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(54) **A TRANSPORT PACKAGING**

(57) A transport packaging comprising: a bottom part (10) having a rectangular base (11) and a surrounding bottom flange (12); an upper part (20) having a surrounding top flange (23) and a rectangular lid (21, 22); wherein the bottom part (10) is connected to the upper part (20) via hinged side walls (30, 40, 50, 60). A first side wall (30) includes two interconnected pivotable panels (31, 32), the lower panel (31) being pivotally connected to the bottom part (10) and the upper panel (32) being pivotally connected to the upper part (20). A second side wall (40) includes two interconnected hinged panels (41, 42), the lower panel (41) being hingedly attached to the bottom part (10) and the upper panel (42) being hingedly attached to the upper part (20). A third side wall (50) is pivotally attached to the upper part (20). A fourth side wall (60) is pivotally attached to the bottom part (10). The packaging is configured to transition between a folded state and an unfolded state, wherein, in the folded state, the hinged panels (31, 32, 41, 42) of the first and second side walls (30, 40) and the third and fourth side walls (50, 60) are positioned parallel to the base (11) and wherein, in the unfolded state, the side walls (30, 40, 50, 60) are

arranged perpendicular to the base (11).

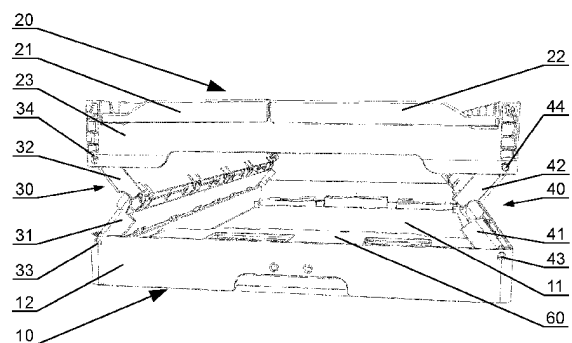


Fig. 1



EUROPEAN SEARCH REPORT

Application Number

EP 24 16 9969

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EPO FORM 1503 03.82 (P04C01)

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	DE 10 2004 055863 A1 (FISCHER ARTUR WERKE GMBH [DE]) 24 May 2006 (2006-05-24)	1	INV. B65D6/18
Y	* paragraphs [0002], [0013], [0014]; figures 1-4 *	2,3,7-11	B65D6/16
Y	JP 5 265945 B2 (YAMATO PACKING TECHNOLOGY INST; GIFU PLASTIC IND CO LTD) 14 August 2013 (2013-08-14) * paragraph [0040]; figures 1-7 *	2,3	
Y	CN 112 744 424 A (NINGBO CHUYUAN INFORMATION TECH CO LTD) 4 May 2021 (2021-05-04) * abstract; figures 1-3 *	7,9-11	
Y	CN 108 545 290 A (BEIJING AGRICULTURE CUBE GREENHOUSE ENGINEERING TECH CO LTD) 18 September 2018 (2018-09-18) * claim 6; figures 1-2 *	8	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
-The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 6 September 2024	Examiner Grondin, David
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	



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EP 24 16 9969

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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 - 11

☐ 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 24 16 9969

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, 7-11

A transport packaging comprising:

- a bottom part having a rectangular base and a surrounding bottom flange;
- an upper part having a surrounding top flange and a rectangular lid;
- wherein the bottom part is connected to the upper part via hinged side walls;
- wherein
 - a first side wall includes two interconnected pivotable panels, the lower panel being pivotally connected to the bottom part and the upper panel being pivotally connected to the upper part;
 - a second side wall includes two interconnected hinged panels, the lower panel being hingedly attached to the bottom part and the upper panel being hingedly attached to the upper part;
 - a third side wall is pivotally attached to the upper part;
 - a fourth side wall is pivotally attached to the bottom part;
 - wherein the packaging is configured to transition between a folded state and an unfolded state, wherein, in the folded state, the hinged panels of the first and second side walls and the third and fourth side walls are positioned parallel to the base and wherein, in the unfolded state, the side walls are arranged perpendicular to the base.

2. claims: 1, 4-6

Transport packaging with a locking mechanism wherein the locking mechanism includes a retractable pin located in one of the flaps and a retractable semi-rotatable bolt operatively connected to a slider positioned on the exterior of the flap, such that the pin aligns with a first slot in the fourth side wall, and the semi-rotatable bolt aligns with a second slot in the surrounding top flange.

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

EP 24 16 9969

5 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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06 - 09 - 2024

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
	DE 102004055863 A1	24-05-2006	NONE	
	-----	-----	-----	-----
15	JP 5265945 B2	14-08-2013	JP 5265945 B2	14-08-2013
			JP 2009214913 A	24-09-2009
	-----	-----	-----	-----
	CN 112744424 A	04-05-2021	NONE	
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20	CN 108545290 A	18-09-2018	NONE	
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82