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(54) **ASHTRAY, SMOKING ROOM PROVIDED WITH AN ASHTRAY**

ASCHENBECHER, MIT EINEM ASCHENBECHER AUSGESTATTETES RAUCHERZIMMER

CENDRIER, FUMOIR DOTE D'UN CENDRIER

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Description

[0001] The invention relates to an ashtray as described in the preamble of claim 1.

[0002] The invention also relates to a smoking area furnished with such an ashtray.

[0003] By and large, smoking is becoming less and less tolerated and consequently smokers often smoke outdoors. In doing so, the waste / street litter (cigarette butts) also moves outdoors. This problem has been emphasised once again in a recent report prepared by assignment of "Holland Spotless", which reveals that cigarette litter (butts) constitutes a major and an ever more important factor in street litter.

[0004] Because of the statutory ban on smoking, gathering areas emerge in companies and in (public) facilities at entrances of buildings and in waiting areas (inside and outside) and at outdoor places to smoke. Smoking is only allowed in the areas assigned for this purpose, either behind closed doors (often in a separate area or a room equipped with an exhaust installation) or outdoors.

[0005] Such smoking rooms are often furnished with standard litter bins and/or ashtrays. Even though one would think that because of these provisions the problem oflitter would be reduced in and around such smoking rooms, the opposite often proves to be true. The litter in the way of cigarette butts is clearly visible and constitutes a big problem. Butts make the smoking room look dirty, which in itself is a problem, but this also results in the fact that smokers are going to avoid the 'filthy' smoking rooms, which merely increases the problem of scattered smoking litter.

[0006] A great number of ashtrays is known, for instance:

From the British patent application GB 2 350 277 an ashtray is known that is suitable for placement in existing litter bins. From the German patent application DE 100 10 893 an ashtray is known that can be placed on a column. From the American patent US 1 793 100 an ashtray is known that is placed in an edge of a table. Also, from the American patent US 1436 405 an ashtray is known that is placed in an edge of a table. From the American patent US 2 637 490 an ashtray is known that is fastened to a wall so that people who, for instance, are waiting for a lift are able to extinguish their cigarettes into it. From the American patent US 5 159 941 an ashtray is known that is placed in a stand up housing. From the German "Gebrauchsmuster" DE 84 09 525 U1 an ashtray is known that is placed in a pole. Therefore there is no lack of types of ashtray constructions. In spite of the large number of well-known ashtrays, litter in the form of cigarette butts is and remains a serious, strongly increasing problem, also due to having chased smokers away from buildings. Cleaning of an ashtray also provides for a problem. For these problems the existing ashtrays do not offer a good solution.

[0007] It is an objective of the invention to provide an ashtray and a smoking area enabling the above-mentioned problems to become more controllable.

[0008] For this purpose the ashtray is characterised according to claim 1.

[0009] The smoking area is furnished with an ashtray according to claim 1.

[0010] According to the invention, the ashtray is provided with a water collector, separate from the receptacle for cigarette butts and the ashtray is provided with a water conductor for guiding water that drops in the ashtray to the water collector and cigarette butts to the receptacle.

[0011] This is especially important for ashtrays in which the stamping-out surface lies flush with a floor space. When it rains or when the floor is being cleaned, water can flow into the ashtray. By providing the ashtray with a water conductor which guides the water to a water collector that is separate from the receptacle for cigarette butts, the ashtray will not fill up so quickly and will be easier to clean.

[0012] Preferable the stamping-out surface is furnished with one or more inclined planes that slant toward the opening.

[0013] An inclined plane facilitates sliding the stamped-out cigarette butt towards the opening. This way it is easier to slide the butt with the foot into the opening. Moreover, the biggest problem is that butts start scattering about after a while, Butts start to scatter about mostly either because other people inadvertently walk over and move them around or by the wind. In such cases the inclined plane will smoothly guide the butt to the opening so that anyway a share of the butts are collected and this prevents them scattering about.

[0014] Preferably the opening is positioned at an upwardly pointed angle relative to the edge of the stamping-out surface next to the opening. There where the inclined plane guides the butt to the opening, an upwardly pointed opening ensures that the butts can slide easier into the opening, either intentionally (which of course is preferable) or unintentionally, for instance, by the wind. In all cases the problem diminishes by this position of the opening. Within the scope of the invention, upwardly pointed means that a plane through the opening from the edge of the stamping-out surface is pointed upward.

[0015] Preferably the opening is in essence a vertical opening. This leads to a good result.

[0016] Preferably the dimension of the opening in vertical direction is at least 1 centimetre. A butt is typically about 2 to 2.5 cm long and 0.8 cm wide. A height of 1 cm of the opening enables the cigarette butt to slide easily into the opening. Preferably the dimension of the opening in vertical direction is less than 5, but more than 2.5 cm. An opening that is too high will invite shoving other larger waste material, such as tins and such into the opening. Although this in itself does not yet need to cause any problem, it can quickly cause the opening to block up,

after which the ashtray loses its function. Preferably the opening is large enough to allow cigarette butts to enter that have a larger diameter (maximum 2 tot 2.5 cm)

[0017] Preferably the opening is shaped by an edge section of the ashtray and the stamping-out surface, whereby the stamping-out surface stretches out up to under the edge section on the spot of the edge section. This reduces the chance of accidents and it reduces or eliminates a direct view of the smoking waste.

[0018] Preferably the ashtray is designed in such a way that there is no direct view of smoking waste present in the receptacle. Conventional ashtrays allow a direct view of the smoking waste. This renders a dirty impression as a whole, which either scares off people or it gives the impression that the surroundings are already dirty anyway so that one is quickly inclined not to pay any attention to cleanliness.

[0019] Preferably the stamping-out surface is bowed.

[0020] For a stamping-out surface in the shape of a flat section provided with a helical slope at one side, one should press with the foot a cigarette butt from the flat section of the stamping-out surface onto the helical slope. A bowed stamping-out surface has the advantage that it "automates" the sliding motion of the butt, that means that merely a slight foot movement, or even no foot movement at all suffices to move the butt, after stamping it out, into the opening by means of the inclined plane shaped by the curvature of the stamping-out surface. This reduces the chance of stamped out cigarette butts from scattering around. This means that it is also possible to use nicer shapes, such as round, elliptical shapes, but also long lines/strings, with roundings and corners (cigarette butt gutter). The stamping-out surface has a shape that is bowed on at least one side. The height difference over the curvature lies preferably between 2 and 5 cm which on the one hand is sufficient for being able to slide the butt into the opening, on the other hand it does not provoke any safety problems. A preferred curvature is a curvature which increases toward the outer edge, preferably increases on the basis of a logarithmic curve. A bowed shape, compared to a shape with a sudden transition between a flat section and an inclined section, also reduces the chance of tripping. An increased curvature provides on one side a reasonably flat piece on which the cigarette butt can be extinguished, whereas on the other side it is possible to make a relatively sharp slope to allow a stamped-out cigarette to enter the opening.

[0021] For the cigarette butt receptacle there are a number of preferred embodiments:

The stamping-out surface forms a "cover" on the receptacle. This receptacle should be able to absorb the forces that may be applied to the "cover". A receptacle which shows a tubular shape is preferred, preferably shaped as a round tube. In this way the forces are absorbed optimally. Preferably the receptacle is, for instance, implemented in the shape of a round tube, made of concrete, but it can also be made of polyester concrete (especially in view of production, transportation costs and suchlike) or made of plastic, preferably flameproof or self-extinguishing.

[0022] Preferably, for ashtrays that are dug in, the bottom of the receptacle is provided with holes in the bottom with a diameter smaller than that of a cigarette (sieve effect). This allows rainwater to flow in the existing subsoil. Preferably the holes are covered with a layer with a granular structure. If a deposit of butts, forming a concentrated sludge, lies on the bottom, it is highly likely that the channels will get clogged. A layer with a granular structure helps to prevent the channels from clogging and can serve as a wafer buffer. Such a buffer can be useful when there is a fixed bottom especially during a heavy rainfall. Preferable on top of this layer, a fine-meshed preferably bowed, perforated plate is mounted, which serves as a sieve that lets the water through and distillates the butts at the top of the plate.

[0023] In embodiments the receptacle is removable, so that it can be emptied.

[0024] In other embodiments the stamping-out surface is detachable or it can swing open so that it is possible to empty and dean the receptacle that is situated underneath it.

[0025] In yet other embodiments the ashtray is provided with a suction opening so that the receptacle situated underneath the stamping-out surface can be drained and possibly rinsed. The operations needed to empty the ashtray are preferably both simple and hygienic. Emptying the ashtray using a "vacuum cleaner", or with larger systems rinsing it with liquid is a simple operation. When using this latter method, the layer with a granular structure and the perforated plate is preferably not mounted, also there are no drain holes in the bottom. In principle, emptying can be done by using a normal vacuum cleaner, but professionally, by using a mobile suction unit attached to the cleaner's back, (compare it with a leaf blower operating reversely) that can clean up the surroundings littered by small pieces of waste as well.

[0026] The suction opening for emptying purposes by means of a vacuum cleaner can be located in a central section of the stamping-out surface but because such a central section is also often a pressure point, the suction opening is preferably located away from the central section of the stamping-out surface, namely situated further towards the edge, however, in such a manner that the suction nozzle is free to move (the edge may not be in the way). For this purpose the suction nozzle is indeed adapted to the inclined suction position.

[0027] The invention also relates to a smoking area furnished with an ashtray according to any one of the claims 1 to 16.

[0028] In embodiments the ashtray is placed and fastened in a floor of the smoking area and the stamping out surface extends between 20 cm below and 40 cm above a ground surface of the floor. Preferably the stamp-

ing out area extends in essence at ground level.

[0029] Placing the ashtray in a floor space makes the ashtray sturdier so that one's foot can be placed on it with the exertion of force. After the cigarette has been extinguished with the foot, one can shove the butt with the foot, therefore without bending down, into the opening that is provided next to the stamping-out surface, after which the butt is collected in the receptacle and is no longer a part of the litter problem. In this manner, in a way that is consistent with the existing, unshakable habit of smokers, the problem of cigarette litter is solved quite simply, at least diminishes.

[0030] Smokers are used to extinguishing a cigarette/cigar prior to depositing it in a litter bin or ashtray. However, a large number of smokers has a deeply rooted habit of extinguishing a cigarette or butt with the foot, they let the cigarette/butt intuitively drop on the floor and stamp it out with the (front)foot or sometimes also with the heel of the shoe. Of course, after wards the smoker can pick up the butt and deposit it in a litter bin or an ashtray which customarily is available in or near the smoking room, but the reality is, that many people neglect to do this, and also this action is for many people simply not possible due to physical handicaps. All of the previously known ashtrays implicitly assume the principle that people extinguish the cigarettes by hand and subsequently deposit them in the ashtrays. The inventor has ascertained that none of the existing ashtrays can solve the production of litter with regard to stamped-out butts on the ground. The opening of the well-known ashtrays is usually at hand height for instance on a column, or in a table, or on the wall, or placed in existing public litter bins, and therefore the opening of the ashtray at hip or hand height is approximately 1 metre from the ground. When a person stamps out a butt with the foot, he should pick up the stamped-out but and dispose it in the ashtray. However, many forget to undertake this action.

[0031] The smoking area of the invention solves, in a way that is consistent with the existing, unshakable habits of smokers of extinguishing the cigarette by foot, the problem of cigarette litter quite simply; at least the problem is greatly diminished.

[0032] Within the framework of the invention 'placed in' is to be broadly interpreted. In embodiment the ashtray is positioned in the floor in its entirety, but it can also partly protrude from the floor, as long as the stamping-out surface is at the indicated height The ashtray may be permanently fastened, in the sense that it cannot be removed without using brute force. The ashtray can be removable fastened, for instance by screws, bolts, bajonet joint systems. Preferably such reversible fastening means are provided with a lock to prevent removal by unauthorized persons.

[0033] The ashtray can also be placed in a in shape corresponding cavity in the floor without being fastened, although such embodiments are not preferred, given the risk of theft.

[0034] Within the framework of the invention "floor" is to interpreted broadly as any surface upon which one could walk. The floor may be situated inside a building or outside a building. 'Floor' encompasses for instance also a ground, a pavement, concrete indoor floors, tiled floors, staircases etc. A stamping-out surface is a surface that is large enough to place a front foot or heel of a shoe on it and it is strong and sturdy enough to extinguish a cigarette with the foot.

[0035] Preferably the ashtray is placed in such a way that the stamping-out surface extends between 5 centimetres below and 20 cm above the floor surface. Too much distance between the floor surface and the stamping-out surface requires, at least for some people, too much of an effort.

[0036] At any rate, preferably a part of the stamping-out surface is actually at floor level and the ashtray does not or barely protrudes above floor level. At floor level, this means that the distance in vertical direction between the stamping-out surface on the one hand and the surrounding floor on the other, is less than 2 cm, preferably is less than 0.5 cm. No or negligible protrusion means that also the remaining top parts of the ashtray in essence extend at floor level. This reduces the chance of tripping over or in the ashtray to a minimum

[0037] In such embodiments the ashtray is dug into the ground and preferably recessed to such an extent that the pavement and the top of the ashtray stretch out flush in one plane. This reduces the chance of stumbling and thereby increases the safety aspect.

[0038] In other embodiments the ashtray is fastened to the ground as a separate unit. In that case the ashtray protrudes above the ground and preferably it is fastened on the ground to a wall, and even more preferably fastened on the ground in a corner. The chance of stumbling over the ashtray is therefore reduced to a minimum.

[0039] These and further aspects of the invention are described in the following and illustrated on the basis of the drawing:

In the drawing:

Figures 1 to 6 show ashtrays without a water collector and without a water conductor.
Figures 7 and 8 show embodiments of an ashtray provided with a water collector and a water conductor according to the invention as claimed.

[0040] The figures are not drawn to scale, equivalent parts, as a rule, are marked with identical reference numerals.

[0041] Figure 1 shows in cross-section an ashtray. In this figure the floor level is marked by the horizontal dotted line. In this example the ashtray 1 has been inserted in the floor. The ashtray contains a stamping-out surface 2, next to which openings 3 are provided for. A typical dimension of a round or square stamping-out surface lies between 100 and 900 cm^2. With elongated, large-shaped ashtrays the dimensions in transverse direction are typ-

ically 15 to 30 can. The stamping-out surface is at foot height. In this ashtray a central part of the stamping-out surface is situated at ground level and on a plane with the edge 6. The stamping-out surface is provided with an inclined section 4 which slopes down. This allows stamped-out cigarettes to easily slide towards the opening Preferably the stamping-out surface, in this example the section 4 of the stamping-out surface 2, stretches out to underneath the edge 6. This reduces the chance of people tripping or getting their heels entangled when they walk over the ashtray. The opening here is in essence a vertically orientated opening with a vertical dimension d_v. This height d_v of opening 3 is preferably more than 1 cm, allowing cigarette butts to easily slide into the opening and preferably the height is less than 5, most preferably less than 4 cm, but more than 2.5 cm, thereby making it difficult to push much larger objects into the opening, except for smoking waste. In this preferred example the stamping-out surface 2 is bowed with a curvature R, of which the curvature R of the central section 2a increases towards the opening. This results in a relatively flat central section 2a on which the cigarette can easily be extinguished, and a fairly steep section 4 allowing the cigarette to slide easily into the opening. Such a gradient transition also reduces the chance of a person slipping on it The receptacle 5 is provided with holes 7 in the bottom allowing (rain) water to drain out. It is also provided with a granular layer 8 on top of which a grid 9 is mounted. This grid and the granular layer prevent the holes 7 from getting clogged. The ashtray is provided with a suction opening 10. In this figure the suction opening is situated in the stamping-out surface under the floor level, outside of the central section 2a. The receptacle 5 is, in this figure, carried out in a tubular shape which absorbs the forces the best. An eye illustrates that the constriction is such that collected cigarette butts are not visible. It is simple to experimentally determine whether this condition has been complied with, as well as by drawing lines at eye height (between 1.50 and 1.90 metres) through the opening or openings. If these lines merely meet the top section of the receptacle the condition has been complied with. Also the adjustments regarding the shape in order to meet this criterion can quite simply be carried out. The smoker drops the burning cigarette butt on the stamping-out surface, the butt is extinguished with the foot, subsequently the cigarette butt is pushed to the opening by the foot of the smoker via the inclined plane 4, or on account of its inclined character it slides automatically to the opening 3. From a horizontal position the cigarette butt thus slides automatically via the inclined plane into the opening. Since the opening relative to the inclined plane protrudes upwards, there is a small chance that (as could happen with a pure horizontal opening) the cigarette slides or bounces over the opening. In this and the other given examples the receptacle is situated directly underneath the stamping-out surface. Seen from above the stamping-out surface and the receptacle could also be positioned side by side although such ashtrays will take up more space. It is possible to slide an extinguished butt from the stamping-out surface into the opening. The opening and the stamping-out surface are positioned with respect tof each other and the floor such that this is possible.

[0042] Figure 2 shows in cross-section still another ashtray. Various stamping-out surfaces 2 are provided in the figure, each provided with an inclined section 4 that leads to an opening 3. The tops of the stamping-out surfaces lie in one plane and the openings are vertical. This prevents or reduces the chance of people from tripping.

[0043] Figure 3 shows a variation to the ashtray of figure 2 in which the central stamping out-surface is flat.

[0044] Figure 4 shows a simple embodiment of the ashtray in which the stamping-out surface is flat. Also in this ashtray a direct view of the collected smoke waste is not possible. Disadvantages compared to previously shown ashtrays are a slightly greater chance of tripping and furthermore the cigarette butt should be actively shoved into the opening as there is no inclined plane present. An advantage is that a direct view of the smoking waste collected is not possible.

[0045] Figure 5 shows an ashtray that is inserted in the floor space in such a way that it partially protrudes above the floor space.

[0046] Figure 6 shows once again a further ashtray. In this ashtray the suction opening 10 is located at the side, and the stamping-out surface is equipped with a hinge 11 so that it is can be folded out. Although it is possible to make the stamping-out surface detachable or made to swing open as shown in this figure, preferably a fixed stamping-out surface 2 is used which continues up to under the edge 6 (see figure 1) and it is provided with one suction opening. In this ashtray the stamping out surface runs quite abruptly over from a flat horizontal section to a surface (which means with an almost infinite large radius of curvature) which slopes downwards. A smoother transition of a flat section to an inclined section, therefore a bowed appearance (as shown in previous figures) has the advantage that there is a bigger chance that the extinguished cigarette slides towards the opening whereas the smoker, by and large, needs to exert less of an effort. This figure also shows schematically the width W of the stamping-out surface which, for instance and preferably lies between the 15 and 35 cm.

[0047] The ashtray shown in the above figures 1 to 6 are not provided with a water collector and a water conductor as per claim 1. Water can flow into the ashtray and be absorbed by the cigarette butts in the receptacle for cigarette butts.

[0048] Figure 7 shows an embodiment of the ashtray according to the invention from a top view in the top part of the figure and a cross-sectional view in the bottom part of the figure. Water that falls on stamping-out surface 2, either directly or through the opening, flows to the water collector 10 through the bowed-shape of water conductor 11. The water collector 10 is a section that is separate from the cigarette butt receptacle. By means of adhesion

the water sticks to the water conductor until it has reached the bottom edge, after which it falls from the bottom edge of water conductor 11 into the water collector 10. In contrast, cigarette butts fall down from edge 12 into the receptacle 5.

[0049] Figure 8 shows a variant to the embodiment displayed in figure 7. In figure 7 the water is collected in an innermost section of water collector 10. In figure 8 the water is collected in an outermost ring of water collector 10. Receptacle 5 is here an innermost section. This is preferred, particularly if, as shown schematically in figure 8, the top part of the ashtray is detachable. In this case the top part rests on supports 13 and is fastened with screws not shown here and other reversible fastening tools. It is possible to remove the top part which allows direct and simple access to the centrally positioned receptacle 5. This makes cleaning of receptacle 5 simpler.

[0050] It must be quite clear that within the scope of the invention many variations are possible and that the invention is not limited to the examples given above.

[0051] In summary the invention may be described by:

An ashtray (1) is placed in a floor space and provided with a stamping-out surface (2) at foot height The ashtray is provided with an opening (3) next to the stamping-out surface that leads to a receptacle (5) for cigarette butts. The ashtray is provided with a water collector (10), separate from the receptacle (5) for cigarette butts and the ashtray is provided with a water conductor (11) for guiding water that enters in the ashtray to the water collector (10) and cigarette butts to the receptacle (5). The stamping-out surface (2) is preferably bowed. Preferably the ashtray does not protrude from the floor.

Claims

1. An ashtray (1), wherein the ashtray comprises a stamping-out surface (2) and an opening (3) next to the stamping out-surface leading to a receptacle (5) for cigarette butts, **characterised in that** the ashtray is provided with a water collector (10), separate from the receptacle (5) for cigarette butts and the ashtray is provided with a water conductor (11) for guiding water that enters in the ashtray to the water collector (10) and cigarette butts to the receptacle (5).

2. An ashtray as claimed in claim 1, wherein the ashtray comprises a removable top part above the receptacle, said top part comprising the water conductor (11).

3. An ashtray as claimed in claim 1 or 2, wherein the water conductor (11) comprises a first edge (12) and a second edge, below the first edge (12).

4. An ashtray as claimed in any of the claims 1 to 3, wherein the water collector comprises an outermost ring, around the receptacle (5), for collection of water from the water conductor (11).

5. An ashtray according to any of the preceding claims, **characterised in that** the stamping-out surface is provided with one or more inclined planes (4) that slope towards the opening (3).

6. An ashtray according to any of the preceding claims, **characterised in that** the opening (3) is positioned at an upwardly pointed angle relative to the edge of the stamping-out area next to the opening.

7. An ashtray according to claim 6, **characterised in that** the opening (3) is essentially a vertical opening.

8. An ashtray according to claim 6 or 7, **characterised in that** the dimension (d_v) of the opening (3) in vertical direction is at least 1 centimetre.

9. An ashtray according to claim 8, **characterised in that** the dimension (d_v) of the opening in vertical direction is less than 5 centimetres.

10. An ashtray according to any one of the preceding claims, **characterised in that** the opening is formed between an edge section (6) of the ashtray and the stamping-out surface, whereby the stamping-out surface (2) on the sport of the edge section (6) stretches out to below the edge section.

11. An ashtray according to any one of the preceding claims, **characterised in that** the stamping-out surface (2) is bowed.

12. An ashtray according to claim 11, **characterised in that** the stamping-out surface shows a curvature (R) whereby the curvature increases towards the outside.

13. An ashtray according to any one of the preceding claims, **characterised in that** receptacle comprises holes (7) in the bottom with a diameter that is smaller than that of a cigarette.

14. An ashtray according to claim 13, **characterised in that** the ashtray comprises a layer (8) with a granular structure placed above the holes (7).

15. An ashtray according to any one of the preceding claims, **characterised in that** the ashtray comprises a suction opening for draining the receptacle located underneath the stamping out surface.

16. An ashtray according to claim 15, **characterised in that** the suction opening is situated in the stamping out surface in a section between a central section

(2a) of the stamping- out surface and the opening (3).

17. Smoking area furnished with an ashtray according to any one of the preceding claims.

18. Smoking area as claimed in claim 17, wherein the ashtray is placed and fastened in a floor of the smoking area and the stamping out surface extends between 20 cm below and 40 cm above a ground surface of the floor.

19. Smoking area as claimed in claim 18, wherein the stamping out area extends in essence at ground level.

Patentansprüche

1. Ein Aschenbecher (1), wobei der Aschenbecher einen Austretbereich (2) und eine Öffnung (3) neben dem Austretbereich enthält, die zu einem Behälter (5) für Zigarettenkippen führt, **dadurch gekennzeichnet, dass** der Aschenbecher mit einem Wasserauffangbehälter (10) versehen ist, welcher vom Behälter (5) für Zigarettenkippen getrennt ist, und der Aschenbecher verfügt über einer Wasserleitvorrichtung (11) zum Leiten des Wassers, das in den Aschenbecher eindringt, zum Wasserauffangbehälter (10) und von Zigarettenkippen in den Behälter (5).

2. Ein Aschenbecher nach Anspruch 1, wobei der Aschenbecher einen abnehmbaren oberen Teil über dem Behälter enthält, welcher oberer Teil die Wasserleitvorrichtung (11) enthält.

3. Einen Aschenbecher nach Anspruch 1 oder 2, wobei die Wasserleitvorrichtung (11) einen ersten Rand (12) und einen zweiten Rand unter dem ersten Rand (12) enthält.

4. Ein Aschenbecher nach Ansprüche 1 bis 3, wobei der Wasserauffangbehälter einen den Behälter (5) umgebenden äußeren Ring zum Sammeln von Wasser vom Wasserauffangbehälter (11) enthält.

5. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Austretbereich mit einer oder mehreren zur Öffnung (3) hin geneigten schrägen Flächen (4) ausgestattet ist.

6. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Öffnung (3) einen nach oben weisenden Winkel bezüglich des Randes des Austretbereichs neben der Öffnung aufweist.

7. Ein Aschenbecher nach Anspruch 6, **dadurch gekennzeichnet, dass** die Öffnung (3) eine im Wesentlichen senkrechte Öffnung ist.

8. Ein Aschenbecher nach Anspruch 6 oder 7, **dadurch gekennzeichnet, dass** die Größe (d_V) der Öffnung (3) in senkrechter Richtung mindestens 1 Zentimeter beträgt.

9. Ein Aschenbecher nach Anspruch 8, **dadurch gekennzeichnet, dass** die Größe (d_V) der Öffnung in senkrechter Richtung weniger als 5 Zentimeter beträgt.

10. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Öffnung zwischen einem Randabschnitt (6) des Aschenbechers und dem Austretbereich gebildet wird, wobei sich der Austretbereich (2) an der Stelle des Randabschnitts (6) bis unterhalb des Randabschnitts erstreckt.

11. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Austretbereich (2) bogenförming ist.

12. Ein Aschenbecher nach Anspruch 11, **dadurch gekennzeichnet, dass** der Austretbereich eine Krümmung (R) aufweist, wobei die Krümmung nach außen hin zunimmt.

13. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Behälter Löcher (7) im Boden enthält, deren Durchmesser kleiner als der einer Zigarette ist.

14. Ein Aschenbecher nach Anspruch 13, **dadurch gekennzeichnet, dass** der Aschenbecher über den Löchern (7) eine Schicht (8) mit Granulatstruktur enthält.

15. Ein Aschenbecher nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Aschenbecher eine Saugöffnung zum Entleeren des Behälters enthält, die sich unter dem Austretbereich befindet.

16. Ein Aschenbecher nach Anspruch 15, **dadurch gekennzeichnet, dass** die Saugöffnung sich im Austretbereich befindet und zwar in einem Abschnitt zwischen einem mittleren Abschnitt (2a) des Austretbereichs und der Öffnung (3).

17. Rauchbereich ausgestattet mit einem Aschenbecher nach einem der vorhergehenden Ansprüche.

18. Rauchbereich nach Anspruch 17, wobei der Aschenbecher in einem Fußboden des Rauchbereichs aufgestellt und befestigt ist und der Austretbereich sich

zwischen 20 cm unter und 40 cm über einer Bodenfläche des Fußbodens erstreckt.

19. Rauchbereich nach Anspruch 18, wobei der Austretbereich sich im Wesentlichen auf der Bodenfläche erstreckt.

Revendications

1. Un cendrier (1), dans lequel le cendrier comprend une surface d'écrasement (2) et, à côté de la surface d'écrasement, une ouverture (3) conduisant à un réceptacle (5) à mégots, **caractérisé en ce que** le cendrier est doté d'un collecteur d'eau (10), distinct du réceptacle (5) à mégots et que le cendrier est fourni avec un conducteur d'eau (11) pour diriger l'eau entrant dans le cendrier vers le collecteur d'eau (10) et les mégots vers le réceptacle (5).

2. Un cendrier selon la revendication 1, dans lequel le cendrier comprend une partie supérieure amovible, ladite partie supérieure comprenant le conducteur d'eau (11).

3. Un cendrier selon la revendication 1 ou 2, dans lequel le conducteur d'eau (11) comprend un premier bord (12) et un second bord sous le premier bord (12).

4. Un cendrier selon l'une quelconque des revendications 1 à 3, dans lequel le collecteur d'eau comprend un anneau extérieur autour du réceptacle (5) pour recueillir l'eau du conducteur d'eau (11).

5. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la surface d'écrasement est dotée d'un ou de plusieurs plans inclinés (4) en pente vers l'ouverture (3).

6. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'ouverture (3) est positionnée à un angle dont la pointe est dirigée vers le haut par rapport au bord de la zone d'écrasement à côté de l'ouverture.

7. Un cendrier selon la revendication 6, **caractérisé en ce que** l'ouverture (3) est essentiellement une ouverture verticale.

8. Un cendrier selon la revendications 6 ou 7, **caractérisé en ce que** la dimension (d_V) de l'ouverture (3) dans le sens vertical est d'au moins 1 centimètre.

9. Un cendrier selon la revendication 8, **caractérisé en ce que** la dimension (d_V) de l'ouverture dans le sens vertical est de moins de 5 centimètres.

10. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'ouverture est constituée entre une section bord (6) du cendrier, tandis que la surface d'écrasement (2) à l'endroit de la section bord (6) s'étend jusqu'au-dessous de la section bord.

11. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la surface d'écrasement (2) est courbe.

12. Un cendrier selon la revendication 11, **caractérisé en ce que** la surface d'écrasement présente une courbure (R), la courbure augmentant vers l'extérieur.

13. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le réceptacle comprend, dans le fond, des orifices (7) d'un diamètre inférieur à celui d'une cigarette.

14. Un cendrier selon la revendication 13, **caractérisé en ce que** le cendrier comprend une couche (8) à structure granuleuse placée au-dessus des orifices (7).

15. Un cendrier selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le cendrier comprend une ouverture de succion pour le drainage du réceptacle situé au-dessous de la surface d'écrasement.

16. Un cendrier selon la revendication 15, **caractérisé en ce que** l'ouverture de succion est située sous la zone d'écrasement, dans une section entre une section centrale (2a) de la surface d'écrasement et l'ouverture (3).

17. Zone fumeur équipée d'un cendrier selon l'une quelconque des revendications précédentes.

18. Zone fumeur selon la revendication 17, dans laquelle le cendrier est placé et fixé dans un sol de la zone fumeur et la surface d'écrasement s'étend entre 20 cm au-dessous et 40 cm au-dessus d'une surface du sol.

19. Zone fumeur selon la revendication 18, dans laquelle la zone d'écrasement s'étend essentiellement au niveau du sol.

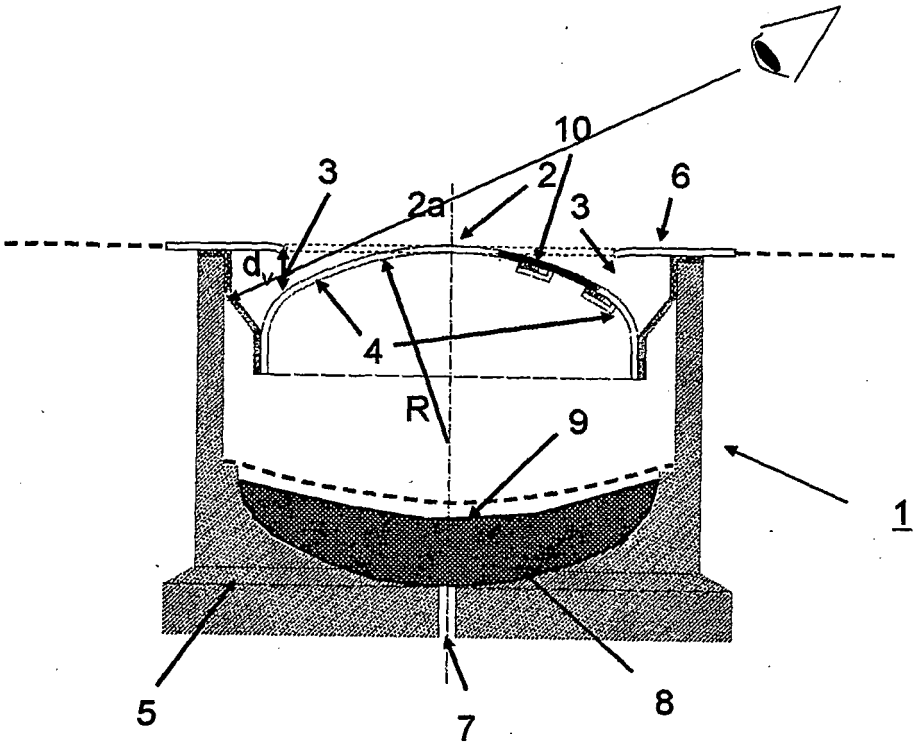

Fig. 1

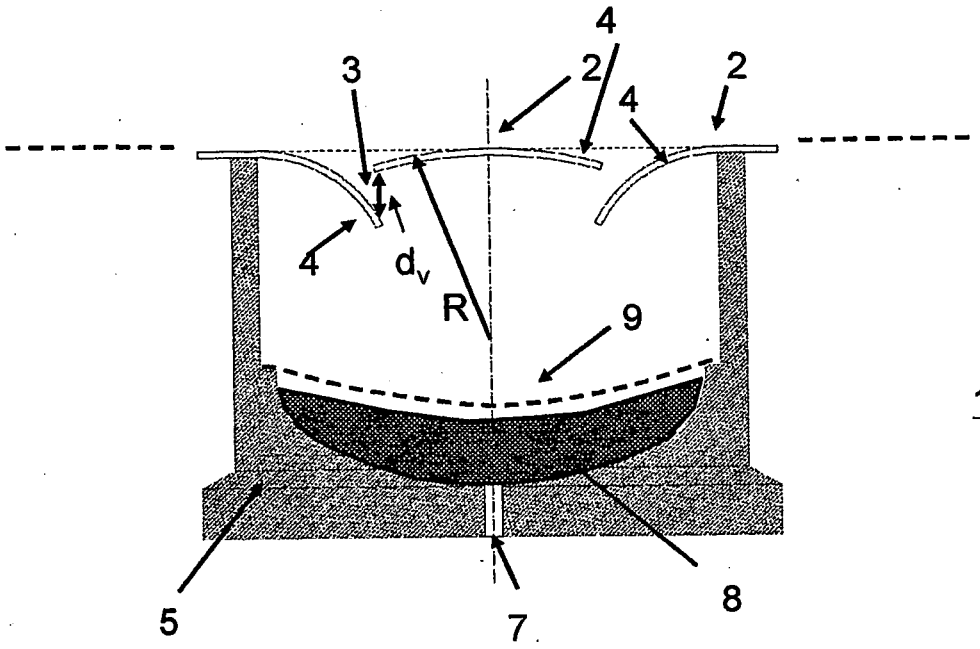

Fig. 2

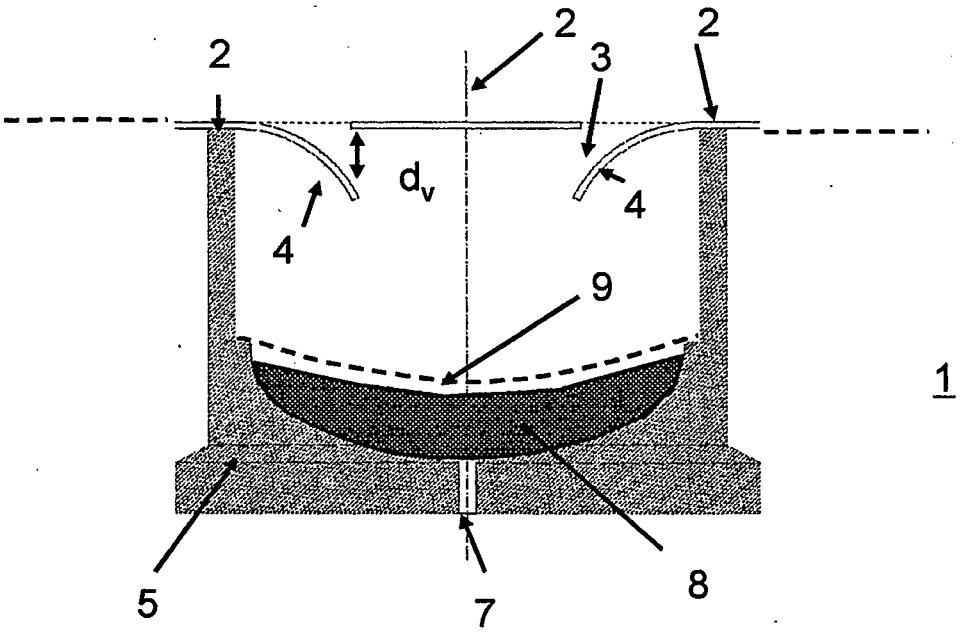

Fig. 3

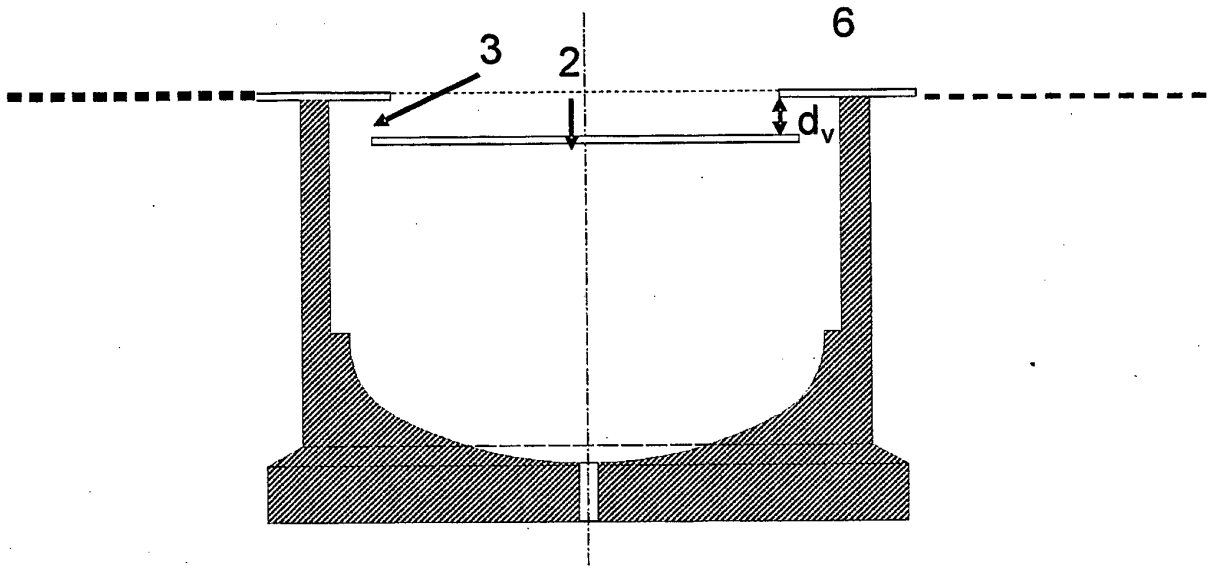

Fig. 4

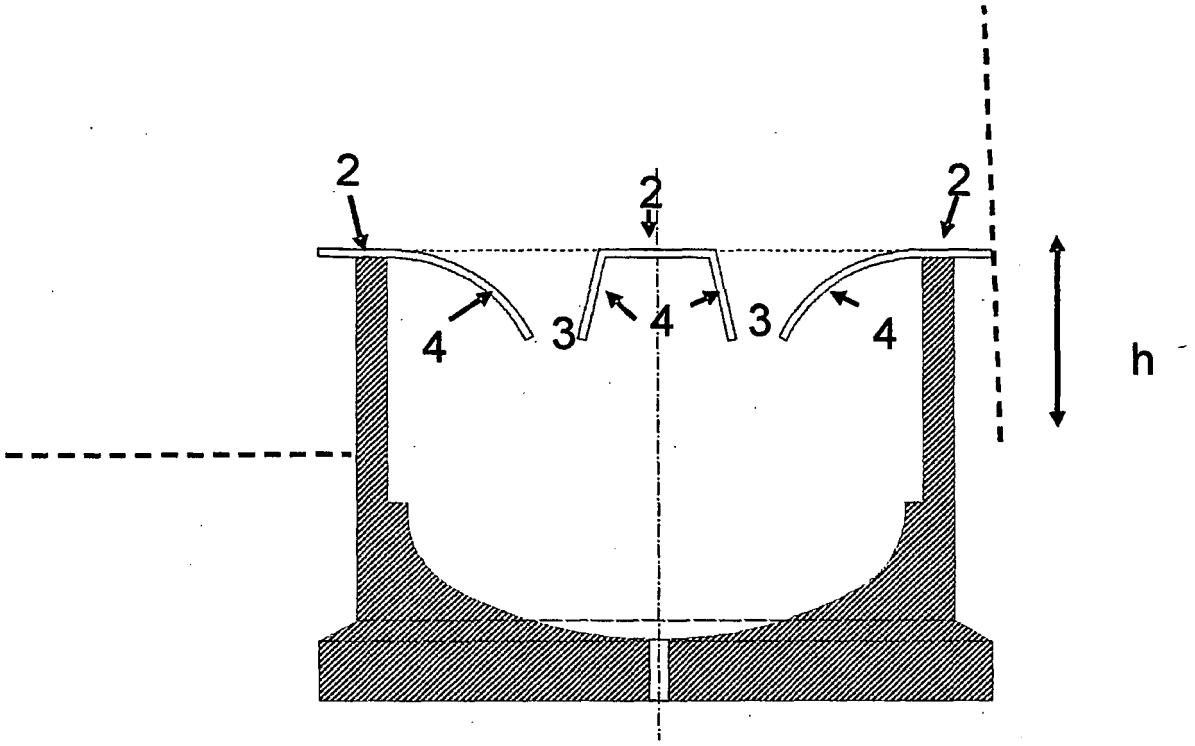

Fig. 5

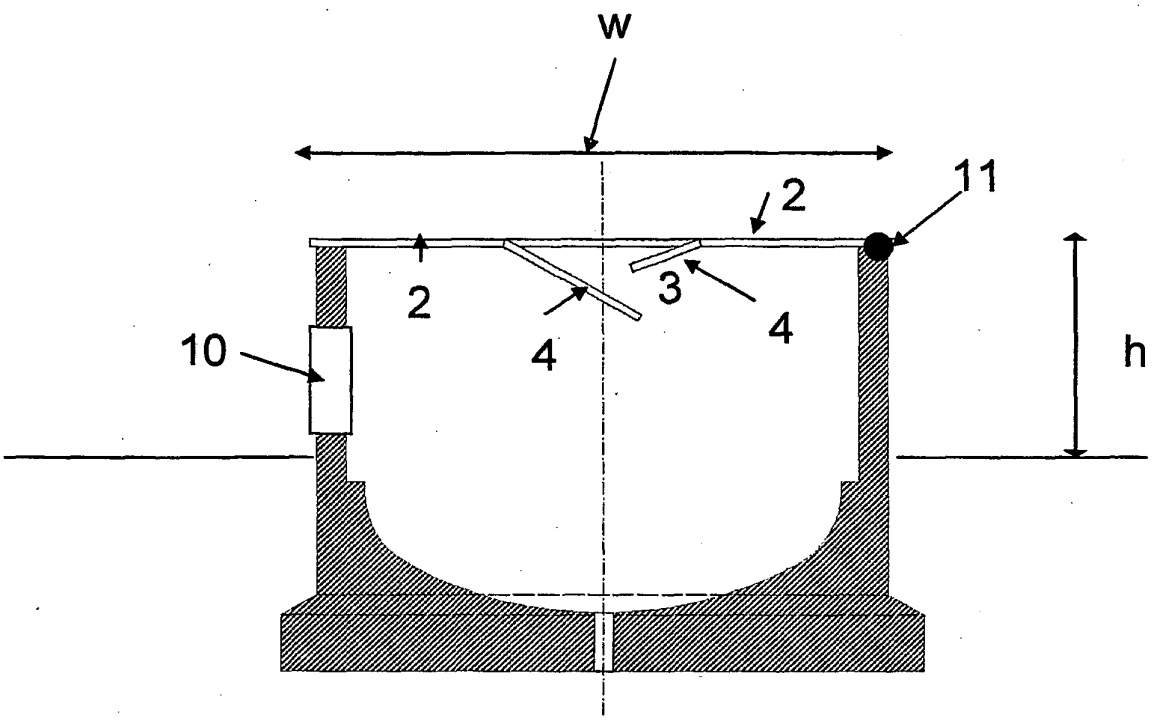

Fig. 6

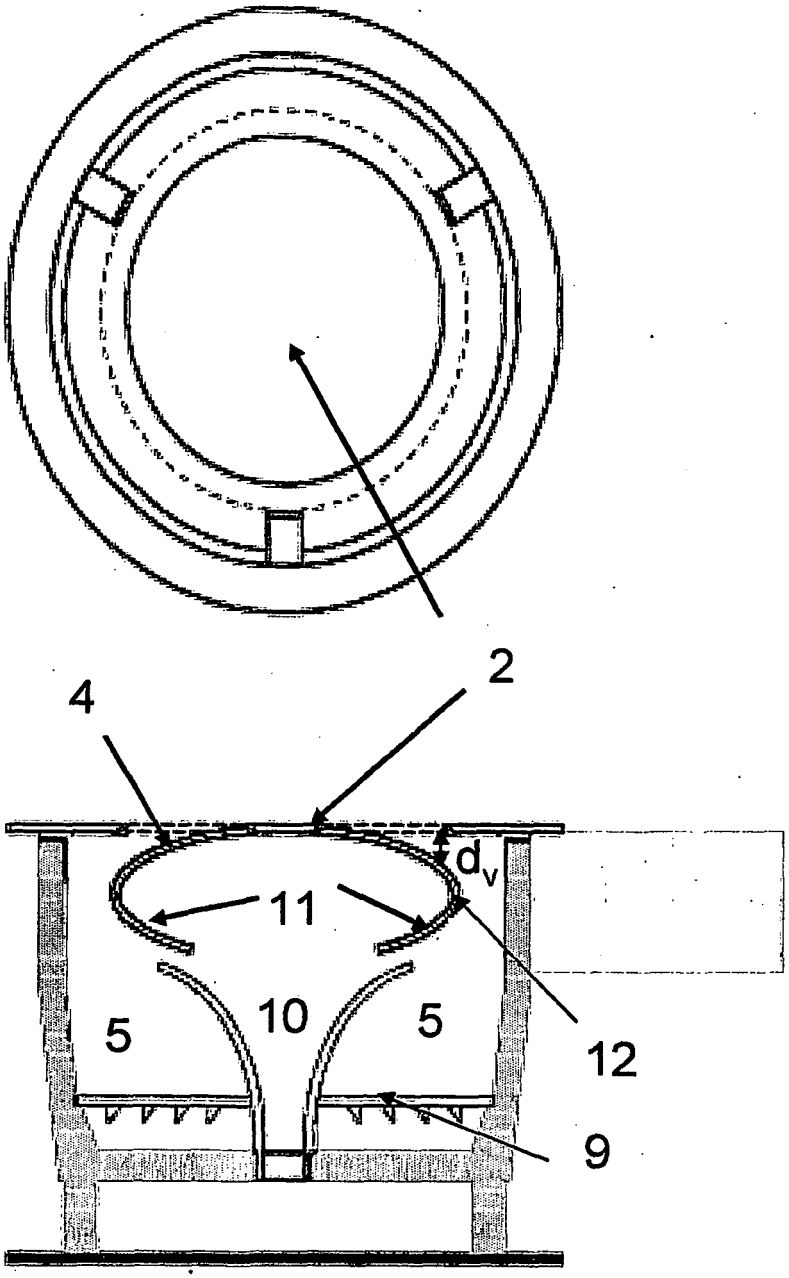

Fig. 7

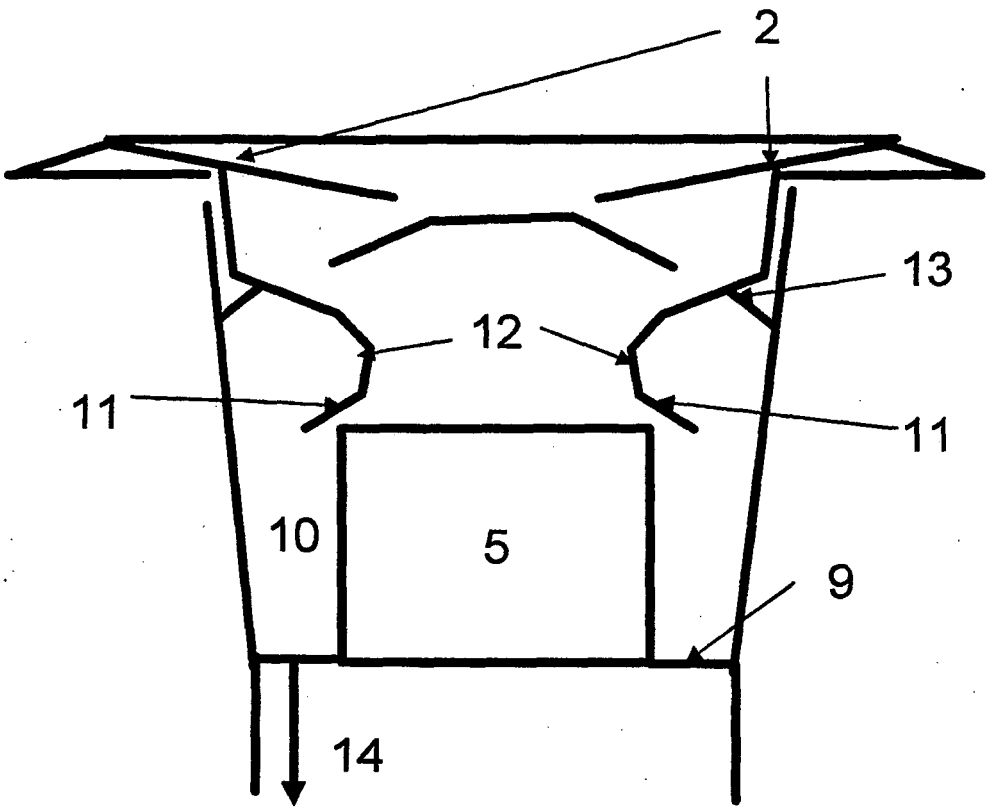

Fig. 8

REFERENCES CITED IN THE DESCRIPTION

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