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B32B 1/02 (2006.01) B65D 3/24 (2006.01)  
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kind of national protection available): AE, AG, AL, AM,  
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(54) Title: BARREL FOR CO<sub>2</sub>-CONTAINING DRINKS AND USE THEREOF

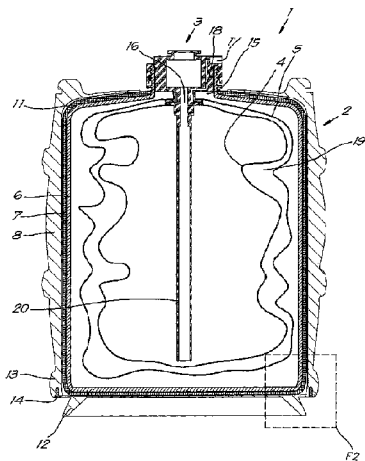


Fig. 1

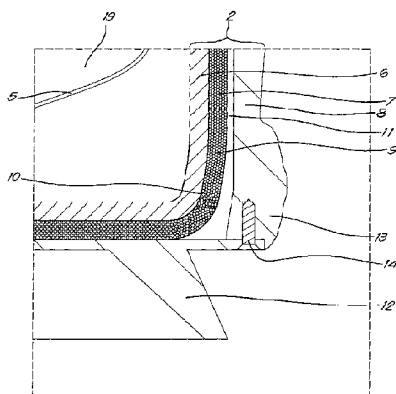


Fig. 2

(57) Abstract: Barrel for CO<sub>2</sub>-containing drinks, whereby the barrel comprises a rigid holder that comprises at least two layers, i.e. a first layer that is made of a polymer and a second, fibre-reinforced, layer, whereby the second layer is outside the first layer and whereby the second layer is attached to the first layer.



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BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

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- *of inventorship (Rule 4.17(iv))*

**Published:**

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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5 January 2017

**INTERNATIONAL SEARCH REPORT**

International application No  
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A. CLASSIFICATION OF SUBJECT MATTER					
INV.	B32B5/02	B32B5/28	B32B7/00	B32B27/12	B32B27/32
	B32B1/02	B65D8/00	B65D1/16	B65D23/08	B65D77/04
	B65D1/02	B65D1/48	B65D3/22	B65D3/24	B65D77/06
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) B32B B65D

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.
X	US 2013/105501 A1 (VANSWIJGENHOVEN TONY [BE] ET AL) 2 May 2013 (2013-05-02) figures; paragraphs 1, 5, 6, 45, 48-50, 52-57, 59, 176, 184, 188 -----	1-7, 14-17
A	US 2010/018994 A1 (ANTHEIL WILLIAM L [US] ET AL) 28 January 2010 (2010-01-28) figure 7; paragraphs 1-3, 5-8, 31, 33, 35, 39, 42 -----	1-3,14
X	GB 728 929 A (PLASTIC BARREL CORP) 27 April 1955 (1955-04-27) the whole document -----	1,4,5, 14,15
A	US 2014/103066 A1 (GEERT NORBERT R STANDAERT [BE] ET AL) 17 April 2014 (2014-04-17) the whole document -----	1-7, 14-17

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	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  4 October 2016	Date of mailing of the international search report  02/12/2016
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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  Barenbrug, Theo
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/BE2016/000012

## 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.:

2-7, 14-17(completely); 1(partially)

### 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.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

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

1. claims: 2-7, 14-17(completely); 1(partially)

A barrel for CO<sub>2</sub> containing beverages (e.g. a beer keg), comprising a rigid holder with a composite layer of reinforcing (glass) fibers wound around a rigid inner layer, and an internal flexible bag to contain the beverage. The bag being for easy recycling and for easy dispensing of the beverage by means of a pressure external to the bag.

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2. claims: 8-13(completely); 1(partially)

A barrel for CO<sub>2</sub> containing beverages (e.g. a beer keg), comprising a rigid holder with a composite layer of reinforcing (glass) fibers wound around a rigid inner layer, and an internal flexible bag to contain the beverage. The bag being for easy recycling and for easy dispensing of the beverage by means of a pressure external to the bag.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/BE2016/000012
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