# (11) EP 4 570 119 A1

(12)

### **EUROPEAN PATENT APPLICATION**

(43) Date of publication: 18.06.2025 Bulletin 2025/25

(21) Application number: 24218220.2

(22) Date of filing: 07.12.2024

(51) International Patent Classification (IPC):

A45D 19/00 (2006.01) A45D 19/06 (2006.01) A45D 44/00 (2006.01) A45D 44/02 (2006.01) A45F 5/14 (2006.01) A45F 5/00 (2006.01)

(52) Cooperative Patent Classification (CPC): A45D 19/00; A45D 19/06; A45D 44/00; A45D 44/02; A45F 5/14; A45F 5/1575

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

**Designated Extension States:** 

BΑ

**Designated Validation States:** 

**GE KH MA MD TN** 

(30) Priority: 13.12.2023 US 202363609516 P

(71) Applicant: Framar International Inc.
Niagara Falls Ontario L2H 0Y5 (CA)

(72) Inventor: GALLO, Giovanni Niagara Falls, L2H 0Y5 Ontario (CA)

(74) Representative: KIPA AB Drottninggatan 11
252 21 Helsingborg (SE)

## (54) BOWL ASSEMBLY FOR HAIR PRODUCTS

(57) A bowl assembly for hair product including a flexible receptacle adapted to receive hair product and a flexible support structure having a proximal end and a distal end. The proximal end is adapted to have a suction means and the distal end further includes an opening that

is adapted to receive the flexible receptacle. The proximal end of the flexible support structure engages a support surface, and the suction means engages the support surface with a sufficient force to support the flexible receptacle.

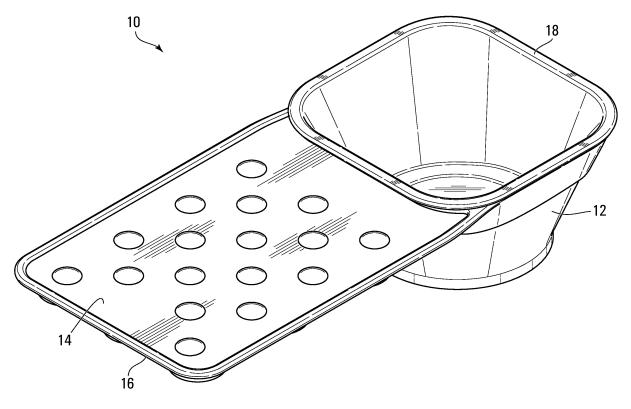


FIG. 1

20

40

45

#### Description

#### Field of the Invention

**[0001]** This invention relates in general to hair product application accessories and more particularly to a receptacle system for containing hair product, which may be removably mounted to any sink.

1

### **Background of the Invention**

**[0002]** Hair products such as hair colouring can require a wide variety of accessories to accurately mix the hair product or tint and to successful apply to a consumer. The required hair product application accessories include some type of receptacle or bowl, brushes and depending on the hair stylist environment, a sink or other structure to support the receptacle. For example, a bowl may be used as mixing bowl for mixing at least two products and/or compositions in any form, such as liquid, paste and/or powder form.

[0003] Prior art hair product application processes and accessories can often require multiple bowls that need to be positioned close to the consumer, as the process can involve several steps. Typically, a hair stylist applies a hair color to the hair of a customer by scooping out the hair color from a bowl or the like, and the bowl containing the hair color is placed near a head of the customer sitting in a chair. A brush is often used to apply the hair colour by temporarily soaking the brush in the hair color in a bowl. The brush portion is then pressed against the side of the bowl to scrape off the needless hair color and the hair color is then applied to the hair of a consumer. During this application process conventional hair product bowls, are often unstable as they may be moved to accommodate multiple bowls on a stylist's workstation or sink area. Furthermore, this instability can lead to spilt hair product outside the bowl due to the hair product being scraped off by the brush or due to the positioning on the brush relative to the unstable bowl. By providing a stable solution to the hair product application system, hair product does not easily land on the consumer or on any other unintended surface.

[0004] As the process of applying hair product can be complicated, messy and time consuming, having the correct arrangement of receptacles, brushes and set up is critical to be timely and to not have any accidental mishaps. Otherwise, the process can have increased labour, hair applying of product and / or dyeing time is prolonged, and mistakes may be made by taking the incorrect receptacle and hair product. Mistakes in applying hair product such as colour can have serious consequences. For example, exchanging two bowls by mistake will result in different shades on different parts of the hair. Some mistakes are not fully reversible and therefore a correction is very difficult and may not even be possible. [0005] Some hair product application systems or processes include complicated bowl assemblies that have

additional elements, such as structures that secure the brush to the bowl, extended rims for clamping apparatuses for helping to identity the intended bowl content.

#### Summary of the Invention

**[0006]** An object of one aspect of the present invention is to provide an improved a receptacle system for containing hair product, which may be mounted to any support structure such as a sink.

[0007] In accordance with one aspect of the present invention there is provided a bowl assembly for hair product that includes a flexible receptacle adapted to receive hair product and a flexible support structure having a proximal end and a distal end. The proximal end may be adapted to have a suction means. The distal end may further include an opening that is adapted to receive the flexible receptacle. The proximal end of the flexible support structure may engage a support surface, and the suction means may engage the support surface with a sufficient force to support the flexible receptacle. [0008] Conveniently, the proximal end of the flexible support may move or flex relative to the distal end from a range 0° to 360°. Furthermore, the proximal end of the flexible support may engage the support surface at an angle having a range from 0° to 180°. The flexible receptacle may be furthered defined as having a top rim and tapered sides. The opening of the distal end of the flexible support may be further defined as having a top edge and bottom edge whereby the bottom edge is defined by the tapered sides of the flexible receptacle. [0009] Preferably, the suction means may be a series of suction cups positioned on the bottom side of the flexible support and are deformable and engage an uneven support surface.

### **Brief Description of the Drawings**

**[0010]** A detailed description of the preferred embodiments are provided herein below by way of example only and with reference to the following drawings, in which:

Figure 1 in a perspective view, illustrates a bowl assembly for hair product in accordance with the preferred embodiment of the present invention.

Figure 2 in a front view, illustrates the bowl assembly for hair product of Figure 1.

Figure 3 in a perspective view, illustrates the bowl assembly for hair product of Figure 1 where the flexible receptacle and flexible support structure are separated.

Figure 4 in a top view, illustrates the bowl assembly for hair product of Figure 1.

Figure 5 in a bottom view, illustrates the bowl as-

55

20

sembly for hair product of Figure 1.

Figure 6 in a left side view, illustrates the bowl assembly for hair product of Figure 1.

Figure 7 in a right-side view, illustrates the bowl assembly for hair product of Figure 1.

Figure 8 in a perspective view, illustrates the bowl assembly for hair product of Figure 1 positioned on the outside of a support structure.

Figure 9 in a perspective view, illustrates the bowl assembly for hair product of Figure 1 positioned on the inside of a support structure.

**[0011]** In the drawings, preferred embodiments of the invention are illustrated by way of example. It is to be expressly understood that the description and drawings are only for the purpose of illustration and as an aid to understanding and are not intended as a definition of the limits of the invention.

#### **Detailed Description of the Preferred Embodiment**

[0012] Referring to Figures 1 through 9, there is illustrated in a perspective view, a bowl assembly for hair products 10 in accordance with a preferred embodiment of the present invention. The bowl assembly 10 includes a flexible receptacle 12 that is adapted to receive hair product or products. The bowl assembly 10 also includes a flexible support structure 14 that has a proximal end 16 and a distal end 18. The proximal end 16 is adapted to have a suction means 20 and the distal end 18 further includes an opening 22 that is adapted to receive the flexible receptacle 12. The proximal end 16 of the flexible support structure 14 may engage a support surface 24. The suction means 20 may engage the support surface 24 with a sufficient force to support the flexible receptacle 12 and any contents.

**[0013]** The flexible receptacle 12 may be further defined as having a top rim 26, tapered sides 28 and a bottom 30. The opening 22 of the distal end 18 of the flexible support structure 14 may be further defined as having a top edge 32 and bottom edge 34. The bottom edge 34 may be defined to accept the bottom 30 and tapered sides 28 of the flexible receptacle 12. More specifically the bottom edge 34 and top edge 32 friction fit against the tapered sides 28 of the flexible receptacle 12 so as to provide a secure, snug fit of the flexible receptacle 12 within the opening 22.

[0014] The top rim 26 may be further defined as a lip 36 that engages the distal end 18 of the flexible support structure 14, whereby the lip 36 rests on the top edge 32 of the opening 22. This engagement is sufficient whereby the top edge 32 of the opening 22 and the distal end 18 of the flexible support structure 14 easily supports the weight of the flexible receptacle 12 and any contents

within the flexible receptacle 12 and the flexible receptacle 12 does not fall through the opening 22.

[0015] In alternative embodiment of the present invention, the flexible receptacle 12 may be integrally adhered to the flexible support structure 14 so that the bowl assembly 10 is a single unit. The single unit bowl assembly 10 may be made of malleable plastic that can be manipulated into a variety of positions and secured to a support surface 24. The malleable plastic may be stain resistant and easily cleaned for repeat use.

[0016] The flexible receptacle 12 is deformable in nature and may be made of a malleable plastic that allows it to easily engage with the flexible support structure. The malleable nature of the flexible receptacle 12 also allows the stylist to easily remove the flexible receptacle 12 from the opening 22 if required. The flexible receptacle 12 maybe further defined as having a variety of shapes, such as square, circular or rectangular by way of example only. The flexible receptacle 12 may be configured whereby the tapered sides 28 from the top rim 26 to the bottom 30 allow for the smooth insertion of the flexible receptacle 12 into the opening 22 of the distal end 18 of the flexible support structure where it can rest on the lip 36.

**[0017]** The proximal end 16 of the flexible support structure 14 can achieve significant movement relative to the distal end 18 from a range 0° to 360°. This flexibility allows for the proximal end 16 and more specifically the suction means 20 to engage the support surface 24 in a wide variety of positions. For example, the proximal end 16 may be positioned against the support surface 24 at a right angle or 90° to the flexible receptacle 12.

**[0018]** The proximal end 16 of the flexible support structure 14 may be defined, as having a topside 40 and bottom side 42. In one embodiment, the suction means 20 may be positioned on the bottom side 42 of the proximal and 16 of the flexible support structure 14. The suction means 20 may also be positioned on the top side 40 of the proximal end 16 of the flexible support structure 14.

[0019] Referring to Figures 8 and 9 and the support surface 24 may be further defined as the inside surface or the outside surface of a sink. The support surface 24 may also be any kind of solid structure, such as a table that the suction means 20 can adhere to. The support surface 24 must have sufficient strength to accommodate the weight of the bowl assembly 10 for hair products and any contents. A stylist may easily place hair product within the flexible receptacle 12 and position the proximal end 16 against support surface 24. The application of pressure on the top side 40 of the proximal end 16 of the flexible support structure 14 will thereby engage the suction means 20 on the bottom side 42 of the flexible support structure and against the support surface 24. Once engaged, the suction means 20 will secure the bowl assembly 10 to the support surface 24 and the stylist is ready to disperse the hair products as desired.

[0020] The flexible support structure 14 maybe deformable in nature and made out of malleable plastic that

45

10

15

20

25

40

45

allows for increased flexing while providing sufficient strength to engage the support surface 24 as well as the flexible receptacle 12. The flexible support structure 14 can vary in overall shape. More specifically, both the proximal end 16 and the distal end 18 may vary in shape to accommodate both the opening 22 and the suction means 22. The opening 22 may have a variety of configurations or shapes to accommodate or match the shape of the flexible receptacle 12.

**[0021]** The suction means 20 maybe further defined as a series of suction cups 44 positioned to engage the support surface 24. The number and size of the suction cups 44 may vary depending on size of the overall bowl assembly 10.

[0022] The illustrations of the embodiments described herein are intended to provide a general understanding of the structure of the various embodiments. The illustrations are not intended to serve as a complete description of all of the elements and features of apparatus and systems that utilize the structures or methods described herein. Many other embodiments may be apparent to those of skill in the art upon reviewing the disclosure. Other embodiments may be utilized and derived from the disclosure, such that structural and logical substitutions and changes may be made without departing from the scope of the disclosure. Additionally, the illustrations are merely representational and may not be drawn to scale. Certain proportions within the illustrations may be exaggerated, while other proportions may be reduced. Accordingly, the disclosure and the figures are to be regarded as illustrative rather than restrictive.

[0023] One or more embodiments of the disclosure may be referred to herein, individually and/or collectively, by the term "invention" merely for convenience and without intending to limit the scope of this application to any particular invention or inventive concept. Moreover, although specific embodiments have been illustrated and described herein, it should be appreciated that any subsequent arrangement designed to achieve the same or similar purpose may be substituted for the specific embodiments shown. This disclosure is intended to cover any and all subsequent adaptations or variations of various embodiments. Combinations of the above embodiments, and other embodiments not specifically described herein, will be apparent to those of skill in the art upon reviewing the description.

**[0024]** Other variations and modifications of the invention are possible. All such modifications or variations are believed to be within the sphere and scope of the invention as defined by the claims appended hereto.

#### **Claims**

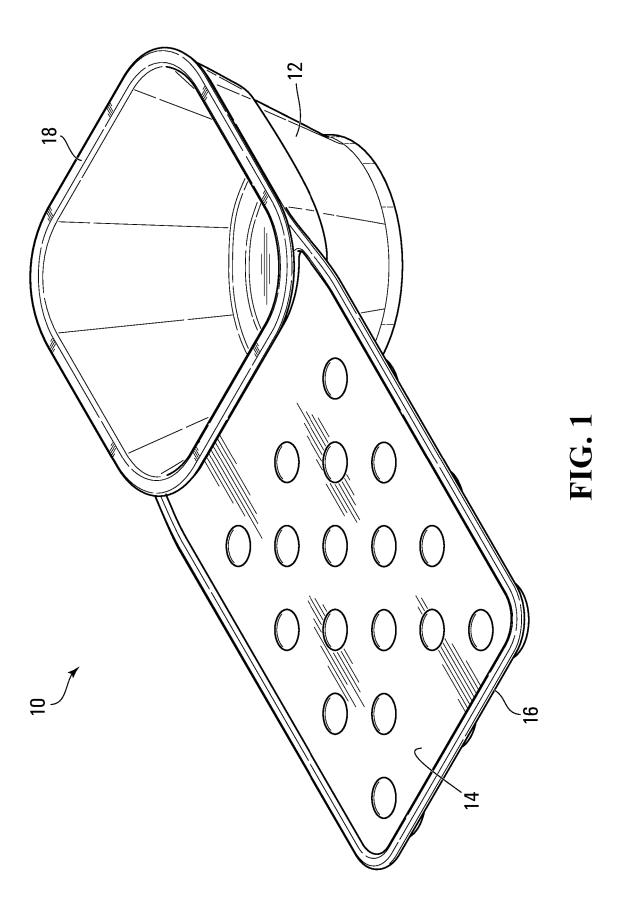
- 1. A bowl assembly for hair product comprising,
  - (a) a flexible receptacle adapted to receive hair product; and

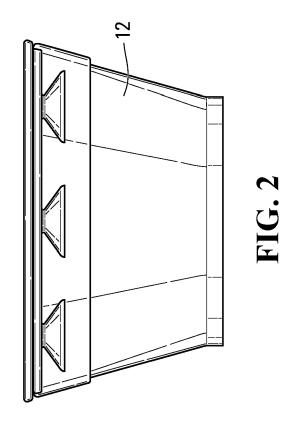
(b) a flexible support structure having a proximal end and a distal end, wherein the proximal end is adapted to have a suction means and the distal end further comprises an opening that is adapted to receive the flexible receptacle,

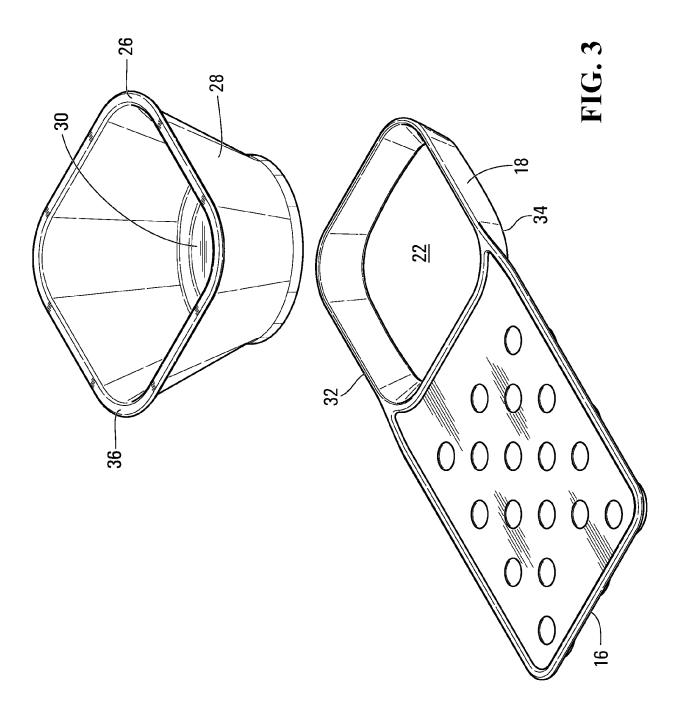
wherein the proximal end of the flexible support structure engages a support surface, and the suction means engages the support surface with a sufficient force to support the flexible receptacle.

- 2. A bowl assembly for hair product as claimed in claim 1, wherein the proximal end of the flexible support structure moves relative to the distal end from a range 0° to 360°.
- 3. A bowl assembly for hair product as claimed in claim 2, wherein the proximal end of the flexible support structure engages the support surface at an angle having a range from 0° to 180°.
- **4.** A bowl assembly for hair product, as claimed in claim 3 wherein the flexible receptacle further comprises a top rim and tapered sides.
- 5. A bowl assembly for hair product as claimed in claim 4 wherein the opening of the distal end of the flexible support structure further comprises a top edge and bottom edge whereby the bottom edge is defined by the tapered sides of the flexible receptacle.
- 6. A bowl assembly for hair product, as claimed in claim 5 wherein flexible receptacle is friction fit into the opening of the distal end of the flexible support structure.
- 7. A bowl assembly for hair product, as claimed in claim 6 wherein be flexible support structure comprises a topside and a bottom side.
- **8.** A bowl assembly for hair product as claimed in claim 7 wherein the suction means is a series of suction cups positioned on the bottom side of the flexible support structure.
- **9.** A bowl assembly for hair product as claimed in claim 8 wherein the suction cups are deformable and engage an uneven support surface.
- 50 10. A bowl assembly for hair product, as claimed in claim9 wherein the flexible receptacle and the flexible support structure are integral to one another.

55







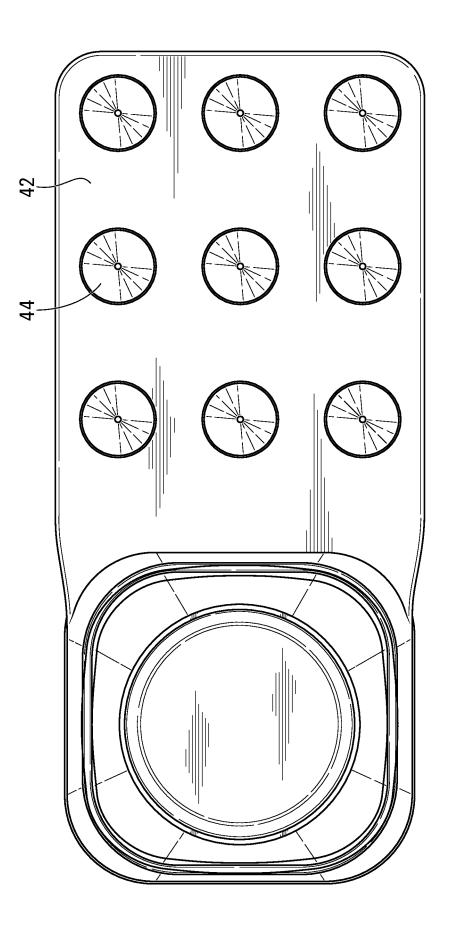


FIG. 4

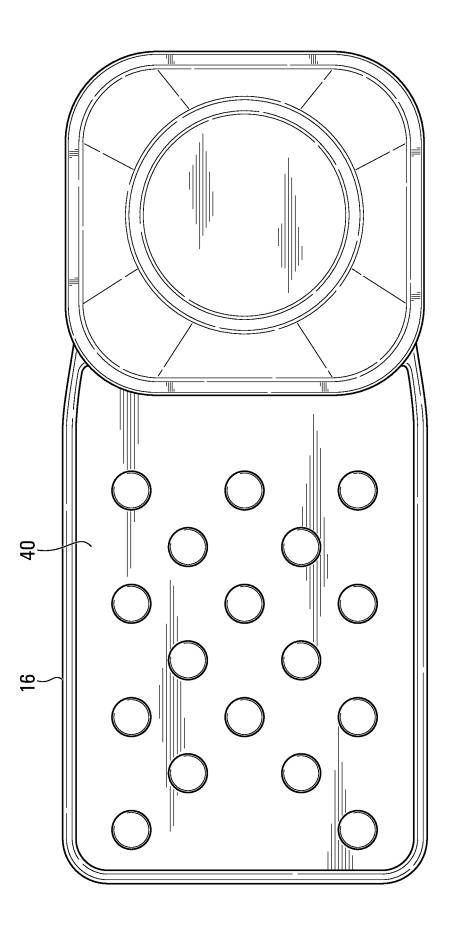
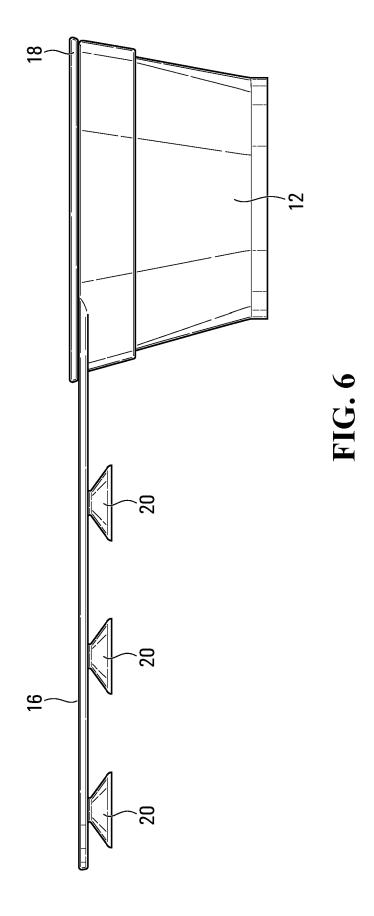
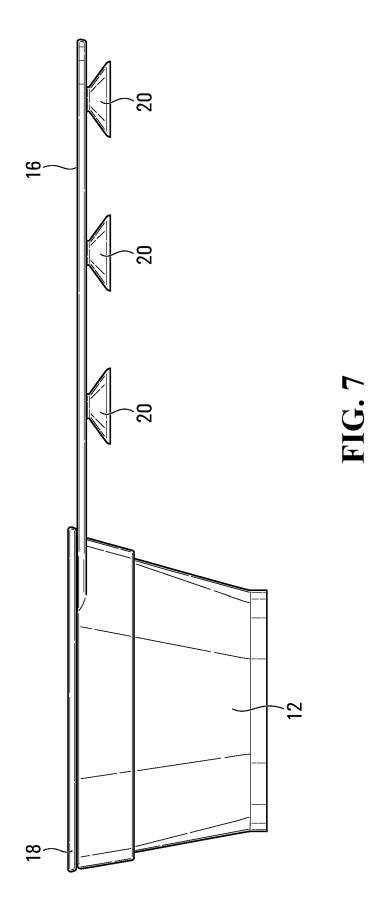
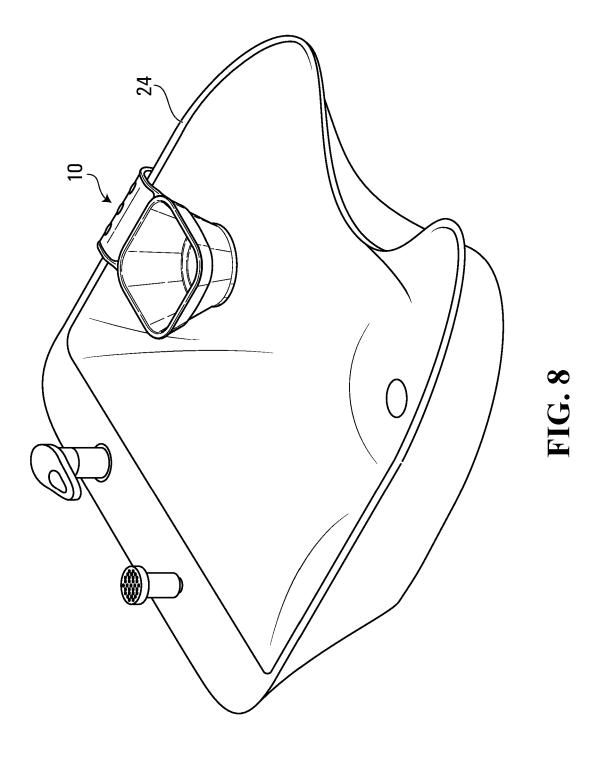
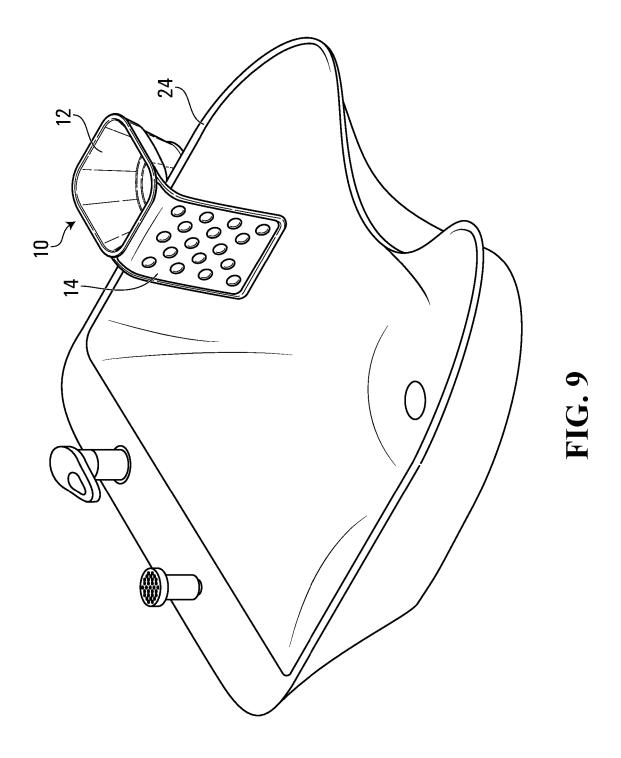


FIG. 5











# **EUROPEAN SEARCH REPORT**

**Application Number** 

EP 24 21 8220

<u></u>		DOCUMENTS CONSID	ERED TO BE RELEVANT		
С	Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
2	x	7 January 1997 (199	M DONALD [US] ET AL) 7-01-07) - column 4, line 49;	1-10	INV. A45D19/00 A45D19/06 A45D44/00 A45D44/02
2	x	SPACE GMBH [DE]) 19 September 2019 (	- paragraph [0070];	1-10	A45F5/14 A45F5/00
2	x	WO 2015/005911 A1 ( 15 January 2015 (20 * paragraph [0006] figures 1-5 *		1-10	
F	A	GB 2 180 743 A (YAL 8 April 1987 (1987- * page 1, line 60 - figures 1, 2 *	04-08)	1-10	
2	X	JP 2005 089185 A (Y YOSHIMURA HIROKO) 7 April 2005 (2005- * the whole documen	04-07)	1	TECHNICAL FIELDS SEARCHED (IPC)  A45D A45F A47K
2	x	AL) 28 October 2003	TES GEORGE D [US] ET (2003-10-28) - column 6, line 23;	1	A47J A47L
2	x	US 7 802 763 B2 (RI 28 September 2010 ( * column 2, line 26 figures 1-18 *	1		
1		The present search report has been drawn up for all claims			
		Place of search	Date of completion of the search		Examiner
04C0.		The Hague	3 April 2025	april 2025 Ehr	
FORM 1503 03.82 (P04C01)	X : part Y : part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot ument of the same category inological background	L : document cited	cument, but publ ate in the application	ished on, or

### EP 4 570 119 A1

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 24 21 8220

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

03-04-2025

10	cit		
15	US  DE		
20	WO  GB		
25	JP  US  US		
30			
35			
40			
45			
50			

**FORM P0459** 

55

	atent document d in search report		Publication date	Patent family member(s)	Publication date
US	5590804		07-01-1997		
DE	102018203847		19-09-2019	DE 102018203847 A1 US 2019284786 A1	19-09-2019 19-09-2019
	2015005911		15-01-2015	NONE	
	2180743	A	08-04-1987	GB 2180743 A ZA 863739 B	08-04-198 30-12-198
JΡ	2005089185	A	07-04-2005		
បន	6637707	в1	28-10-2003	NONE	
បន	7802763		28-09-2010		

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82