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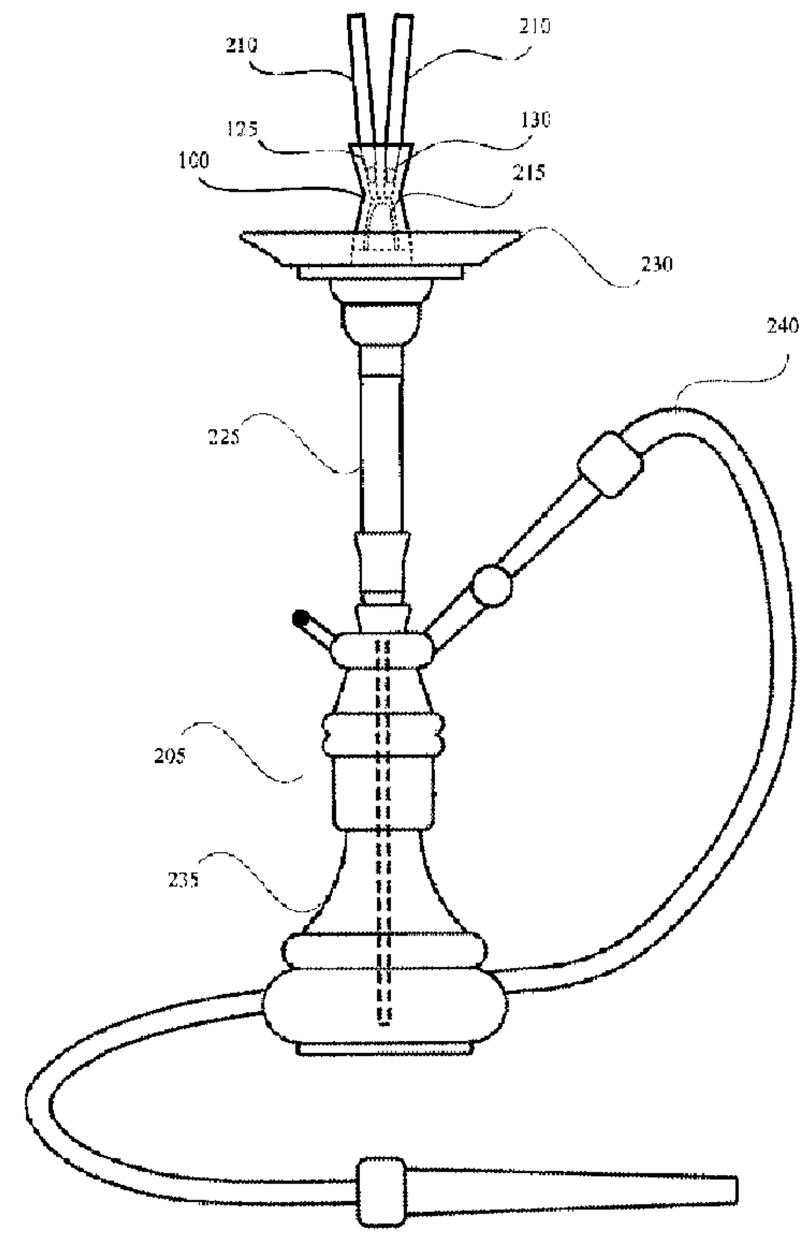
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(54) Titre : ADAPTATEUR POUR RACCORDEMENT DE VAPORISATEUR ELECTRONIQUE AUTOMATIQUE A UNE SHISHA TRADITIONNELLE

(54) Title: ADAPTER FOR CONNECTING AUTOMATIC ELECTRONIC VAPORIZER TO A TRADITIONAL SHISHA



(57) Abrégé/Abstract:
An adapter for connecting automatic electronic vaporizers to a traditional shisha, said adapter comprising a top part having at least one hole and a bottom part designed to fix into the hookah bowl grommet of the traditional shisha wherein the at least one hole on the top part of the adapter firmly holds automatic electronic vaporizer whereby inhaling through the flexible hose of the traditional shisha, a smoker causes automatic electronic vaporizer to be activated by passage of air through it which causes vapor to be drawn from the automatic electronic vaporizer and vapor passes through the holes of the adapter down to the body pipe and gradually fills the vapor collection portion of the reservoir of the traditional shisha and when sufficient vapour is collected, passes on through said flexible hose to said smoker thereby transforming said traditional shisha into an electronic shisha.

ABSTRACT

ADAPTER FOR CONNECTING AUTOMATIC ELECTRONIC VAPORIZER TO A TRADITIONAL SHISHA

An adapter for connecting automatic electronic vaporizers to a traditional shisha, said adapter comprising a top part having at least one hole and a bottom part designed to fix into the hookah bowl grommet of the traditional shisha wherein the at least one hole on the top part of the adapter firmly holds automatic electronic vaporizer whereby inhaling through the flexible hose of the traditional shisha, a smoker causes automatic electronic vaporizer to be activated by passage of air through it which causes vapor to be drawn from the automatic electronic vaporizer and vapor passes through the holes of the adapter down to the body pipe and gradually fills the vapor collection portion of the reservoir of the traditional shisha and when sufficient vapour is collected, passes on through said flexible hose to said smoker thereby transforming said traditional shisha into an electronic shisha.

ADAPTER FOR CONNECTING AUTOMATIC ELECTRONIC VAPORIZER TO A TRADITIONAL SHISHA

FIELD OF THE INVENTION

[0001] The present invention generally relates to alternative smoking devices. More particularly, the present invention relates to an automatic electronic vaporizers configured to a traditional shisha with the help of an adapter to convert it into an electronic shisha.

BACKGROUND OF THE INVENTION

[0002] Shisha, also known as hookah or nargile because of the tobacco typically used, are well known worldwide. The shisha has been used for centuries to smoke both plain and flavored tobaccos, mixtures of various aromatic herbs and spices, or mixtures of both. Typically a shisha has a bowl in which tobacco is placed, the bowl being mounted on top of a reservoir structure. The interior of the reservoir is partially filled with water. Extending downward from the bowl into the reservoir is a tubular hollow stem, with its lowermost extremity immersed in the water. The interior portion of the reservoir structure (i.e., the air space) above the level of the water forms a chamber into which smoke may be collected. One or more flexible hoses extend outward from this smoke collection portion of the reservoir or from a neck base extending from and in fluid communication with the reservoir.

[0003] Inhaling through a flexible hose, a smoker causes smoke to be drawn from the bowl down the stem, passing the smoke through the water in the lower portion of the reservoir. Passing upwards through the water in the form of bubbles, smoke gradually fills the smoke collection portion of the reservoir, and when sufficient smoke has been collected, passes on

through the flexible hose to the smoker. By drawing the smoke through a water reservoir, the smoke is filtered and cooled.

[0004] This basic functionality is shared by virtually all traditional shishas, which generally differ only in size, shape, style and number of hoses, although the means used to burn the tobacco may also differ. Some use a lighted coal placed in or above the bowl with the tobacco to provide a heat source for burning the tobacco. Others may require an ignition source such as a match or butane lighter to be placed near the top of the bowl to begin burning the tobacco. However, all traditional shishas use combustion as the method of producing smoke, thus also producing all the undesirable combustion by-products in the smoke. Use of water to filter and cool the smoke may reduce some of the undesirable smoke components, but most, such as carbon monoxide, heavy metal and potentially hazardous chemicals created by placing the aluminum foil that is used to cover the tobacco beneath the burning charcoal, cannot be removed in this manner.

[0005] Combustion has traditionally been the only technology available for production of smoke. However, electric power has allowed development of a variety of alternatives to combustion for use by smokers. One such technology is the technology behind modern electronic vaporizer, such as an electronic cigarette. These electronic vaporizers typically generate a sufficient flavoured vapour to give users the sensation and flavour of smoking, but avoiding undesirable combustion by-products such as carbon monoxide present in smoke. The flavoured vapor is produced by controlled vaporization of volatile aromatic liquid. This liquid used as a "fuel" for electronic vaporizers is commonly called E-liquid, and also known as "e-juice", "vapor juice" and "vape juice". However, there is a need for a device which converts a traditional shisha into an electronic shisha, so that users can get the sensation and flavour of smoking, without having to inhale carcinogenic hookah smoke.

[0006] Electronic Vaporizers, such as portable electronic cigarettes and electronic shisha have become increasingly popular in recent times. Electronic cigarettes emulate a tobacco cigarettes, but without the combustion of tobacco. Rather than burning tobacco, a liquid is atomized within the electronic cigarette, which emulates the smoke produced in a tobacco

cigarette. The liquid may contain flavoring agents such as tobacco flavor, menthol flavour, and others, to enhance the "smoking" experience of the electronic cigarette. Scent from traditional cigarette smoke gets into, and clings, to just about anything it comes in contact with. Not only does the odor cling, many consider cigarette smell offensive and avoid close contact. One reason traditional cigarette smoke smells so bad is tar and chemicals burn in addition to the tobacco itself. Properties from burning these substances make them cling to clothing, hair, walls, furniture, etc. Electronic cigarettes on the other hand do not have this ominous odour because instead of exhaling smoke, a vapour that evaporates almost immediately is exhaled.

[0007] Other benefits of electronic cigarettes are that electronic cigarettes are safer, less harmful to health as compared to traditional cigarettes, can be smoked virtually anywhere, give off no smoke so they can be smoked in social setting without people complaining about second hand smoke. They are clean because they don't require ashtrays so there are no smelly ashes and cigarette butts.

[0008] Thus, there is a need for a device which enables to combine automatic electronic vaporizers with a traditional shisha and provides the advantages of electronic vaporizers like electronic cigarette and an electronic shisha.

[0009] A prior art search revealed that there is no such device which enables to combine an electronic cigarette like device with a traditional shisha and provides the advantages of electronic vaporizers like electronic cigarette and an electronic shisha.

[0010] Consequently, there exists in the art a long-felt need for a device which enables to connect automatic electronic vaporizers with a traditional shisha and provides the advantages of electronic vaporizers like electronic cigarette and electronic shisha. Additionally, there is a long felt need in the art for a device that converts a traditional shisha into an electronic shisha. Finally, there is a long felt need in the art for a device that accomplishes all of the

forgoing objectives and that is relatively inexpensive to manufacture, safe and easy to connect and use.

SUMMARY OF THE INVENTION

[0011] The following presents a simplified summary in order to provide a basic understanding of some aspects of the disclosed invention. This summary is not an extensive overview, and it is not intended to identify key/critical elements or to delineate the scope thereof. Its sole purpose is to present some concepts in a simplified form as a prelude to the more detailed description that is presented later.

[0012] The common forms and names of automatic electronic vaporizer include, but are not limited to, personal vaporizer, electronic cigarette, e-cigs, electronic hookah, e-shisha and electronic cigar). For convenience, personal vaporizer, electronic cigarette, e-cigs, electronic hookah, e-shisha, electronic cigar will simply be referred to herein as automatic electronic vaporizer, it being understood that personal vaporizer, electronic cigarette, e-cigs, electronic hookah, e-shisha, electronic cigar are intended unless otherwise stated.

[0013] The present invention combines existing automatic electronic vaporizers and a traditional shisha to form an electronic shisha. The adapter of the present invention connects automatic electronic vaporizers to a traditional shisha thus converting it into an electronic shisha. In a preferred embodiment of the present invention, the adapter can be securely connected into a traditional shisha as the adapter fits into the hookah bowl grommet at the top stem of the traditional shisha, essentially replacing the traditional tobacco bowl. The bottom part of the adapter is so designed that it easily fits into the hookah bowl grommet of the traditional shisha. When the adapter is fitted with automatic electronic vaporizers, that are activated by inhalation pressure sensor, the traditional shisha is ready to be used. The vapour flows from the adapter into the traditional shisha. The vapour flows through the holes of the

adapter and then into the body pipe of the traditional shisha in a conventional manner. Inhaling through a flexible hose, a smoker causes activation of the automatic electronic vaporizers, and then vapour to be drawn from the automatic electronic vaporizers through the holes of the adapter down the body pipe of the traditional shisha, passing the vapour through the lower portion of the reservoir of a conventional traditional shisha in a conventional manner. The lower portion of the reservoir may or may not contain water as per user preference. Vapor gradually fills the vapour collection portion of the reservoir in a conventional manner, and when sufficient vapour has been collected, passes on through the flexible hose to the smoker in a conventional manner. The Light Emitting Diode (LED), if present on the other end of the automatic electronic vaporizers, indicates that the adapter is functioning properly.

[0014] Consequently, the adapter of the present invention enables to connect automatic electronic vaporizers with a traditional shisha and provides the advantages of automatic electronic vaporizers like electronic cigarette and electronic shisha. The adapter of the present invention thus converts a traditional shisha into an electronic shisha. The adapter of the present invention is relatively inexpensive to manufacture, safe and easy to connect and use.

[0015] To the accomplishment of the foregoing and related ends, certain illustrative aspects of the disclosed invention are described herein in connection with the following description and the annexed drawings. These aspects are indicative, however, of but a few of the various ways in which the principles disclosed herein can be employed and is intended to include all such aspects and their equivalents. Other advantages and novel features will become apparent from the following detailed description when considered in conjunction with the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG.1 illustrates a perspective view depicting an example of the adapter for connecting automatic electronic vaporizer to a traditional shisha according to one embodiment of the present invention;

[0017] FIG.2 illustrates another perspective view depicting an example of the adapter for connecting automatic electronic vaporizer to a traditional shisha according to one embodiment of the present invention;

[0018] FIG.3 illustrates a yet another perspective view depicting an example of the adapter for connecting automatic electronic vaporizer to a traditional shisha according to one embodiment of the present invention;

[0019] FIG.4 illustrates a front view depicting an example of the adapter with automatic electronic vaporizer connected to a traditional shisha according to one embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0020] In the following detailed description, a reference is made to the accompanying drawings that form a part hereof, and in which the specific embodiments that may be practiced is shown by way of illustration. These embodiments are described in sufficient detail to enable those skilled in the art to practice the embodiments and it is to be understood that the logical, mechanical and other changes may be made without departing from the

scope of the embodiments. The following detailed description is therefore not to be taken in a limiting sense.

[0021] The invention is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. The figures are not necessarily to scale and some features may be exaggerated or minimized to show details of particular components. In other instances, well-known components, systems, materials or methods have not been described in detail in order to avoid obscuring the present invention. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding thereof. It may be evident, however, that the invention can be practiced without these specific details.

[0022] The adapter of the present invention enables to connect a plurality of automatic electronic vaporizers with a traditional shisha and provides the advantages of automatic electronic vaporizers like electronic cigarette and electronic shisha. The adapter of the present invention converts a traditional shisha into an electronic shisha. Finally, the adapter of the present invention is relatively inexpensive to manufacture, safe and easy to connect and use.

[0023] FIG. 1, FIG.2 and FIG.3 illustrate perspective views of one embodiment of the adapter 100 of the present invention for connecting automatic electronic vaporizers to a traditional shisha. In one embodiment of the present invention, the adapter 100 comprises a top part 110, and a bottom part 120. Top part 110 further comprises a first hole 125 and a second hole 130 for receipt of automatic electronic vaporizers.

[0024] The internal diameter of the holes, for example, the internal diameter of first hole 125 and second hole 130, is such that these can easily hold the mouthpiece side of most common automatic electronic vaporizer sizes firmly. The cone shaped cavities of the first hole 125 and second hole 130, allow for the automatic electronic vaporizer to be held firmly so that air ingress from the surrounding during inhalation is kept at minimum possible level. Air can only pass via the hole on the mouth piece of automatic electronic vaporizer. This helps create maximum possible air tight seal so that the pressure-activated automatic electronic vaporizers can be activated when someone inhales resulting in creation of vapor from the devices. In a preferred embodiment of the present invention, the inside of the bottom part 120 of the adapter 100 has a cavity 140 which is made cone shaped. The first hole 125 and the second hole 130 meet at the upper portion of this cone shaped cavity 140 resulting in fluidic connection from top to bottom of the adapter 100 of the present invention.

[0025] As best illustrated in FIG. 4, the tip 215 of the body pipe 225 of a traditional shisha 205 usually protrudes by an inch or so from the ashtray 230. In traditional shishas the tip 215 of the body pipe 225 usually is fitted with a soft- rubber ribbed padding, usually called bowl grommet, which helps firm gripping of the tobacco bowl of the traditional shisha 205 onto the body pipe tip 215. In a preferred embodiment of the present invention, the adapter 100 replaces the traditional tobacco bowl. The cone shape of cavity 140 helps easy and proper installation of the adapter 100 onto the bowl grommet of the tip 215 of traditional shisha 205.

[0026] The combination of the automatic electronic vaporizers 210, the adapter 100, and the traditional shisha 205 is best illustrated in FIG. 4. The conventional tobacco bowl of the traditional shisha 205 is replaced with the adapter 100. In a preferred embodiment of the present invention, one automatic electronic vaporizer 210 fits at each of the cone shaped cavities of holes 125 and 130 of the adapter 100. Inhaling through a flexible hose 240, the person inhaling ("the smoker") causes automatic electronic vaporizers 210 to be activated by the passage of air through it, typically because of a Pressure Sensor or another pressure transducer that is activated by negative pressure. This causes vapour to be drawn from the automatic electronic vaporizers 210. The freshly created vapor then passes through the holes

of the adapter 100 down to the body pipe 225, passing the vapour through the lower portion of the reservoir 235. The lower portion of the reservoir 235 may or may not contain water as per user preference. Vapour gradually fills the vapour collection portion of the reservoir 235 in a conventional manner, and when sufficient vapour has been collected, passes on through the flexible hose 240 to the smoker. The LED, if present on the other end of the automatic electronic vaporizer, indicates that the adapter is functioning properly and also gives the user the visual feel of using a shisha much like a traditional shisha where the burning coal turns amber during inhalation.

[0027] As extremely low quantity of heat is generated during smoking of an automatic electronic vaporizer 210, the adapter 100 can be manufactured from any suitable material known in the art such as plastic, ceramic, metal etc. The adapter 100 is compatible for all electronic vaporizer devices such as any disposable or rechargeable electronic cigarette, electronic shisha or electronic cigar which are activated by inhalation as already mentioned in the foregoing description. Adapter 100 can also be manufactured in a variety of sizes, colors, styles, shapes and designs such as the shape of a skull, apple, alien head and bull head etc. all serving the same function. Various designs have a varying number of cavity holes to satisfy needs of heavy shisha smokers and light shisha smokers. The simple design of the adapter 100 enables it to be also 3D printed.

[0028] In another preferred embodiment of the present invention, the top part 110 of the adapter 100 has at least one hole.

[0029] In another preferred embodiment of the present invention, the top part 110 of the adapter 100 has more than two holes.

[0030] In another preferred embodiment of the present invention, the adapter can connect thicker than standard sized automatic electronic vaporizers to a traditional shisha thereby transforming the traditional shisha into an electronic shisha.

[0031] In another preferred embodiment of the present invention, the adapter can connect thinner than standard sized automatic electronic vaporizers to a traditional shisha thereby transforming the traditional shisha into an electronic shisha.

[0032] Having now described the preferred embodiments of the present invention its use and usefulness will now be described. The adapter of the present invention connects automatic electronic vaporizers to a traditional shisha thus converting it into an electronic shisha. The present invention allows for shisha smokers to get habit relief (oral fixation, hand to mouth motion), get the taste, and also serve the social aspect of shisha smoking (which is the most common reason for smoking shisha). The benefits of an electronic shisha are that electronic shishas are safer in terms of health than traditional shishas, they are cheaper, not a fire hazard as there is no burning of coal, and the automatic electronic vaporizers used are recyclable. Since automatic electronic vaporizers typically last longer than one typical shisha session, they could be used for multiple smoking sessions. They also do not have bad odour and no ash or burns tobacco to clean after usage. Moreover, they can be used indoors. All of this is made available by the adapter of the present invention in a traditional shisha, thus converting a traditional shisha into an electronic shisha by the use of the adapter of the present invention.

[0033] Additionally, other variations are within the spirit of the present invention. Thus, while the invention is susceptible to various modifications and alternative constructions, a certain illustrated embodiment thereof is shown in the drawings and has been described above in detail. It should be understood, however, that there is no intention to limit the invention to the specific form or forms disclosed, but on the contrary, the intention is to cover all modifications, alternative constructions, and equivalents falling within the spirit and scope of the invention.

[0034] The use of the terms "a" and "an" and "the" and similar referents in the context of describing the invention are to be construed to cover both the singular and the plural, unless otherwise indicated herein or clearly contradicted by context. The terms "comprising," and "having," are to be construed as open-ended terms (i.e., meaning "including, but not limited to,") unless otherwise noted. The term "connect" is to be construed as partly or wholly contained within or joined together, even if there is something intervening. All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of any and all examples or exemplary language (e.g., "such as") provided herein, is intended merely to better illuminate embodiments of the invention and does not pose a limitation on the scope of the invention unless otherwise claimed. No language in the specification should be construed as indicating any non-claimed element as essential to the practice of the invention.

[0035] Preferred embodiments of this invention are described herein. Variations of those preferred embodiments may become apparent to those of ordinary skill in the art upon reading the foregoing description. The inventor expects skilled artisans to employ such variations as appropriate, and the inventor intends for the invention to be practiced otherwise than as specifically described herein. Accordingly, this invention includes all modifications and equivalents of the subject matter as permitted by applicable law. Moreover, any combination of the above-described elements in all possible variations thereof is encompassed by the invention unless otherwise indicated herein or otherwise clearly contradicted by context.

What is claimed is:

1. An adapter for connecting automatic electronic vaporizer to a traditional shisha, said adapter comprising:

a top part having at least one hole; and

a bottom part designed to fix into the hookah bowl grommet of said traditional shisha;

wherein said at least one hole on said top part of said adapter firmly holds said automatic electronic vaporizer whereby inhaling through a flexible hose of said traditional shisha, a smoker causes automatic electronic vaporizer to be activated by passage of air through it which causes vapor to be drawn from said automatic electronic vaporizer and vapor passes through said holes of said adapter down to a body pipe of said traditional hookah, passing the vapor through the lower portion of a reservoir of said traditional shisha and vapor gradually fills the vapor collection portion of said reservoir, and when sufficient vapour is collected, passes on through said flexible hose to said smoker thereby transforming said traditional shisha into an electronic shisha.

2. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter replaces a tobacco bowl of said traditional shisha.

3. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter is made of plastic.

4. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter is made of ceramic.

5. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter is made of metal.

6. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in

claim 1, wherein said adapter is made of any suitable material.

7. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein the shape of said adapter is a skull.

8. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein the shape of said adapter is an apple.

9. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein the shape of said adapter is an alien head.

10. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein the shape of said adapter is a bull head.

11. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein the shape of said adapter is any geometrical shape.

12. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter is 3D printable.

13. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter can firmly hold standard sized automatic electronic vaporizers.

14. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter can firmly hold thicker than standard sized automatic electronic vaporizers.

15. The adapter for connecting automatic electronic vaporizer to a traditional shisha as in claim 1, wherein said adapter can firmly hold thinner than standard sized automatic electronic vaporizers.

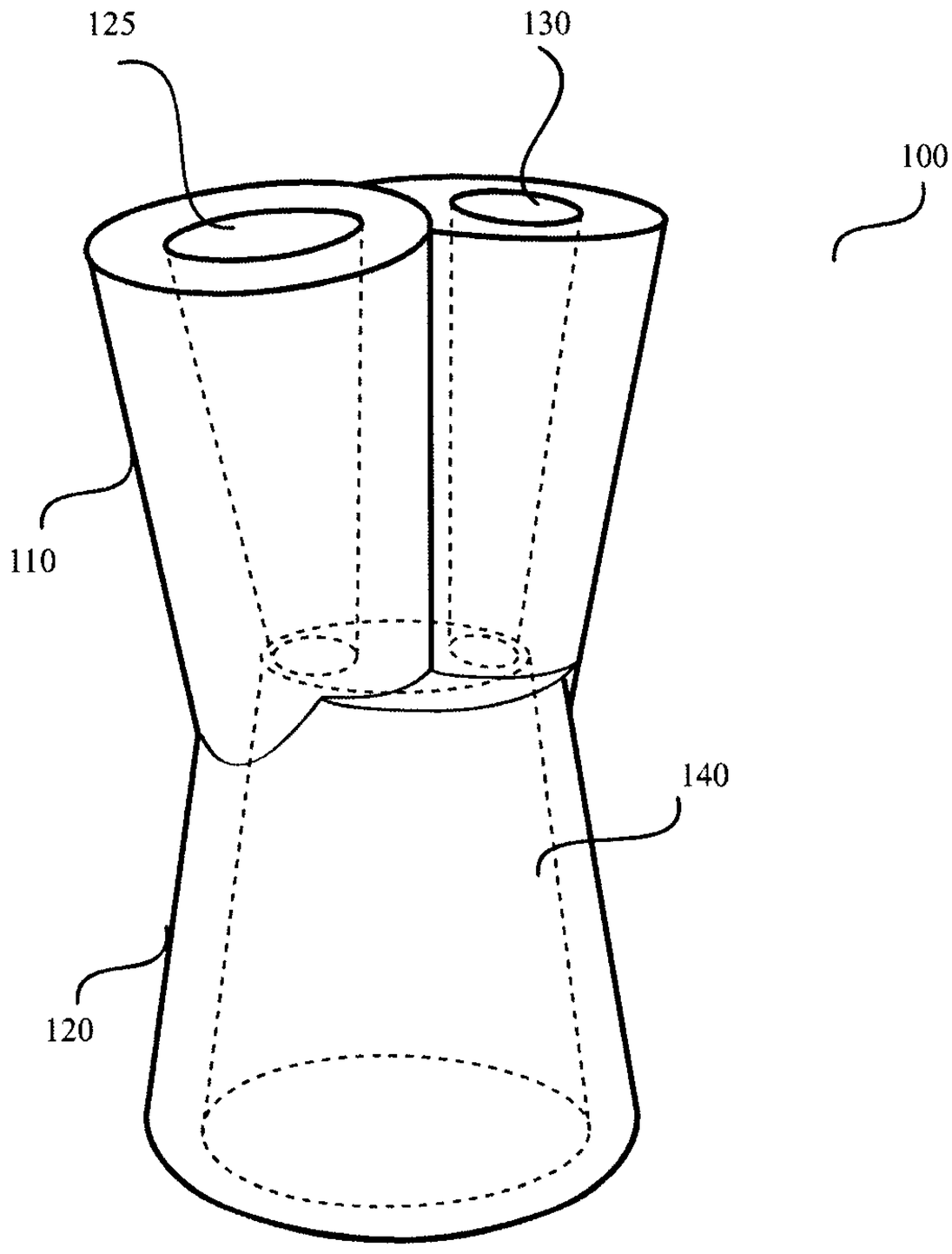


FIG.1

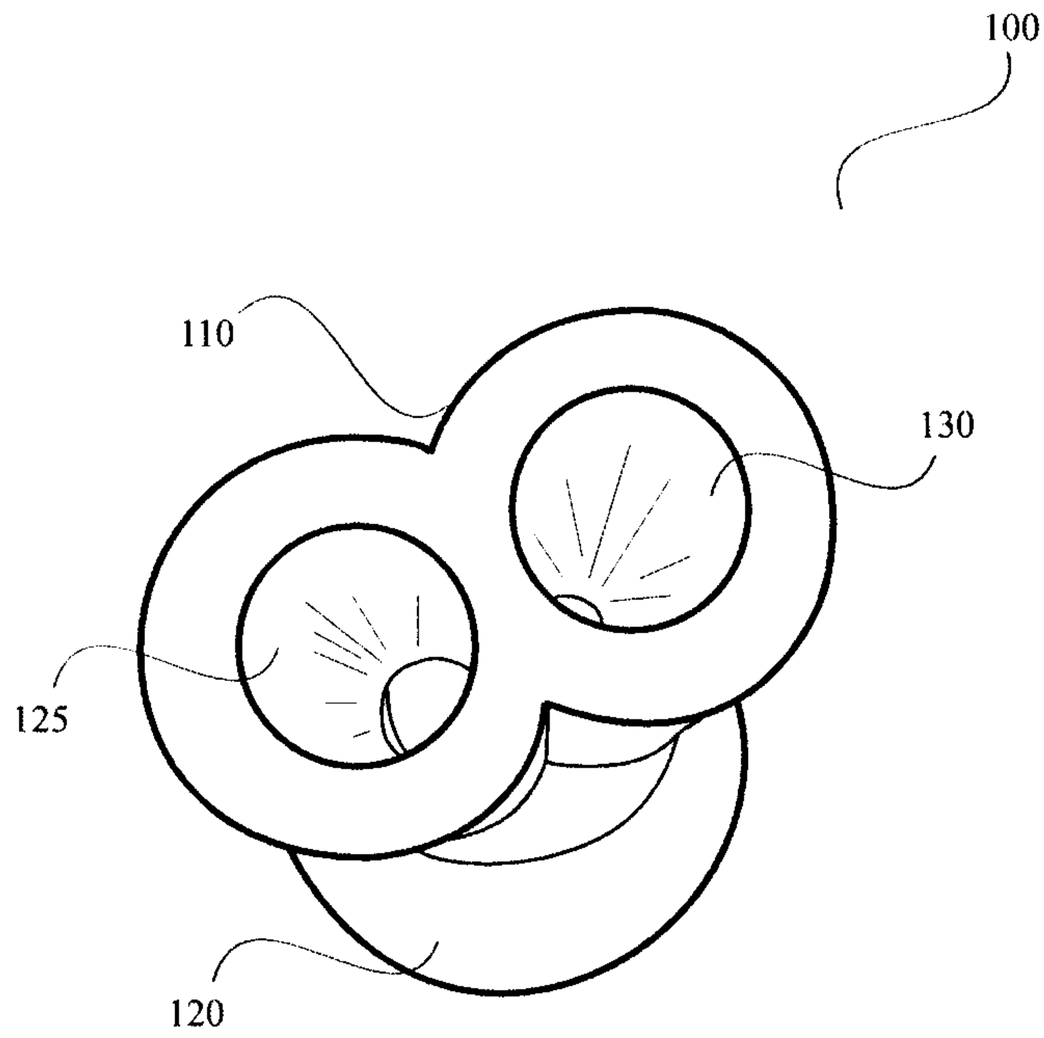


FIG.2

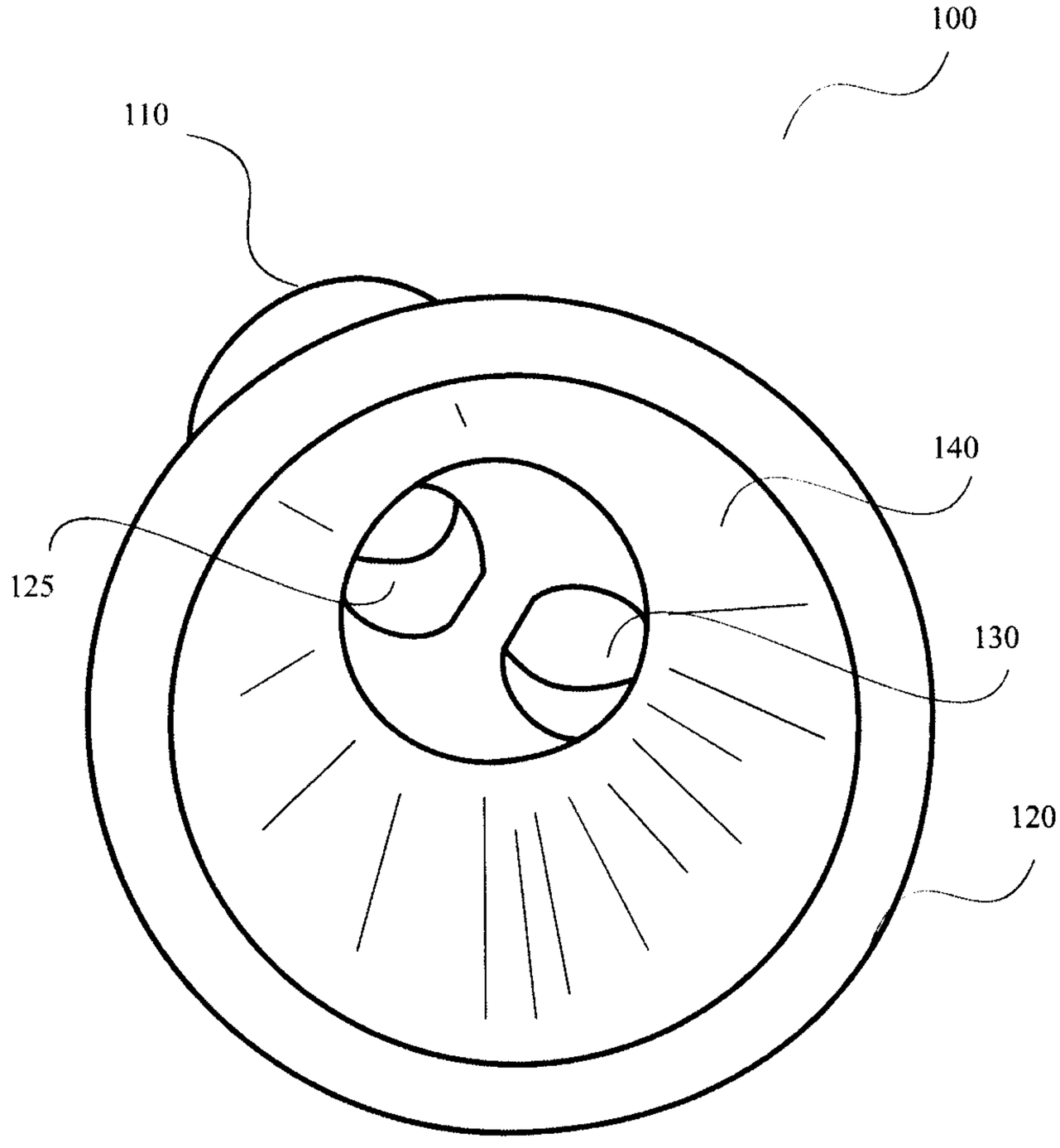


FIG.3

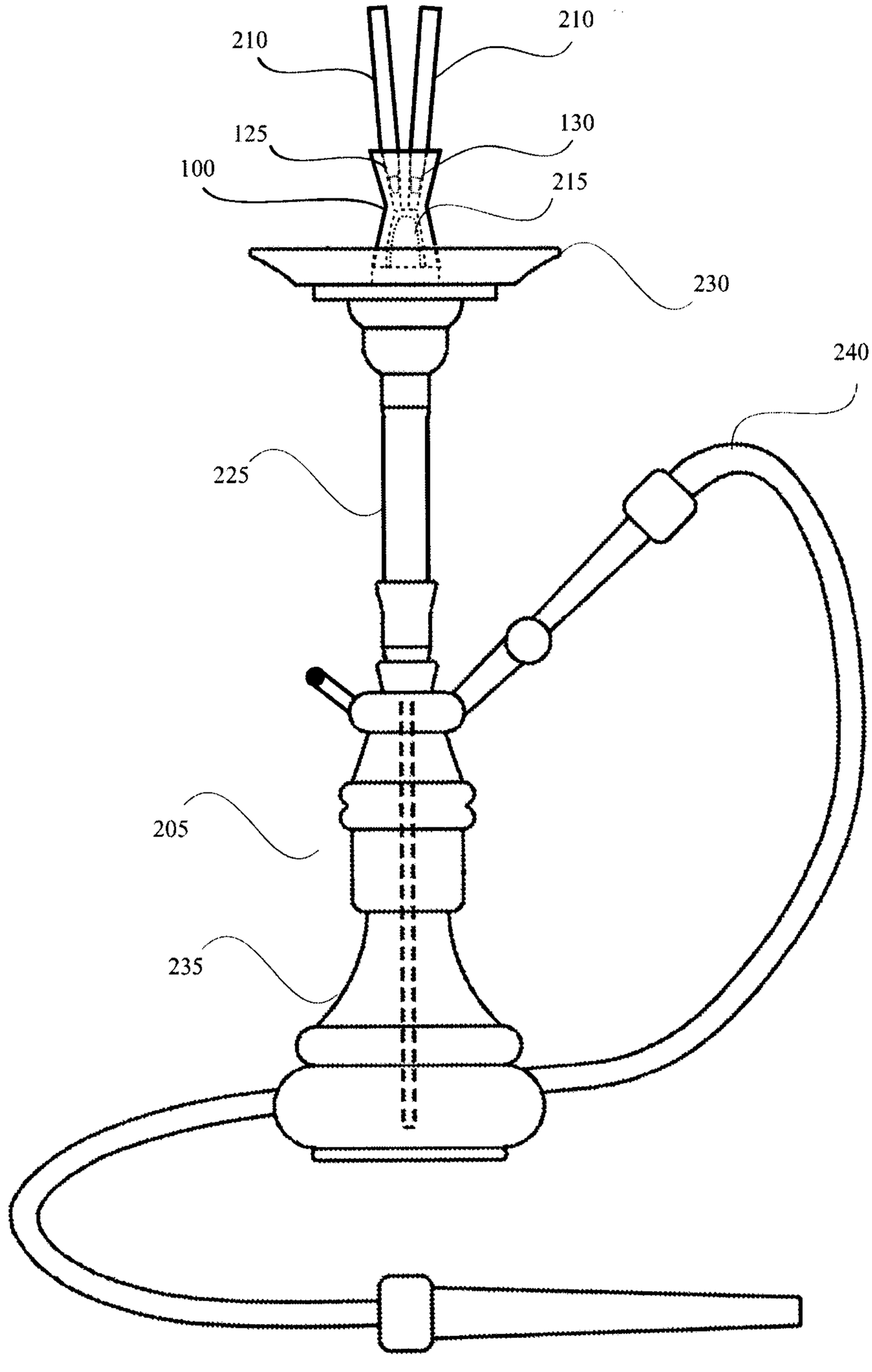
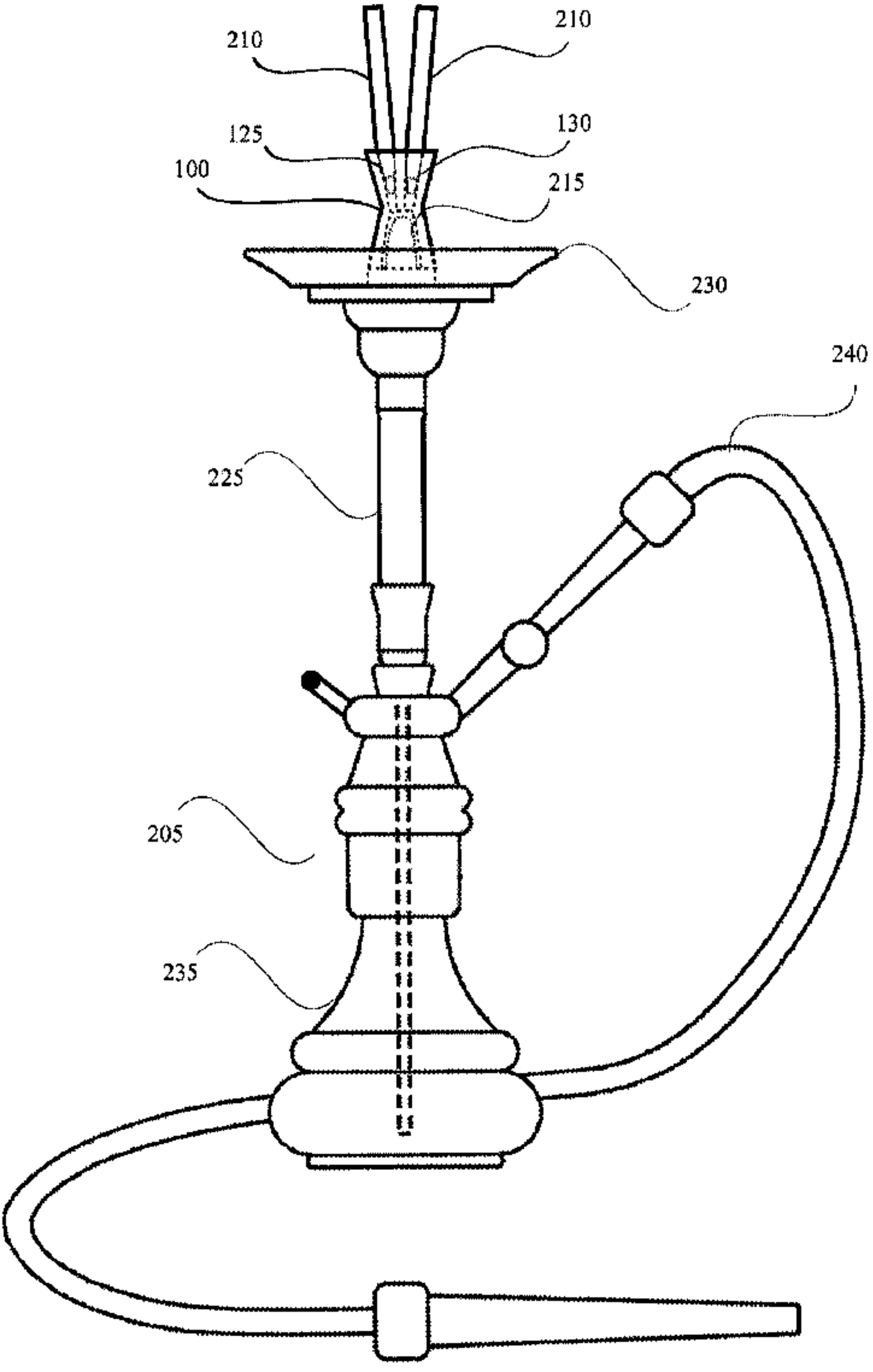


FIG.4


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