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(54) **PACKAGING APPARATUS FOR FORMING SEALED PACKAGES**

(57) There is described a packaging apparatus (1) comprising a tube forming and sealing device (5), a filling device (7), a product delivery device (8) configured to receive a pourable product from an external product supply (9) and to selectively feed the pourable product along a flow path to and into the filling device (7) and a package forming unit (10) configured to at least form and transversally seal the tube (3) for forming packages (2) filled with the pourable product. The product delivery device (8) comprises a main inlet valve (30) having a first inlet (31) and a first outlet (32) and a control valve (33) arranged downstream from the main inlet valve (30) and upstream from the filling device (7) along the flow path and having a second inlet (34) and a second outlet (35). The main inlet valve (30) comprises a first valve element (42) controllable into at least a closing position, an opening position and one or more intermediate positions. Additionally or alternatively, the control valve (33) comprises a second valve element (44) being controllable into a closed position and an open position.

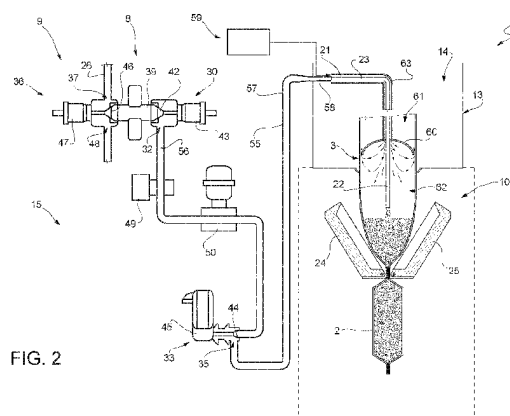


FIG. 2



EUROPEAN SEARCH REPORT

Application Number

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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)
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X	EP 3 656 687 A1 (TETRA LAVAL HOLDINGS & FINANCE [CH]) 27 May 2020 (2020-05-27)	10-12	
Y	* the whole document *	1-15	ADD. B65B51/30
			TECHNICAL FIELDS SEARCHED (IPC)
			B65B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 21 October 2022	Examiner Cardoso, Victor
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	



Application Number

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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:

☐ 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

EP 22 15 5109

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: 1-9

Packaging apparatus comprising a product flow arrangement

2. claims: 10-15

**Packaging apparatus comprising a sterile controlled
environment**

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

EP 22 15 5109

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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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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82