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Santa Marta, Julio 30 de 2003

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 01-211050- -00005-0000

Fecha: 2003-07-31 17:34:35 Dep. 2020 DIR.NUEVASCR
Tra. 2 PATENTES Eve: 1 REGDEPOSITO
Act. 538 PETICION Folios: 2

Señores

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIVISION DE NUEVAS CREACIONES
Bogotá, D.C.

Mi nombre es **EFRAIN ALBERTO ARANGO ORTEGA**, identificado con la cédula de ciudadanía número 8.317.356 de Medellín y he consignado en el Banco Popular a la cuenta de la Superintendencia la suma de \$ 335.000.00, por concepto de la solicitud del estudio de fondo o la examinación de la solicitud de patente de invención, radicaba bajo el número 01211050 del año 2001, publicada en la Gaceta de Propiedad Industrial No. 529 del 27 de junio del 2003. En el valor de recibo bancario incluyo, también, el valor de la gaceta de propiedad industrial de \$16.000 y el porte para el correo fuera de la ciudad de Bogotá de \$ 14.000.

Por favor envíenme la Gaceta de Propiedad Industrial a la siguiente dirección:

EFRAIN ARANGO ORTEGA

A.A # 270 Santa Marta – Magdalena (Colombia)

e-mail: geosierradelmagdalena@latinmail.com

Incluyo recibo anexo a a presente.

Atentamente,

EFRAIN ARANGO ORTEGA

C.C No. 8.317.356 de Medellín

SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO



No. 01-211050- -00005-0000

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NIT : 800176089-2

RECIBO OFICIAL DE CAJA : 03 - 53,430
FECHA : JULIO 31 DE 2003

***** CONSIGNACION *****

DEPOSITANTE	TIPO PAGO	BANCO	CUENTA	No. PAGO	FECHA PGO	Vr. PAGO
EFRAIN ARANGO ORTEGA	CONSIGNACION	BANCO POPULAR	050-00110-6	13276686	30/07/2003	365,000.00

***** CONCEPTO *****

CANT.	RENTISTICO	CONCEPTO	TOTAL CONCEPTO
1	50005-01-01 SOLICITUDES	85 EXAMEN DE PATENTABILIDAD DE INVEN	335,000.00
		TOTAL :	\$ 335,000.00

SON: TRESCIENTOS TREINTA Y CINCO MIL PESOS

RESPONSABLE : 

RECIBO DE CAJA APLICADO AL EXPEDIENTE No. _____

DIVISIÓN DE NUEVAS CREACIONES

RADICACIÓN EXPEDIENTE No. 01-211050

EL EXTRACTO DE LA PRESENTE SOLICITUD DE **PATENTE DE INVENCION**

FUE PUBLICADO EN LA GACETA DE PROPIEDAD INDUSTRIAL No **530** DE

FECHA **31 DE JULIO DE 2003** EL TÉRMINO HÁBIL SEÑALADO POR LA LEY

EXPIRA EL **28 DE OCTUBRE DEL 2003**

NOTA: Dentro del plazo de los seis (6) meses siguientes a partir de la fecha de publicación en la gaceta de Propiedad Industrial, deberá solicitar y cancelar el examen de patentabilidad so pena de que la solicitud caiga en abandono, de acuerdo con lo establecido en el Artículo 44 de la Decisión 486/2000.

SE PRESENTARON OPOSICIONES POR PARTE DE TERCEROS.

SI _ _ _ _ _

NO _ _ **X** _ _

MINISTERIO DE INDUSTRIA
REGISTRO DE LA PROPIEDAD INDUSTRIAL



ESPAÑA

19 ES	11	NUMERO	10 A1
	21	443.488	
	22	FECHA DE PRESENTACION	
		13 Diciembre 1975	

PATENTE DE INVENCION

30 PRIORIDADES:		
31 NUMERO	32 FECHA	33 PAIS
532.430	13-12-74	Estados Unidos

47 FECHA DE PUBLICIDAD	51 CLASIFICACION INTERNACIONAL	62 PATENTE DE LA QUE ES DIVISIONARIA
	B26B	

54 TITULO DE LA INVENCION
UNA UNIDAD AFEITADORA PARA UNA MAQUINILLA DE AFEITAR DE SEGURIDAD DE DOBLE FILO.

71 SOLICITANTE (S)
WARNER-LAMBERT COMPANY

DOMICILIO DEL SOLICITANTE
201 Tabor Road, MORRIS PLAINS, New Jersey, Estados Unidos

72 INVENTOR (ES)
FRANK ANTHONY FERRARO, de nacionalidad estadounidense, el cual ha cedido sus derechos a la compañía solicitante.

73 TITULAR (ES)

74 REPRESENTANTE
D. BERNARDO UNGRIA GOIBURU

TF.

1 tes 88, 89 de la hoja superior 81. Las aberturas 83-85 se extienden entre las porciones de lengüeta de extremo 72, 73; 70, 71; 74, 75 del elemento espaciador 80 y las hojas 81, 82.

La figura 3 muestra la unidad afeitadora asentada y fijada en una maquinilla de afeitar de seguridad de doble filo que tiene un montaje de barra central y vástago 40. El montaje de barra central y vástago 40 se ajusta a través de las aberturas 83-85 para colocar la unidad afeitadora en la maquinilla de afeitar. Un par de casquetes en sección 41, 42 actúan para desviar la unidad afeitadora sobre un asiento de hoja con los filos cortantes de las hojas 81, 82 dispuestos en tándem con respecto a las superficies de barra de protección 44, 45 formadas sobre los extremos exteriores del asiento de hoja. La figura 3 también muestra las porciones de unidad afeitadora 78, 79 entre las lengüetas 70-75 en un estado plano. Sin embargo, las porciones de lengüeta 70-75 se doblan arqueadamente (no mostrado). Cuando la unidad afeitadora se asienta en una maquinilla de afeitar como se muestra en la figura 3, las cintas del elemento espaciador 80 entre su abertura 83 y las perforaciones 36, 37 tienden a flexionarse torsionalmente y reducir por ello la cantidad de fuerza necesitada para asentar la unidad afeitadora.

Las porciones de lengüeta de extremo 72, 73; 70, 71; 74, 75 tienen porciones muescadas 76, 77 que reducen el área de sección transversal de la unidad y también reducen por ello la cantidad de fuerza necesitada para asentar la unidad en la maquinilla de afeitar.

Las hojas 81, 82 y el elemento espaciador 80 pueden estar compuestos de acero inoxidable martensítico delgado usado comúnmente para hojas de afeitar, o de cualquier otro material

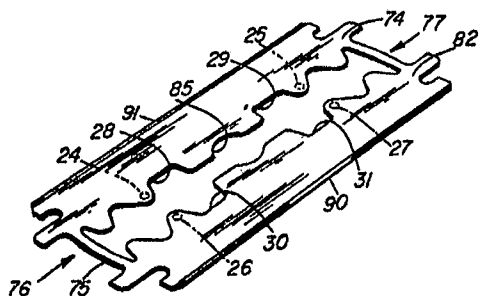
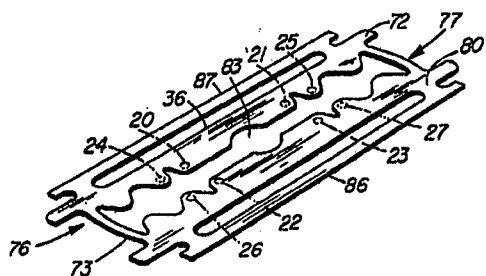
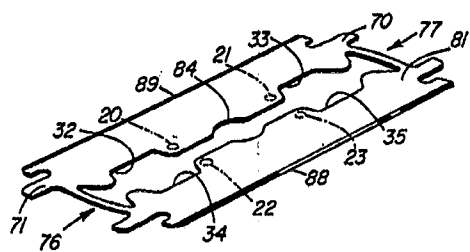


Fig. 1

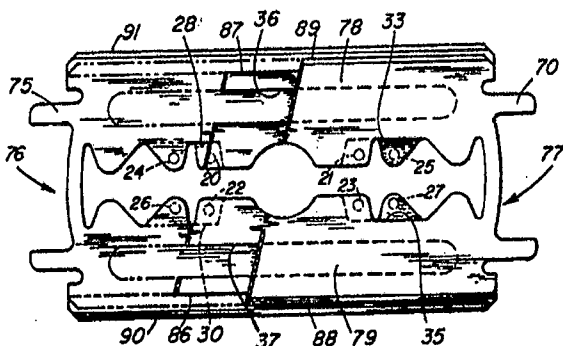


Fig. 2

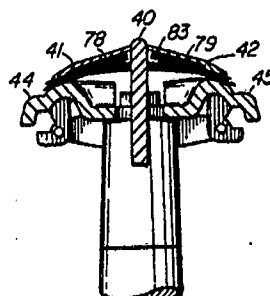


Fig. 3

ESCALA VARIABLE
Madrid, 13 de Diciembre de 1975
BERNARDO UNGRIA
P.P.



US006185822B1

(12) **United States Patent**
Tseng et al.

(10) **Patent No.:** US 6,185,822 B1
(45) **Date of Patent:** *Feb. 13, 2001

(54) **SHAVING SYSTEM**

(75) **Inventors:** Mingchih M. Tseng, Hingham;
Michael J. Kwiecien, Quincy, both of
MA (US)

(73) **Assignee:** The Gillette Company, Boston, MA
(US)

(*) **Notice:** This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

This patent is subject to a terminal disclaimer.

(21) **Appl. No.:** 09/347,585

(22) **Filed:** Jul. 1, 1999

Related U.S. Application Data

(63) Continuation of application No. 08/807,492, filed on Feb. 27, 1997.

(51) **Int. Cl.** B65B 21/40

(52) **U.S. Cl.** 30/41; 30/81

(58) **Field of Search** 30/41, 34.05, 77,
30/80, 81

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"The Razor Tamer", Wafer Shave.
Sensor for Women.

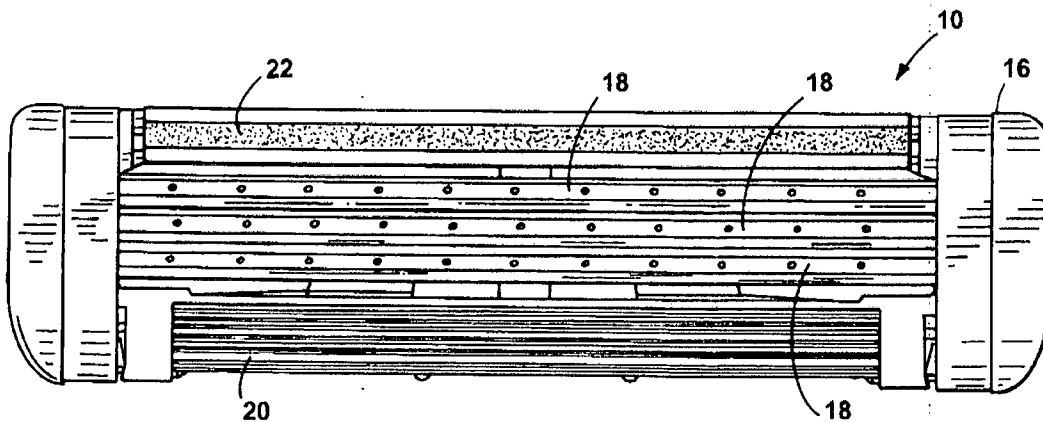
Primary Examiner—Douglas D. Watts

(74) *Attorney, Agent, or Firm*—Fish & Richardson P.C.

(57) **ABSTRACT**

A shaving unit includes a composite that has a surface for engaging the user's skin. The composite includes adjacent lengthwise-extending portions, each containing a shaving aid.

42 Claims, 2 Drawing Sheets



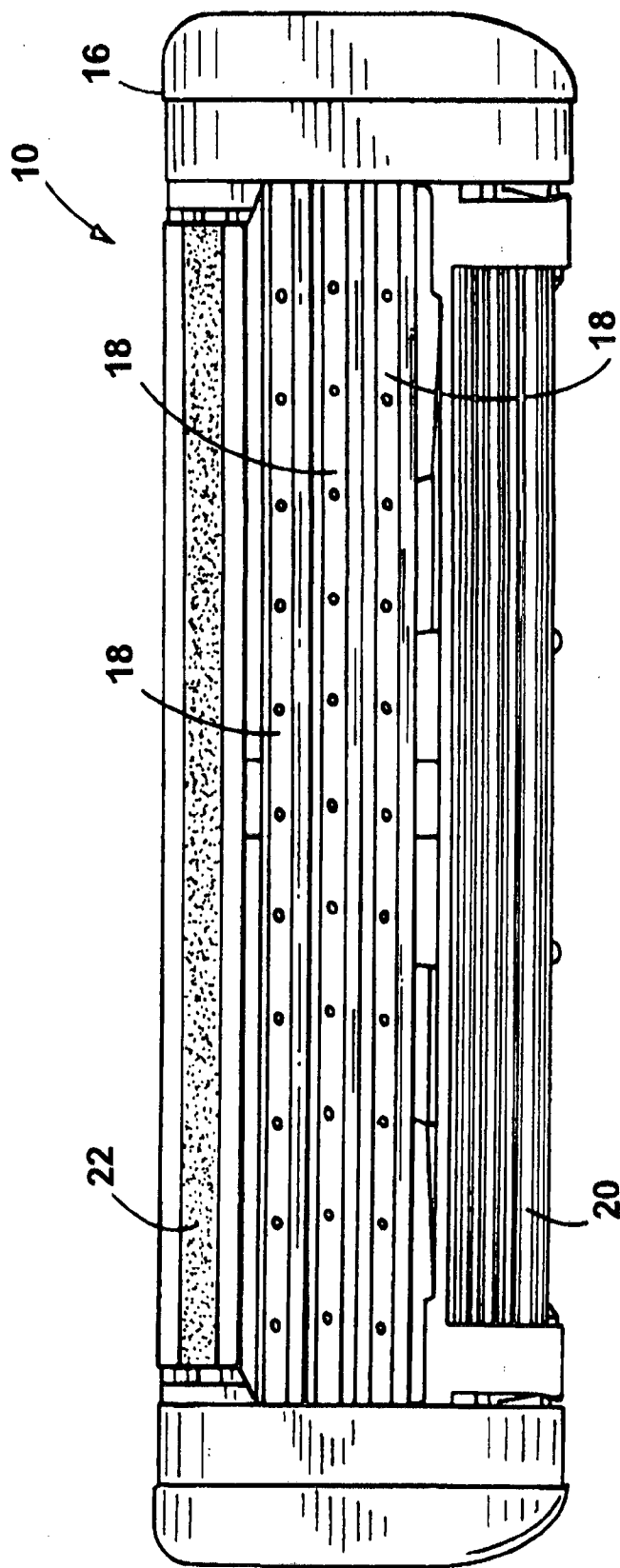


FIG. 1

mating receiving portion of the cartridge. Portions 44 and 48 and connecting portion 49 have the same compositions and, together, surround all but the exposed face of portion 46. They can provide support for portion 46. Portions 44, 46, and 48 each may be, for example, between 1.20 inches and 1.35 inches (more preferably between 1.25 inches and 1.275 inches) in length, and between 0.07 inch and 0.11 inch (more preferably between 0.085 inch and 0.095 inch) in width.

Portions 44, 46, and 48 each contains a water insoluble polymer, optionally in different amounts, and a shaving aid. They may contain the same shaving aid, or different shaving aids. In one embodiment portions 44 and 48 are identical, and contain the same shaving aid, while portion 46 contains a different shaving aid, optionally in combination with the same shaving aid contained in portions 44 and 48.

Each portion also may contain other conventional shaving and composite ingredients, such as low molecular weight water-soluble release enhancing agents such as polyethylene glycol (e.g., 1-10% by weight), water-swallowable release enhancing agents such as cross-linked polyacrylics (e.g., 2-7% by weight), colorants, antioxidants and preservatives. Water-soluble release enhancing agents are described in U.S. Pat. No. 5,113,585, which is hereby incorporated by reference. Water-swallowable release-enhancing agents are described in U.S. Ser. No. 08/121,153, filed Sep. 13, 1993, which is assigned to the same assignee as the parent application and is hereby incorporated by reference. Portions that contain a colorant can be designed to release the colorant, and change color, during shaving, preferably in response to wear of the portion. A portion may contain, for example, between about 0.1% and about 5.0% (preferably between about 0.5% and 3%) colorant by weight.

Suitable water-insoluble polymers which can be used include polyethylene, polypropylene, polystyrene, butadiene-styrene copolymer (e.g. medium and high impact polystyrene), polyacetal, acrylonitrile-butadiene-styrene copolymer, ethylene vinyl acetate copolymer and blends such as polypropylene/polystyrene blend.

Preferably, each portion includes about 5% to 50%, more preferably about 15 to 40%, and most preferably about 20 to 35% by weight of the water-insoluble polymer. The more preferred water-insoluble polymer is polystyrene, preferably a general purpose polystyrene such as BASF 2824 or a high impact polystyrene (i.e. polystyrene-butadiene), such as Mobil 4324. The portion should contain a sufficient quantity of water-insoluble polymer to provide adequate mechanical strength, both during production and use.

A shaving aid is a substance that enhances shaving performance. It may, for example, improve shaving comfort (e.g., by lubricating the skin, improve shaving efficiency, condition the beard, or condition the skin. Examples of shaving aids include lubricious water-soluble polymer such as polyethylene oxide, polyvinyl pyrrolidone, polyacrylamide, hydroxypropyl cellulose, polyvinyl imidazoline, and polyhydroxyethylmethacrylate; beard hair softeners; oils such as silicone oil and mineral oil; substances that enhance the healing or stop the bleeding of the skin; essential oils such as menthol, eugenol, eucalyptol, safrol, and methyl salicylate; rinsing aids; non-volatile cooling agents; inclusion complexes of skin-soothing agents with cyclodextrin; fragrances; vitamin E (including common forms of vitamin E such as vitamin E acetate); vitamin A and B-carotene; panthenol and aloe; antipruritic/counterirritant materials; antimicrobial/keratolytic materials; anti-inflammatory agents; and astringents.

Enough shaving aid should be included to provide the desired benefit. A portion may contain, for example, about

20% to about 80%, more preferably about 40% to about 75%, by weight of a lubricious water soluble polymer. A portion also may include, for example, about 0.01% to about 5.0%, more preferably about 0.05 to about 1.0%, vitamin E (or common forms of vitamin E) by weight.

The preferred lubricious water-soluble polymer is polyethylene oxide. The more preferred polyethylene oxides generally are known as POLYOX (available from Union Carbide Corporation) or ALKOX (available from Meisei Chemical Works, Kyoto, Japan). These polyethylene oxides will preferably have molecular weights of about 100,000 to 6 million, most preferably about 300,000 to 5 million. The most preferred polyethylene oxide comprises a blend of about 40 to 80% of polyethylene oxide having an average molecular weight of about 5 million (e.g. POLYOX COAGULANT) and about 60 to 20% of polyethylene oxide having an average molecular weight of about 300,000 (e.g. POLYOX WSR-N-750). The polyethylene oxide blend may also advantageously contain up to about 10% by weight of a low molecular weight (i.e., MW<10,000) polyethylene glycol such as PEG-100.

The shaving aid composite may be fabricated by any appropriate method, including injection molding and extrusion, the latter being preferred.

A preferred shaving aid composite is provided below. Portions 44 and 48 (and connecting portion 49) are the same in each example. One shaving aid composite includes a central blue portion (46), the other a central green portion (46). The colorant in the central portion is released during shaving, generally by the gradual wearing away of that portion during use, thereby indicating through color change that the shaving aid originally contained in the central portion is no longer being delivered.

Because of the rounded lobe geometry of portions 44, 46, and 48, including the significant recesses at the junctions of portions 44 and 46 and portions 46 and 48, the shaving aid composite may have more surface area available to contact the skin than, for example, a shaving aid composite having a flat skin-engaging surface. This may provide increased lubrication for the skin and may reduce the time it takes for portion 46 to wear away. The raised elevation of the exposed surface of portion 46 relative to the exposed surface of portions 44 and 48 also may enhance the rate of wear of portion 46.

In the chart, the components used in the shaving aid composites are provided in the first column on the left. The quantities of each component in portions 44 and 48 and connecting portion 49 are provided in the second column. The third and fourth columns provide ranges for the quantities of components that are used in the shaving aid composite including a central blue portion (46). The fifth and sixth columns provide ranges for the quantities of components that are used in the shaving aid composite including a central green portion (46).

Component	Portions 44, 48, and 49	Portion 46 (Blue)				Portion 46 (Green)	
		HI	LO	HI	LO	HI	LO
BASF 2824 (CPS)	33.54%	22.50%	32.50%	23.00%	33.00%		
Polyox Coag. ¹	33.02%	32.86%	38.86%	32.86%	38.86%		
Polyox WSR N750	21.99%	0.00%	21.99%	0.00%	21.99%		
N-750 w/Vit E ²		0.00%	21.99%	0.00%	21.99%		
Dow 4500 PEG	10.00%	10.00%	10.00%	10.00%	10.00%		