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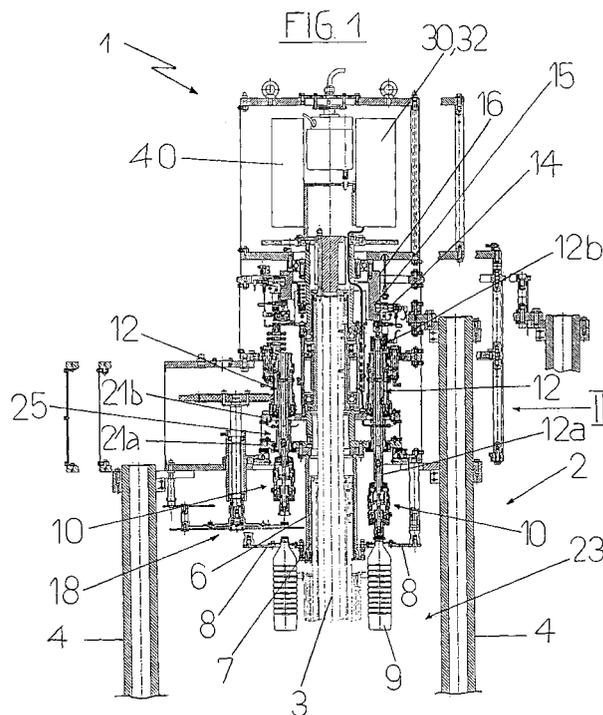
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(54) **Apparatus for sterilising movable means in bottling machines**

(57) An apparatus for the sterilisation of movable means (12, 50) and provided with alternating motion and able to pass from a sterile area (23) to a non sterile area, is characterised in that it comprises heating means (25, 26) acting in correspondence with a localised and restricted area of the movable means (12, 50) proximate to the sterile area (23) to keep it at such a temperature

as to guarantee its sterility so that the remaining part of each movable means (12, 50) is not heated by the heating means (25, 26).

The movable means can be the drawing rods of a blower, the stems (50) of a jack for lifting containers in a filling machine, or the shafts (12) supporting a capping head.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 02 01 1751

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	DE 12 11 963 B (SEITZ WERKE GMBH) 3 March 1966 (1966-03-03) * the whole document *	1	B67C7/00
A	US 6 214 282 B1 (KATOU TAKAAKI ET AL) 10 April 2001 (2001-04-10) * column 3, line 11 - line 40; figures 5-13F *	2	
A	EP 0 893 396 A (KRONES AG) 27 January 1999 (1999-01-27) * column 4, line 55 - column 5, line 25; figure 2 *	4	
A	EP 0 405 402 A (TOYO SEIKAN KAISHA LTD) 2 January 1991 (1991-01-02)		
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A	DE 37 01 915 A (FINNAH GMBH) 4 August 1988 (1988-08-04)		
A	US 5 962 039 A (KATOU TAKAAKI ET AL) 5 October 1999 (1999-10-05)		TECHNICAL FIELDS SEARCHED (Int.Cl.7) A61L B29C B67C B67B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 December 2002	Examiner Müller, C
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 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:

2, 4

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 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, 8-14

Apparatus for sterilizing movable means

2. Claims: 2, 3, 8-14

Machine for blowing preforms

3. Claims: 4, 8-14

Jack for lifting containers

4. Claims: 5-14

Automatic capping equipment

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

EP 02 01 1751

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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12-12-2002

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