



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 1 066 881 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
03.07.2002 Bulletin 2002/27

(51) Int Cl.7: **B01L 3/14**

(43) Date of publication A2:
10.01.2001 Bulletin 2001/02

(21) Application number: **00113635.7**

(22) Date of filing: **28.06.2000**

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

- **Peckham, Allison**
Wayne, New Jersey 07470 (US)
- **Prais, Alois**
Rutherford, New Jersey 07070 (US)

(30) Priority: **09.07.1999 US 143214 P**
09.09.1999 US 392867

(74) Representative:
von Kreisler, Alek, Dipl.-Chem. et al
Patentanwälte,
von Kreisler-Selting-Werner,
Bahnhofsvorplatz 1 (Deichmannhaus)
50667 Köln (DE)

(71) Applicant: **Becton, Dickinson and Company**
Franklin Lakes, New Jersey 07417 (US)

(72) Inventors:
• **Rosen, Steven M.**
Mountain Lakes, New Jersey 07046 (US)

(54) **Specimen collection assembly with cap**

(57) The present invention is a collection assembly (10) comprising a container (12), and a cap assembly (14) removably and sealably secured to the container (12) whereby access to the interior of the container (12) can be made with a piercing element without removing the cap assembly (14) from the container (12). The cap assembly (14) includes a cap body and a membrane like septum (32) supported by the cap body. The septum (32) provides for a pierceable element to have access to the interior of the container. The membrane is of a thermoplastic elastomer and is self-sealing upon removal of the piercing element.

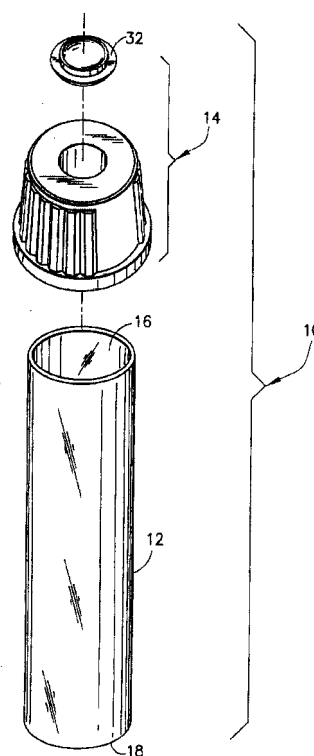


FIG.2

EP 1 066 881 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 11 3635

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)
X	US 5 306 270 A (MACARTNEY CHARLES T ET AL) 26 April 1994 (1994-04-26) * column 2, line 5 - column 3, line 18 * * column 2, line 38 - column 3, line 15; claim 1; figures 1,2 * * abstract *	1	B01L3/14
X	US 5 779 074 A (BURNS JAMES A) 14 July 1998 (1998-07-14) * column 2, line 7 - column 2, line 63 * * column 7, line 43 - column 7, line 58; figure 11 * * column 10, line 46 - column 10, line 63 *	1	
X	WO 89 02399 A (PARSONS JOSEPH NOMINEES) 23 March 1989 (1989-03-23) * page 7, line 23 - page 9, line 27; figure 2 *	1	
X	EP 0 454 493 A (DAYKIN VICTOR ALEXANDER ; MACARTNEY CHARLES TERRENCE (CA)) 30 October 1991 (1991-10-30) * page 1 * * column 1, line 37 - column 1, line 57 * * column 3, line 4 - column 3, line 8 * * column 4, line 30 - column 4, line 56; figures 4,5 *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B01L B65D
A	US 5 247 015 A (BAYAN GHAWAMEDIN) 21 September 1993 (1993-09-21) * column 3, line 28 - column 6, line 46; claim 1 *	1	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 7 May 2002	Examiner Smith-Hewitt, L
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 (P04G01)

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

EP 00 11 3635

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.

07-05-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5306270	A	26-04-1994	CA	2007620 A1	11-07-1991
			US	5177215 A	05-01-1993
			EP	0442600 A2	21-08-1991
			US	5258395 A	02-11-1993
US 5779074	A	14-07-1998	US	5632396 A	27-05-1997
			US	5738233 A	14-04-1998
			US	5699923 A	23-12-1997
WO 8902399	A	23-03-1989	AU	2422188 A	17-04-1989
			WO	8902399 A1	23-03-1989
EP 0454493	A	30-10-1991	CA	2015571 A1	26-10-1991
			EP	0454493 A2	30-10-1991
US 5247015	A	21-09-1993	US	4975308 A	04-12-1990
			CA	2006580 A1	22-06-1990