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(54) Title: LINERLESS LABEL DEVICE AND METHOD

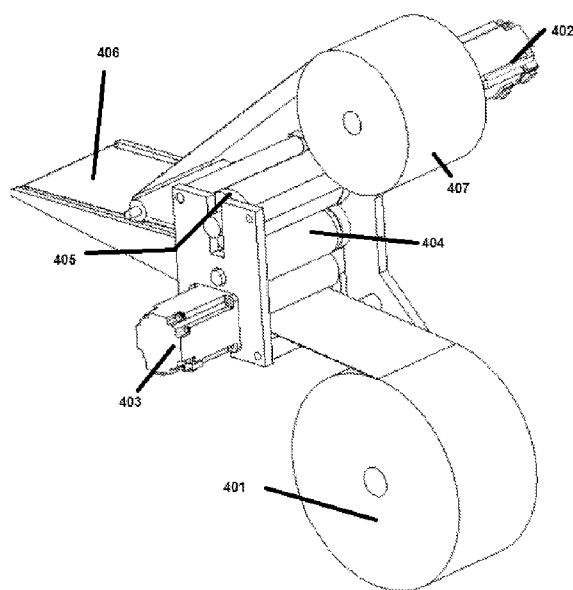


Figure 4

(57) Abstract: This apparatus and method for applying a linerless label to an end user product includes a device with a printer for printing on a face surface of a linerless label, and a release coat applicator for applying a release coat to the face surface of the label; another device including an unwinder unit (103) to unwind a roll of printed linerless label; a belt (108); a glue applicator (102) for applying glue to the belt; a nip roller (106) for contacting and applying pressure to the face surface of the linerless label such that the glue on the belt transfers to the back surface of the linerless label; at least one slitting knife (105) positioned downstream the belt and a rewriter unit (104) positioned downstream the slitting knife; and a third device which die cuts and applies the linerless label to an end user object.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2014/000841

A. CLASSIFICATION OF SUBJECT MATTER
INV. B31D1/02 B65C9/18
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)
B31D B65C

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)

EP0-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	GB 2 013 613 A (COSCO IND) 15 August 1979 (1979-08-15) page 2, line 6 - line 32; figure 4 -----	1,3-5, 14-16
A	US 5 750 192 A (SMITH DOUGLAS M [US]) 12 May 1998 (1998-05-12) column 2, line 63 - column 4, line 35; figure 1 -----	1,3-5, 14-16

☐

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 application or patent 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

20 August 2014

Date of mailing of the international search report

05/11/2014

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
GB 2013613	A	15-08-1979	DE	2901374 A1		19-07-1979
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			CN	1182496 A		20-05-1998
			DE	69602528 D1		24-06-1999
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			EP	0819298 A1		21-01-1998
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			KR	100274475 B1		15-12-2000
			NZ	305213 A		29-07-1999
			US	5578352 A		26-11-1996
			US	5750192 A		12-05-1998
			WO	9631861 A1		10-10-1996

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2014/000841

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.: 2
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.:
1-5, 14-16

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: 1-5, 14-16

System and method for printing, release coating, gluing, slitting and rewinding a linerless label.

2. claims: 6-13, 17-34

Device and method for applying a linerless label to an end user object.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 2

Claim 2 was excluded from search, because it only specifies that the glue applicator is a component of the first device, but is quiet in respect of the interrelated belt, nip roller and slitting knife. Moreover, if the belt and nip roller were assumed to be components of the first device as well, then how could the slitting knife be positioned in between the belt and a rewinder unit in the second device. Thus, the subject-matter of claim 2 is so unclear, that a meaningful search was deemed impossible.

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 Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.