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(54) **REAGENT BOTTLE SHADING DEVICE AND ANALYSIS DEVICE**

(57) The present utility model relates to a reagent bottle shading device, comprising: a tray and a sidewall connected to the tray; wherein a base hole is provided on the tray; a top end of the sidewall forms a top end

opening, to allow the convenient insertion and withdrawal of a reagent bottle; wherein a base hole is provided on the tray, the size of the base hole being adapted for the entry of a finger.

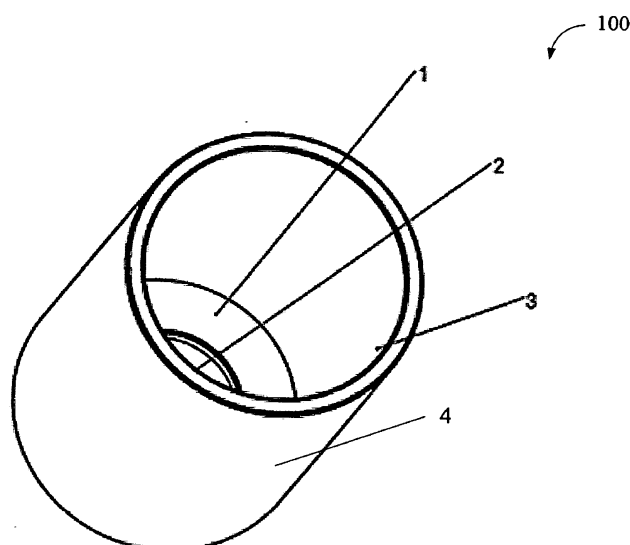


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 15 00 1322

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 278 176 A (ADAMS MARK B) 14 July 1981 (1981-07-14) * column 1, line 11 - line 17 * * column 3, line 8 - line 20 * * column 3, line 67 - column 4, line 3 * * column 4, lines 13-16, 21-26, 31-41 * * figures 1, 2 *	1-5	INV. B01L3/00 B01L9/00 B65D23/08 B65D81/30
X	US 8 561 828 B2 (KRAUSS ULRICH [DE] ET AL) 22 October 2013 (2013-10-22) * column 1, line 22 - line 62 * * column 2, line 44 - column 3, line 4 * * figures 1, 2 *	1-5	
X	WO 2014/028159 A1 (BECTON DICKINSON CO [US]) 20 February 2014 (2014-02-20) * paragraphs [0027], [0028], [0035], [0038] * * figures 1-6, 8, 9 *	1-4	
X	EP 0 508 015 A2 (CHROMACOL LTD [GB]) 14 October 1992 (1992-10-14) * column 2, line 8 - line 33 * * column 3, line 10 - line 18 * * figures 2, 3, 6 *	1-4	TECHNICAL FIELDS SEARCHED (IPC) B01L B65D
X	EP 0 916 406 A2 (BAYER AG [US]) 19 May 1999 (1999-05-19) * paragraphs [0016], [0017], [0023] * * figures 1-5 *	1-3	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 September 2015	Examiner Bischoff, Laura
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	

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due 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 those claims for which no payment was due.

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:

2-5(completely); 1(partially)

☐ 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).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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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: 2-5(completely); 1(partially)

A reagent bottle shading device, comprising: a tray and a sidewall connected to the tray; wherein a top end of the sidewall forms a top end opening, to allow the insertion and withdrawal of a reagent bottle; wherein a base hole is provided on the tray, the size of the base hole being adapted for the entry of a finger, solving the problem to provide an alternative reagent bottle shading device which facilitates insertion and withdrawal of the reagent bottle.

2. claims: 6-10(completely); 1(partially)

A reagent bottle shading device, comprising: a tray and a sidewall connected to the tray; wherein a top end of the sidewall forms a top end opening, to allow the insertion and withdrawal of a reagent bottle; wherein a base hole is provided on the tray, the size of the base hole being adapted for the entry of a finger, further comprising a weight sensor adapted for detecting the weight of a reagent bottle - An analysis device, comprising such a reagent bottle shading device; a reagent addition means adapted for adding reagent to the reagent bottle; and a control means adapted for controlling the reagent addition means according to the weight of the reagent bottle detected by the weight sensor, solving the problem to provide a reagent bottle shading device with a weight sensor.

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

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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
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4278176 A	14-07-1981	NONE	
US 8561828 B2	22-10-2013	CN 102470072 A DE 102009027454 A1 EP 2448541 A1 US 2012181285 A1 WO 2011000623 A1	23-05-2012 05-01-2011 09-05-2012 19-07-2012 06-01-2011
WO 2014028159 A1	20-02-2014	AU 2013303168 A1 CA 2882142 A1 CN 103587822 A CN 203461306 U EP 2885078 A1 JP 2015532624 A US 2015182968 A1 WO 2014028159 A1	12-03-2015 20-02-2014 19-02-2014 05-03-2014 24-06-2015 12-11-2015 02-07-2015 20-02-2014
EP 0508015 A2	14-10-1992	DE 508015 T1 DE 69107298 D1 DE 69107298 T2 EP 0508015 A2 US 5382409 A US 5536476 A	25-11-1993 23-03-1995 08-06-1995 14-10-1992 17-01-1995 16-07-1996
EP 0916406 A2	19-05-1999	AT 273076 T CA 2248425 A1 DE 69825544 D1 DK 0916406 T3 EP 0916406 A2 JP H11218537 A US 5897090 A	15-08-2004 13-05-1999 16-09-2004 29-11-2004 19-05-1999 10-08-1999 27-04-1999

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