

(19)



(11)

**EP 1 547 694 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**14.05.2008 Bulletin 2008/20**

(51) Int Cl.:  
**B05B 11/00 (2006.01)**

(43) Date of publication A2:  
**29.06.2005 Bulletin 2005/26**

(21) Application number: **04030249.9**

(22) Date of filing: **21.12.2004**

(84) Designated Contracting States:  
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR  
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**  
Designated Extension States:  
**AL BA HR LV MK YU**

(72) Inventors:  
• **Francavilla, Frank  
Branchville  
New Jersey 07826 (US)**  
• **Kearsey, Kevin F.X.  
Monsey  
New York 10952 (US)**

(30) Priority: **24.12.2003 US 196339  
03.03.2004 US 792036**

(74) Representative: **Forattini, Amelia  
Internazionale Brevetti  
Ingg. ZINI, MARANESI & C. S.r.l.  
Piazza Castello 1  
20121 Milano (IT)**

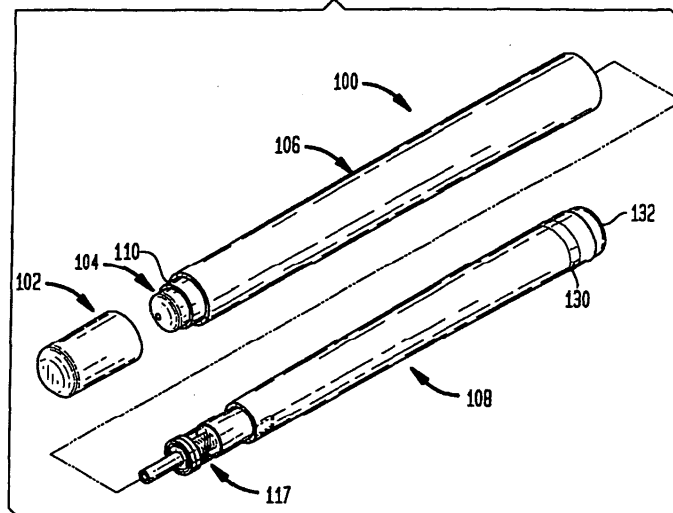
(71) Applicant: **Expac Corporation  
Montvale,  
New Jersey 07645 (US)**

(54) **Fluid dispenser assembly**

(57) The present invention is directed toward a cost effective instrument for storing a fluid material, and applying a predetermined amount of the fluid material to a surface. The instrument is comprised of few parts including an outer casing (106) and a fluid insert (108), making the instrument cheaper to manufacture, and easy to assemble. The embodiments disclosed can be provided in

a preassembled form to cosmetic companies and the like seeking to fill a dispenser with their fluid cosmetic products. The ability to provide dispensers in a pre-assembled form, combined with the compatibility of the fluid dispensers with industrial high speed filling machines, reduces the overall filling costs to the cosmetic company, as well as the cost to the consumer.

**FIG. 1**



**EP 1 547 694 A3**



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	DE 26 30 569 A1 (TRISA BUERSTENFABRIK AG) 19 January 1978 (1978-01-19) * page 4, lines 11-16; figure 1 * -----	1,18	INV. B05B11/00
A	EP 1 295 646 A (PFEIFFER ERICH GMBH & CO KG [DE]) 26 March 2003 (2003-03-26) * paragraph [0027] * -----	1,18	
A	US 6 533 482 B1 (BYUN YOUNG KWANG [KR]) 18 March 2003 (2003-03-18) * the whole document * -----	1,18	
X	FR 2 645 509 A (STEP SOC TECH PULVERISATION [FR]) 12 October 1990 (1990-10-12) * page 4, columns 10-18 * * page 5, lines 27-33 * -----	36,37	
A	US 4 944 429 A (BISHOP KEITH H [US] ET AL) 31 July 1990 (1990-07-31) * column 4, lines 18-68 * -----	4-6,29	
A	DE 35 21 611 A1 (MEGA PROD VERPACK MARKETING [DE]) 18 December 1986 (1986-12-18) * claims 1-3; figures 5,6 * -----	4-6	
		6	TECHNICAL FIELDS SEARCHED (IPC) B05B A61M A46B A45D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 April 2008	Examiner Juguet, Maurice
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

3  
EPO FORM 1503 03.02 (F04C01)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
- The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3 8-28

Instrument for applying a fluid material to a surface comprising a fluid insert with a pump and a protruding ridge, and an outer casing having an interior ridge.

---

2. claims: 4-7 29-35

Instrument for applying a fluid material to a surface comprising a fluid insert with a pump and a notch, and an outer casing with a tab

---

3. claims: 36, 37

Method of filling a dispenser assembly

---

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

EP 04 03 0249

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.

02-04-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 2630569	A1	19-01-1978	NONE	
-----				
EP 1295646	A	26-03-2003	AT 348664 T	15-01-2007
			EP 1295644 A1	26-03-2003
			EP 1295645 A1	26-03-2003
			ES 2276868 T3	01-07-2007
-----				
US 6533482	B1	18-03-2003	NONE	
-----				
FR 2645509	A	12-10-1990	NONE	
-----				
US 4944429	A	31-07-1990	NONE	
-----				
DE 3521611	A1	18-12-1986	NONE	
-----				

EPO FORM P0459

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