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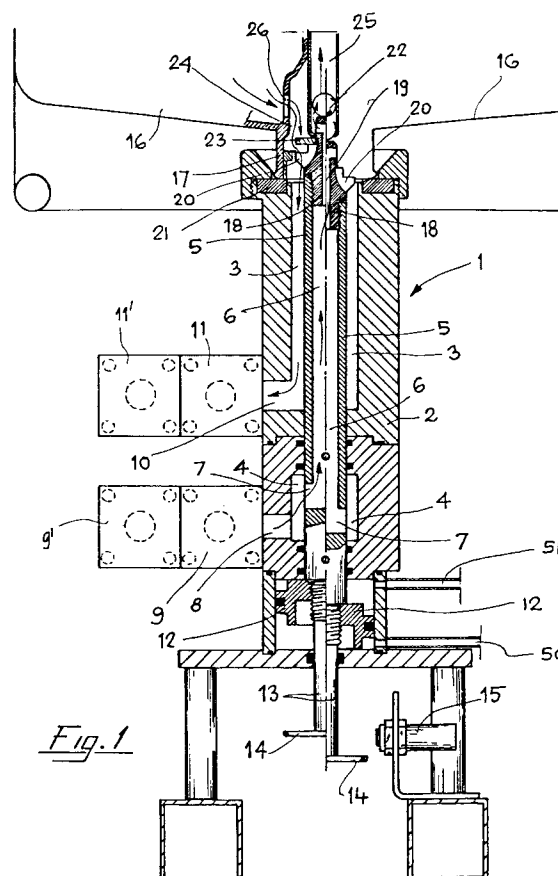
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**19.11.92 Bulletin 92/47**(71) Applicant: **Mascheretti, Mariarosa**  
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**I-24100 Bergamo(IT)**(54) **Improvements in a machine for the preparation and filling of drums for fluid products.**

(57) Improvements in a drum filling machine comprise heads (1) for prewashing, washing and sterilization of the filling heads (36) substantially made up of coaxial bodies (2) and (37) having upper internal chambers (3) and (41) and lower internal chambers (4) and (38) through which, and by means of central distributors (5) with upper pushers (18), the washing fluids can be run into the overturned drums (16) through their central ducts (25) with ball valves (22) and discharged through the annular apertures (24) of the fillers (17) while filling with the fluids is performed by counterflow for discharge of internal air or gases through the central duct (25).

An intermediate phase can include a jaw system (28) which rotates the drums (16) while shaking the contents thereof.

All is done automatically within the full cycle of the drum filling machine.

*Fig. 1***EP 0 453 823 A3**



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## EUROPEAN SEARCH REPORT

Application Number

EP 91 10 5156

| 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.5) |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EP-A-0 035 238 (TILL)<br>* page 6, paragraph 3; figures *<br>---                                       | 1-9                                                   | B67C3/30<br>B08B9/08<br>//                    |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DE-A-3 723 521 (MASCHINENFABRIK C.A. NEUBECKER)<br>* abstract; figures *<br>---                        | 1-9                                                   | B08B101:06                                    |
| Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | GB-A-2 058 029 (TILL)<br>* page 1, line 31 - line 48 *<br>* page 2, line 1 - line 17; figures *<br>--- | 1-9                                                   |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | GB-A-1 173 510 (BURNETT & ROLFE)<br>* the whole document *<br>---                                      | 1-6                                                   |                                               |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DE-A-3 600 301 (MALEK)<br>* the whole document *<br>-----                                              | 1-6                                                   |                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                        |                                                       | TECHNICAL FIELDS SEARCHED (Int. Cl.5)         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                        |                                                       | B67C<br>B08B                                  |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                        |                                                       |                                               |
| Place of search<br>THE HAGUE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                        | Date of completion of the search<br>24 SEPTEMBER 1992 | Examiner<br>DE SCHEPPER H.P.                  |
| <b>CATEGORY OF CITED DOCUMENTS</b><br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>.....<br>& : member of the same patent family, corresponding document |                                                                                                        |                                                       |                                               |