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(54) **A FILLING MACHINE FOR CAPSULES**

(57) A filling machine (6) to fill capsules (1) with respective quantities (2) of an incoherent product; the filling machine (6) has: at least one tray (8) having a plurality of pockets (9), which are designed to each hold a corresponding capsule (1); a feeding unit (7), which receives a disorderly mass of empty capsules (1) and inserts the capsule (1) into the pockets (9) of the tray (8), so as to fill the tray (8); a filling unit (11), which receives, from the feeding unit (7), the tray (8) containing empty capsules

(1), so as to feed into each capsule (1) the corresponding quantity (2) of product; a transferring unit (12), which receives, from the filling unit (11), the tray (8) containing full capsules (1) and transfers the full capsules (1) to an output (13) of the filling machine (6); and a main conveyor (15), which feeds the tray (8) from an output station (S2) of the feeding unit (7) to an input station (S1) of the feeding unit (7) passing through the filling unit (11) and the transferring unit (12).

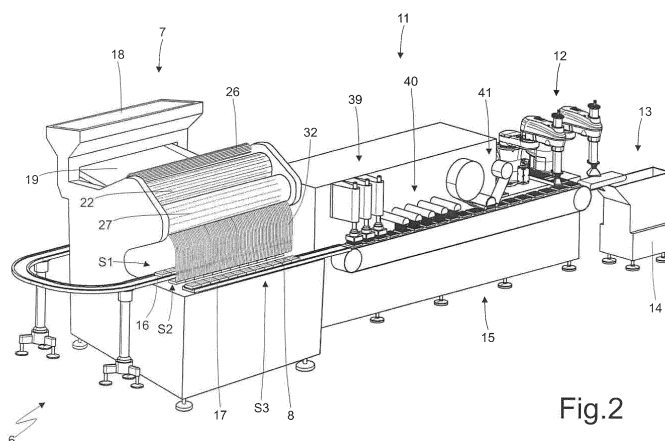


Fig.2



EUROPEAN SEARCH REPORT

Application Number
EP 17 17 9085

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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	WO 2013/035061 A2 (AZIONARIA COSTRUZIONI ACMA SPA [IT]; SCRIVANI MASSIMO [IT]) 14 March 2013 (2013-03-14)	1	INV. B65B29/02 B65B43/52 B65B65/00 B65B55/04
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			TECHNICAL FIELDS SEARCHED (IPC)
			B65B
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		20 September 2017	Yazici, Baris
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:

1-14

☐ 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: 1-14

a main conveyor with a final straight branch which is arranged in the area of the input station of the feeding unit, and an initial straight branch, which is arranged in the area of the output station of the feeding unit and is parallel to as well as faces the final branch, a plurality of veins, which are arranged beside one another in the insertion station and feed the capsules with help of gravity, and a supply conveyor which advances stepwise each tray through station of insertion and under the outlet end of the veins in such a way to stop at each step the tray with a row of empty pockets aligned at the exit end thereof.

2. claims: 15-17

a cleaning device which is arranged upstream of the filling device and is provided with a plurality of cleaning heads

**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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