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(54) **PACKAGING SYSTEM AND METHOD FOR PRODUCING POUCHES COMPRISING A GEL AND A FILM**

(57) Packaging system for producing pouches comprising a water-soluble film and a gel, comprising:

- multiple moulds (5),
- a mould conveyer (8),
- a filling device (13) comprising multiple gel dispensers (15), each gel dispenser comprising:
 - a reservoir (18)
 - an integer nozzle number of nozzles (20),
 - a pin holder (23) arranged in the reservoir holding a pin number of pins (24), wherein:

-- the pin holder (23) is moveable by a pin actuator (25) from an active position into an inactive position, and vice versa,

-- in the inactive position of the pin holder, the pins (24) are arranged in the reservoir (18) and the nozzle openings (22) are in fluid communication with the reservoir (18),

-- in the active position of the pin holder (23), each pin (24) extends into the nozzle (20) through hole of its associated nozzle to expel gel from the nozzle through hole.

-- the pin number is equal to the nozzle number,

Fig. 1

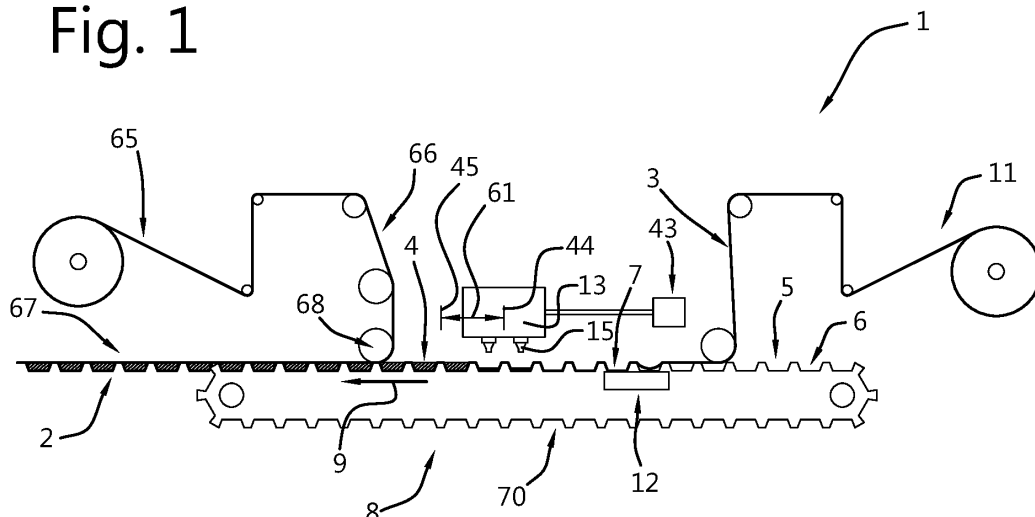
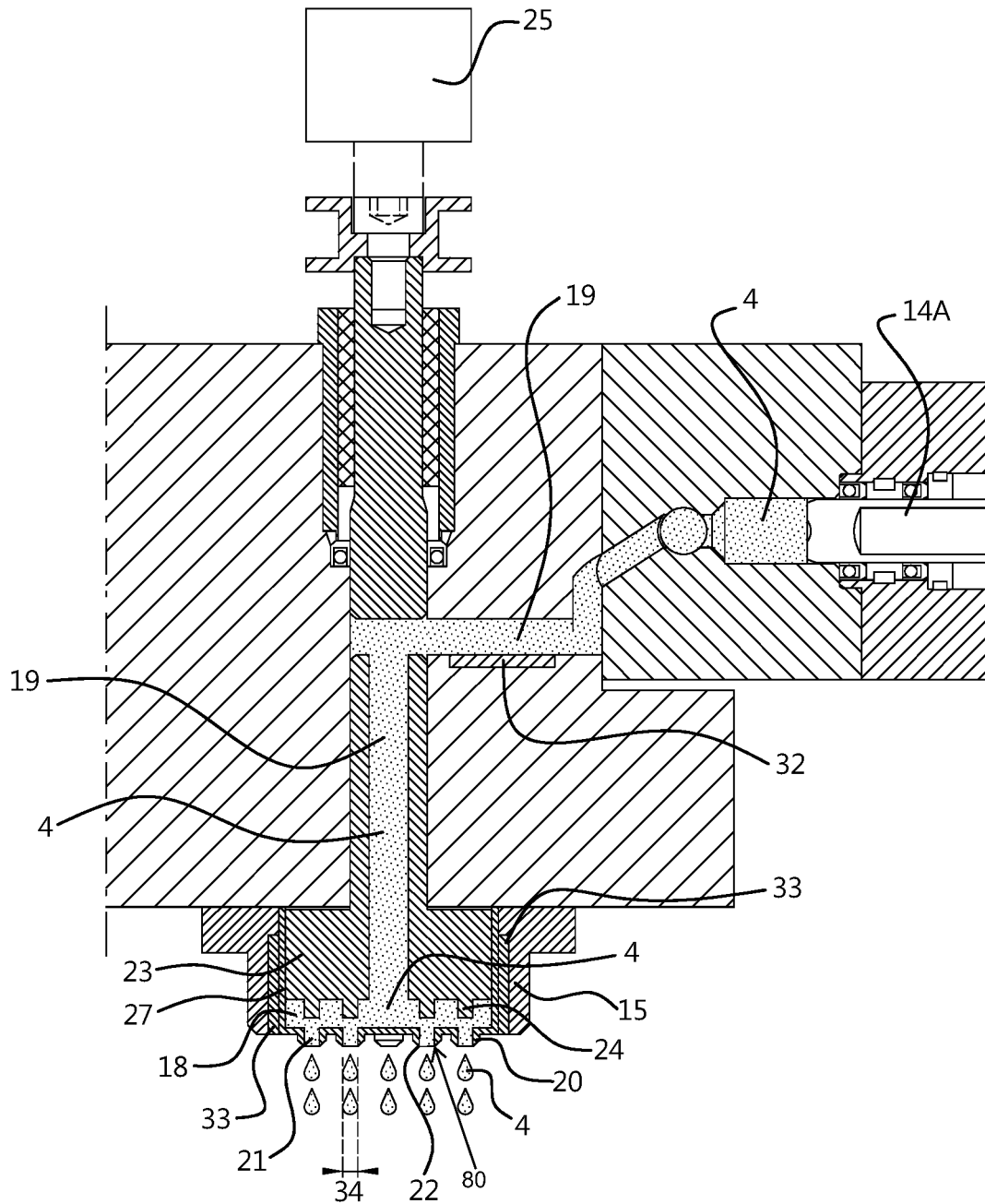


Fig. 4





EUROPEAN SEARCH REPORT

Application Number

EP 23 18 9489

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EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
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A	* paragraphs [0001], [0002], [0004], [0044]; figures 1-7b *	2, 3, 6	B65B39/00 B65B63/08

A	EP 3 656 534 A1 (GASIOROWSKI MAREK [PL]) 27 May 2020 (2020-05-27) * figures 5a-5b *	1	

A	WO 2006/056855 A1 (TGM TECNOMACHINES S R L [IT]; TOGNI GIANCARLO [IT]) 1 June 2006 (2006-06-01) * figure 2 *	4, 5	

A	US 2017/121169 A1 (DAILEY COLLIN C [US] ET AL) 4 May 2017 (2017-05-04) * paragraphs [0070] - [0071]; figure 2 *	7	

			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 8 January 2024	Examiner Garlati, Timea
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:

1-7, 10, 15 (completely); 12-14 (partially)

☐ 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 23 18 9489

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: 1-7, 10, 15 (completely); 12-14 (partially)

A system for filling pouches according to claim 1 with a plurality of nozzles according to claim 2.

2. claims: 8, 9, 11 (completely); 12-14 (partially)

A system for filling pouches according to claim 1 with fume extraction openings according to claim 8.

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

EP 23 18 9489

5 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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08-01-2024

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