cigarette.
背景技术	Background technique
电子烟是香烟的替代品。电子烟整体结构包括位于前段的电子烟杆、位于后段的雾化器以及嵌紧在雾化器前端的连接座。电子烟杆内藏电源和感应电路，连接座内设有发热丝和纤维棉，雾化器内设有盛装着烟油的储油腔，纤维棉吸收烟油之后，发热丝由电子烟杆内藏的电源供电发热，灼烤纤维棉，使烟油挥发雾化，形成带有烟草味道的烟雾从雾化器后端逸出，被使用者吸入，从而模拟出吸烟的口感。而由于所述烟雾并非真正烟叶所发出，其内不含尼古丁等有害物质，因此该模拟吸烟过程不会对人体造成伤害，不会上瘾，不形成二手烟雾，因此电子烟在过渡戒烟法中被广泛地应用。	E-cigarettes are an alternative to cigarettes. The overall structure of the electronic cigarette includes an electronic cigarette rod located in the front section, an atomizer located in the rear section, and a connecting seat embedded in the front end of the atomizer. The electronic cigarette rod has a built-in power supply and induction circuit. There is a heating wire and fiber cotton in the connecting seat. There is an oil storage chamber filled with e-liquid in the atomizer. After the fiber cotton absorbs the e-liquid, the heating wire is released from the e-cig rod. The hidden power supply supplies heat, burns the fiber cotton, volatilizes and atomizes the e-liquid, and forms tobacco-flavored smoke that escapes from the rear end of the atomizer and is inhaled by the user, thereby simulating the taste of smoking. Since the smoke is not emitted by real tobacco leaves and does not contain harmful substances such as nicotine, the simulated smoking process will not cause harm to the human body, will not be addictive, and will not form second-hand smoke. Therefore, electronic cigarettes are used in the transitional smoking cessation method. widely used.

由于发热丝的热能来自于电源，因此为了使电子烟杆内的电源能够与发热丝电联接，传统的电子烟是将电子烟杆的后端与连接座的前端设计成螺纹联接的，连接座的中部与发热丝的一端联接，连接座的螺纹段与发热丝的另一端联接，从而分别形成两个电路接头；电子烟杆末端亦对应地在中部以及螺纹段设成电源的正负极接头，故当电子烟杆与雾化器的前端（即连接座）旋入联接、拧紧之后，整体电路就完成了，实现了发热丝两端分别与电源两极的电联接。但是，此种做法并不是最佳方案，因为首先电子烟的体积较细，要在这种细管或细杆上加工出内外螺纹并不容易，为了实现装配，还需要配备正极芯、绝缘硅胶圈等物，部件多，生产成本低；其次用户操作时旋出旋入都很麻烦，组装动作不够简单，使用麻烦。	Since the heat energy of the heating wire comes from the power supply, in order to enable the power supply in the electronic cigarette rod to be electrically connected to the heating wire, the traditional electronic cigarette is designed to thread the rear end of the electronic cigarette rod and the front end of the connecting seat into a threaded connection. The middle part of the connecting seat is connected with one end of the heating wire, and the threaded section of the connecting seat is connected with the other end of the heating wire, thereby forming two circuit connectors respectively; the end of the electronic cigarette rod is also correspondingly set in the middle part and the threaded section as the positive and negative terminals of the power supply, so when the electronic cigarette rod and the front end of the atomizer (that is, the connecting seat) are screwed into the connection and tightened, the overall circuit is completed, and the electrical connection between the two ends of the heating wire and the two poles of the power supply is realized. However, this method is not the best solution, because first of all, the volume of electronic cigarettes is relatively small, and it is not easy to process internal and external threads on such thin tubes or thin rods. There are many parts and high production cost; secondly, it is very troublesome for the user to unscrew and screw in during operation, the assembly action is not simple enough, and the use is troublesome.
实用新型内容	Utility model content
本实用新型要解决的技术问题是：提供一种不采用螺纹联接的组装方式的电子烟，且要组装简单快捷，部件数量少。	The technical problem to be solved by the utility model is: to provide an electronic cigarette which does not adopt the assembly method of screw connection, and the assembly is simple and fast, and the number of parts is small.
本实用新型解决其技术问题的解决方案是：	The solution that the utility model solves its technical problem is:

采用插接方式组装的电子烟，包括位于前段的、具有电源输出端的电子烟杆、位于后段的雾化器以及在电子烟杆和雾化器之间的连接座，连接座内设有发热丝，所述电源输出端为两支位于电子烟杆后端的连接针，连接座的前端设有两个与所述连接针位置对应、供连接针插入的连接孔，所述发热丝的两端亦分别接入到所述的两个连接孔中，使连接针与发热丝电联接；雾化器的前端中空，形成容纳连接座和电子烟杆的后端嵌入的安装段，连接座和电子烟杆后端这二者的外壁上均设有卡槽，安装段的内壁上设有凸出的、嵌到卡槽内的卡座。	An electronic cigarette assembled by plugging, including an electronic cigarette rod with a power output end in the front section, an atomizer in the rear section, and a connecting seat between the electronic cigarette rod and the atomizer. There is a heating device in the connecting seat The power output end is two connecting pins located at the rear end of the electronic cigarette rod. The front end of the connecting seat is provided with two connecting holes corresponding to the positions of the connecting pins for insertion of the connecting pins. The two ends of the heating wire It is also connected to the two connecting holes respectively, so that the connecting pin is electrically connected with the heating wire; the front end of the atomizer is hollow, forming a mounting section for accommodating the connecting seat and the rear end of the electronic cigarette rod, the connecting seat and the electronic cigarette rod Both outer walls of the rear end of the tobacco rod are provided with card slots, and the inner wall of the installation section is provided with protruding card seats embedded in the card slots.
作为上述技术方案的进一步改进，所述电子烟杆包括本体以及装在本体后端的连接头，连接针与连接头连接，所述电子烟杆后端上的卡槽即设在连接头上。	As a further improvement of the above technical solution, the electronic cigarette rod includes a body and a connector mounted on the rear end of the body, the connecting pin is connected to the connector, and the slot on the rear end of the electronic cigarette rod is set on the connector.
作为上述技术方案的进一步改进，连接座上的卡槽至少有两道，与电子烟杆同轴；连接头上的卡槽亦至少有两道，与连接座上的卡槽互相平行并一一对应；同一直线上的前后两道卡槽，共用同一个卡座。	As a further improvement of the above technical solution, there are at least two card slots on the connecting seat, which are coaxial with the electronic cigarette rod; there are at least two card slots on the connector, which are parallel to the card slots on the connecting seat and one by one Corresponding; the front and rear card slots on the same straight line share the same card holder.
作为上述技术方案的进一步改进，所述连接座整体为硅胶构件，连接孔的孔径小于其对应的连接针的直径。	As a further improvement of the above-mentioned technical solution, the connecting base is a silicone member as a whole, and the diameter of the connecting hole is smaller than the diameter of the corresponding connecting pin.

本实用新型的有益效果是：本实用新型有两个设计要点：①、将传统的螺旋联接式电源输出结构，设计成连接针与连接孔配合的形式；②、连接座和电子烟杆的后端均设有卡槽，卡槽与卡座配合，同时起到定位、导向和止转的作用。①与②这两点综合一起，使得电子烟的整体装配形式变成了插接式，极其便利，同时减少了整体零部件的数量，节约生产成本。本实用新型可作为香烟替代品，具有不错的戒烟效果。	The beneficial effects of the utility model are: the utility model has two design points: ①, the traditional spiral connection power output structure is designed in the form of connecting pins and connecting holes; ②, the rear of the connecting seat and the electronic cigarette rod Both ends are equipped with card slots, and the card slots cooperate with the card holders, and at the same time play the role of positioning, guiding and anti-rotation. The combination of ① and ② makes the overall assembly form of the electronic cigarette into a plug-in type, which is extremely convenient, and at the same time reduces the number of overall parts and saves production costs. The utility model can be used as a cigarette substitute, and has good smoking cessation effect.
附图说明	Description of drawings
为了更清楚地说明本实用新型实施例中的技术方案，下面将对实施例描述中所需要使用的附图作简单说明。显然，所描述的附图只是本实用新型的一部分实施例，而不是全部实施例，本领域的技术人员在不付出创造性劳动的前提下，还可以根据这些附图获得其他设计方案和附图。	In order to illustrate the technical solutions in the embodiments of the present invention more clearly, the following will briefly describe the accompanying drawings that are used in the description of the embodiments. Apparently, the drawings described are only some embodiments of the utility model, not all embodiments, and those skilled in the art can also obtain other designs and drawings according to these drawings without creative work.
图1是本实用新型的整体外形轴测示意图；	Fig. 1 is a schematic diagram of an overall shape axonometrically of the present utility model;
图2是本实用新型的爆炸图，其中为了表现安装段的内部结构，对雾化器作了部分剖切；	Fig. 2 is an exploded view of the utility model, wherein in order to show the internal structure of the installation section, the atomizer is partially cut;
图3是连接座的正视图。	Figure 3 is a front view of the connection seat.
具体实施方式	Detailed ways

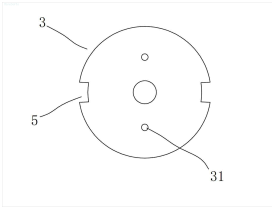
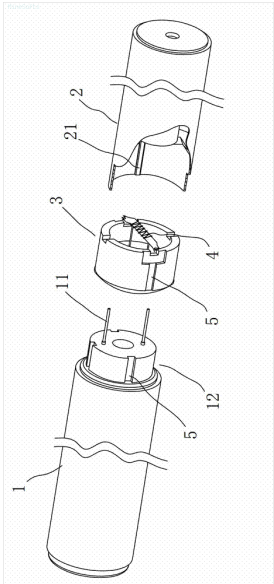
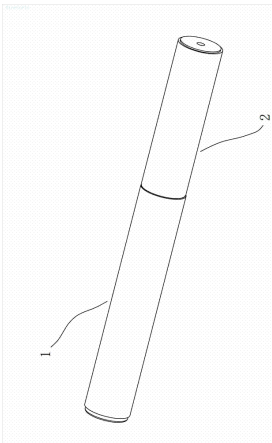
以下将结合实施例和附图对本实用新型的构思、具体结构及产生的技术效果进行清楚、完整地描述，以充分地理解本实用新型的目的、特征和效果。显然，所描述的实施例只是本实用新型的一部分实施例，而不是全部实施例，基于本实用新型的实施例，本领域的技术人员在不付出创造性劳动的前提下所获得的其他实施例，均属于本实用新型保护的范围。另外，文中所提到的所有联接/连接关系，并非单指构件直接相接，而是指可根据具体实施情况，通过添加或减少联接辅件，来组成更优的联接结构。	The idea, specific structure and technical effects of the present utility model will be clearly and completely described below in conjunction with the embodiments and accompanying drawings, so as to fully understand the purpose, characteristics and effects of the present utility model. Apparently, the described embodiments are only some of the embodiments of the present utility model, rather than all embodiments. Based on the embodiments of the present utility model, other embodiments obtained by those skilled in the art without paying creative efforts, All belong to the protection scope of the utility model. In addition, all the connection/connection relationships mentioned in this article do not refer to the direct connection of components, but mean that a better connection structure can be formed by adding or reducing connection accessories according to specific implementation conditions.
参照图1~图3，采用插接方式组装的电子烟，包括位于前段的、具有电源输出端的电子烟杆1、位于后段的雾化器2以及在电子烟杆1和雾化器2之间的连接座3，连接座3内设有发热丝4，所述电源输出端为两支位于电子烟杆1后端的连接针11，连接座3的前端设有两个与所述连接针11位置对应、供连接针11插入的连接孔31，所述发热丝4的两端亦分别接入到所述的两个连接孔31中，使连接针11与发热丝4电联接；雾化器2的前端中空，形成容纳连接座3和电子烟杆1的后端嵌入的安装段，连接座3和电子烟杆1后端这二者的外壁上均设有卡槽5，安装段的内壁上设有凸出的、嵌到卡槽5内的卡座21。	Referring to Figures 1 to 3, the electronic cigarette assembled in the plug-in mode includes an electronic cigarette stick 1 with a power output end at the front section, an atomizer 2 at the rear section, and an electronic cigarette stick 1 and the atomizer 2 The connecting seat 3 is provided with a heating wire 4 inside the connecting seat 3, and the output end of the power supply is two connecting pins 11 located at the rear end of the electronic cigarette rod 1, and the front end of the connecting seat 3 is provided with two connecting pins 11 The position corresponds to the connection hole 31 for the insertion of the connection needle 11, and the two ends of the heating wire 4 are respectively connected to the two connection holes 31, so that the connection needle 11 and the heating wire 4 are electrically connected; the atomizer The front end of 2 is hollow, forming a mounting section for the insertion of the connecting seat 3 and the rear end of the electronic cigarette rod 1. Both the outer walls of the connecting seat 3 and the rear end of the electronic cigarette rod 1 are provided with a card slot 5, and the inner wall of the mounting section A protruding card seat 21 embedded in the card slot 5 is provided on the top.
进一步作为优选的实施方式，所述电子烟杆1包括本体以及装在本体后端的连接头12，连接针11与连接头12连接，所述电子烟杆1后端上的卡槽5即设在连接头12上。	As a further preferred embodiment, the electronic cigarette rod 1 includes a body and a connector 12 mounted on the rear end of the body, the connecting pin 11 is connected to the connector 12, and the card slot 5 on the rear end of the electronic cigarette rod 1 is set on the Connector 12.

进一步作为优选的实施方式，连接座3上的卡槽5至少有两道，与电子烟杆1同轴；连接头12上的卡槽5亦至少有两道，与连接座3上的卡槽5互相平行并一一对应；同一直线上的前后两道卡槽5，共用同一个卡座21。实际设计中，应当尽量保证质量与受力的平衡性，这时可以采用左右对称的方式来布置卡槽卡座。	Further as a preferred embodiment, there are at least two card slots 5 on the connecting seat 3, which are coaxial with the electronic cigarette rod 1; 5 are parallel to each other and correspond to each other; the front and rear two card slots 5 on the same straight line share the same card seat 21. In the actual design, the balance between quality and force should be ensured as much as possible. At this time, the slots and holders can be arranged symmetrically.
进一步作为优选的实施方式，所述连接座3整体为硅胶构件，连接孔31的孔径小于其对应的连接针11的直径。由于连接座3为硅胶构件，因此其具有松紧弹性，略小于连接针11的连接孔31可以在供针脚插入的同时将之紧紧包裹住，提供握力防止松脱。另外硅胶质的连接座3也可以在雾化器的安装段中起到紧塞密封的作用。	As a further preferred embodiment, the connection base 3 is a silicone member as a whole, and the diameter of the connection hole 31 is smaller than the diameter of the corresponding connection needle 11. Since the connection seat 3 is a silicone member, it has elasticity, and the connection hole 31 slightly smaller than the connection pin 11 can tightly wrap it while inserting the pin, providing a grip to prevent loosening. In addition, the connecting seat 3 made of silica gel can also play the role of a tight plug seal in the installation section of the atomizer.
本实用新型的装配过程是这样的：先将连接座3置入雾化器2的安装段内，放入前要对好连接座3上的卡槽5和安装段内壁的卡座21，之后塞到底，此时安装段仍剩下前端的一部分空间，卡座21还有一段距离可用；接着再利用所述剩余的一段卡座21以及连接头12上的卡槽5进行定位导向，将电子烟杆1插入到安装段内，直到连接针11插入到连接孔31中、整体插接牢固、不易松脱为止。	The assembly process of the utility model is as follows: first put the connecting seat 3 into the installation section of the atomizer 2, and align the slot 5 on the connecting seat 3 and the card seat 21 on the inner wall of the installation section before putting it in, and then To the end, at this time, there is still a part of the space at the front end of the installation section, and there is still a certain distance available for the card holder 21; The cigarette rod 1 is inserted into the installation section until the connecting pin 11 is inserted into the connecting hole 31, and the overall insertion is firm and difficult to loosen.
以上是对本实用新型的较佳实施方式进行了具体说明，但本发明创造并不限于所述实施例，熟悉本领域的技术人员在不违背本实用新型精神的前提下还可作出种种的等同变型或替换，这些等同的变型或替换均包含在本申请权利要求所限定的范围内。	The above is a specific description of the preferred embodiments of the present utility model, but the invention is not limited to the described embodiments, those skilled in the art can also make various equivalent modifications without violating the spirit of the present utility model Or replacement, these equivalent modifications or replacements are all included in the scope defined by the claims of the present application.

Legal events

Code	Title	Date	Country	Impact	Details
GR01	PATENT GRANT	2013-05-08	CN	+	
C14	GRANT OF PATENT OR UTILITY MODEL	2013-05-08	CN	+	
CF01	TERMINATION OF PATENT RIGHT DUE TO NON-PAYMENT OF ANNUAL FEE	2015-12-02	CN	-	Granted Publication Date 20130508 Termination Date 20141016
EXPY	TERMINATION OF PATENT RIGHT OR UTILITY MODEL	2015-12-02	CN	-	

Images





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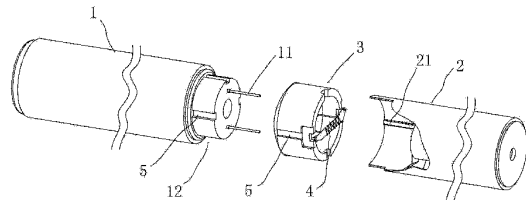
权利要求书1页 说明书3页 附图3页

(54) 实用新型名称

采用插接方式组装的电子烟

(57) 摘要

本实用新型公开了一种采用插接方式组装的电子烟,包括电子烟杆、雾化器以及在电子烟杆和雾化器之间的连接座,连接座内设有发热丝,电子烟杆后端装有作为电源输出端的连接针,连接座的前端设有两个与所述连接针位置对应、供连接针插入的连接孔,发热丝的两端亦分别接入到所述的两个连接孔中,使连接针与发热丝电联接;雾化器的前端中空,形成容纳连接座和电子烟杆的后端嵌入的安装段,连接座和电子烟杆后端这二者的外壁上均设有卡槽,安装段的内壁上设有卡座。连接针插入到连接孔中后,可以给发热丝供电使其发热,卡槽卡座可以给插接动作提供定位、导向与止转的功能。本实用新型插接组装方便,部件少,生产成本低,可作为香烟替代品使用。



1. 采用插接方式组装的电子烟,包括位于前段的、具有电源输出端的电子烟杆(1)、位于后段的雾化器(2)以及在电子烟杆(1)和雾化器(2)之间的连接座(3),连接座(3)内设有发热丝(4),其特征在于:所述电源输出端为两支位于电子烟杆(1)后端的连接针(11),连接座(3)的前端设有两个与所述连接针(11)位置对应、供连接针(11)插入的连接孔(31),所述发热丝(4)的两端亦分别接入到所述的两个连接孔(31)中,使连接针(11)与发热丝(4)电联接;雾化器(2)的前端中空,形成容纳连接座(3)和电子烟杆(1)的后端嵌入的安装段,连接座(3)和电子烟杆(1)后端这二者的外壁上均设有卡槽(5),安装段的内壁上设有凸出的、嵌到卡槽(5)内的卡座(21)。

2. 根据权利要求1所述的采用插接方式组装的电子烟,其特征在于:所述电子烟杆(1)包括本体以及装在本体后端的连接头(12),连接针(11)与连接头(12)连接,所述电子烟杆(1)后端上的卡槽(5)即设在连接头(12)上。

3. 根据权利要求1所述的采用插接方式组装的电子烟,其特征在于:连接座(3)上的卡槽(5)至少有两道,与电子烟杆(1)同轴;连接头(12)上的卡槽(5)亦至少有两道,与连接座(3)上的卡槽(5)互相平行并一一对应;同一直线上的前后两道卡槽(5),共用同一个卡座(21)。

4. 根据权利要求1~3任一项所述的采用插接方式组装的电子烟,其特征在于:所述连接座(3)整体为硅胶构件,连接孔(31)的孔径小于其对应的连接针(11)的直径。

采用插接方式组装的电子烟

技术领域

[0001] 本实用新型涉及一种电子烟。

背景技术

[0002] 电子烟是香烟的替代品。电子烟整体结构包括位于前段的电子烟杆、位于后段的雾化器以及嵌紧在雾化器前端内的连接座。电子烟杆内藏电源和感应电路,连接座内设有发热丝和纤维棉,雾化器内设有盛装着烟油的储油腔,纤维棉吸收烟油之后,发热丝由电子烟杆内藏的电源供电发热,灼烤纤维棉,使烟油挥发雾化,形成带有烟草味道的烟雾从雾化器后端逸出,被使用者吸入,从而模拟出吸烟的口感。而由于所述烟雾并非真正烟叶所发出,其内不含尼古丁等有害物质,因此该模拟吸烟过程不会对人体造成伤害,不会上瘾,不形成二手烟雾,因此电子烟在过渡戒烟法中被广泛地应用。

[0003] 由于发热丝的热能来自于电源,因此为了使电子烟杆内的电源能够与发热丝电联接,传统的电子烟是将电子烟杆的后端与连接座的前端设计成螺纹联接的,连接座的中部与发热丝的一端联接,连接座的螺纹段与发热丝的另一端联接,从而分别形成两个电路接头;电子烟杆末端亦对应地在中部以及螺纹段设成电源的正负极接头,故当电子烟杆与雾化器的前端(即连接座)旋入联接、拧紧之后,整体电路就完成了,实现了发热丝两端分别与电源两极的电联接。但是,此种做法并不是最佳方案,因为首先电子烟的体积较细,要在这种细管或细杆上加工出内外螺纹并不容易,为了实现装配,还需要配备正极芯、绝缘硅胶圈等物,部件多,生产成本低;其次用户操作时旋出旋入都很麻烦,组装动作不够简单,使用麻烦。

实用新型内容

[0004] 本实用新型要解决的技术问题是:提供一种不采用螺纹联接的组装方式的电子烟,且要组装简单快捷,部件数量少。

[0005] 本实用新型解决其技术问题的解决方案是:

[0006] 采用插接方式组装的电子烟,包括位于前段的、具有电源输出端的电子烟杆、位于后段的雾化器以及在电子烟杆和雾化器之间的连接座,连接座内设有发热丝,所述电源输出端为两支位于电子烟杆后端的连接针,连接座的前端设有两个与所述连接针位置对应、供连接针插入的连接孔,所述发热丝的两端亦分别接入到所述的两个连接孔中,使连接针与发热丝电联接;雾化器的前端中空,形成容纳连接座和电子烟杆的后端嵌入的安装段,连接座和电子烟杆后端这二者的外壁上均设有卡槽,安装段的内壁上设有凸出的、嵌到卡槽内的卡座。

[0007] 作为上述技术方案的进一步改进,所述电子烟杆包括本体以及装在本体后端的连接头,连接针与连接头连接,所述电子烟杆后端上的卡槽即设在连接头上。

[0008] 作为上述技术方案的进一步改进,连接座上的卡槽至少有两道,与电子烟杆同轴;连接头上的卡槽亦至少有两道,与连接座上的卡槽互相平行并一一对应;同一直线上的前

后两道卡槽,共用同一个卡座。

[0009] 作为上述技术方案的进一步改进,所述连接座整体为硅胶构件,连接孔的孔径小于其对应的连接针的直径。

[0010] 本实用新型的有益效果是:本实用新型有两个设计要点:①、将传统的螺旋联接式电源输出结构,设计成连接针与连接孔配合的形式;②、连接座和电子烟杆的后端均设有卡槽,卡槽与卡座配合,同时起到定位、导向和止转的作用。①与②这两点综合一起,使得电子烟的整体装配形式变成了插接式,极其便利,同时减少了整体零部件的数量,节约生产成本。本实用新型可作为香烟替代品,具有不错的戒烟效果。

附图说明

[0011] 为了更清楚地说明本实用新型实施例中的技术方案,下面将对实施例描述中所需要使用的附图作简单说明。显然,所描述的附图只是本实用新型的一部分实施例,而不是全部实施例,本领域的技术人员在不付出创造性劳动的前提下,还可以根据这些附图获得其他设计方案和附图。

[0012] 图1是本实用新型的整体外形轴测示意图;

[0013] 图2是本实用新型的爆炸图,其中为了表现安装段的内部结构,对雾化器作了部分剖切;

[0014] 图3是连接座的正视图。

具体实施方式

[0015] 以下将结合实施例和附图对本实用新型的构思、具体结构及产生的技术效果进行清楚、完整地描述,以充分地理解本实用新型的目的、特征和效果。显然,所描述的实施例只是本实用新型的一部分实施例,而不是全部实施例,基于本实用新型的实施例,本领域的技术人员在不付出创造性劳动的前提下所获得的其他实施例,均属于本实用新型保护的范围。另外,文中所提到的所有联接/连接关系,并非单指构件直接相接,而是指可根据具体实施情况,通过添加或减少联接辅件,来组成更优的联接结构。

[0016] 参照图1~图3,采用插接方式组装的电子烟,包括位于前段的、具有电源输出端的电子烟杆1、位于后段的雾化器2以及在电子烟杆1和雾化器2之间的连接座3,连接座3内设有发热丝4,所述电源输出端为两支位于电子烟杆1后端的连接针11,连接座3的前端设有两个与所述连接针11位置对应、供连接针11插入的连接孔31,所述发热丝4的两端亦分别接入到所述的两个连接孔31中,使连接针11与发热丝4电联接;雾化器2的前端中空,形成容纳连接座3和电子烟杆1的后端嵌入的安装段,连接座3和电子烟杆1后端这二者的外壁上均设有卡槽5,安装段的内壁上设有凸出的、嵌到卡槽5内的卡座21。

[0017] 进一步作为优选的实施方式,所述电子烟杆1包括本体以及装在本体后端的连接头12,连接针11与连接头12连接,所述电子烟杆1后端上的卡槽5即设在连接头12上。

[0018] 进一步作为优选的实施方式,连接座3上的卡槽5至少有两道,与电子烟杆1同轴;连接头12上的卡槽5亦至少有两道,与连接座3上的卡槽5互相平行并一一对应;同一直线上的前后两道卡槽5,共用同一个卡座21。实际设计中,应当尽量保证质量与受力的平衡性,这时可以采用左右对称的方式来布置卡槽卡座。

[0019] 进一步作为优选的实施方式,所述连接座 3 整体为硅胶构件,连接孔 31 的孔径小于其对应的连接针 11 的直径。由于连接座 3 为硅胶构件,因此其具有松紧弹性,略小于连接针 11 的连接孔 31 可以在供针脚插入的同时将之紧紧包裹住,提供握力防止松脱。另外硅胶质的连接座 3 也可以在雾化器的安装段中起到紧塞密封的作用。

[0020] 本实用新型的装配过程是这样的:先将连接座 3 置入雾化器 2 的安装段内,放入前要对好连接座 3 上的卡槽 5 和安装段内壁的卡座 21,之后塞到底,此时安装段仍剩下前端的一部分空间,卡座 21 还有一段距离可用;接着再利用所述剩余的一段卡座 21 以及连接头 12 上的卡槽 5 进行定位导向,将电子烟杆 1 插入到安装段内,直到连接针 11 插入到连接孔 31 中、整体插接牢固、不易松脱为止。

[0021] 以上是对本实用新型的较佳实施方式进行了具体说明,但本发明创造并不限于所述实施例,熟悉本领域的技术人员在不违背本实用新型精神的前提下还可作出种种的等同变型或替换,这些等同的变型或替换均包含在本申请权利要求所限定的范围内。

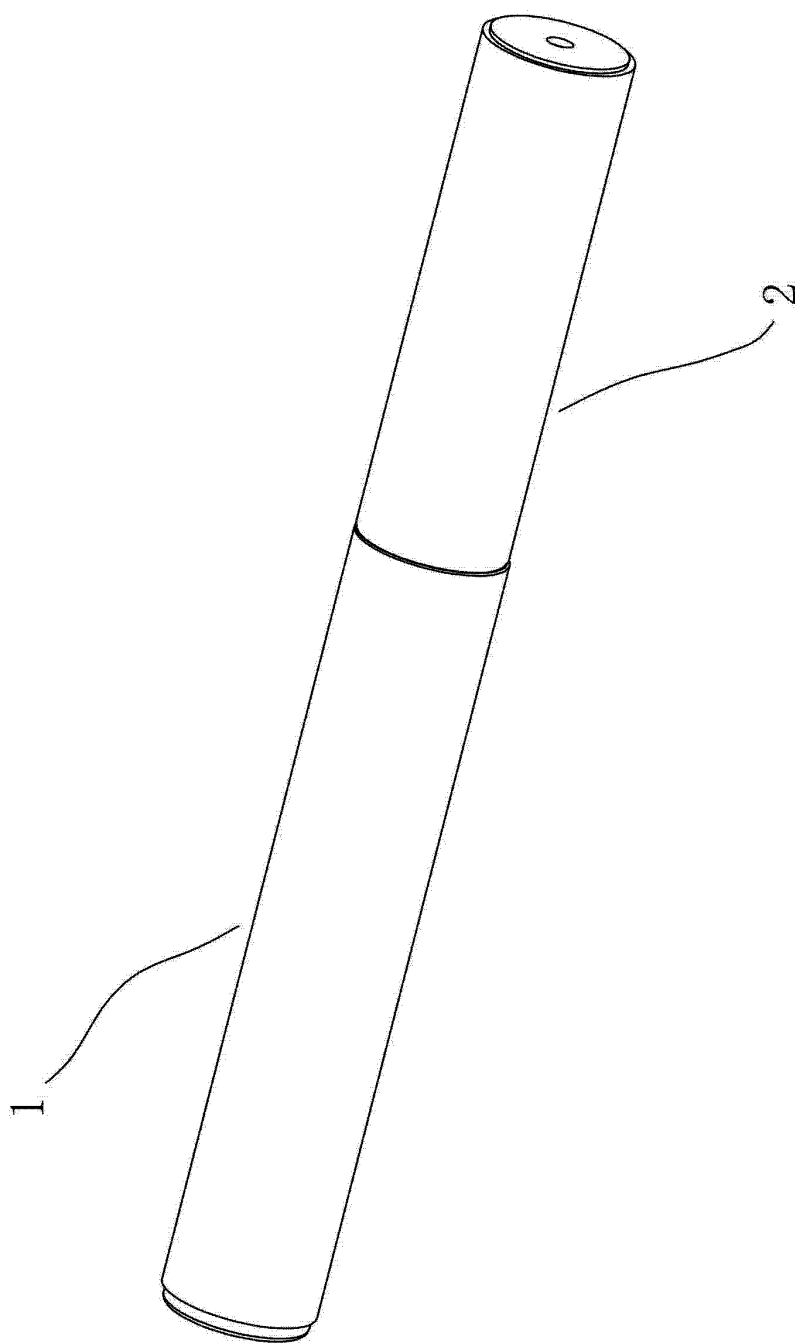


图 1

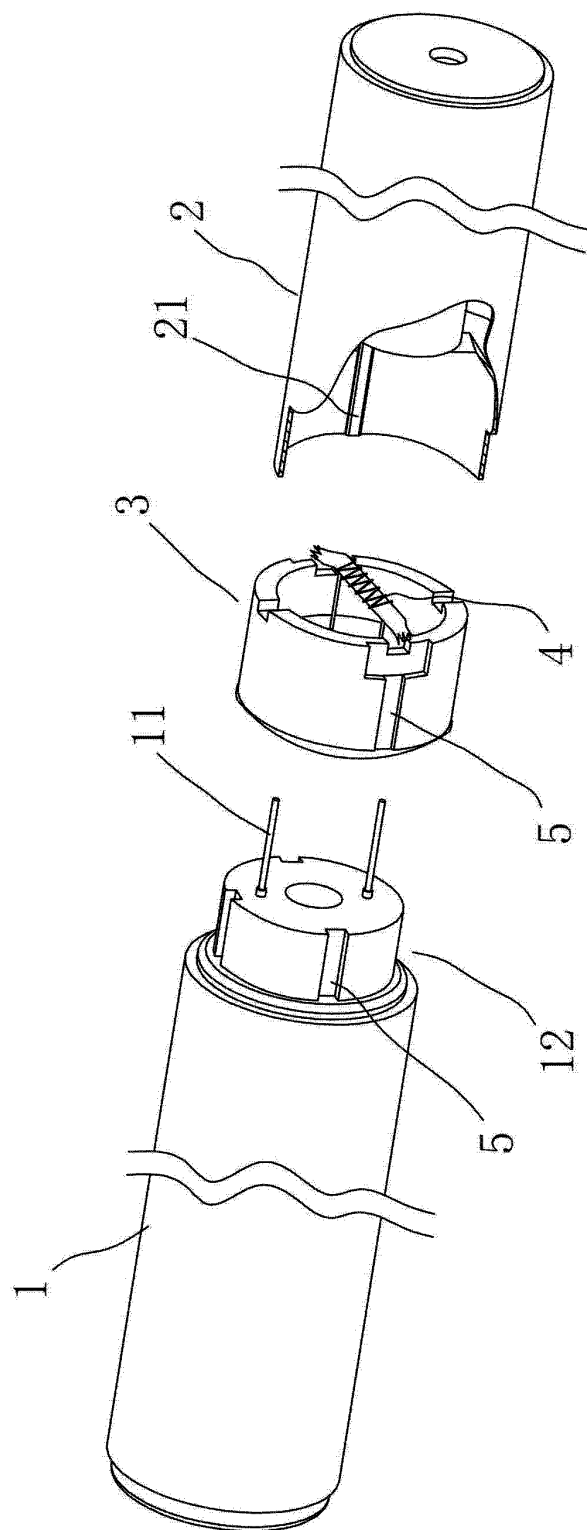


图 2

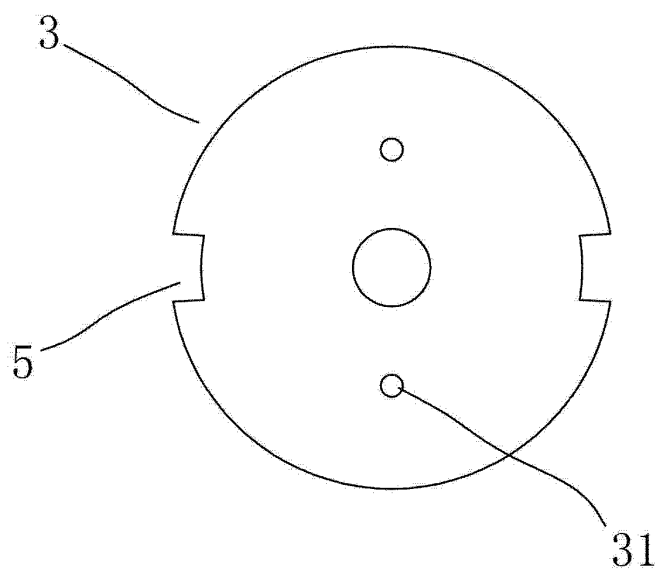


图 3