



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 439 000 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
01.09.2004 Bulletin 2004/36

(51) Int Cl.7: **B01F 13/10, B01F 15/02,
B01F 15/04, B65D 51/00,
B65B 3/32, B44D 3/12**

(43) Date of publication A2:
21.07.2004 Bulletin 2004/30

(21) Application number: **04000475.6**

(22) Date of filing: **13.01.2004**

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

(72) Inventor: **Sarti, Ferdinando**
60035 Jesi (Ancona) (IT)

(74) Representative: **Dall'Olio, Giancarlo**
INVENTION s.a.s.,
Via delle Armi, 1
40137 Bologna (IT)

(30) Priority: **16.01.2003 IT BO20030018**

(71) Applicant: **Valpaint S.r.l.**
60020 Polverigi (Ancona) (IT)

(54) **Apparatus for dosing colored pigments in a container for paint or neutral enamel and a container usable with this apparatus**

(57) Apparatus includes a self-service color metering device for introducing dosed colored pigments into a neutral product contained in a container (5). The color metering device (100) includes a plurality of tanks (1) containing the colored pigments, connected to a corresponding number of delivery needles (3), situated in a coloring chamber (4). The container (5) has a cover (50), with a window (15) made therein, closed by a membrane (150) of elastomeric material. The container (5), together with the cover (5), is placed on the plate (80) of a weighing machine (8), situated inside the coloring chamber (4).

After the user has entered necessary data and has prepaid the operation by suitable means of the color metering device (100), the raising means (18) raise the weighing machine (8) and the container (5), so that the delivery needles (3) pierces the membrane (150) and enter the container (5), to deliver said colored pigments. Afterwards, the container (5) is lowered, the holes of the membrane (15) close spontaneously, and the user can withdraw the container (5) with the product colored as required.

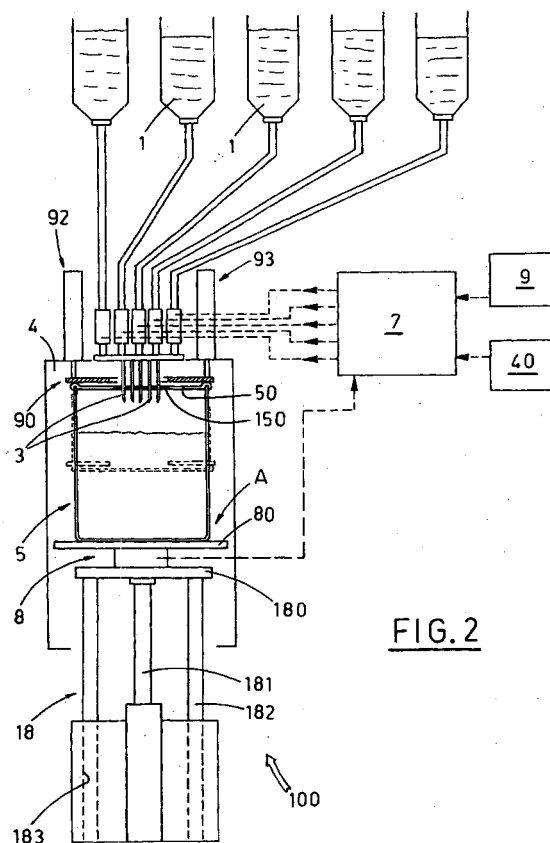


FIG. 2

EP 1 439 000 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 00 0475

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	EP 0 779 241 A (COROB SPA) 18 June 1997 (1997-06-18)	1-9,11, 12	B01F13/10 B01F15/02
A	* column 1, line 10 - line 40 * * column 3, line 43 - column 4, line 31 * * figures 1,2 *	10,13,14	B01F15/04 B65D51/00 B65B3/32 B44D3/12
Y	US 2002/074053 A1 (KELSEY STEVEN ET AL) 20 June 2002 (2002-06-20)	1-3	
A	* page 1, paragraph 3 - paragraph 14 * * page 2, paragraph 29 * * page 2, paragraph 36 * * page 2, paragraph 41 - paragraph 42 * * page 3, paragraph 56 - paragraph 58 * * figures 1-4 *	4-14	
Y	US 4 335 759 A (KOIVISTO EERO ET AL) 22 June 1982 (1982-06-22)	1,2,4-9	
A	* column 2, line 3 - line 41 * * figures *	3,10-14	
Y	GB 2 162 158 A (PILLA DONALD PAUL) 29 January 1986 (1986-01-29)	11,12	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	* page 1, line 17 - line 46 * * page 1, line 70 - line 74 * * page 1, line 117 - line 129 *	13,14	B01F B65D B44D B65B
Y	GB 1 239 346 A (-) 14 July 1971 (1971-07-14)	1,2,6,7	
A	* page 1, line 16 - line 77 * * figures *	3-5,8-14	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 14 July 2004	Examiner Real Cabrera, R
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	

EPO FORM 1503 03.82 (P04C01)

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

EP 04 00 0475

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.

14-07-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0779241	A	18-06-1997	IT 80950591 A1	16-06-1997
			US 5784854 A	28-07-1998
			DE 69601693 D1	15-04-1999
			DE 69601693 T2	14-10-1999
			EP 0779241 A1	18-06-1997
			ES 2131903 T3	01-08-1999

US 2002074053	A1	20-06-2002	AU 5227101 A	07-11-2001
			WO 0181190 A1	01-11-2001

US 4335759	A	22-06-1982	FI 58264 B	30-09-1980
			DE 2935698 A1	13-11-1980
			FR 2455991 A1	05-12-1980
			GB 2048825 A ,B	17-12-1980
			NL 8002443 A	12-11-1980

GB 2162158	A	29-01-1986	NONE	

GB 1239346	A	14-07-1971	FI 45144 B	30-11-1971
			AT 297891 B	10-04-1972
			BE 739118 A	19-03-1970
			CH 494653 A	15-08-1970
			DE 1909185 A1	04-06-1970
			FR 2018554 A5	29-05-1970
			NL 6914217 A ,B	24-03-1970
			NO 124244 B	27-03-1972
			SE 356933 B	12-06-1973
