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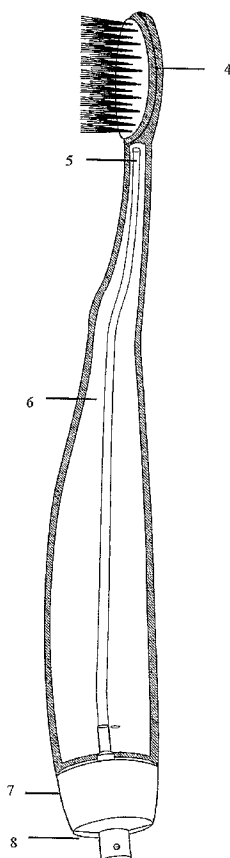
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SPRAY BRUSH



(57) Abstract: A 'spray brush', consists of a spray bottle body for storing a liquid and having a nozzle for dispensing the liquid on demand in the form of a spray at the bottom of the body; and bristle with a cap at the top of the body. It can dispense a mist-liquid specially of all oral health-hygiene-cosmetic applications including a dentifrice, cleaning/polishing agents, mouth-wash/freshener, and antibacterial/antiviral agents, or in general any other purpose applications including medical, therapeutic, health, hygiene, cleaning any surface (e.g. carpet, cloth material, and floor) and cosmetics. However, any kind of spray device may be mountable in a cylindrical housing within the spray brush body.



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SPRAY BRUSH

FIELD OF INVENTION:

The present invention relates to the field of manually operated spray brushes for dispensing desired liquid solutions from the reservoir within the handle.

BACKGROUND OF THE INVENTION:

People who travel are often restricted with the amount of items that they can carry with them. Thus, a need exists for a device that will incorporate brush or toothbrush, and spray that people use for dental hygiene or any other cleaning purpose in one simple to use instrument, which in a more hygienic way can easily be transported without occupying a great deal of space.

Besides allowing effective and convenient oral hygiene, whether in home or outside, the subject device of the present invention has the following distinguishing characteristics: ease of use, disposable, and portable (it can even be stored inside small handbag).

While some devices in the prior art fulfil their respective, particular objective and requirements, but no patent describe such a brush with any manual spray system for allowing desired fluid / liquid solution to be pumped independently from within the reservoir in the handle of the toothbrush by a easy, reliable, and simple mechanism.

Therefore, it can be appreciated that this new and improved invention of spray brush is devised and designed with a greater concern to be more cost-effective, simple, hygienic, ergonomic, utility, easy to use and carry, and easy to manufacture, i.e. convenient for industrial design-production-application application with few components/parts. It can effectively and independently spray the desired liquid solutions to the desired place. Hence, the present invention substantially fulfils a variety of concerns and needs.

THE OBJECTS / SUMMARY OF THE INVENTION:

The primary object of the invention is to provide a brush head and spray head in one simple to use device, multipurpose application, which is contrary to the conventional or traditional separate brush and separate liquid spray practise.

For specific application, specific fluid can be filled with the brush for convenience. The reservoir in a transparent plastic handle portion will allow users to see the remaining amount of liquid solution. The ergonomically designed elongated fat handle of the toothbrush will allow sufficient space within to store required amount of desired liquid solution, and fit comfortably in the hand with better grip and manoeuvrability. It is to make choice for the manufacturer of the present invention refillable or non-refillable, as both options are given. The airtight plastic cap of the brush-head will prevent any contamination or accumulation of dust and dirt, and protect from germs to breed and dirt to accumulate over the bristle and the nozzle.

Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

DESCRIPTION OF THE ACCOMPANYING DRAWINGS / OF PREFERRED EMBODIMENTS

Further aspects of the present invention will become apparent from the following description, with reference to the accompanying drawings in which:

Referring to **FIG. 1**, shows a side view of a spray brush or toothbrush, which embodies the invention, comprises a reservoir **2** filled with desired liquid solution in the hallowed handle, and an independent manual spray head **3**.

Referring to **FIG. 2**, shows the perspective view of the whole body including the spray head 3. It shows an elevated rib 4 for gripping the cap for the brush head 1, a transparent plastic body of reservoir 6, in which a flexible transparent plastic pipe is attached to the spray mechanism 7 for drawing the fluid towards the nozzle when spray head 7 is pressed. .

Referring to **FIG. 3**, shows an outline of a cap for brush head 1.

Referring to **FIG. 4**, shows outline views of the spray head.

Referring to **FIG. 5**, shows a side perspective view of the said invention device, held upside down, showing streams of spray.

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CLAIMS

What is claimed is:

1. A 'spray brush', consists of a spray bottle body for storing a liquid and having a nozzle for dispensing the liquid on demand in the form of a spray at the bottom of the body; and bristle with a cap at the top of the body.
2. As a spray toothbrush, it can dispense a mist-liquid especially of all oral health-hygiene-cosmetic applications including a dentifrice, cleaning / polishing agents, mouthwash / freshener, and antibacterial/antiviral agents.
3. As a multipurpose spray brush, it can be used for a variety of purposes by making it of various sizes and shapes to suit the need. In general any other purpose applications including medical, therapeutic, health, hygiene, cleaning any surface (e.g. carpet, cloth material, and floor) and cosmetics. However, any spray device may be mountable in a cylindrical housing within the spray brush body.
4. The present invention relates to a spraying device suitable for spraying cleaning compositions onto hard surfaces.
5. The present invention, a 'spray brush', can be easily operated by lightly pressing a round flat surface of the spray head with a finger.
6. A hand-held spraying device comprising a container, and a spray head, all of which are part of said device during use of said device, wherein the container contains a desired composition.

7. The spraying device provides a visual indicator that signals to a user see the amount or level of the desired fluid or solution in the reservoir and the body of the reservoir is made of transparent plastic.
8. The present invention consists of a transparent cap for the brush head.
9. The present invention can be fitted with any kind of spray mechanism, be it manual (piston pump or pressurised liquid reservoir system), electrical or any other mechanisms.

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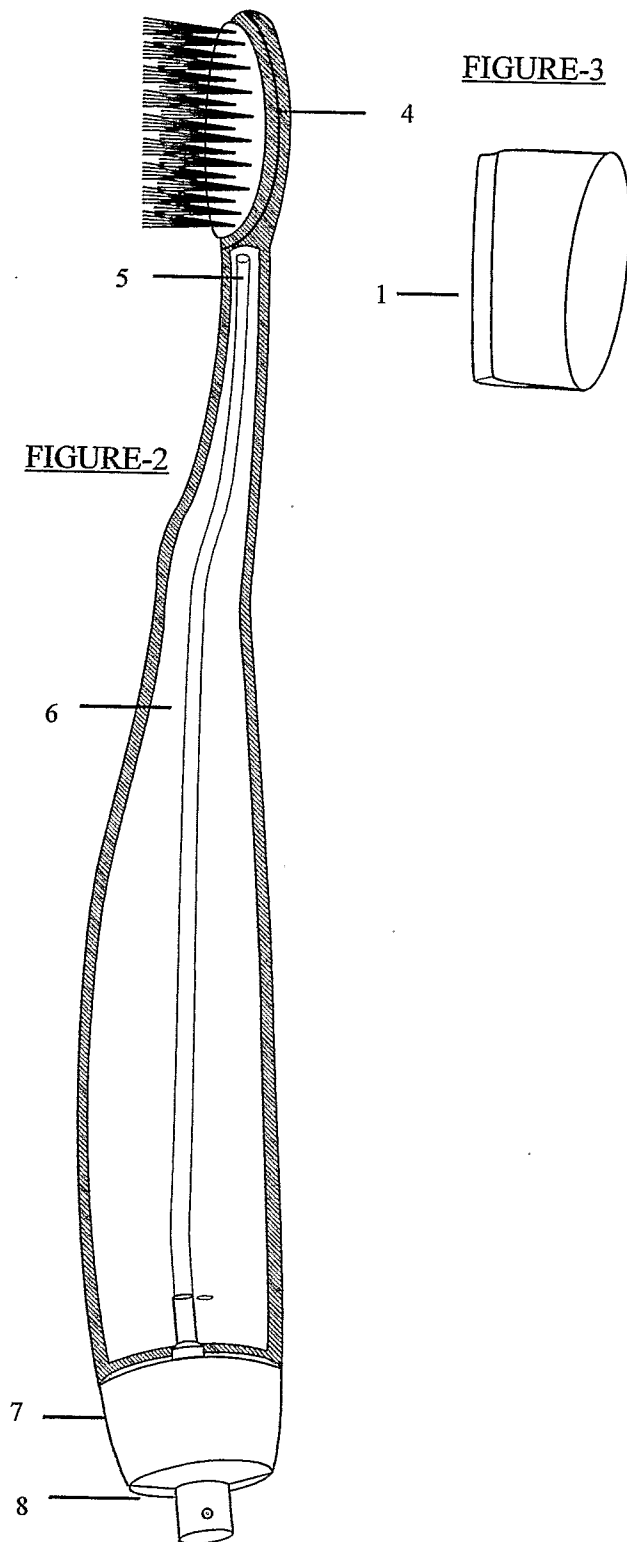
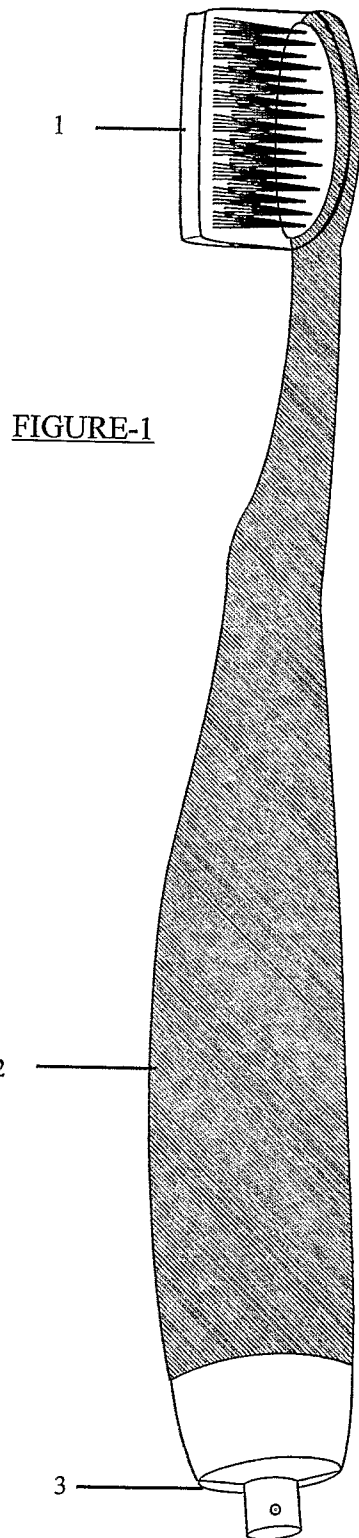


FIGURE-4

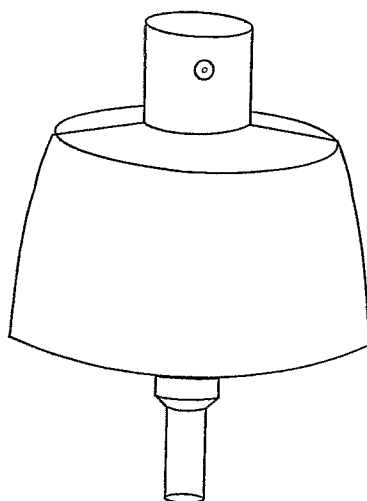
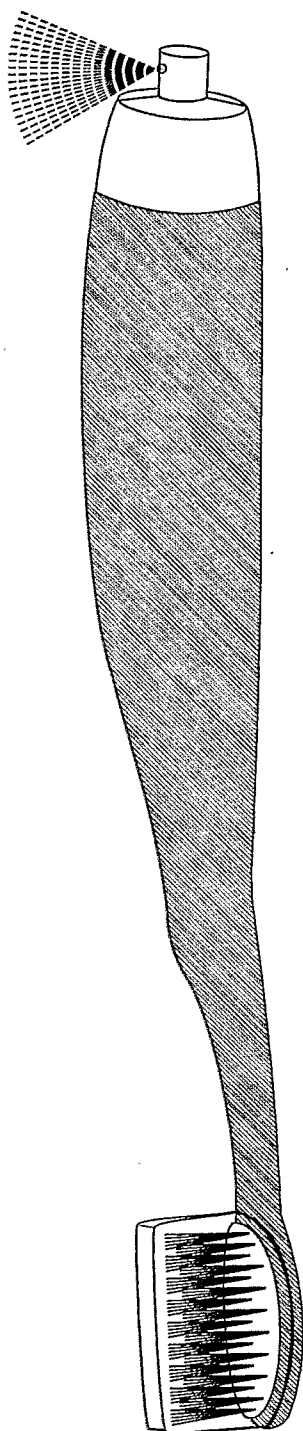


FIGURE-5



INTERNATIONAL SEARCH REPORT

International application No
PCT/IN2006/000409

A. CLASSIFICATION OF SUBJECT MATTER

INV. A46B11/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A46B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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