



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) **EP 0 919 516 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
24.07.2002 Bulletin 2002/30

(51) Int Cl.7: **B67B 3/064**, B67B 5/03,
B67B 3/20, F17C 5/00

(43) Date of publication A2:
02.06.1999 Bulletin 1999/22

(21) Application number: **98500244.3**

(22) Date of filing: **11.11.1998**

(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

(72) Inventors:
• **Méndez Rutllan, Andrés**
El Soto, 28100 Alcobendas (Madrid) (ES)
• **Antunez Jiménez, José**
28529 Rivas Vaciamadrid (Madrid) (ES)

(30) Priority: **27.11.1997 ES 9702474**

(74) Representative: **Riera Blanco, Juan Carlos**
Doctor Fleming 24, 1o A
28036 Madrid (ES)

(71) Applicant: **REPSOL BUTANO, S.A.**
28015 Madrid (ES)

(54) **Sealing cap installing machine**

(57) Machine for installing sealing caps, particularly caps for protecting the outlet valve of containers holding gas under pressure, the sealing caps proceeding down towards the lower end of a feed channel (3), where they are pushed upwardly by a cylinder (2) in order to insert

them in a lower lodging (6, 6') of a respective cylinder (5, 5') comprised in a group liable to rotate along a horizontal plane when driven by an actuator (4) for the purpose of transferring the collected cap to a position where it is applied onto the container (7), which is retained in said position through a brake (8).

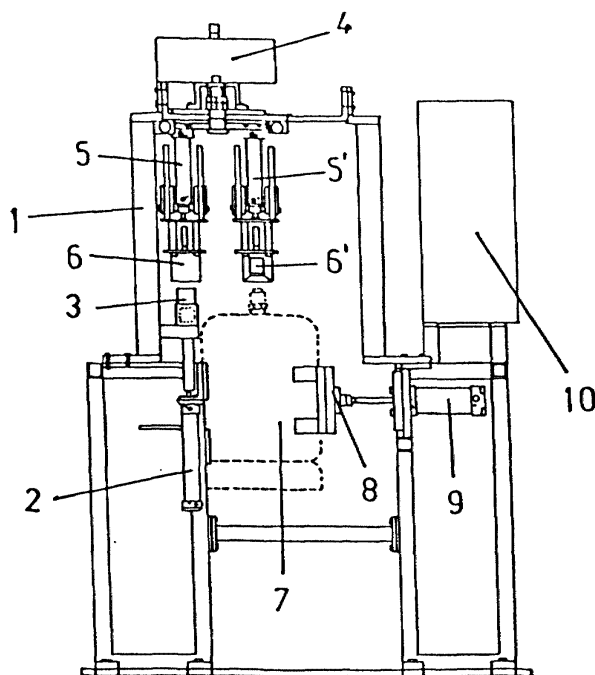


FIG. 1

EP 0 919 516 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 50 0244

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.6)		
Y	EP 0 780 191 A (REPSOL BUTANO SA) 25 June 1997 (1997-06-25) * column 7, line 1 - line 20; figures 3,4 * * column 8, line 24 - line 46 * ---	1	B67B3/064 B67B5/03 B67B3/20 F17C5/00		
Y	FR 2 658 587 A (SIRAGA IND FSE ;TOTALGAZ CIE FSE (FR)) 23 August 1991 (1991-08-23) * page 3, line 28 - page 4, line 28; figure 2 * ---	1			
A	EP 0 521 581 A (SHELL INT RESEARCH) 7 January 1993 (1993-01-07) * column 2, line 57 - column 3, line 33; figure 1 * ---				
A	GB 2 174 674 A (SHELL INT RESEARCH) 12 November 1986 (1986-11-12) * page 3, line 54 - line 76; figure 2 * ---				
A	GB 1 361 072 A (SHELL INT RESEARCH) 24 July 1974 (1974-07-24) * page 2, line 76 - line 113; figures 1,4 * * page 3, line 98 - line 111 * -----		<table border="1"> <thead> <tr> <th>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</th> </tr> </thead> <tbody> <tr> <td>B67B F17C</td> </tr> </tbody> </table>	TECHNICAL FIELDS SEARCHED (Int.Cl.6)	B67B F17C
TECHNICAL FIELDS SEARCHED (Int.Cl.6)					
B67B F17C					
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 30 May 2002	Examiner Schneider, M		
<table border="0"> <tr> <td style="vertical-align: top;"> 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 </td> <td style="vertical-align: top;"> 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 </td> </tr> </table>				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
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 B2 (P04C011)

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

EP 98 50 0244

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.

30-05-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0780191	A	25-06-1997	ES	2130896 A1	01-07-1999
			EP	0780191 A1	25-06-1997
FR 2658587	A	23-08-1991	FR	2658587 A1	23-08-1991
EP 0521581	A	07-01-1993	FR	2678598 A1	08-01-1993
			DK	521581 T3	18-03-1996
			EP	0521581 A1	07-01-1993
			ES	2078644 T3	16-12-1995
GB 2174674	A	12-11-1986	DK	204885 A ,B,	10-11-1986
			FR	2563808 A1	08-11-1985
GB 1361072	A	24-07-1974	FR	2106646 A5	05-05-1972
			AU	462183 B	19-06-1975
			AU	3357671 A	22-03-1973
			BE	772549 A2	14-03-1972
			DE	2146438 A1	23-03-1972
			DK	138219 B	31-07-1978
			ES	395143 A1	16-12-1973
			IT	939813 B	10-02-1973
			NL	7112722 A	21-03-1972
			OA	3798 A	24-12-1971