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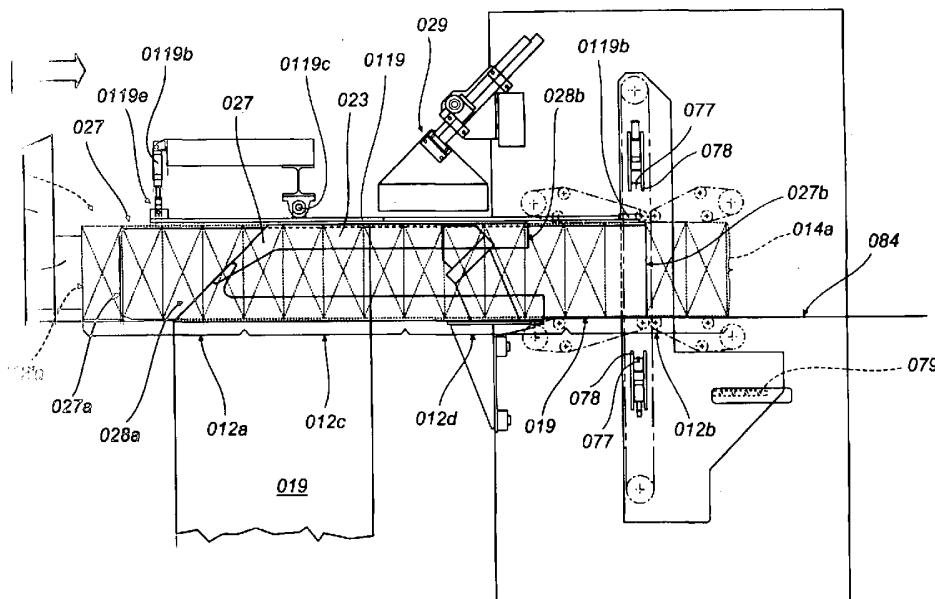
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[Continued on next page]

(54) Title: APPARATUS FOR PACKING GROUPS OF ITEMS



(57) Abstract: An apparatus (010) for packing a group of items, in which the items are preferably packs containing respective products, in a special wrapper formed by a plastic film comprises means for supplying groups of items, means for feeding a wrapping film, and means for wrapping the group of items in the wrapper. The wrapping means comprise means for forming a tubular film (019) for wrapping the group of items, starting with a film being fed and means for inserting a plurality of items in the tunnel forming tubular film (019) forming means.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2005/002056

A. CLASSIFICATION OF SUBJECT MATTER

INV. B65B9/06 B65B25/14 B65B35/40

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

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 1 382 842 A (IWEMA FORPACKNINGS AB) 5 February 1975 (1975-02-05) figure 1 abstract page 2, line 24 - page 3, line 37 -----	1,4-21, 28,29, 45-56, 60,90, 92,93
A	US 3 431 831 A (ROBERT W. MCGILL ET AL) 11 March 1969 (1969-03-11) figures 1-6 abstract ----- -/--	1,4-21, 28,29, 45-56, 60,90, 92,93

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

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2005/002056

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 018 031 A (SMAW ET AL) 19 April 1977 (1977-04-19) the whole document -----	1,4-21, 28,29, 45-56, 60,90, 92,93-

INTERNATIONAL SEARCH REPORT

International application No.
PCT/1B2005/002056

Box 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 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 fee, this Authority did not invite payment of any additional fee.
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.:

see annex - first group of claims

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- 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: Claims 1, 92-93, 2-91~~ (when these claims, or the claims to which they refer back, do refer back to the whole claim 1 and not just its preamble)

An apparatus (and corresponding method) for packing a group of items in which said group is fed in the tube being aligned and engaged with other groups.

2. claims: Claims 2-3 (when claim 2 is according to the preamble of claim 1)

An apparatus for packing a group of items in which the transversal portions of the tubular wrapping film are sealed.

3. claims: Claims 22-27 (when claims 22 or 23 are according to the preamble of claim 1)

An apparatus for packing a group of items with items pushing means.

4. claims: Claims 30-44 (when claim 30 is according to the preamble of claim 1)

An apparatus for packing a group of items with special means for distancing the groups of items.

5. claim: Claim 57 (when claim 57 is according to the preamble of claim 1)

An apparatus for packing a group of items with means for moving the downstream pack away from sealing and cutting means.

6. claims: Claims 58, 59 and 61-66 (when claims 58, 59 or 61 are according to the preamble of claim 1)

An apparatus for packing a group of items with special film feed means.

7. claims: Claims 67-72 (when claim 67 is according to the preamble of claim 1)

An apparatus for packing a group of items with means for stopping the feed of the groups.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

~~8. claims: Claims 73-77 (when claim 73 is according to the preamble
of claim 1)~~

An apparatus for packing a group of items with means for
exchanging air with the inside of the tubular film.

9. claims: Claims 78-87 (when claim 78 is according to the preamble
of claim 1)

An apparatus for packing a group of items with means for
receiving the items in sequence.

10. claims: Claims 88-89 (when claim 88 is according to the
preamble of claim 1)

An apparatus for packing a group of items with item
compacting and side centring means.

11. claim: Claim 91 (when claim 91 is according to the preamble of
claim 1)

An apparatus for packing a group of items with means for
packaging the items in a plurality of levels.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2005/002056

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