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(54) **HOOKAH WITH SIMPLIFIED LIGHTING**

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(57) **ABSTRACT**

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The invention relates to a hookah comprising a filter bottle (1) provided with a suction outlet (10), a bowl (21) designed to contain a combustible mix (M) to be smoked, and a plunger tube (22) connecting the bowl (21) inside the bottle (1) and dipping into the water contained in the bottle to filter the descending smoke.

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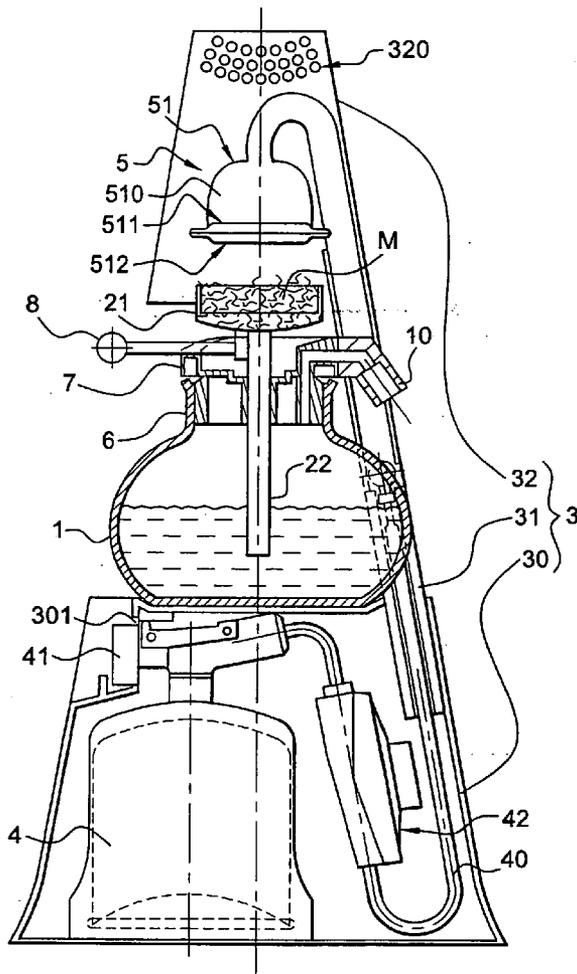
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The hookah according to the invention also comprises a supporting structure (3), an energy source (4), and a heat generator (5), the supporting structure (3) holding the bottle (1), the energy source (4) and the heat generator (5) in a relatively stable position, and the heat generator (5) being located above the bowl (21) and supplied with the energy source (4) during use to heat the combustible mix (M) to a suitable heating temperature.



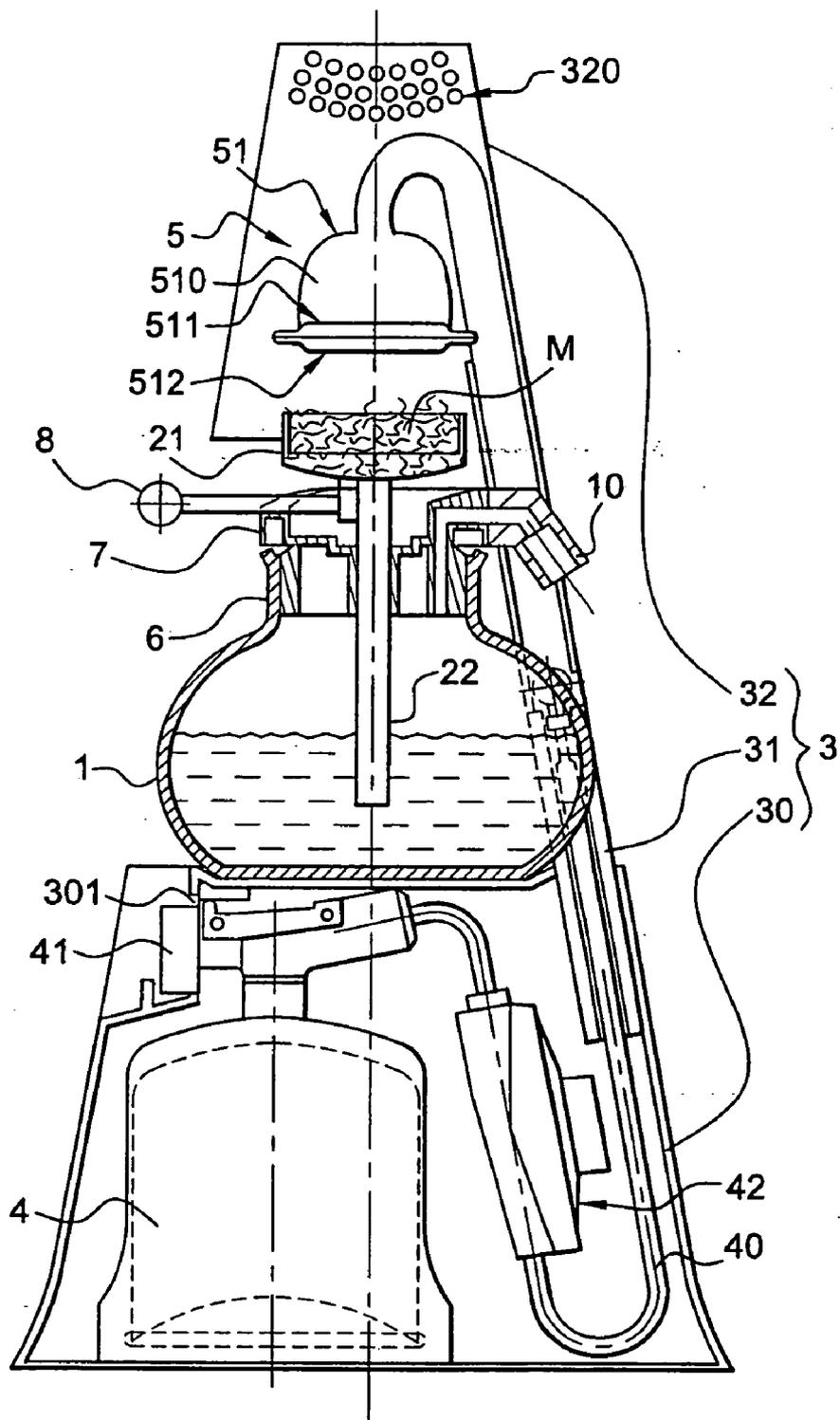


Figure 1

HOOKAH WITH SIMPLIFIED LIGHTING

[0001] The invention relates in general to an article for a smoker.

[0002] More precisely, the invention relates to a hookah or a water pipe comprising a filter bottle provided with a suction outlet, a bowl designed to contain a combustible mix to be smoked, and a plunger tube connecting the bowl to the inside of the bottle and dipping into the water contained in the bottle to filter the descending smoke when the hookah is in use.

[0003] Articles of this type have been known and used in Africa and in Asia for centuries.

[0004] Filtering of the smoke by the water contained in the bottle, the low content of tobacco in the combustible mix and the relatively cool "distillation" temperature of this mix, are all major advantages of the hookah to replace more widespread tobacco consumption habits throughout the world and for which the dangers are now well known.

[0005] However, the use of a traditional hookah in a modern environment raises some difficulties because it requires the manipulation of incandescent fast lighting natural or chemically manufactured coal in order to start and maintain heating of the mix.

[0006] Not only does this manipulation induce risks of burns and fire, particularly if the embers drop because the hookah falls over, but also combustion gases and smoke from the embers (including carbon monoxide) can be irritating for the smoker or persons around him.

[0007] The purpose of the invention in this context is a hookah that is easy to use and does not suffer from the disadvantages mentioned above.

[0008] Consequently, the hookah according to the invention, which complies with the generic definition given in the preamble above, is essentially characterised in that, apart from the filter bottle, the bowl and the plunger tube, it also includes a supporting structure, an energy source and a heat generator, the supporting structure holding the bottle, the energy source and the heat generator in a relatively stable position, and the heat generator being located above the bowl and supplied with the energy source during use to heat the combustible mix to a suitable temperature for distillation.

[0009] The supporting structure advantageously comprises a base, this base possibly delimiting an internal volume inside which the energy source is housed, and that may have a resting surface on which the bottle is placed.

[0010] For example, the energy source may consist of a reserve of combustible gas, in which case the heat generator typically comprises a burner connected to the gas reserve through a pipe, the pipe and the burner possibly being held in place by two uprights of the supporting structure.

[0011] Preferably, the burner includes a pot, an internal metallic grill facing the pot and an external metallic grill facing the bowl, the internal and external grills being separated from each other by a space inside which the burned gas flame is formed.

[0012] For example, the supporting structure includes a cap inside which the burner is housed, and therefore protects the environment from any accidental direct contact with it.

[0013] Furthermore, the stability of the hookah according to the invention can be optimised by an arrangement such that the supporting structure consisting of the base and the cap combined is approximately in the shape of a pyramid.

[0014] The cap can be separated from the base support surface by a space inside which the bottle and the bowl can easily be inserted together, to facilitate access to the bowl when loading the mix.

[0015] As a variant, the cap may be installed free to move in rotation or in translation with respect to the base.

[0016] For example, the base may be provided with a drilling through which there is at least one projecting gas lighter or a gas flow adjustment valve, from the internal volume of this base.

[0017] Finally, the hookah according to the invention also comprises a plug closing the bottle during use, this plug being fitted with the suction outlet and a smoke overflow evacuation valve.

[0018] Other characteristics and advantages of the invention will become clearer from reading the following description given for guidance and that is in no way limitative, with reference to the attached drawing in which the single FIGURE is a diagrammatic sectional view of the hookah according to the invention.

[0019] As mentioned above, such a hookah traditionally includes a filter bottle **1**, a bowl **21** and a plunger tube **22**.

[0020] The filter bottle **1**, usually but not necessarily made of glass, is half-filled with water and has a suction outlet **10** connected through a fast coupling fitting to a long flexible pipe terminated by an end piece that the smoker puts in his mouth, these latter elements not being shown.

[0021] During use, this bottle is closed by a plug **6**, for example carrying the suction outlet **10** through which the plunger tube **22** passes, and provided with a valve **7** that the smoker uses to blow into the bottle **1** when he wants to evacuate the smoke overflow.

[0022] The bowl **21** is designed to contain the combustible mix **M** to be smoked and is prolonged by the plunger tube **22**, the lower end of which is submersed in the water contained in the bottle **1** during use, and that will filter the descending smoke.

[0023] The hookah according to the invention also comprises a supporting structure **3**, an energy source **4** and a heat generator **5**.

[0024] The function of the supporting structure **3** is to hold the bottle **1**, the energy source **4** and the heat generator **5** in a relatively stable position.

[0025] In the embodiment illustrated, the supporting structure **3** comprises a base **30**, two uprights **31** and a cap **32**, the cap being connected to the base by uprights, and the assembly being such that the external shape of the supporting structure **3** resembles a truncated pyramid with a small angle at the vertex.

[0026] Furthermore, the base **30** delimits an internal volume inside which the energy source **4** is housed, and has a resting surface **300** on which the bottle **1** is placed.

[0027] As can be seen in the FIGURE, the suction outlet 10 is preferably oriented downwards and is provided with the structure 3 between the uprights 31, this arrangement preventing the bottle 1 from tipping over.

[0028] Furthermore, the suction outlet 10 is advantageously adapted to contain a fast attachment system, or is provided with such a system, so that the flexible tube can quickly and easily be put into place.

[0029] The heat generator 5 is arranged above the bowl 21 in the cap 32 and is supplied by the energy source 4 during use to warm up the combustible mix M to an appropriate heating temperature.

[0030] In the case illustrated in the FIGURE in which the energy source 4 is composed of a combustible gas reserve 4, the heat generator 5 essentially comprises a burner 51 connected through a pipe 40 to the gas reserve 4 through a flow adjustment valve 41 and a pressure reducer 42.

[0031] This adjustment valve 41 and possibly a gas lighter, for example a piezo-electric lighter, are at least partially housed in the internal volume of the base 30 and project outwards from the base through a drilling 301 in the base, this valve and this gas lighter possibly being activated from outside the base 30.

[0032] The pipe 40 and the burner 51 are advantageously supported at least partly supported by the uprights 31 of the supporting structure 3.

[0033] The burner 51 comprises a pot 510, an internal metallic grill 511 facing the pot 510 and an external metallic grill 512 facing the bowl 21.

[0034] These internal and external metallic grills 511 and 512, for example made of steel, are separated from each other by a space inside which the gas flame burned in the burner 51 is formed during use.

[0035] An adjustment pullback 8 adjusts the height of the bowl 21 relative to the burner 51 and correspondingly to vary the distillation rate of the mix M to be smoked.

[0036] In the embodiment illustrated, the cap 32 is separated from the support surface 300 of the base 30 by a space inside which the bottle 1 and the bowl 21 may be inserted together, particularly so that the bowl 21 can easily be reloaded with the mix M and ash can be removed after use.

[0037] As a variant, the cap 32 may be installed free to move in rotation or translation with respect to the base 30, so that it can adopt a position in which the bottle and the bowl are accessible.

[0038] The upper part of the cap 32 is perforated with openings 320 over 36% of its surface, for example to enable correct evacuation of combustion gases and heat from the

burner, otherwise the residual temperature inside the cap will be excessive and could cause micro-explosions of combustion gases still contained in it.

1. Hookah comprising a filter bottle (1) provided with a suction outlet (10), a bowl (21) designed to contain a combustible mix (M) to be smoked, and a plunger tube (22) connecting the bowl (21) to the inside of the bottle (1) and dipping into the water contained in the bottle to filter the descending smoke, characterised in that it also comprises a supporting structure (3), an energy source (4) and a heat generator (5), the supporting structure (3) comprising a base (30) and holding the bottle (1), the energy source (4) and the heat generator (5) in a relatively stable position, and the heat generator (5) being located above the bowl (21) and supplied with the energy source (4) during use to heat the combustible mix (M) to a suitable heating temperature, and in that the base (30) delimits an internal volume in which the energy source (4) is housed and has a rest surface (300) on which the bottle (1) is placed.

2. Hookah according to claim 1, characterized in that the energy source (4) consists of a reserve (4) of combustible gas.

3. Hookah according to claim 2, characterized in that the heat generator (5) comprises a burner (51) connected to the gas reserve (4) through a pipe (40), the pipe (40) and the burner (51) being held by two uprights (31) of the supporting structure (3).

4. Hookah according to claim 3, characterized in that the burner (51) comprises a pot (510), an internal metallic grill (511) facing the pot (510) and an external metallic grill (512) facing the bowl (21), and in that the internal and external grills (511, 512) are separated from each other by a space inside which the burned gas flame is formed.

5. Hookah according to claim 1, characterized in that the supporting structure (3) comprises a cap (32) in which the burner (51) is housed, and in that the supporting structure consisting of the base (30) and the cap (32) combined is approximately in the shape of a pyramid.

6. Hookah according to claim 5, characterized in that the cap (32) is separated from the support surface (300) of the base (30) by a space in which the bottle (1) and the bowl (21) can be inserted together, or in that the cap (32) is installed free to move with respect to the base (30).

7. Hookah according to claim 1, characterized in that the base (30) has a drilling (301) through which at least one gas lighter or a gas flow adjustment valve (41) projects from the internal volume of this base (30).

8. Hookah according to claim 1, characterized in that it also comprises a plug (6) closing the bottle (1), this plug being fitted with the suction outlet (10) and a smoke overflow evacuation valve (7).

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