



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
22.08.2012 Bulletin 2012/34

(51) Int Cl.:
B31D 5/00 (2006.01)

(43) Date of publication A2:
13.06.2012 Bulletin 2012/24

(21) Application number: **11192609.3**

(22) Date of filing: **08.12.2011**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(30) Priority: **08.12.2010 GB 201020749**

(71) Applicants:
• **Jones, Ronald**
Liverpool, Merseyside L23 09TW (GB)
• **Rea, Alan**
Liverpool, Merseyside L13 0BT (GB)

(72) Inventors:
• **Jones, Ronald**
Liverpool, Merseyside L23 09TW (GB)
• **Rea, Alan**
Liverpool, Merseyside L13 0BT (GB)

(74) Representative: **Walker, Ross Thomson et al**
Forresters
Skygarden
Erika-Mann-Strasse 11
80636 München (DE)

(54) **Cushioned packaging materials**

(57) A method of manufacturing cushioned packaging material (5,13,14) from paper, wherein an array of discrete portions (5a,5b) is formed over the majority of the surface area of the paper. Each of the discrete portions independently extends either above or below the

plane of the paper and thereby, in combination with the other discrete portions, provides a cushioning effect. A cushioned packaging material and paper packaging made from such material, including envelopes (15) and mailer bags, are also provided.

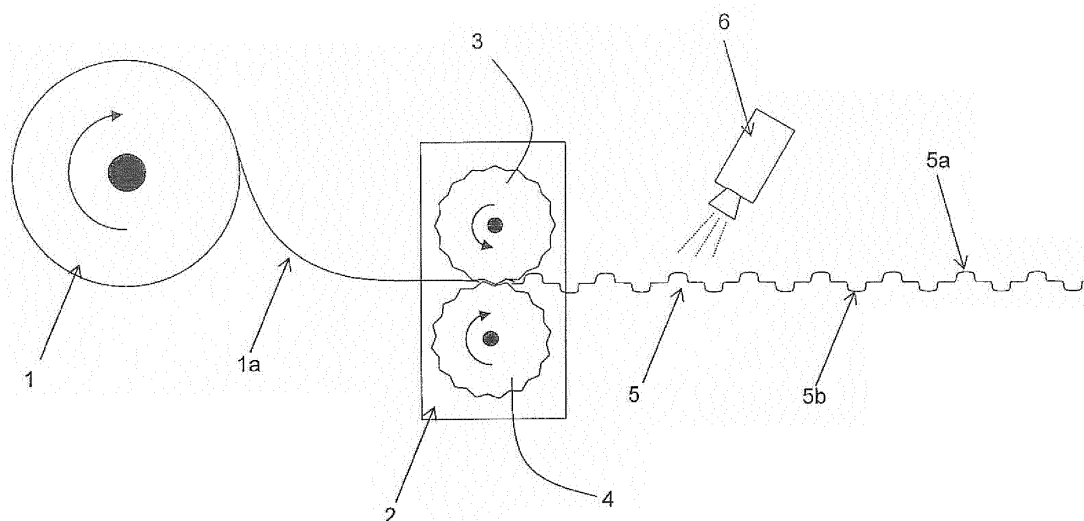


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 11 19 2609

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2004/076798 A1 (LARSSON NILS-AKE [US] ET AL) 22 April 2004 (2004-04-22) * paragraphs [0002], [0015], [0017], [0020], [0024], [0029]; figures 1-8 *	1-4,6-14	INV. B31D5/00
X	US 997 994 A (HAHN JOHN N [US]) 18 July 1911 (1911-07-18) * the whole document *	1-4, 6-11,13, 14	
X	US 2 036 051 A (KIEFFER JOHN E) 31 March 1936 (1936-03-31) * page 1, column 1, line 1 - line 10 * * page 2, column 1, line 5 - line 15; figures 1-7 *	1-4, 7-11,14	
X	US 2 978 006 A (LUDWIG CLEMENS) 4 April 1961 (1961-04-04) * column 1, line 15 - line 17 * * column 2, line 41 - line 46 * * column 3, line 60 - line 64 * * figures 1-13 *	1-4, 6-11,13, 14	TECHNICAL FIELDS SEARCHED (IPC) B31D B31F
X	US 5 316 622 A (BABINSKY VLADISLAV A [US] ET AL) 31 May 1994 (1994-05-31) * column 3, line 31 - line 41 * * column 5, line 21 - line 24 * * figures 1-8 *	1-4, 6-11,13, 14	
1 The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 20 March 2012	Examiner Sundqvist, Stefan
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 03.02 (P04C01)



Application Number

EP 11 19 2609

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-3, 7, 8, 10, 12, 14(completely); 4, 6, 9, 11, 13(partially)

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 11 19 2609

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3, 7, 8, 10, 12, 14(completely); 4, 6, 9, 11, 13(partially)

Cushioned packaging material, its manufacture as well as a package.

- 1.1. claims: 1-3, 7, 8, 10(completely); 9(partially)

Embossed cushioned packaging material and its manufacture from plain paper, chemically treated paper or laminated paper.

- 1.2. claims: 4, 11(all partially)

Hemi-spherical, square, triangular, circular, rectangular or diamond cushion shape of cushioned packaging material and its manufacture.

- 1.3. claims: 6, 13(all partially)

Strengthened cushioned packaging material (and its manufacture) by an additional paper or plastic layer (claims 6 and 13).

- 1.4. claim: 12

Thickness of cushioned packaging material.

- 1.5. claim: 14

Cushioned paper packaging.

2. claims: 4, 11(all partially)

Pyramidal cushion shape of cushioned packaging material and its manufacture.

3. claims: 5(completely); 6, 13(partially)

Strengthened cushioned packaging material (and its manufacture) by hardening solution (claim 5) or by an additional rubber, metal or fabric layer (claims 6 and 13).

4. claim: 9(partially)

Cushioned packaging material from metalised paper.



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

EP 11 19 2609

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

5. claim: 15

Cushioned paper bag or envelope.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 19 2609

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

20-03-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004076798 A1	22-04-2004	EP 1363775 A1	26-11-2003
		SE 523870 C2	25-05-2004
		SE 0100434 A	13-08-2002
		US 2004076798 A1	22-04-2004
		WO 02064369 A1	22-08-2002

US 997994 A	18-07-1911	NONE	

US 2036051 A	31-03-1936	NONE	

US 2978006 A	04-04-1961	NONE	

US 5316622 A	31-05-1994	US 5316622 A	31-05-1994
		US 5374468 A	20-12-1994
