(19) World Intellectual Property Organization International Bureau

ty Organization APPO Cau

) | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1888 | 1

(43) International Publication Date 27 March 2008 (27.03.2008)

(10) International Publication Number $WO\ 2008/036641\ A3$

- (51) International Patent Classification: *B65B 9/04* (2006.01)
- (21) International Application Number:

PCT/US2007/078744

(22) International Filing Date:

18 September 2007 (18.09.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/846,188 20 September 2006 (20.09.2006) US

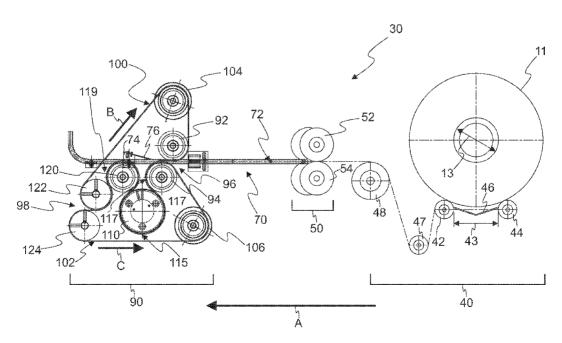
- (71) Applicant (for all designated States except US): PREGIS INNOVATIVE PACKAGING INC. [US/US]; 1650 Lake Cook Road, Deerfield, Illinois 60015 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): WETSCH, Thomas, D. [US/US]; 1503 Keim Court, St. Charles, Illinois 60174 (US). SELLE, Paul, A. [US/US]; 1146 E. Northwood Drive, Appleton, Wisconsin 54911 (US). HEIN, Mitchell, J. [US/US]; 1921 Strawberry Lane, Green Bay, Wisconsin 54304 (US).
- (74) Agents: GOULD, E. Bradley et al.; Winston & Strawn LLP, Patent Department, 1700 K Street, N.W., Washington, District Of Columbia, 20006-3817 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 14 August 2008

(54) Title: INFLATION AND SEALING DEVICE FOR INFLATABLE AIR CUSHIONS



(57) Abstract: The invention is directed to a device (30) for inflating and sealing an inflatable structure, such as inflatable cushions (28). The device includes an assembly (70) configured for inflating a cushion cavity disposed between first and second layers (20,22) of a film (10), and a sealing mechanism (90) that preferably includes a rotary sealing drum (110), which includes a heat source (116).



INTERNATIONAL SEARCH REPORT

International application No PCT/US2007/078744

		PC1/US20	07/078744		
A. CLASSI INV	IFICATION OF SUBJECT MATTER B65B9/04				
			•		
	o International Patent Classification (IPC) or to both national class SEARCHED	ification and IPC	·		
	ocumentation searched (classification system followed by classifi	cation symbols)			
B65B					
,		_			
Documenta	tion searched other than minimum documentation to the extent th	at such documents are included in the fields	searched		
	•	,			
Electronic d	data base consulted during the international search (name of data	a base and, where practical, search terms use	ed)		
EPO-In	ternal, WPI Data, PAJ				
}			· :		
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT		——————————————————————————————————————		
Category*	Citation of document, with indication, where appropriate, of the	relevant passages	Relevant to claim No.		
		· · · · · · · · · · · · · · · · · · ·			
Х	US 2006/110581 A1 (PERKINS ANDR	REW [US] ET	1,2,8,9,		
lγ	AL) 25 May 2006 (2006-05-25) the whole document		20 4-7,10,		
			11,14-19		
Υ	EP 1 666 232 A (SEALED AIR CORF	' [US])	4		
	7 June 2006 (2006-06-07)				
	paragraph [0052]				
Υ	US 6 209 286 B1 (PERKINS ANDREW	[US] ET	5-7		
	AL) 3 April 2001 (2001-04-03)				
	cited in the application the whole document		i		
ļ					
Υ	US 2004/206050 A1 (FUSS GUNTER		10,11,		
į	AL) 21 October 2004 (2004-10-21 page 2, paragraph 32 - page 3,		14-19		
ļ	53 page 2, par agraph of page 3,	ף מו מקו מף וו			
}		/			
		-/			
X Furt	her documents are listed in the continuation of Box C.	See patent family annex.			
* Special o	categories of cited documents :	"T" later document published after the in	ternational filing date		
"A" docume	ent defining the general state of the art which is not dered to be of particular relevance	or priority date and not in conflict wi cited to understand the principle or	heory underlying the		
	document but published on or after the international	invention "X" document of particular relevance; the	claimed invention		
"I" docume	ant which may throw doubts on priority claim(s) or is cited to establish the publication date of another	cannot be considered novel or cann involve an inventive step when the c	locument is taken alone		
citatio	n or other special reason (as specified)	"Y" document of particular relevance; the cannot be considered to involve an	inventive step when the		
other i	ent referring to an oral disclosure, use, exhibition or means	document is combined with one or r ments, such combination being obv			
"P" docume later th	ent published prior to the international filing date but han the priority date claimed	in the art. "&" document member of the same pater	nt family		
Date of the	actual completion of the international search	Date of mailing of the international se	earch report		
2	9 May 2008	04/06/2008			
Name and r	malling address of the ISA/	Authorized officer			
	European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk				
	Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Ungureanu, Mirela			

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/078744

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 3 389 534 A (PENDLETON JOHN M) 25 June 1968 (1968-06-25) figures 7,8	,	1,20					
A	US 3 703 430 A (RICH JOSEPH L) 21 November 1972 (1972-11-21) figures 1,2	•	1,20					
		•						
	•	- ,						
,								
į								
		·						
,	2							

International application No. PCT/US2007/078744

INTERNATIONAL SEARCH REPORT

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:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
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. X 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 reportcovers 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.:
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: 1,20

an inflation and sealing device comprising inflation assembly and a sealing mechanism with a sealing drum

1.1. claims: 2,3,8,9

referring to the rotary sealing drum

1.2. claim: 4

refers to the sealing mechanism in general

1.3. claims: 5,6

referring to the cutting part

1.4. claim: 7

referring to the tension roller that hold the film

2. claims: 10-18

an inflation and sealing device comprising inflation assembly and a sealing mechanism and belts for nipping there between the edge portions of the film

3. claim: 19

an inflation and sealing device comprising inflation assembly, a sealing mechanism and rollers with a special configuration that permitts the bias of the opposite film edges

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2007/078744

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
US 2006110581	A1	25-05-2006	NONE		*****	
EP 1666232	А	07-06-2006	AU CA NZ US	2005227415 2525194 543339 2006090839	A1 A	18-05-2006 03-05-2006 29-06-2007 04-05-2006
US 6209286	В1	03-04-2001	AU WO	3511700 0053501		28-09-2000 14-09-2000
US 2004206050	A1	21-10-2004	NONE	,		
US 3389534	Α	25-06-1968	NONE			· · · · · · · · · · · · · · · · · · ·
US 3703430	Α	21-11-1972	NONE	·		