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Jet Brush

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(56) Related Art
US 2010/0278582 A1
US 2009/0136285 A1
EP 2793741 B1
WO 2016/185162 A1
US 6735803 B2
US 5309590 A
US 5918995 A
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4.

Abstract

The Jet Brush is an electric tooth brush with a water jet function. A capsule is inserted into the back of the tooth brush accessed by the lid. The capsule contains antibacterial cleaning solution. The bristles are replaceable meaning it is a long lasting product. It has advantages over the standard electric toothbrush because of the water jet aspect. It gives a more thorough clean and eliminates the need of flossing.

Title of Invention: Jet Brush

Technical Field:

The invention is in the field of dental devices and oral hygiene and provides an electrically powered toothbrush with a combined cleaning and flossing effect.

Background Art:

Electric toothbrushes are well known. Numerous examples include means for discharging a fluent material in the form of a liquid or a paste from a brushing head. Reference may be made to patent number EP 2793741 and patent application publications US 2009/0136285, US 2010/0278582 and WO 2016/185162.

Summary of Invention:

According to the invention, there is provided a fluid-dispensing electric toothbrush comprising a bristled teeth-cleaning brush head, a base portion to which the brush head is operatively attached, a capsule within the base portion and in fluid communication with the brush head, the capsule being chargeable with liquid for application to a user's teeth via the brush head, jet-generating means operable to cause liquid from the capsule to be discharged in a jet from the brush head to the user's teeth, whereby a flossing-like effect is obtainable by means of the jet, while a tooth is being brushed with the bristled brush head.

Description of Embodiments:

The jet brush of this invention is a tooth brush with the benefits of a water jet. The water is dispersed from the bristles by pressure from a built in micro-pump or pressure membrane that is inside the base of the tooth brush. The bristles are detachable and a replacement insert can be put into use by ejecting the used bristles of the tooth brush head.

The battery inside the toothbrush is rechargeable and there is a lid that can be opened to insert the anti-bacterial cleaning solution capsule. The jet brush has a multi-speed water jet setting and can go from a gentle clean to a more intensive clean from the touch of a button. The invention of the jet brush

came from the inventor's realization that such a device would eliminate the need for a user to floss after brushing, saving time and giving a more thorough clean.

Technical health problems that are known to develop from brushing with a standard tooth brush include:

- Cavities - from improper cleaning techniques
- Worn tooth enamel from abrasive cleaning with standard toothbrushes
- Fillings from not thoroughly cleaning the tooth enamel.
- Gum disease from bacteria left over from standard tooth brushes not being able to reach in between teeth.
- Tissue replacement from growth build-up of bacteria and abrasive cleaning which damages the gum line.
- Gingivitis

Solution to Problem

Using the tooth brush of the invention enables a user to brush and floss simultaneously.

The jet /brush combined function cleans the teeth and gums more gently than the standard tooth brush, which lowers the risk of worn tooth enamel and gum damage.

A capsule of liquid or gel antibacterial cleaning solution is inserted into the jet brush body. -The liquid dispensed through the bristles gives the teeth a flossing effect while brushing occurs at the same time.

Advantageous effects of Invention:

The jet brush eliminates having to floss and is an effective and hygienic way to clean teeth.

It is more effective in removal of plaque and bacteria and is gentle on the gums.

CLAIMS

1. A fluid-dispensing electric toothbrush comprising a bristled teeth-cleaning brush head, a base portion to which the brush head is operatively attached, a capsule within the base portion and in fluid communication with the brush head, the capsule being chargeable with liquid for application to a user's teeth via the brush head, jet-generating means operable to cause liquid from the capsule to be discharged in a continuous stream of pressurized liquid from the brush head to the user's teeth, whereby a flossing-like effect is obtainable by means of the continuously-discharged liquid stream, while a tooth is being brushed with the bristled brush head.
2. The toothbrush of claim 1 wherein the jet generating means comprises a micro pump.
3. The toothbrush of claim 1 or claim 2 wherein the capsule is replaceable.
4. The toothbrush of any one of the preceding claims wherein the brush head comprises a replaceable insert comprising bristles.

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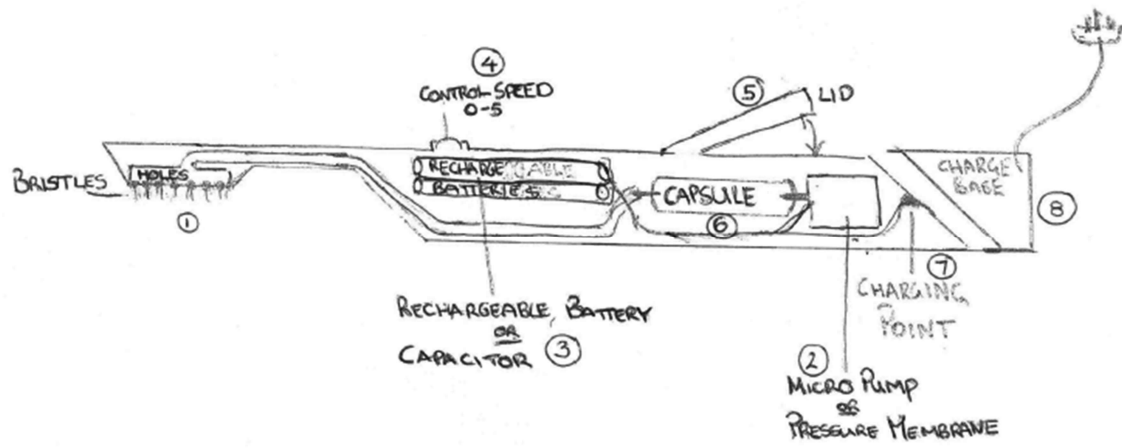


FIGURE 1

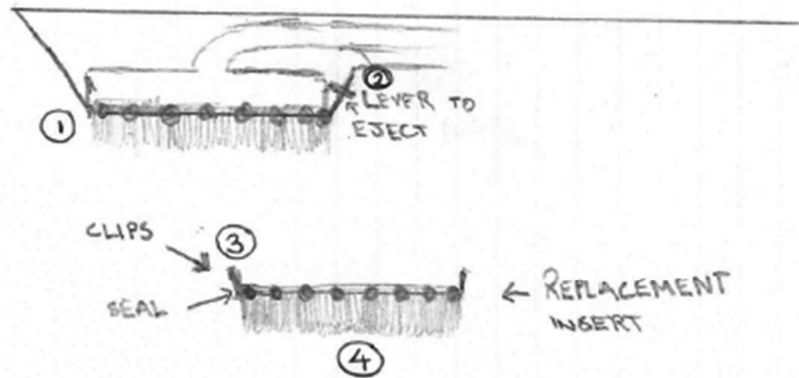


FIGURE 2