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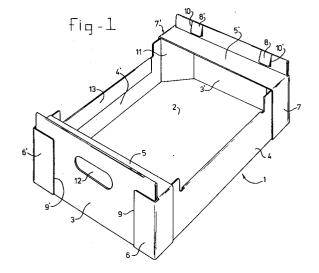
Applicant: BÜHRMANN-TETTERODE NEDERLAND B.V. Hermesweg 9 NL-3771 ND Barneveld(NL)

Inventor: Van Eijndhoven, Peter Paul van Haersoltelaan 48 NL-3771 JW Barneveld(NL)

(4) Representative: de Bruijn, Leendert C. et al Nederlandsch Octrooibureau Scheveningseweg 82 P.O. Box 29720 NL-2502 LS 's-Gravenhage(NL)

(54) Blank for the production of a box made of folding sheet material, and box produced of such blank.

(57) The invention relates to a blank of folding sheet material such as cardboard for the production of a box with flanges (5, 5') running along a first pair of side walls (3, 3') at a distance from the top edge thereof. To improve the stacking strength of such box and to allow that such box can be made of solid cardboard, the blank to make such box is designed such that the flanges (5, 5') are connected to the second pair of side walls (4, 4') by corner pieces (7, 7') which can have extentions (6, 6') so that angle sections are present in the corners of the box. According to the present invention, the box can further be strenghthened by additional corner reinforcements (11), which are also part of the blank. To improve prevention of mutual movement of boxes in a stack, lips (8, 8') can be situated above the flanges (5, 5') at the first pair of side walls (3, 3'), forming stops that can interact with stop edges (9, 9') situated on the outside of the next box placed with the bottom on the flanges mentioned. The blank to make a box according to one of the embodiments of the present invention is designed such that waste of material is minimized.



## **EUROPEAN SEARCH REPORT**

EP 91 20 0743

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,	DOCUMENTS CONSI	DERED TO B	E RELEVAN	Γ		
ategory	Citation of document with indication, where appro		priate, Relevant to claim		CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)	
Y,D	* Page 2, lines 34-	A-8 802 724 (ALEXANDER PACKA age 2, lines 34-38; page 4, l 38; page 6, lines 5-11; figur		1-4,7, 10	B 65 D B 65 D	
A				6,12		
Y	FR-A-2 490 184 (SOC. NORMANDE D CARTON) * Page 2, line 35 - page 3, line figures 1-4 *			1-4,7, 10		
Y	GB-A-2 205 083 (V PACK (SALES) * Page 4, lines 16-19; page 4, l - page 5, line 8; figures 1-4 *			3,4,10		
A	GB-A-1 563 383 (Ma * Figures 1-3 *	cMILLAN BLOE	DEL)	5,11		
A,P		-A-O 394 549 (G. HOFFMANN Gmb Column 4, line 44 - column 5, figures 1,7 *		5,11	TECHNICAL SEARCHED	
A	US-A-4 015 713 (CL * Column 2, lines 4 lines 19-43; figure	6-60; column	3,	6,12	B 65 D	(III. CI.)
A,D	US-A-2 588 455 (ADAMS) * Column 1, lines 16-23; column 3, 163 - column 4, line 9; figures 1-7			1		
A,D	BE-A- 631 250 (CARTON. DES ANC. ETABL. VANBREUZE)		C.			
A	FR-A-2 219 881 (PA CLERGEAU)		/-			
	The present search report has b	een drawn up for all	claims			
	Place of search	Date of com	pletion of the search		Examiner	
THE	HAGUE	14-04-	-1992	BERF	RINGTON N.	М.
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background			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			



CLAIMS INCURRING FEES							
	<u> </u>						
The present European patent application comprised at the time of filing more than ten claims.							
All claims fees have been paid within the prescribed drawn up for all claims.		All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.					
[		Only part of the claims fees 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 claims:					
		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.					
	1	CK OF UNITY OF INVENTION					
		Division considers that the present European patent application does not comply with the requirement of unity of					
inve		nd relates to several inventions or groups of inventions,					
am	.ory.						
:	See	sheet -B-					
	X	All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.					
		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 has 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:					

## EUROPEAN SEARCH REPORT

Application Number

EP 91 20 0743

	DOCUMENTS CONSIDE			
Category	Citation of document with indica of relevant passag	ation, where appropriate, es	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-3 580 475 (MOBLE		to train	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
···-	The precent county amount has been	drawn up for all claims		
	The present search report has been		Examiner	
ТШ	E HAGUE	Date of completion of the search 14-04-1992	REDI	RINGTON N.M.
X: par Y: par doc A: tec O: no	CATEGORY OF CITED DOCUMENTS rticularly relevant if taken alone rticularly relevant if combined with another cument of the same category hnological background n-written disclosure ermediate document	T: theory or principle t E: earlier patent docun after the filing date D: document cited in L: document cited for	inderlying the nent, but publication ther reasons	invention ished on, or



## LACK OF UNITY OF INVENTION

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

- 1. Claims 1-4,7-10: Box and blank with flange and reinforcement corner pieces.
- 2. Claims 5,11: Collapsible box and blank for forming a collapsible box.
- 3. Claims 6,12,13: Box and blank provided with elements for preventing lateral motion stacked boxes.

Non-unity of invention has been found a posteriori, i.e. after a search for claims 1,7.