(11) **EP 4 197 932 A3**

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 23.08.2023 Bulletin 2023/34

(43) Date of publication A2: 21.06.2023 Bulletin 2023/25

(21) Application number: 22213791.1

(22) Date of filing: 15.12.2022

(51) International Patent Classification (IPC):

865D 21/02^(2006.01)

865D 81/26^(2006.01)

865D 1/22^(2006.01)

865D 1/22^(2006.01)

B65D 25/06 (2006.01)

(52) Cooperative Patent Classification (CPC): B65D 81/261; B65D 1/22; B65D 21/0209; B65D 25/06

(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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated Extension States:

BA

Designated Validation States:

KH MA MD TN

(30) Priority: 15.12.2021 US 202163265452 P

17.12.2021 US 202163265598 P 09.12.2022 US 202218063784 09.12.2022 US 202218063838 (71) Applicant: Orbis Corporation
Oconomowoc, Wisconsin 53066 (US)

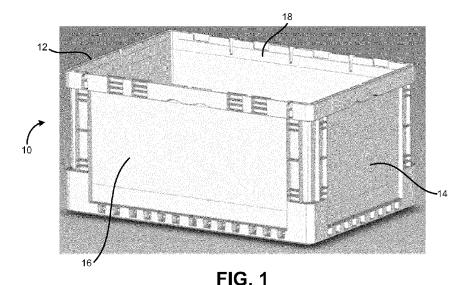
(72) Inventor: Frankenberg, Jason R. Lake Mills 53551 (US)

(74) Representative: Hamer, Thomas Daniel Kilburn & Strode LLP Lacon London 84 Theobalds Road London WC1X 8NL (GB)

(54) TOTE WITH SIDE WALL DRAIN HOLES

(57) A tote with a drainage system for evenly distributing water through all four sides is provided. The tote includes a first end wall, a second opposing end wall, a first side wall, a second opposing side wall, and a bottom wall. A bumper extends outward around the periphery of

the tote. A plurality of drain holes are positioned a first distance above the upper surface of the bottom wall which allow liquid in the tote to drain evenly out of the tote through the bumper.



EP 4 197 932 A3



EUROPEAN SEARCH REPORT

Application Number

EP 22 21 3791

5	
10	
15	
20	
25	
30	
35	
40	
45	
50	

	POCOMEN 12 CONSID	ERED TO BE RELEVANT					
Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)			
x	US 2021/229863 A1 (29 July 2021 (2021-	SOSTMANN RÜDIGER [DE]) 07-29)	1,7-10, 15	INV. B65D21/02			
Y		raphs [0001], [0004], [0025], 1-4, [0030], [0031], [0039]; figures 11-14					
Y	DE 18 40 375 U (HEN 26 October 1961 (19	2,3	B65D25/06				
A	* page 5, paragraph	3; figures 1-5 *	1,15				
Y	US 2018/362212 A1 (20 December 2018 (2	2-4					
A	* paragraphs [0010]	, [0039]; figures 1-12	1,15				
Y	DE 19 41 280 U (WIV 23 June 1966 (1966-		2,3				
A	· · · · · · · · · · · · · · · · · · ·	•	1,15				
x	US 10 611 547 B2 (R 7 April 2020 (2020-	EHRIG PACIFIC CO [US]) 04-07)	1,2, 7-10,15	TECHNICAL FIELDS SEARCHED (IPC)			
	* column 2, lines 1	0-61; figures 1-14 *		B65D			
Y	US 4 588 087 A (SWI 13 May 1986 (1986-0 * column 3, lines 3		11,12				
Y	US 4 499 997 A (SWI 19 February 1985 (1 * column 4, line 53 figures 1-9 *	1,13,14					
A	10 January 2017 (20		1-4,7-15				
	The present search report has t	<u> </u>					
	Place of search	Date of completion of the search		Examiner			
	Munich	17 July 2023	Gab	rich, Katharina			
X : part Y : part doc A : tech O : nor	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot ument of the same category innojoical backgroundwritten disclosure rmediate document	L : document cited for	ument, but publice the application or other reasons	shed on, or			

55

2



Application Number

EP 22 21 3791

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:				
1-4, 7-15				
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

Application Number

EP 22 21 3791

5

10

15

20

25

30

35

40

45

50

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: 1-4, 15

A tote with a drainage system for enabling even flow of liquid comprising:

a container body having a first end wall, an opposing second end wall, a first side wall and an opposing second side wall extending upwards from a bottom wall;

a bumper extending outward from the first end wall, second end wall, first side wall and second side wall around a lower portion of the container body;

a first drain hole in the first end wall spaced a first distance above a top surface of the bottom wall allowing liquid from an interior of the container body to exit through the bumper;

a first drain hole in the second end wall spaced the first distance above the top surface allowing liquid from the interior of the container body to exit through the bumper; a first drain hole in the first side wall spaced the first distance above the top surface allowing liquid from the interior of the container body to exit through the bumper; a first drain hole in the second side wall spaced the first distance above the top surface allowing liquid from the interior of the container body to exit through the bumper, wherein the tote is configured to accumulate liquid in a bottom portion of the container body below the first distance before drainage occurs;

a plurality of ribs extending upward from the top surface of the bottom wall; and

wherein the plurality of ribs comprises a plurality of spaced apart parallel ribs extending from proximate the first end wall to proximate the second end wall.

2. claims: 1, 2, 5, 6

The tote, wherein each of the plurality of ribs extends upward a second distance that is less than the first distance.

3. claims: 1, 2, 7-12

The tote, wherein each of the drain holes is D-shaped having a flat segment and an arcuate segment connected at a first end to a first end of the flat segment and at a second end to a second end of the flat segment.

4. claims: 1, 2, 7-10, 13, 14

The tote, wherein the bumper includes a first horizontal

55

page 1 of 2



LACK OF UNITY OF INVENTION SHEET B

Application Number

EP 22 21 3791

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:

upper wall extending outward from the container body and a second lower horizontal wall extending outward from the container body and wherein the drain holes are between the first wall of the bumper and the second wall of the bumper.

page 2 of 2

EP 4 197 932 A3

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

EP 22 21 3791

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

17-07-2023

								17 07 202.
10		Patent document cited in search report		Publication date		Patent family member(s)		Publication date
	U	s 2021229863	A1	29-07-2021	СН	714972	A1	15-11-2019
					CN	112088131		15-12-2020
					EP	3790817	A1	17-03-2021
15					PL	3790817		03-10-2022
					US	2021229863		29-07-2021
					WO	2019215521		14-11-2019
	ם	E 1840375	U	26-10-1961	NONE			
20	- ט	s 2018362212	A1	20-12-2018	NONE			
	D	E 1941280	บ	23-06-1966	BE	676151	A	08-08-1966
					DE	1941280	U	23-06-1966
25					NL	6512204		21-03-1967
		S 10611547	в2	07-04-2020	CA	3016522		05-03-2019
					US	2019071234	A1	07-03-2019
	_				US	2020317421		08-10-2020
30	ט	s 4588087	A		NONE			
	ט	s 4499997	A	19-02-1985	CA	1243283	A	18-10-1988
					EP	0136354	A1	10-04-1985
					US	4499997		19-02-1985
35	_				WO	8403268		30-08-1984
	ט	S 9540140	в2	10-01-2017	CA	2866790		09-04-2015
					MX	353529		18-01-2018
	_				US 	2015151875 		04-06-2015
40								
45								
50								
30								
55	FORM P0459							
	፲ └──							

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