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<i>B41F 17/30</i> (2006.01)	<i>B65B 65/02</i> (2006.01)
<i>B41J 3/407</i> (2006.01)	<i>B65G 47/86</i> (2006.01)
<i>B65B 23/06</i> (2006.01)	

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[Continued on next page]

(54) Title: ENDLESS EGG CONVEYOR

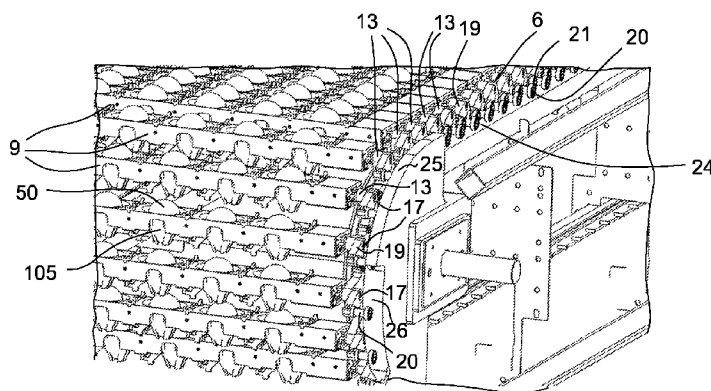


Fig. 5

(57) Abstract: An endless egg conveyor includes an endless element running around a set of rotational wheels and a drive unit defining a conveying direction of the conveyor. The conveyor has an upper run and a lower run and head sections where the direction of movement of the endless element between the upper run and the lower run is reversed. The conveyor furthermore includes at least one lane of egg retaining pockets coupled to the endless element, moving in the conveying direction. Each of the retaining pockets has a central axis and an upper receiving opening to receive an egg (50) with a longitudinal axis of the egg generally aligned with said central axis. The retaining pockets are each coupled to the endless element by a bearing structure allowing rotation of the retaining pocket around a rotational axis extending parallel to the rotational axes of said rotational wheels, allowing the retaining pockets to remain in an upright position in every position in the lane. Adjacent retaining pockets of different lanes define a pocket row, wherein, the conveyor comprises carrying elements (9) that carry the pockets of one row. The bearing structure of each pocket row comprises a support arm (13) on either lateral side of the conveyor. The support arm is positioned upright with respect to the circulating endless element and rigidly connected thereto. The bearing structure of said pocket row comprises at least one spindle (17) rigidly connected to the carrying element which pivotally connects the carrying element to the support arms.





— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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INTERNATIONAL SEARCH REPORT

International application No PCT/NL2016/050023

A. CLASSIFICATION OF SUBJECT MATTER		
INV. A01K43/00	A01K43/10	B41F17/30
B65G17/06	B65G17/12	B65B65/02
B41J3/407	B65B23/06	
B65G47/86		
ADD.		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) A01K B41F B41J B65B B65G		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 560 458 A1 (FOOD PROCESSING SYSTEMS [NL]) 15 September 1993 (1993-09-15) cited in the application column 10, line 6 - column 11, line 50; figures 3, 4	1-15
A	----- US 3 297 139 A (SPEIGLE JAMES L) 10 January 1967 (1967-01-10) cited in the application claim 1; figures 2,6 -----	1
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
26 April 2016	22/07/2016	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer von Arx, Vik	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2016/050023

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-15

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-15

An endless egg conveyor with egg retaining pockets, whereby rotation of the retaining pockets is allowed around a rotational axis that extends parallel to the rotational axes of rotational wheels of an egg conveyor chain, allowing the retaining pockets to remain in an upright position in every position on the conveyor.

2. claims: 16-19

An endless egg conveyor with egg retaining pockets, which comprise moveable fingers to engage the egg.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NL2016/050023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 0560458	A1	15-09-1993	EP 0560458 A1	15-09-1993
			JP 3437854 B2	18-08-2003
			JP H06211213 A	02-08-1994
			US 5232080 A	03-08-1993

US 3297139	A	10-01-1967	NONE	
