

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification<sup>6</sup> :**B65D 85/00****A1**

(11) International Publication Number:

**WO 96/15961**

(43) International Publication Date:

30 May 1996 (30.05.96)

(21) International Application Number: PCT/US95/14645

(22) International Filing Date: 8 November 1995 (08.11.95)

(30) Priority Data:

341,425

17 November 1994 (17.11.94) US

(71) Applicant: THE MAKE-UP GROUP, INC. [US/US]; 8033 Sunset Boulevard, No 1420, Los Angeles, CA 90046 (US).

(72) Inventors: JENSEN, Maren; 8033 Sunset Boulevard, No 1420, Los Angeles, CA 90046 (US). LOBELL, Jeanine; 8033 Sunset Boulevard, No 1420, Los Angeles, CA 90046 (US). STEVENS, Lou; 4832 Ridge Road, Cleveland, OH 44144 (US).

(74) Agent: SHARP, Janice, A.; Merchant, Gould, Smith, Edell, Welter &amp; Schmidt, Suite 400, 11150 Santa Monica Boulevard, Los Angeles, CA 90025 (US).

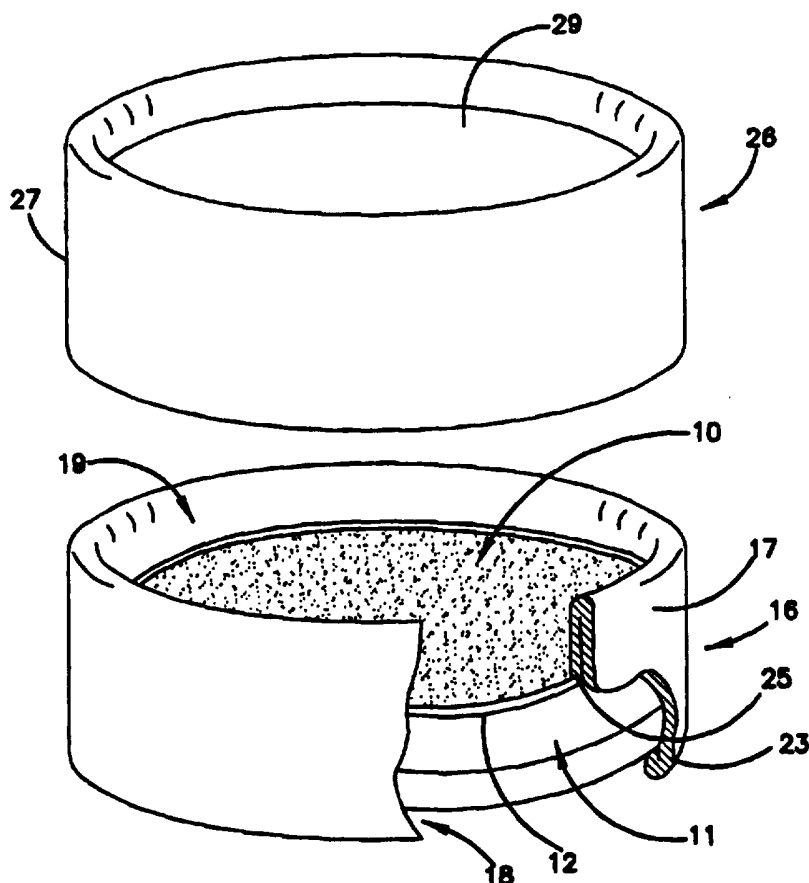
(81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, UG, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, LS, MW, SD, SZ, UG).

**Published***With international search report.*

(54) Title: TWO-PART CONTAINER

## (57) Abstract

A container (11) for a substantially solid product (10) such as a cosmetic product includes a base (16) and a lid (26). The base defines a shape for the product and has open ends (18, 19) which include interior rims (20, 21) for sandwiching an end panel (24) and a cosmetic product (10) between them. The lid includes an interior rim (28) at one end. An end panel (29) frictionally fits with the rim. The container is formed of biodegradable material.



**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AT	Austria	GB	United Kingdom	MR	Mauritania
AU	Australia	GE	Georgia	MW	Malawi
BB	Barbados	GN	Guinea	NE	Niger
BE	Belgium	GR	Greece	NL	Netherlands
BF	Burkina Faso	HU	Hungary	NO	Norway
BG	Bulgaria	IE	Ireland	NZ	New Zealand
BJ	Benin	IT	Italy	PL	Poland
BR	Brazil	JP	Japan	PT	Portugal
BY	Belarus	KE	Kenya	RO	Romania
CA	Canada	KG	Kyrgyzstan	RU	Russian Federation
CF	Central African Republic	KP	Democratic People's Republic of Korea	SD	Sudan
CG	Congo	KR	Republic of Korea	SE	Sweden
CH	Switzerland	KZ	Kazakhstan	SI	Slovenia
CI	Côte d'Ivoire	LI	Liechtenstein	SK	Slovakia
CM	Cameroon	LK	Sri Lanka	SN	Senegal
CN	China	LU	Luxembourg	TD	Chad
CS	Czechoslovakia	LV	Latvia	TG	Togo
CZ	Czech Republic	MC	Monaco	TJ	Tajikistan
DE	Germany	MD	Republic of Moldova	TT	Trinidad and Tobago
DK	Denmark	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	US	United States of America
FI	Finland	MN	Mongolia	UZ	Uzbekistan
FR	France			VN	Viet Nam
GA	Gabon				

## TWO-PART CONTAINER

BACKGROUND

This invention relates to a container. In particular, it relates to a container for cosmetic products.

Many different containers for different products are known. In the area of containers  
5 for cosmetics, these containers are invariably formed of plastic, metal and/or glass. These  
containers are relatively expensive to fabricate, at least in the costs of establishing the initial  
fabrication dyes and molds. Moreover, the containers are not environmentally optimum.

There is a need to provide a container for products, particularly cosmetic products,  
which is environmentally benign, namely is formed of bio-degradable products, and which  
10 is relatively inexpensive to produce.

SUMMARY

By this invention, there is provided a container for a substantially solid product,  
particularly a cosmetic product, which minimizes the disadvantages of known containers.

15 According to the invention, a container for a substantially solid product comprises a  
base having a chosen peripheral side wall shape about a space for confining a substantially  
solid product. The base has open end walls, side wall interior rims at each end of the base  
and an end panel of a selected thickness disposed adjacent to and transverse to an interior  
room of the base. The substantially solid product is disposed between another interior rim  
20 of the base and the end panel.

A lid includes a peripheral side wall conforming to and slightly larger than the base  
for enclosing the base with a sliding frictional fit. The lid has open ends and a side wall  
interior rim at one end of the lid. An end panel is disposed adjacent to the interior rim and  
transverse to the interior rim. The lid is for covering the base.

25 The container is made of bio-degradable material which is substantially non-  
deformable and rigid as assembled.

The peripheral side wall ends are at least partly inwardly directed to form the interior  
rims. The peripheral dimensions of the substantially solid product are selected such that the  
product is frictionally maintained between and transverse to the interior rim and end panel of  
30 the base. The end panel of the base and the end panel of the lid are literally separate  
elements for location adjacent to the inwardly directed interior rims.

The invention is further described with reference to the accompany drawings.

### DRAWINGS

**Figure 1** is an exploded perspective view of a container including a base member and a lid, with part of the base being broken away.

5        **Figure 2** is a cross-sectional view of the container showing the base and lid.

### DESCRIPTION

10        A container for a substantially solid cosmetic product such as shadow material in a compacted powder form **10** is contained in a receptacle **11**. The receptacle **11** is formed with side wall **12** and a bottom **13**. The powder product **10** is compacted in the receptacle **11** so that it provides a substantially flush surface **14**, the surface **14** being substantially aligned with the top **15** of the side wall **12**.

15        A base **16** for a container includes a selected peripheral side wall shaped **17** which is illustrated as substantially cylindrical. This defines a space for confining the solid product **10**. The base **16** has open ends **18** and **19**, respectively, and there is provided an interior rim **20** adjacent the top of the base **16** and rim **21** adjacent the bottom of the base **16**. The rims **20** and **21** are formed by inwardly folding the outer walls **22** of the base **16** such as to form a ledge **23** on which an end panel **24** can fit in this engagement. A ridge **25** is located at the top of the base **16** for engaging the top **15** of the receptacle **11** for containing the solid product **10**. In this manner, the receptacle **11** is sandwiched between the inner rims **20** and **21** of the base **16** of the container.

20        The material from which the base **16** is a fairly rigid cardboard or paper material formed as a tube and cut to a predetermined size. After the tube is cut, the ends are folded inwardly to form the interior rims **20** and **21**.

25        The end panel **24** is similarly formed of a thickened semi-rigid cardboard material. Should the receptacle **11** not be in place, the end panel **24** would be a relatively loose fit between the rims **20** and **21**. The end panel **24** may be located in position before both or one of the inner rims **20** or **21** are folded inwardly thereby facilitating location of the end panel **24** in position.

30        Alternatively, the interior rims **20** and **21** are formed and the panel **24** is then pushed into position. Similarly, the receptacle **11** could be located in position after one rim **21** is formed, the panel **24** and the receptacle **11** are in position. Thereafter the second rim **20** is

formed thereby sandwiching the receptacle 11 in position. A rigid structure holds substantially solid product 10 in position.

5 A second component for the container is a lid 26. The lid 26 is formed with a peripheral side wall 27 conforming to and slightly larger than the side wall 17 for the base 16 thereby permitting for enclosing the base 16 with a sliding frictional fit.

The side wall 27 has open ends, and one end rim 28 of the side wall 27 is inwardly folded to form an interior rim at one open end of the lid. An end panel 29 is located and disposed adjacent to the edge 30 of the interior rim 28 in a substantially transverse location relative to the interior rim 28. The lid is for covering the base 16 of the container.

10 The end panel 29 can be a relative loose or frictional fit with the side wall 27. Preferably, a degree of friction is applied such that the end panel 29 is sized so that it cannot freely be removed from its location adjacent to the rim 28 when located in position on the lid. The lid material is formed of a semi-rigid cardboard or paper and is thus like the base 16 substantially non-deformable and rigid as assembled.

15 By having the container formed of bio-degradable cardboard material, there is provided a container which is environmentally benign and is a substantial advance in the art. Although the container has been described with reference to use with a cosmetic product which is substantially solid, the container so formed could have uses in other applications.

20 In different variations of the invention, the interior rims of the base and the lid may be formed in part by a partial deformation of the edges of the side walls of the base and/or lid. In other forms of the invention, an internal ring may be provided, the internal ring being a separate element formed to fit within the cylindrical interior of the base and lid. Deformation of the base or lid towards one or more of the ends may provide the effective interior rim.

25 Many more variations of the invention exist, each differing from others in matters of detail only. The invention is to be determined solely in terms of the following claims.

CLAIMS

What is claimed is:

- 5 1. A container for a substantially solid product comprising a base having a chosen peripheral side wall shape about a space for confining the substantially solid product, wherein the side wall comprises a single element, first and second open ends, wherein the side wall at the first and second open ends are folded into the space of the base, an end panel of a selected thickness disposed adjacent to and transverse to the folded side wall at the first end of the base, and the substantially solid product being disposed between the folded side wall at the second end of the base and the end panel.  
10
2. The container of claim 1 including a lid with a peripheral side wall conforming to and slightly larger than the peripheral side wall of the base for enclosing the base with a sliding frictional fit, the side wall has open ends, a side wall folded into the interior and at one open end of the lid, and an end panel disposed adjacent to the folded side wall and transverse to the folded side wall, the lid being for covering the base.  
15
3. The container of claim 1 wherein the container is made of a biodegradable material which is substantially non-deformable and rigid as assembled.  
20
4. The container of claim 1 wherein the peripheral dimensions of the substantially solid product are selected such that the product is frictionally maintained between, and transverse to, the folded side wall at the second end and end panel of the base.  
25
5. A container for cosmetics comprising a base having a chosen peripheral side wall shape about a space for confining cosmetics wherein the side wall is a single element, the base having open ends, folds in the side wall, into the space, at each end of the base, an end panel of a selected thickness disposed adjacent to and transverse to a folded side wall of the base, and a cosmetics substrate disk disposed between the other folded end of the base and the end panel.  
30
6. The container of claim 5 including a lid with a peripheral side wall conforming to and slightly larger than the base for enclosing the base with a sliding frictional

fit, the lid having open ends, a folded side wall folded into the interior of and at one open end of the lid, and an end panel disposed adjacent to the folded side wall and transverse to the folded side wall, the lid being for covering the base.

7. The container of claim 5 wherein the container is made of a biodegradable material which is non-deformable and rigid as assembled.

8. The container of claim 5 wherein the peripheral dimensions of the substrate are selected such that the substrate is frictionally maintained between, and transverse to, the folded side wall and end panel of the base.

9. A method of forming a container comprising:

forming a base from a single element to have a chosen peripheral side wall shape about a space for confining cosmetics, the base having open ends, folding the side wall into the space at each end of the base, disposing an end panel of a selected thickness adjacent to and transverse to a folded side wall of the base, locating a substrate between the folded side wall at the other end of the base and the end panel; and

locating a lid having a peripheral side wall conforming to and slightly larger than the base such that the lid encloses the base with a sliding frictional fit.

10. A method of forming a container as claimed in claim 9 wherein the base and lid are of biodegradable material.

11. A method of forming a container as claimed in claim 9 wherein the substrate is a cosmetics substrate, and frictionally maintaining the substrate between, and transverse to, the folded side wall and end panel of the base.

12. A container for cosmetics consisting essentially of:

a base comprising:

a cylinder having a side wall, an open first and an open second end defining an interior space;

a fold, into the interior space, in the side wall at the open first end;

an end panel, disposed in the interior space, abutting the fold in the side wall at the open first end;

a fold, into the interior space, in the side wall at the open second end;

a cosmetics substrate, disposed in the interior space, abutting the fold in the side wall at the open second end and the end panel; and

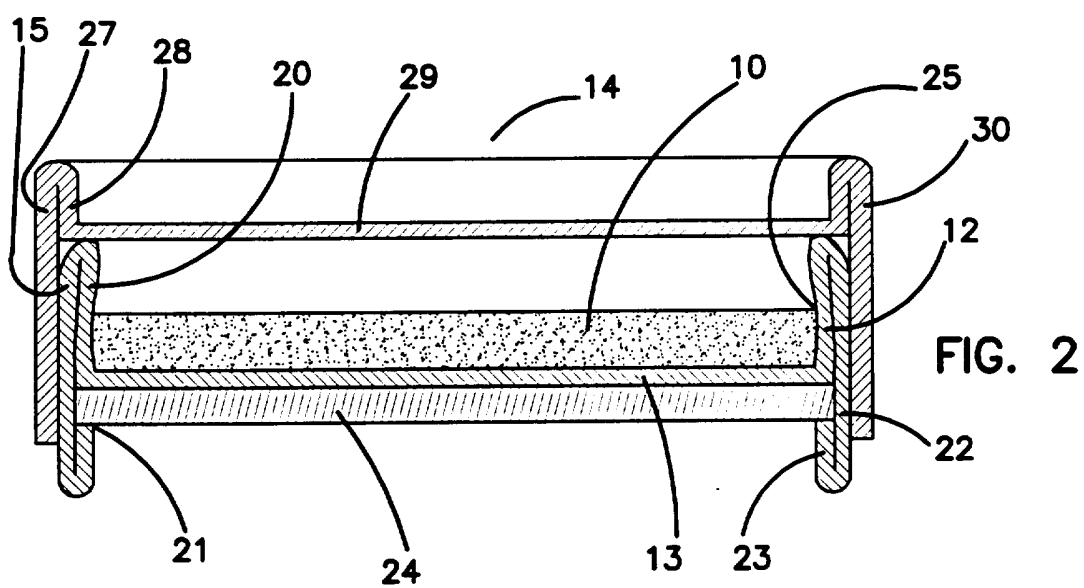
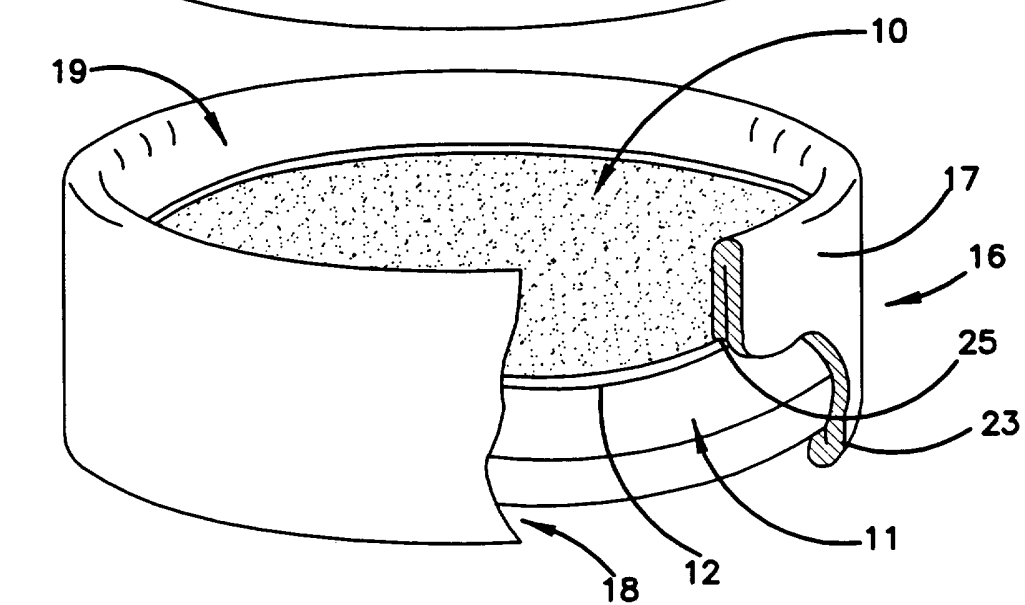
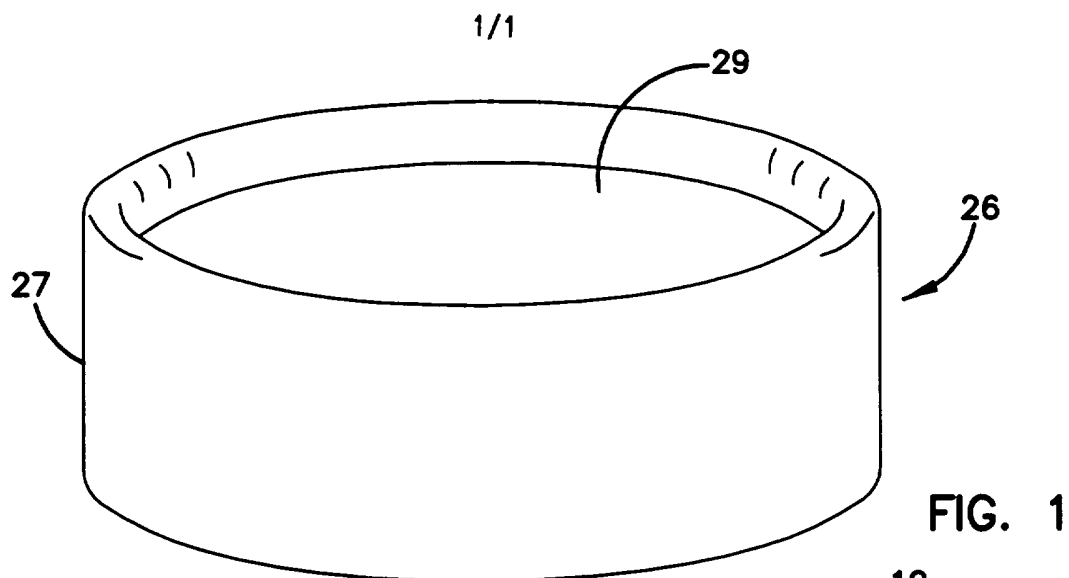
a lid comprising:

a cylinder having a side wall, an open first and an open second end defining an interior space wherein the diameter of the interior space is dimensioned to slidably engage the base;

a fold, into the interior space, in the side wall at an open first end of the lid; and

an end panel, disposed in the interior space, abutting the fold in the side wall at the open first end.





## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US95/14645

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :B65D 85/00

US CL :132/293; 206/527

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)

U.S. : 132/293, 294; 206/229, 527, 581, 823

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONEElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
NONE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US, A, 1,535,522 (DOLAN) 28 April 1925, see Figure 1.	1-4
----		-----
Y		4-12
Y	US, A, 1,794,301 (KENDALL) 24 February 1931, see Figures 7 and 11.	4-12
A	US, A, 1,735,853 (DREUX) 19 November 1929.	1-12
A	US, A, 4,337,859 (MURPHY ET AL) 06 July 1982.	1-12

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	"T" Inter document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"A" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

17 JANUARY 1996

Date of mailing of the international search report

13 FEB 1996

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

JIMMY G. FOSTER

Telephone No. (703) 308-1148

*Sheila Veney*  
Sheila Veney  
Paralegal Specialist  
Group 3200