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<p>(21) International Application Number: PCT/GB95/02406</p> <p>(22) International Filing Date: 11 October 1995 (11.10.95)</p> <p>(30) Priority Data: 9420456.7 11 October 1994 (11.10.94) GB</p> <p>(71) Applicant (for all designated States except US): HANLEX LIMITED [GB/GB]; Blackhorse Road, Letchworth, Hertfordshire SG6 1HD (GB).</p> <p>(72) Inventor; and (75) Inventor/Applicant (for US only): COWAN, Michael, Anthony [GB/GB]; Hanlex Limited, Blackhorse Road, Letchworth, Hertfordshire SG6 1HD (GB).</p> <p>(74) Agents: MOIR, Michael, Christopher et al.; Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL (GB).</p>		<p>(81) Designated States: IS, NO, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> <p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 18 July 1996 (18.07.96)</p>
<p>(54) Title: MANUFACTURE AND FILLING OF PLASTICS BAGS</p>		
<p>(57) Abstract</p>		
<p>A form and fill machine for resealable plastics bags having reclosable fastening strip adjacent the mouth thereof, the machine comprising a filling tube (60) around which the bags are formed on a continuous tube from sheet material upon which the fastening strip is attached, means (66, 68) for advancing the continuous tube over the filling tube in bag-width steps, sealing means (76) for forming side seams and at least partially severing successive bags at bag width intervals, and means (78, 80) for spreading the lower end of the continuous tube prior to forming a side seam, characterized in that the spreading means comprises at least one means (80) for externally engaging a portion of the continuous tube so as to position the portion of the tube whereat the fastening strip is disposed relative to the sealing means.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 95/02406

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 B65B9/20

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)
IPC 6 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US,A,4 829 745 (R. BEHR) 16 May 1989 see column 4, line 46 - column 6, line 16; figures ---	1-3 4
X	US,A,4 974 395 (M. MCMAHON) 4 December 1990 see column 2, line 29 - column 4, line 31; figures ---	1-3
X	GB,A,2 065 599 (F. ROWELL) 1 July 1981 see page 2, line 108 - line 122; figure 4 ---	1-3
Y	US,A,3 889 446 (W. SIMMONS) 17 June 1975 see column 5, line 34 - line 46 see column 6, line 55 - column 7, line 42; figures 1,8 ---	4
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Further documents are listed in the continuation of box C.

Patent family members are listed in 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
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- *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

6 February 1996

Date of mailing of the international search report

28.05.96

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 95/02406

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,A,5 046 300 (R. CUSTER) 10 September 1991 -----	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB95/02406

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

See sheet B

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.:

1-5

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

1. Claims 1-5: Form and fill machine for resealable plastic bags comprising spreading means (externally and internally of the tubular material) in order to guarantee a wrinkle-free zone before the tube passes between the sealing means.
2. Claims 6-10: Method and apparatus for making resealable plastic bags comprising means to control the speed of the sheet material at a first station in response to the quantity of this material between this first and a second station.

There is obviously technical relationship between these 2 mentioned inventions. Means for spreading the tubular material is a complete other technical feature as means for controlling the speed of sheet material. Consequently these inventions are not linked by a single inventive concept. The application therefor lacks unity of invention. The partial search has been performed for the first invention, i.e. claims 1-5.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/GB 95/02406

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-4829745	16-05-89	WO-A- 9013485	15-11-90
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