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- with international search report (Art. 21(3))
- 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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(54) Title: DISPENSING DEVICE FOR PIECE GOODS

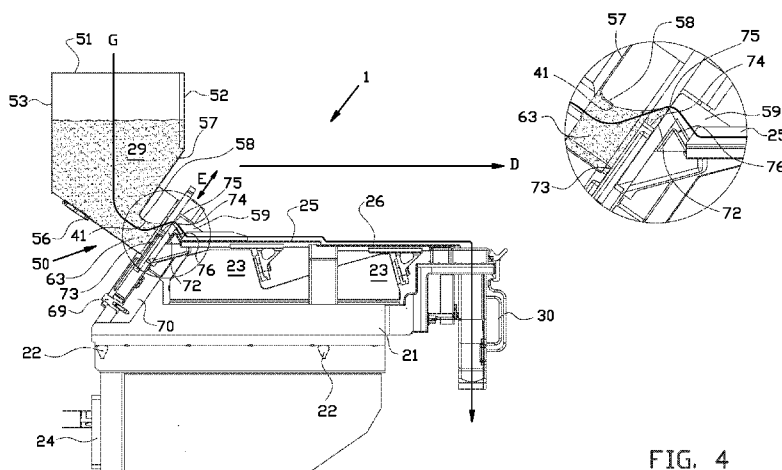


FIG. 4

(57) Abstract: Dispensing device (1) for piece goods, comprising a conveyor and a discharge device (50) for discharging the piece goods in a direction of passage to the conveyor, wherein the discharge device (50) is provided with a bunker (51) having a bottom surface (56) that is oriented downwardly inclined in the direction of passage, a first stopping surface (72) that is oriented upwardly inclined in the direction of passage for keeping the piece goods situated on the bottom surface in the bunker, a threshold (75) defining the transition from the first stopping surface (72) to the conveyor, and a pusher (70) that can be moved up and down along the first stopping surface (72) by means of a first drive, which pusher (70) is provided with a push-up surface for upwardly pushing the piece goods over the threshold (75).



INTERNATIONAL SEARCH REPORT

International application No
PCT/NL2009/050677

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65B35/06 B65B37/00 B65B37/20 B65G65/44

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)

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 practical, search terms used)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 57 160829 A (SATSUKAWA SEISAKUSHO KK) 4 October 1982 (1982-10-04) abstract	1-28
Y	FR 1 195 458 A (NUYTS FRERES ETS) 17 November 1959 (1959-11-17) the whole document	1-28
Y	WO 03/097459 A (IMA SPA [IT]; CICOGNANI SERGIO [IT]) 27 November 2003 (2003-11-27) abstract; figure 1	28



Further documents are listed in the continuation of Box C.



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

"E" earlier document but published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"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

"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.

"&" document member of the same patent family

Date of the actual completion of the international search

3 February 2010

Date of mailing of the international search report

11/05/2010

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/NL2009/050677

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.: 32
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 32
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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.:
1-28

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

Continuation of Box II.1

Claims Nos.: 32

Continuation of Box II.2

Claims Nos.: 32

Claim 32 includes no concrete feature whatsoever

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-28

Dosing device including in particular a hopper and a pusher for removing articles from the hopper by pushing them over a barrier and onto a conveyor

2. claims: 29-31

Dosing system including inter alia a frame holding a straight row of dosing devices wherein the dosing devices are located between horizontal rails and wherein at least two extension pieces are provided which can be connected to the rails in order to support a dosing device shifted out of the row of dosing devices in a horizontal direction

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/NL2009/050677

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 57160829	A	04-10-1982	NONE	
FR 1195458	A	17-11-1959	NONE	
WO 03097459	A	27-11-2003	AU 2003228005 A1	02-12-2003
			CA 2486085 A1	27-11-2003
			CN 1652974 A	10-08-2005
			EP 1506117 A2	16-02-2005
			IT B020020313 A1	21-11-2003
			JP 4372678 B2	25-11-2009
			JP 2005525973 T	02-09-2005
			TW 266726 B	21-11-2006
			US 2005217208 A1	06-10-2005