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B65B 35/44 (2006.01) **B65B 43/30** (2006.01)
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B65B 39/02 (2006.01) **B65B 51/14** (2006.01)
B65B 39/06 (2006.01) **B65B 61/00** (2006.01)
B65B 43/12 (2006.01) **B65B 5/06** (2006.01)

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 BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
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 HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR,
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 MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
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 SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
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— with international search report (Art. 21(3))

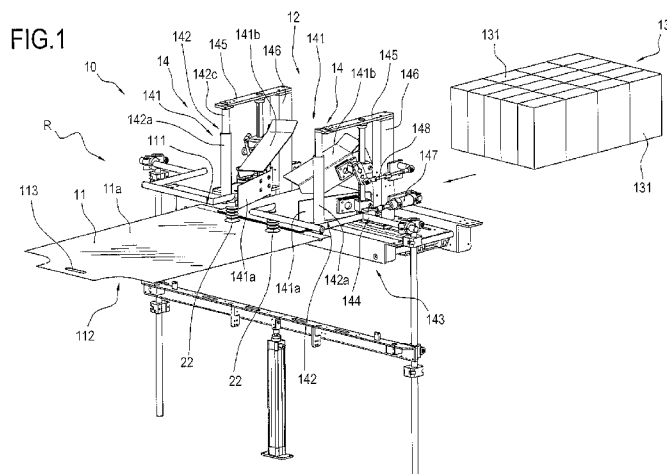
— before the expiration of the time limit for amending the
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amendments (Rule 48.2(h))

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

(88) Date of publication of the international search report:

3 August 2017

(54) Title: APPARATUS FOR PACKAGING OF A PRODUCT IN A RESPECTIVE PREFORMED WRAPPING



(57) Abstract: Described is an apparatus (10) for packaging a product (13) in a respective preformed or ready-formed wrapper (11), preferably made of a suitable film, such as plastic film, and being in particular in the form of a bag, the ready-formed wrapper having a respective open end, allowing the product to be inserted into the wrapper and the product being in particular in the form of a paper product for personal or domestic use, preferably being in the form of a group of articles, especially being in the form of packets, in particular packets of face wipes, hand towels or handkerchiefs, or rolls, preferably of toilet paper or kitchen paper, or the like; the apparatus comprises means for feeding the preformed wrappers, means for feeding the product and means (12) for inserting the product into the ready-formed wrapper through the open end (111) and is characterized in that it comprises means (14) for clamping the pre-formed wrapper (11) when the product (13) is inserted into the preformed wrapper.

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER				
INV.	B65B25/06	B65B25/14	B65B35/30	B65B35/44
	B65B39/02	B65B39/06	B65B43/12	B65B43/14
	B65B43/28	B65B43/30	B65B51/10	B65B51/14
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				B65B43/26
				B65B61/00
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 practicable, 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.
X	US 4 541 227 A (COAD EDWARD F [US] ET AL) 17 September 1985 (1985-09-17)			1-39,42, 81-83, 104-109
A	the whole document			84-92
X	US 4 062 169 A (LISTER EDWARD ALAN ET AL) 13 December 1977 (1977-12-13) the whole document			81-83
X	US 2006/059868 A1 (MELVILLE RICHARD A [NZ]) 23 March 2006 (2006-03-23) the whole document			81-83
X	US 2005/022467 A1 (KUJUBU EITARO [JP] ET AL) 3 February 2005 (2005-02-03) the whole document			81-83
	----- -/-			
☒ 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 27 March 2017			Date of mailing of the international search report 04/07/2017	
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 Ngo Si Xuyen, G	

INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2013/291485 A1 (MCCORKLE TIMOTHY J [US] ET AL) 7 November 2013 (2013-11-07) the whole document -----	81-83
X	US 3 877 562 A (SHAW JESSE B) 15 April 1975 (1975-04-15) the whole document -----	81-83
X	US 5 024 042 A (MEYER HANS-H [DE]) 18 June 1991 (1991-06-18) the whole document -----	81-83
X	EP 0 618 134 A1 (BALL CORP [US]) 5 October 1994 (1994-10-05) the whole document -----	81-83
X	GB 2 065 060 A (HAVER & BOECKER) 24 June 1981 (1981-06-24) the whole document -----	81
X	US 4 345 629 A (INGLETT JR WILFRED L) 24 August 1982 (1982-08-24) the whole document -----	1,81
X	US 4 301 842 A (KUCKHERMANN GUSTAV) 24 November 1981 (1981-11-24) the whole document -----	1,81
X	DE 20 2006 009825 U1 (KHS AG [DE]) 17 August 2006 (2006-08-17) the whole document -----	81-83
X	US 2009/188209 A1 (KOGA SHOICHI [JP] ET AL) 30 July 2009 (2009-07-30) the whole document -----	1,81

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2016/054718

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4541227	A	17-09-1985	NONE
US 4062169	A	13-12-1977	NONE
US 2006059868	A1	23-03-2006	AU 2003278643 A1 13-05-2004 CA 2502913 A1 06-05-2004 EP 1578670 A1 28-09-2005 NZ 522229 A 24-03-2005 US 2006059868 A1 23-03-2006 WO 2004037652 A1 06-05-2004
US 2005022467	A1	03-02-2005	AU 2004203526 A1 17-02-2005 CA 2476221 A1 01-02-2005 DK 1502853 T3 14-09-2009 EP 1502853 A1 02-02-2005 JP 4389006 B2 24-12-2009 JP 2005053516 A 03-03-2005 NZ 534431 A 27-01-2006 US 2005022467 A1 03-02-2005
US 2013291485	A1	07-11-2013	AU 2013250887 A1 02-10-2014 US 2013291485 A1 07-11-2013 WO 2013156854 A2 24-10-2013
US 3877562	A	15-04-1975	NONE
US 5024042	A	18-06-1991	DE 3910208 A1 04-10-1990 EP 0390190 A1 03-10-1990 US 5024042 A 18-06-1991
EP 0618134	A1	05-10-1994	CA 2113780 A1 27-08-1994 EP 0618134 A1 05-10-1994 JP H06321203 A 22-11-1994
GB 2065060	A	24-06-1981	AT 386580 B 12-09-1988 DE 2950822 A1 25-06-1981 FR 2471918 A2 26-06-1981 GB 2065060 A 24-06-1981
US 4345629	A	24-08-1982	NONE
US 4301842	A	24-11-1981	CA 1117920 A 09-02-1982 DE 2852022 A1 04-06-1980 FR 2442770 A1 27-06-1980 GB 2044207 A 15-10-1980 IT 1126455 B 21-05-1986 JP S5579224 A 14-06-1980 US 4301842 A 24-11-1981
DE 202006009825	U1	17-08-2006	NONE
US 2009188209	A1	30-07-2009	AT 535446 T 15-12-2011 EP 2078674 A1 15-07-2009 ES 2374766 T3 21-02-2012 JP 5247156 B2 24-07-2013 JP 2009161230 A 23-07-2009 US 2009188209 A1 30-07-2009

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2016/054718

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.:

1-39, 42, 81-92, 104-109

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: 1-39, 42, 81-92, 104-109

Apparatus for packaging a product comprising means for keeping the mouth of the wrapper open

2. claims: 40, 41, 43-53

Apparatus for packaging a product in a wrapper comprising means for feeding wrappers

3. claims: 54-76

Apparatus for packaging products in a wrapper comprising means for feeding article(s)

4. claims: 77-80

Apparatus for packaging a product in a wrapper comprising means for closing the end of the wrapper

5. claims: 93-103

Aparatus for packaging a product in a wrapper comprising wiping means

6. claims: 110, 111

Apparatus for packaging a product in a wrapper comprising means for extracting and rejected a trimmed off portion of the wrapper
