A perforated packet made of paper or other suitable material in which a scented fragrant material, such as potpourri, is disposed, the packet being placed into a disposable paper vacuum cleaner collection bag prior to its connection to the vacuum cleaner, the sheath and scented fragrant contents providing a scented fragrance to the air during the operation of the vacuum cleaner, the scented fragrance being released to the room or area where the vacuum operation is taking place, the packet also releasing a scent or fragrance masking any odor emanating from collected dirt and debris when not in use. Alternatively, the perforated packet and scented material may be inserted into a container mounted to a wall socket having motor and fan means to circulate ambient air through the packet.
VACUUM CLEANER ACTIVATED AIR FRESHENER

RELATED APPLICATIONS


BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention
[0003] This application relates to air fresheners, and in particular, an air freshener which is deposited in the paper vacuum bag of a vacuum cleaner, either upright or canister, and activated by the vacuum and air flow of the vacuum cleaner during use or alternatively inserted into a container mounted in a wall socket having motor and fan means for passage of ambient air through the air freshener.

[0004] 2. Description of the Prior Art
[0005] The purpose of vacuuming a house or a work place is to remove dirt and debris from surfaces to be cleaned. Carpeted areas accumulate dust, tobacco ashes, animal fur, and dirt. If left unattended, these elements may give off an odor. While one thinks of carpeting as the surface to which a vacuum cleaner would be applied, the vacuum cleaner can also be applied to hardwood floors, marble and other tiled areas. The purpose of vacuuming these other areas is the same as with the carpet.

[0006] The vacuum cleaner normally provides for a container area in which there is positioned a disposable paper bag which accumulates and collects the dirt, dust and debris which is vacuumed from the floor under the influence of the motor of the vacuum cleaner. The paper bag serves as a filter to collect all of the debris allowing the air to pass through it. The paper bag is normally not disposed of until it has become full and affects the air flow of the vacuum cleaner. Therefore certain dust, dirt and debris particles may remain in the vacuum bag for repeated vacuum operations. Applicant would propose individually scented packets which could be positioned within the paper disposal bags before they are positioned on the vacuum cleaner and which would emanate a scent or fragrance into the room under the influence of the air flow from the vacuum cleaner motor during operation and provide a scent or fragrance in the collection bag when not in use to mask any odor generated by the debris collected.

[0007] Applicant is aware of several prior attempts to provide for a freshened exhaust from a vacuum cleaner, including U.S. Pat. No. 6,630,233; U.S. Pat. No. 3,274,758; U.S. Pat. No. 2,574,578; U.S. Pat. No. 2,304,868; and U.S. Pat. No. 2,152,277. All of the aforesaid attend to the problem with complicated add-on devices which in some cases require modification of the vacuum cleaner itself, whereas Applicant's solution to the problem does not require or affect the design and operation of the vacuum cleaner or of the disposable paper bags.

OBJECTS OF THE INVENTION

[0008] An object of the present invention is to provide a novel packet containing scented or fragrant particles, the packet being placed within the disposable collection bag of a vacuum cleaner, and releasing the scented fragrance under the influence of the vacuum cleaner during operation.

[0009] Another object of the present invention is to provide a novel packet containing scented or fragrant particles, the packet residing within the disposable collection bag of a vacuum cleaner, the packet releasing a scent or fragrance when the vacuum is not in use in order to mask any odor emanating from the dirt or debris collected by the vacuum cleaner.

[0010] Another object of the present invention is to provide for a novel packet containing scented or fragrant particles which is biodegradable and which can be disposed of with the disposable collection bag and the collected dirt and debris.

[0011] A still further object of the present invention is to provide for a novel packet containing scented or fragrant particles which is easily positioned through the inlet port of the disposable collection bag before the disposable collection bag is secured to the vacuum.

[0012] A still further object of the present invention is to provide for a novel packet containing scented or fragrant particles for positioning within a disposable collection bag of a vacuum cleaner, the packet being encapsulated in an airtight container before use to prevent the loss or deterioration of the scent or fragrance contained therein.

SUMMARY OF THE INVENTION

[0013] A perforated packet made of paper or other suitable material in which a scented fragrant material, such as potpourri, is disposed, the packet being placed into a disposable paper vacuum cleaner collection bag prior to its connection to the vacuum cleaner, the sheath and scented fragrant contents providing a scented fragrance to the air during the operation of the vacuum cleaner, the scented fragrance being released to the room or area where the vacuum operation is taking place, the packet also releasing a scent or fragrance masking any odor emanating from collected dirt and debris when not in use. Alternatively, the perforated packet and scented material may be inserted into a container mounted to a wall socket having motor and fan means to circulate ambient air through the packet.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] These and other objects of the present invention will become apparent, particularly when taken in light of the following illustrations wherein:

[0015] FIG. 1 is a perspective view of a typical vacuum cleaner bag;

[0016] FIG. 2 is a side view of the preferred embodiment of an air freshener of the present invention designed to be inserted into the vacuum cleaner bag;

[0017] FIG. 3 is an exploded view of the air freshener of the present invention and its packaging prior to use;

[0018] FIG. 4 is a second embodiment of the air freshener of the present invention exhibiting a separate geometric shape;

[0019] FIG. 5 is a perspective view of still another embodiment of the air freshener of the present invention exhibiting a honeycomb geometric shape; and

[0020] FIG. 6 is a side view of a wall socket mounted container for receipt of the air freshener with motor and fan means for circulating ambient air through the air freshener.

DETAILED DESCRIPTION OF THE INVENTION

[0021] FIG. 1 is a perspective view of a typical disposable vacuum cleaner collection bag. The bag 10 comprises a plate member 12 normally formed of reinforced cardboard having a centrally disposed aperture 14 there through, aperture 14 normally having a toroidal planar resilient flexible O-ring 16...
which is designed to fit over a conduit nozzle (not shown) on the vacuum cleaner which conduit directs an airflow from the vacuum with accumulated dirt and debris into the bag. Secured to plate member 12 is a bag member 18, which is formed of an air porous material which collects the dirt and debris which is transported by the vacuum and allows the air flow to pass through, but traps any such dirt and debris. Typically the bag is sold in a planar orientation and the aperture 14 on the plate member 12 is secured over the conduit of the vacuum cleaner. Upon initiation of the vacuum cleaner, the bag 18 would expand to its full capacity.

[0022] The only limiting feature with respect to the disposable vacuum cleaner collection bag is the aperture 14 which is utilized to connect the collection bag to a conduit nozzle (not shown) which directs the air into the bag. The conduit nozzles are normally tubular, therefore requiring the aperture 14 to be circular. However, the diameter may vary from vacuum to vacuum as may possibly the size of the bag vary from vacuum to vacuum depending upon the size of the vacuum cleaner. It will therefore be recognized that Applicant’s air freshener packet may take on several geometric shapes as discussed hereafter, the only limiting parameter being the shape and size of the air freshener packet vis-à-vis the particular aperture 14. Still further, it will be recognized that there is a relationship between the size and shape of the packet, and hence its total surface area, vis-à-vis the volume of the packet and the amount of scented or fragrant material which it can contain.

[0023] FIG. 2 is a side view of a preferred embodiment of the air freshener packet 30 of the present invention. It is designed in a tubular shape as illustrated in FIG. 2, but is not limited to this particular shape. The only limitation on the air freshener would be the size of the aperture 14 in air bag 18, since the air freshener is designed to be inserted into the air bag before use.

[0024] The air freshener packet 30 consists of a porous outer sheath 32, the sheath being filled with a scented fragrant material 34 such as potpourri or the like. Depending upon the size of the material 34 used for the scented fragrant material, the porous sheath 32 could be comprised of perforated paper or a mesh-like material. The sole purpose of the sheath 32 is to contain the scented fragrant material 34 contained therein and therefore its perforation or porosity would be dictated by the type of material utilized. The sheath 32 would be sealed at ends 36 and 38 and packaged in an airtight cellophane or plastic wrap 33 (see FIG. 3) to prevent the loss of scented fragrance prior to use. Immediately before use, the exterior cellophane or plastic wrap would be removed and the air freshener 30 would be inserted into the empty, vacuum cleaner bag 10 before the vacuum cleaner bag was secured to the flow conduit of the vacuum.

[0025] Thereafter, whenever the vacuum cleaner is activated such that it is drawing a vacuum and dirt and debris, the air flow will pass through the perforations or mesh-like material of the sheath 32 and allow the scented fragrant material 34 to impart a pleasant fragrance to the air passing through there, this air eventually passing through the porous bag 18 of the vacuum cleaner and back into the ambient air of the room which is being vacuumed.

[0026] The air freshener 30 would be in its most fully activated state when the vacuum cleaner was in operation and an air flow was passing through the porous sheath 32. However, the air freshener would also impart a slight fragrance when the vacuum cleaner was not in use which would benefit the fact that most vacuum cleaner bags 18 are not filled to capacity with one vacuuming, and often time spend several days in a closet before being reused. Therefore the air freshener 30 would serve to mask the odors of any dirt or debris which have been vacuumed into the bag and which remain in the bag over a short period of time before the bag is filled to capacity and must be discarded. Upon discarding the existing bag, the same method would be followed with the insertion of a new bag into the vacuum cleaner with the insertion of a fresh new air freshener.

[0027] FIG. 4 illustrates an alternative embodiment of the air freshener in which the outer sheath 32A is rectangular in cross section, the sheath being filled with a scented, fragrant material 34A, such as potpourri or the like. [0028] FIG. 5 is a perspective view of still another embodiment of the air freshener of the present invention. In this embodiment the air freshener is illustrated as being rectangular in shape and having a honeycomb structure 40 fabricated from intersecting porous strips of paper or cardboard, the intersecting strips of porous or cardboard forming a honeycomb structure, the actual strips of paper or cardboard being themselves impregnated with a scented fragrance as opposed to having a porous outer sheath encapsulating a scented fragrant material. It should be recognized by those of ordinary skill in the art that while the honeycomb structure as illustrated in FIG. 5 is illustrated with a rectangular cross section, it could be fabricated in another geometrical cross section without departing from the spirit and scope of the invention.

[0029] Finally, FIG. 6 illustrates an alternative use for any of the embodiments of the air freshener previously discussed. In this embodiment, a container 60 housing a small electric motor and fan (not shown) is securable to an electrical outlet via contact prongs 62 for powering the motor and fan. The container includes a receptacle 64 for receipt of the air freshener packet 30. The air freshener packet 30 could comprise the embodiment including the porous outer sheath 32 with scented, fragrant material 34 encapsulated therein, or it could include the honeycomb impregnated structure 40. Receptacle 64 would be shaped to receive either the cylindrical or rectangular air freshener packet. The air freshener packet 30 would be inserted into a receptacle 64, receptacle 64 having a closure means in the form of a cap 66. The receptacle 64 with the inserted air freshener packet 30 would be in the path of an air flow generated by the motor and fan within the container once the container 60 was plugged into an electrical outlet. The air being forced over the air freshener packet 30 would pick up the fragrant scent of the air freshener packet 30 and emanate this scent into the room.

[0030] Therefore, while the present invention has been disclosed with respect to the preferred embodiments thereof, it will be recognized by those of ordinary skill in the art that various changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore manifestly intended that the invention be limited only by the claims and the equivalence thereof.

1 claim:

1. An air freshener for a vacuum cleaner collection bag, the air freshener activated by use of the vacuum cleaner suction and air flow, the air freshener comprising: a perforated container having a cap means, said perforated container containing a scented fragrant composition, said perforated container and said contained scented fragrant composition being encapsulated before use, said encapsulation removed prior to insertion of said
perforated container and said contained scented fragrant composition into a vacuum cleaner bag.

2. The air freshener in accordance with claim 1 wherein said perforated container is fabricated from biodegradable paper.

3. The air freshener in accordance with claim 1 wherein said perforated container is fabricated from polymer.

4. The air freshener in accordance with claim 1 wherein said perforated container is of a geometric shape and sized to pass through a hose connection opening in said vacuum cleaner collection bag.

5. The air freshener in accordance with claim 4 wherein said preferred embodiment of said perforated container is that of a tubular cross-section having at least one removable end cap for filling said perforated container with said scented fragrant composition.

6. The air freshener in accordance with claim 1 wherein said scented fragrant composition comprises a blend of potpourri effected with a selected fragrance or scent.

7. The air freshener in accordance with claim 1 wherein said perforated container allows for the passage of air there through, said air passing there through being imparted with a scented fragrance from said scented fragrant composition, said air flow with imparted scented fragrance reentering the ambient air surrounding the vacuum cleaner usage.

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