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(30) Priority: **02.03.2012 US 201213410494**

(54) **Passive thermally regulated knockdown shipping container**

(57) A stackable, passive thermally regulated, knockdown shipping container. The container includes (i) a pair of separate and independent interchangeable end panels, each carrying a detachable panel of fragile thermal insulation, and (ii) a plurality of separate and independent sidewall components each having at least two hingedly interconnected structural panels which carry a detachable panel of fragile thermal insulation. The end panels are each configured and arranged with (a) an external set of projections operable for stably supporting the container on a planar surface, and (b) an external set of depressions. The depressions are configured and arranged such that each projection on the panel, if inverted, would nest within a corresponding depression on the panel upon rotation of the inverted set of projections a defined angular distance about a longitudinal axis of the container relative to the set of depressions.

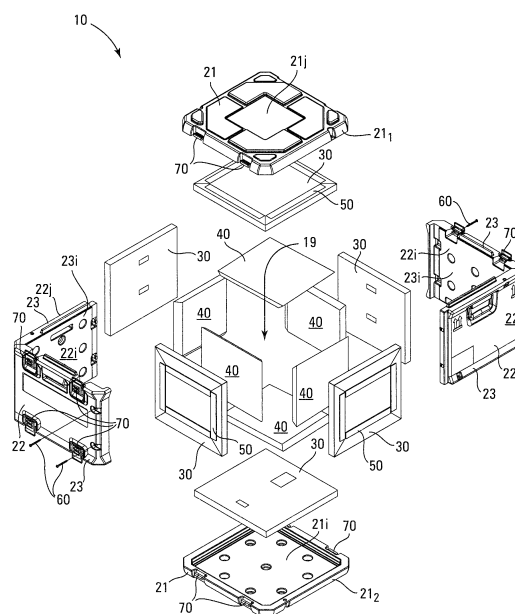


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2011/284556 A1 (PALMER GEORGE M [US] ET AL) 24 November 2011 (2011-11-24) * figures 1-12 *	1	INV. B65D81/38 B65D6/24 B65D21/02
A	FR 2 948 342 A1 (DONATO JEAN LOUIS [FR]) 28 January 2011 (2011-01-28) * figures 1-6 *	1	
A	EP 1 069 048 A1 (BRIET FRANCOIS [FR]) 17 January 2001 (2001-01-17) * figures 1-8 *	1	
A	GB 2 293 160 A (LIN PAC MOULDINGS [GB]) 20 March 1996 (1996-03-20) * figures 1-6 *	1	
X	FR 2 194 615 A2 (PAULY ROGER [FR]) 1 March 1974 (1974-03-01) * figures 1-6 *	11,12	TECHNICAL FIELDS SEARCHED (IPC) B65D
X	US 2009/065514 A1 (VOVAN TERRY [US]) 12 March 2009 (2009-03-12) * figures 1-25 *	11,12	
X	US 4 373 633 A (LUTZ SR MILTON F [US]) 15 February 1983 (1983-02-15) * figures 1-5 *	11,12	
X	US 3 070 257 A (ALEX BOJANOWSKI) 25 December 1962 (1962-12-25) * figures 1-6 *	11,12	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 November 2013	Examiner Jervelund, Niels
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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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:

☐ 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**

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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: 1-10

Claim 1-10 relates to an article of commerce comprising a sidewall component comprising at least two hingedly interconnected structural elements each carrying an detachable panel of fragile thermal insulation.

2. claims: 11, 12

Claim 11-12 relates to an article of commerce comprising a stackable panel having mutually cooperating projections and depressions formed therein.

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

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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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27-11-2013

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