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REQUISITOS NECESARIOS PARA PRESENTACION Y AGILIZACION DEL TRAMITE

	USUARIO	RADICADOR
PATENTE DE INVENCION	()	()
MODELO DE UTILIDAD	()	()
- Indicación de que se solicita la concesión de una patente.	()	()
- Datos de identificación del solicitante o de la persona que se presenta la solicitud.	()	()
- Descripción de la invención.	()	()
- Dibujos de ser estos pertinentes.	()	()
- Comprobante de Pago de las tasas establecidas.	()	()

COMPLETA () INCOMPLETA ()

DISEÑO INDUSTRIAL ()

- Indicación de que se solicita el registro de Diseño Industrial	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica o fotográfica del Diseño Industrial o muestra del Material que incorpora el diseño.	()	()
- Comprobante de pago de las tasas establecidas	()	()

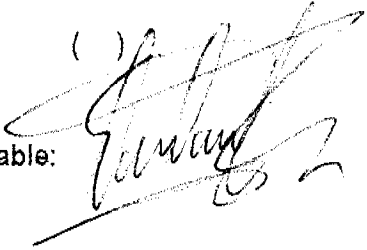
COMPLETA () INCOMPLETA ()

ESQUEMA DE TRAZADO ()

- Indicación de que solicita el registro de un Esquema de trazado.	()	()
- Datos de identificación del solicitante o de la persona que presenta la solicitud.	()	()
- Representación gráfica del esquema de trazado	()	()
- Comprobante de pago de las tasas establecidas.	()	()

COMPLETA () INCOMPLETA ()

Firma Responsable:



Fecha:

SUPERINTENDENCIA Y COMERCIO
Radicación : 05082441 00000000 Folio: 13
Fecha (AMD): 2005-05-31 11:52:40
Trámite : 003 PATENTES E 1 REGISTRO/ 411 PRESENTA
Dependencia: 2020 DIVISION DE NUEVAS CREACIONES

Folio 15

2020
Bogotá DC

Señor(es)
JAIME SANDOVAL GOMEZ
Solicitante(s)

REFERENCIA:	Radicación No.	05 - 52441
	Trámite	003
	Evento	001
	Actuación	416
	Oficio No.	438
	Folios	001

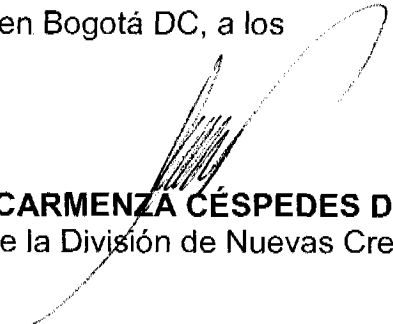
Teniendo en cuenta que la solicitud de privilegio de patente de modelo de utilidad que se tramita bajo el expediente indicado en la referencia, reúne los requisitos de forma establecidos en los artículos 26 y 27 de la Decisión 486 de la Comisión de la Comunidad Andina, y en las demás disposiciones vigentes sobre la materia, se envía el extracto de la solicitud a la Oficina de Comunicaciones para efecto de su publicación en la Gaceta de Propiedad Industrial, conforme lo establece el artículo 40 de la misma Decisión, en concordancia con el artículo 85 de la misma decisión.

Siendo manifestación expresa del interesado, la solicitud no será publicada antes de los tres (3) meses contados a partir de la fecha de presentación de la solicitud, por lo tanto la publicación en este caso se hará a partir **del 31 de agosto de 2005**.

Cúmplase

Dado en Bogotá DC, a los

30 JUN. 2005


ALIX CARMENZA CÉSPEDES DE VERGEL
Jefe de la División de Nuevas Creaciones

Al contestar favor indique el número de radicación consignado en el sticker

Sede Centro: Carrera 13 No. 27-00 Pisos 2, 5, 7 y 10
Conmutador: 3 820840 Fax: 3 505220
Sede CAN: Tr. 40A No. 38-50 3153265 al 69
Fax: 3 505220. Línea 9800-910 165
Web: www.sic.gov.co e-mail: info@sic.gov.co
Bogotá D.C. - Colombia

United States Patent Office

3,432,245

Patented Mar. 11, 1969

1

3,432,245

TOOTHBRUSH WITH DENTIFRICE HOLDER

Virginia Z. Hudson, 598 East Ave., Chico, Calif. 95926

Filed June 16, 1966, Ser. No. 558,044

U.S. Cl. 401-132

Int. Cl. A46 11/00

1 Claim

ABSTRACT OF THE DISCLOSURE

A toothbrush having bristles projecting laterally from a face formed thereon adjacent an end thereof, an elongated slot opening into said face and having its sides bounded by said bristles, a cap extending across an inner end portion of said slot and cooperating therewith to form a dentifrice receiving compartment, said cap having an end extending into said slot and weakened to rupture upon the application of pressure on said cap to cause said dentifrice to be extruded therefrom into the outer end of said slot and, subsequently, onto said bristles.

This invention relates to a toothbrush provided with means for holding a charge of dentifrice material and means for extruding the dentifrice material onto the bristles of a toothbrush and more particularly relates to a combined toothbrush and dentifrice dispenser of this character which may be disposed after a single use.

It is well known that a substantial cause of tooth decay lies in the failure of individuals to brush their teeth after every meal. Brushing after every meal is normally inconvenient for most people because of the lack of a toothbrush and dentifrice, such as after the workday lunch period, on trips by automobile, train or plane where luggage is not readily available, and after a school lunch period or the like.

It is generally conceded that there is no substitute for timely brushing in order to prevent tooth decay. The loss to the general public from tooth decay is clearly great.

In brief terms, the instant invention is comprised of a toothbrush forming a dentifrice transmitting groove extending from adjacent the bristles in a direction toward and including at least a portion of the handle with a charge of dentifrice residing in the groove and covered by a pressure-responsive closure adapted for moving between a first position retaining the dentifrice in the groove and a second position forcing at least a portion of the dentifrice through the groove into the bristle area. Preferably the charge of dentifrice is limited to an amount sufficient for a single brushing such that the individual may throw the toothbrush away shortly thereafter, thereby making the tooth cleaning assembly of the instant invention adapted for use during travel. It will be readily apparent that the disposable tooth cleaning device of the instant invention may be provided as a courtesy by the transportation facility.

It is a primary object of the instant invention to provide a disposable toothbrush provided with a dentifrice dispenser.

Another object of the instant invention is to provide a disposable toothbrush characterized by an elongate groove extending from the bristle area through at least a portion of the handle, the groove carrying at least a part of the dentifrice charge and means completing the encapsulation of the dentifrice charge and movable to force a substantial amount of the dentifrice material through the groove and into the bristle area.

A further object of the instant invention is to provide a disposable toothbrush which is loaded with a charge of dentifrice material sufficient for a single tooth brushing operation so that the toothbrush may be disposed of after initial use.

2

Other objects and advantages of the instant invention reside in the combinations of elements, arrangements of parts, and features of construction and operation, all as will be more fully pointed out hereinafter and disclosed in the accompanying drawing wherein there is shown a preferred embodiment of the instant inventive concept.

In the drawing:

FIGURE 1 is a side elevational view of a toothbrush made in accordance with the principles of the instant invention;

FIGURE 2 is a front elevational view of the toothbrush of FIGURE 1;

FIGURE 3 is a longitudinal cross-sectional view of the toothbrush of FIGURES 1 and 2 taken substantially along line 3-3 of FIGURE 2 as viewed in the direction indicated by the arrows;

FIGURE 4 is a transverse cross-sectional view of the toothbrush of FIGURES 1 to 3 inclusive, taken substantially along line 4-4 of FIGURE 1 as viewed in the direction indicated by the arrows;

FIGURE 5 is a side elevational view of another form of toothbrush made in accordance with the principles of the instant invention;

FIGURE 6 is a longitudinal cross-sectional view of the toothbrush of FIGURE 5 taken along the longitudinal axis thereof; and

FIGURE 7 is a transverse cross-sectional view of the toothbrush of FIGURES 5 and 6 taken substantially along line 7-7 of FIGURE 5 as viewed in the direction indicated by the arrows.

Referring now to the drawing in detail, wherein like reference characters designate like elements throughout the several views thereof, a toothbrush made in accordance with the principles of the instant invention is shown generally at 10 having a handle designated generally at 12 made of any suitable inexpensive material, such as plastic or the like. Handle 12 includes a front face 14, a rear face 16 and a pair of side faces 18, 20. A plurality of bristles 22 extend perpendicularly away from front face 14 in a pair of aligned rows shown best in FIGURE 2. As shown in FIGURES 1 and 3, the general outline of bristles 22 is roughly concave downwardly and is provided with a series of upwardly facing V's therein.

A slot or groove 24 is formed in handle 12 and communicates with front face 14 throughout substantially its entire length. As shown by a comparison of FIGURES 2 and 3, groove 24 diverges away from the bristle area both in plan, as shown in FIGURE 2, and in cross-section as shown in FIGURE 3. Accordingly, the terminal end of groove 24 is rather large and contains a portion of a charge of dentifrice material 26 which is partially encapsulated by a deformable cap 28.

The cap 28 is sealed along its peripheral edge 30 to front surface 14 of handle 12 and extends down into groove 24 thereby sealing charge 26 in the terminal end of groove 24. Cap 28 is weakened as at 32, as by serrating that portion of cap 28 extending into groove 24 such that the depression of cap 28 as shown by the arrow P will form an aperture in cap 28 thereby allowing the dentifrice or toothpaste to be extruded through cap 28 and guided along groove 24 into the bristle area at the end of handle 12.

It will be readily apparent that an individual may utilize toothbrush 10 of the instant invention merely by depressing the cap 28 with the thumb as shown by arrow P to dispense the charge of dentifrice material between bristles 24. After the tooth brushing operation is complete, the individual may merely throw toothbrush 10 away if so desired.

Referring now to FIGURES 5 to 7 inclusive, another form of toothbrush of the instant invention is shown generally at 34 comprised of a handle illustrated generally

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3

at 36 having a semicircular front face 38, a flat rear face 40, and a pair of side faces 42, 44. As shown in FIGURES 5 and 6, a plurality of bristles 46 extend outwardly from a flat face 48 which is substantially coplanar to the center of the remainder of handle 36 as shown in FIGURE 7.

Handle 36 includes a slot shown generally at 50 extending from adjacent the bristle area to the terminal end of the handle. Slot 50 is comprised of two portions, a first passageway 52, illustrated as of a circular cross-sectional configuration, extending a substantial portion of the length of handle 36 toward the bristle area in the second passageway 54 extending from the blind end of passageway 52 to the bristle area. A charge of dentifrice material 56 is positioned in passageway 52 adjacent the junction of passageway 54 with a plunger 58 being slidably mounted in passageway 52.

The discharge area of second passageway 54 may be closed if desired, however, it has been found unnecessary in the event that toothbrush 34 is to be enclosed in a sealed plastic bag. Accordingly, when the individual desires to brush the teeth with toothbrush 34, the plastic sack will be opened and the toothbrush removed. The individual will depress plunger 58 with the thumb thereby extruding toothpaste through second aperture 54 into the bristle area. It will be noted that second passageway 54 is similarly tapered both in plan and in cross-section, approximating a frustum of a cone, acting to deliver toothpaste throughout a substantial portion of the bristle area.

It is now seen that there is herein provided an improved toothbrush with dentifrice holder which accomplishes all of the objects and advantages of the instant invention and others, including many advantages of great practical utility and commercial importance.

Since many embodiments may be made of the instant inventive concept, and since many modifications may be made in the embodiments hereinbefore shown and described, it is to be understood that the foregoing is to be interpreted merely as illustrative and not in a limiting sense.

I claim:

1. A disposable toothbrush comprising
an elongated handle element;
a plurality of bristles having one of their respective

4

ends fixedly secured to said side of said handle element and their respective other ends projecting laterally therefrom at one end thereof and substantially perpendicular with respect thereto;
said handle element having an elongated slot formed therein and extending longitudinally thereof and opening into said side at said one end thereof, said slot having its opposed longitudinally extending sides bounded by said bristles throughout substantially the entire length of its outer end portion, said slot also tapering from the innermost end thereof to its outermost end;
an elongated flexible cap extending over the inner end portion of said slot and cooperating therewith to form a dentifrice receiving compartment, and said cap having a continuous peripheral marginal edge portion sealed against the longitudinally extending marginal edges of said handle and defining said slot, said cap having an end thereof sealed in said slot in confronting relation relative to the outer end portion thereof, and said end of said cap being scored to weaken the same for easy rupture upon the application of pressure on said cap to force said dentifrice to flow through said ruptured end of said cap into the outer end portion of said slot for subsequent transference to said bristles.

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ROBERT PESHOCK, *Primary Examiner.*

U.S. Cl. X.R.

401—152, 184

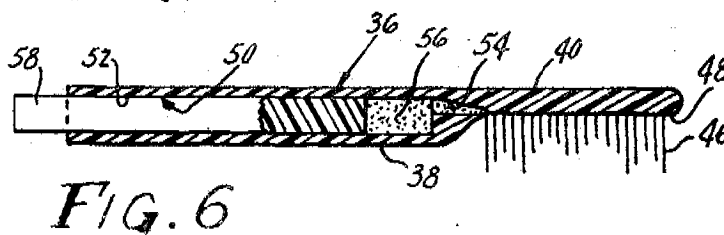
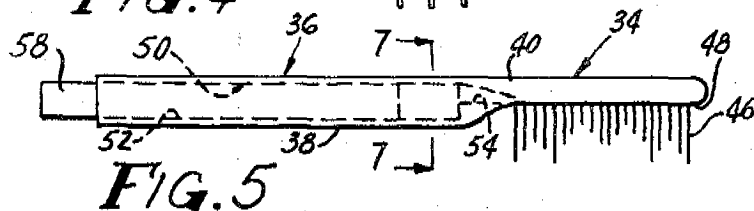
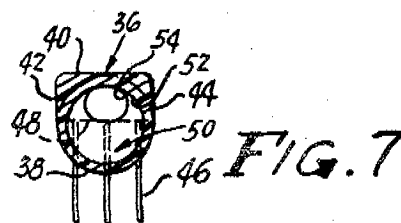
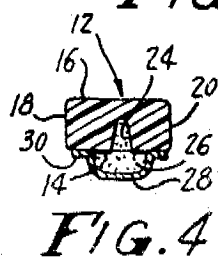
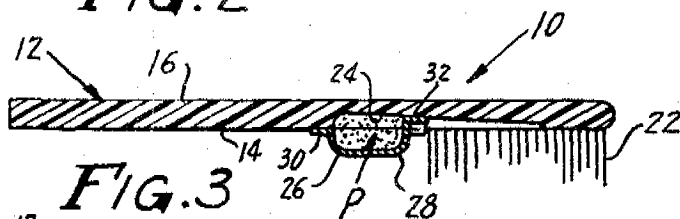
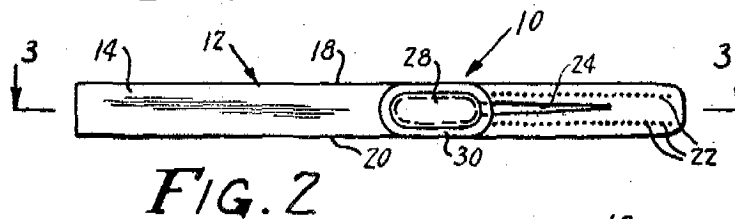
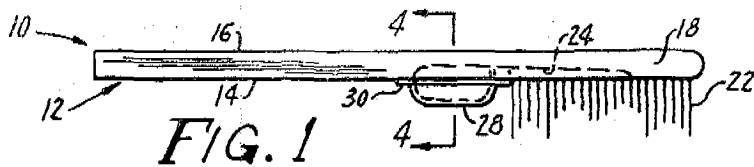
March 11, 1969

V. Z. HUDSON

3,432,245

TOOTHBRUSH WITH DENTIFRICE HOLDER

Filed June 16, 1966



INVENTOR.
VIRGINIA Z. HUDSON

BY *Kimmel*

ATTORNEYS.

AMOSUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISIÓN DE NUEVAS CREACIONES

202086
Bogotá, D.C.,

Solicitante
JAIME ENRIQUE SANDOVAL GÓMEZ

ASUNTO

Radicación 05052441
Trámite 003
Evento 001
Actuación 430
Oficio - 11555
Folios 14

Patente de Invención ☐ Patente de Modelo de Utilidad ☒
Vía Nacional ☒
Vía PCT (fase nacional) ☐ Cap. I ☐ Cap. II ☐
No. Sol. Internacional _____
Fecha de Presentación Interna. _____

Como resultado del examen de fondo, realizado con fundamento en el artículo 85 y en concordancia con el artículo 45 de la Decisión 486 de la Comisión de la Comunidad Andina, se le comunica:

1. Documentos estudiados

- 1.1. Descripción: Folios: 4
1.2. Reivindicaciones: Folios: 5
1.3. Dibujos: Folios: 7 a 11

2. Objeto de la invención

- Título de la solicitud: "CEPILLO DENTAL DE INYECCION" (folio 4).
- Objeto de la invención: El objeto de la presente solicitud de modelo de utilidad es suministrar un producto con un compartimento para almacenar sustancias antisépticas o de enjuagues bucales, el compartimento va por encima del mango del cepillo que se llena con la sustancia, la que bajo suave presión, saldría por la parte activa del cepillo (propulsión).

Según el autor hasta la fecha de solicitud no se encontraba en el mercado un cepillo que preste varias funciones como almacenar, cepillar, higienizar, propulsar y eyectar el liquido antiséptico, humectante, o de limpieza del área, debajo o encima de la matriz del mango, se cubre con un material flexible,