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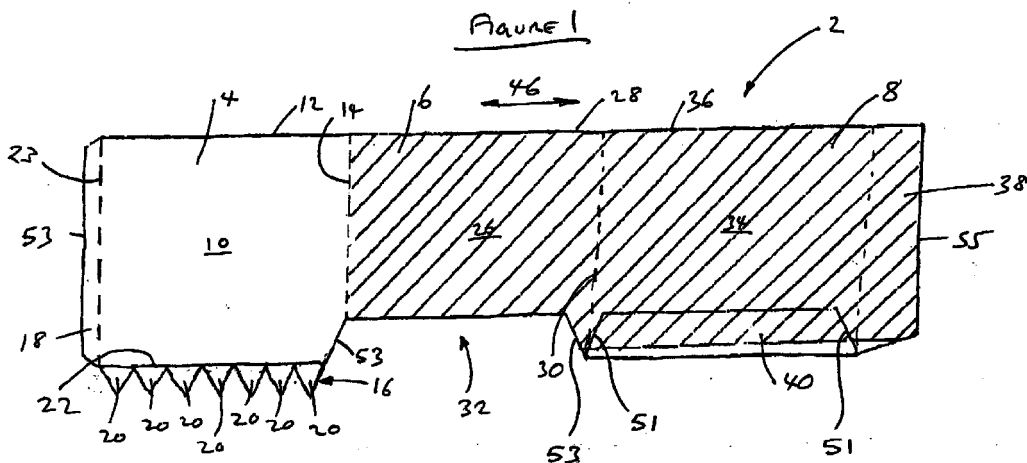
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(54) **Tubular carton as well as method and apparatus for manufacturing the carton**

(57) The present invention relates to cartons, methods of constructing cartons and to blanks (2) for cartons. The present invention also relates to apparatus for manufacturing cartons from carton blanks. The present invention provides a tubular carton comprising at least

two layers (4,6,8), characterised in that the carton wall is of substantially even thickness along the length thereof.



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EUROPEAN SEARCH REPORT

Application Number  
EP 99 30 2458

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 3 929 271 A (MEYERS) 30 December 1975 (1975-12-30) * column 2, line 21 - column 3, line 38; figures 1-5 *	1,2,4,7	B65D3/22 B31C1/00
Y	---	3,6	
Y,D	GB 2 294 021 A (CONCEPT PACKAGING) 17 April 1996 (1996-04-17)	3	
A	* page 4, line 22 - page 7, line 24; figures 1-11 *	5,9	
Y	---	6	
A	GB 542 980 A (STEEL & COMPANY) 4 February 1941 (1941-02-04) * page 2, right-hand column, line 102 - line 122; figures 1,2 *		
A	US 3 918 629 A (HAMPTON) 11 November 1975 (1975-11-11) * column 3, line 52 - column 4, line 31; figures 6-9 *	1,2,4	
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
-The present search report has been drawn up for all claims-			
Place of search		Date of completion of the search	Examiner
THE HAGUE		25 August 1999	Fournier, J
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 03.92 (P04C01)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims 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 the first ten claims.

**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:

1-9



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: 1-9

Subject I (claims 1-9) relates to a multiple layer tubular carton comprising a wall capable of supporting a base or a lid insert, whereby the wall thickness is constant along its length, a blank or blanks and a method of constructing this tubular carton.

2. Claim : 10

Subject II (claim 10) relates to a method of manufacturing a carton including the steps of providing a carton blank and convolute winding the blank into a tubular carton which has a circumferential perimeter length less than half of the length of the blank.

3. Claim : 11

Subject III (claim 11) relates to an apparatus which comprises a rotatable mandrel and means for applying a suction force to the exterior of the mandrel.

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

EP 99 30 2458

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  
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25-08-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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GB 2294021 A	17-04-1996	US 5794842 A	18-08-1998
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US 3918629 A	11-11-1975	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82