

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P46611WO/SPC	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/GB2018/050304	International filing date (<i>day/month/year</i>) 2 February 2018 (02-02-2018)	(Earliest) Priority Date (<i>day/month/year</i>) 3 February 2017 (03-02-2017)
Applicant PETAINER LARGE CONTAINER IP LIMITED		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 7 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

- the international application in the language in which it was filed
 a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6**bis**(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box No. II)

3. **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- the text is approved as submitted by the applicant
 the text has been established by this Authority to read as follows:

KEG CLOSURE HOUSING WITH INTEGRALLY FORMED INNER DUCT

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant
 the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 4b

- as suggested by the applicant
 as selected by this Authority, because the applicant failed to suggest a figure
 as selected by this Authority, because this figure better characterizes the invention

b. none of the figures is to be published with the abstract

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A closure 1 for a beverage keg 90 is provided, comprising an outer housing wall 13 defining at least a portion of a valve housing 21 and an inner duct 24 that is located within the outer housing wall 13. The inner duct 24 extends through at least a portion of the valve housing 21 to define a flow path through the closure 1. The outer housing wall 13 and the inner duct 24 are integrally formed together as part of a single housing component.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2018/050304

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-18, 24

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2018/050304

A. CLASSIFICATION OF SUBJECT MATTER
INV. B67D1/08 B67D1/12 F16K17/16
ADD.
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
B67D F16K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 2 450 307 A2 (APPS WILLIAM P [US]; HANSEN WAYNE MATTHEW [US]) 9 May 2012 (2012-05-09) paragraphs [0008], [0023]; figure 15 -----	1
X	WO 2012/062821 A1 (PETAINER LIDKOEPIG AB [SE]; AHLSTROEM KARL-JOHAN [SE]) 18 May 2012 (2012-05-18) page 9, line 18 - line 22; figures 6-10 -----	1-6, 8-12,24
X	GB 1 315 973 A (ALUMASC LTD) 9 May 1973 (1973-05-09) page 2, line 5 - line 49; figure 1 -----	1-11,24
X	WO 00/20326 A1 (LEER KONINKLIJKE EMBALLAGE [NL]; BOULANGE MICHEL [FR]; WILLINGHAM JOHN) 13 April 2000 (2000-04-13) page 4, line 31 - page 5, line 13 -----	1-6, 8-13,24
	-/--	

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search 23 May 2018	Date of mailing of the international search report 01/08/2018
--	--

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Desittere, Michiel
--	--

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2018/050304

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 102 701 A2 (GRUNDY TEDDINGTON LTD [GB]) 14 March 1984 (1984-03-14)	1-6, 9-11,24
Y	page 5, line 10 - page 6, line 14; figure 1	14-16
Y	----- EP 2 505 546 A1 (SCHAEFER WERKE GMBH [DE]) 3 October 2012 (2012-10-03) paragraph [0014] - paragraph [0017] -----	14-16

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2018/050304

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 2450307	A2	09-05-2012	CA 2757748 A1	09-05-2012
			CA 2997773 A1	09-05-2012
			EP 2450307 A2	09-05-2012
			EP 2599744 A2	05-06-2013
			ES 2451394 T3	26-03-2014
			MX 338356 B	13-04-2016
			US 2012181289 A1	19-07-2012
			US 2016016779 A1	21-01-2016

WO 2012062821	A1	18-05-2012	BR 112013011276 A2	01-11-2016
			CA 2816914 A1	18-05-2012
			CN 103298730 A	11-09-2013
			EP 2637962 A1	18-09-2013
			ES 2532510 T3	27-03-2015
			GB 2485528 A	23-05-2012
			RU 2013125921 A	20-12-2014
			UA 110224 C2	10-12-2015
			US 2013334253 A1	19-12-2013
			US 2016039654 A1	11-02-2016
			WO 2012062821 A1	18-05-2012
			ZA 201303843 B	26-02-2014

GB 1315973	A	09-05-1973	AT 320459 B	10-02-1975
			BE 767007 A	01-10-1971
			CH 540447 A	15-08-1973
			DE 2123347 A1	02-12-1971
			DE 7118408 U	02-09-1971
			ES 197048 U	01-04-1975
			FR 2091385 A5	14-01-1972
			GB 1315973 A	09-05-1973
			NL 7106451 A	15-11-1971
			NO 129947 B	17-06-1974
			SE 367385 B	27-05-1974

WO 0020326	A1	13-04-2000	AU 6112799 A	26-04-2000
			GB 2357496 A	27-06-2001
			WO 0020326 A1	13-04-2000

EP 0102701	A2	14-03-1984	DE 3374780 D1	14-01-1988
			DK 298783 A	08-01-1984
			EP 0102701 A2	14-03-1984
			ES 273328 U	16-01-1984
			GB 2125917 A	14-03-1984
			JP S5926491 A	10-02-1984
			NO 832460 A	09-01-1984
			PT 76976 A	01-08-1983
			US 4548343 A	22-10-1985

EP 2505546	A1	03-10-2012	DE 102011015516 A1	04-10-2012
			EP 2505546 A1	03-10-2012
			RU 2012112206 A	10-10-2013
			US 2012248109 A1	04-10-2012

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18, 24

Closure for a beverage keg wherein the outer housing wall and the inner duct are integrally formed together as part of a single housing component

2. claims: 19-23

Closure for a beverage keg with a venting system provided in the housing wall, separate from the inlet and configured to provide fluid communication between the headspace of the keg and an exterior of the closure
