

1) Family number: 7088008 (GB2255963 A1)

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Title: COMBINED FLEXIBLE CONTAINER AND PALLET

Priority: GB19910010083 19910509

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| GB9110083 A0       | 19910703         | GB19910010083      | 19910509         |
| GB2255963 A1       | 19921125         | GB19920009834      | 19920507         |
| GB9209834 A0       | 19920624         | GB19920009834      | 19920507         |

Probable Assignee: CORRUPLAST LTD

Assignee(s):(std): CORRUPLAST LTD ; TRADCO UK LIMITED ; TRADCO UK LTD

Assignee(s): CORRUPLAST LIMITED

Inventor(s):(std): HAINES CLIVE PETER ; STONE MICHAEL GEORGE

Inventor(s): CLIVE PETER HAINES ; MICHAEL GEORGE STONE

International class (IPC 8-9): B65D19/00 B65D77/06 B65D88/16

International class (IPC 1-7): B65D19/00 B65D88/16

CPC: B65D19/00 B65D2588/165 B65D77/061 B65D88/1612

[Classification Explorer](#)

Cited documents: EP0080126 A1, GB2199011 A1, GB1453592 A, GB1394877 A, GB1360595 A,

Forward Citations: EP3357824 A2, US9693930 BB,

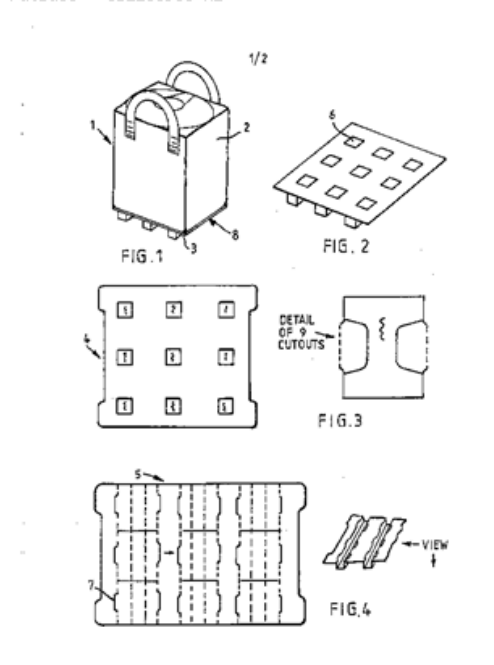
DE202017100554 U1

US2016213562 AA, EP1854742 A1, US5785175 A, US6935782 BB,

Abstract:

A flexible IBC (intermediate Bulk Container) 2 made from e.g polypropylene and containing a flowable material such as powder is supported by and connected to a pallet member 3 which is adapted to deform concomitantly in use with the IBC 2. A protective member 8 comprising a sheet of corrugated plastics may be attached to the base of the IBC 2 and include a removable panel 9 to allow material discharge. The removable panel 9 consists of an elongate tear-away panel 9 which extends between opposing ends 11 and 12 respectively of the protective member 8. The pallet may be secured to or formed separately from the IBC.

PatBase - GB2255963 A1



2) Family number: 28104067 (US2001023891 AA)

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Title: Method and apparatus for shipping bulk liquid, near-liquid and dry particulate materials

Priority: US20000183064P 20000216 WO2001US05141 20010216 US20010785907 20010216

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU200141532 A1     | 20010827         | AU20010041532      | 20010216         |
| AU200141532 A5     | 20010827         | AU20010041532      | 20010216         |
| AU2001241532 AA    | 20010827         | AU20010241532      | 20010216         |

|                        |                 |                      |                 |
|------------------------|-----------------|----------------------|-----------------|
| BRPI0108581 A          | 20040615        | BR2001PI08581        | 20010216        |
| CN1241824 C            | 20060215        | CN20018008162        | 20010216        |
| CN1423618 A            | 20030611        | CN20018008162        | 20010216        |
| EA003793 B1            | 20031030        | EA20020000860        | 20010216        |
| EA200200860 A1         | 20030424        | EA20020000860        | 20010216        |
| <b>EP1265807 A1</b>    | <b>20021218</b> | <b>EP20010912786</b> | <b>20010216</b> |
| <b>US2001023891 AA</b> | <b>20010927</b> | <b>US20010785907</b> | <b>20010216</b> |
| <b>US6550645 BB</b>    | <b>20030422</b> | <b>US20010785907</b> | <b>20010216</b> |
| <b>WO0160735 A1</b>    | <b>20010823</b> | <b>WO2001US05141</b> | <b>20010216</b> |

**Probable Assignee:** ENVIRONMENTAL PACKAGING TECHNOLOGIES INC

**Assignee(s):(std):** CORTAINER PATENT WAREHOUSE L L ; CORTAINER PATENT WAREHOUSE LLC ; NELSON CHARLES M ; PATTON JAMES D ; PATTON JAMES D PATTON ; PATTON PATTON JAMES D PATTON

**Assignee(s):** CHARLES M NELSON ; ENVIRONMENTAL PACKAGING TECHNOLOGIES INC ; GBP DEBT HOLDINGS II LLC ; JAMES D PATTON ; JAMES D PATTON PATTON

**Inventor(s):(std):** NELSON CHARLES M ; PATTON CHARLES M NELSON JAMES ; PATTON JAMES D ; PATTON JAMES D PATTON

**Inventor(s):** CHARLES M NELSON ; CHARLES M NELSON JAMES D PATTON PATTON ; JAMES D PATTON ; JAMES D PATTON PATTON

**Agent(s):** MATTHEWS FIRM; SHELSTON IP; SHELSTON IP PTY LTD; WILLIAM E JOHNSON JR

**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

**International class (IPC 8-9):** B65D77/06 B65D88/02 B65D88/54 B65D90/04 B67B7/00

**International class (IPC 1-7):** B65D3/00 B65D5/00 B65D5/56 B65D5/60 B67B7/00

**CPC:** B65D2590/046 B65D77/061 B65D88/02 B65D88/54 B65D90/041 B65D90/046 B65D90/047

**US class:** 222/105 222/146.1 222/146.2 222/146.6 222/386.5 229/109 229/110 229/110S 229/117.27 229/117.270P 229/117.3 248/152 229/11

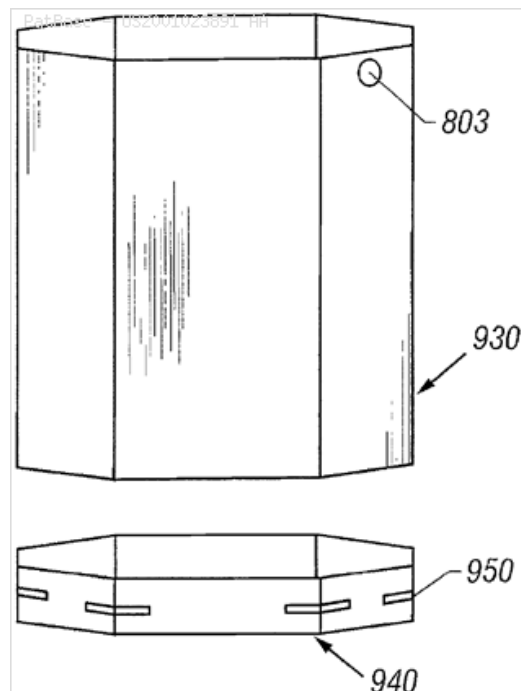
[Classification Explorer](#)

**Cited documents:** US5468117 A, US4817707 A, US4454945 A, US3945534 A, US3583415 A, US3233662 A, US1562991 A, US6000549 A, US5803346 A, US5351849 A, US5050775 A, USRE33128 E, US4850506 A, US4771917 A, US4742951 A, US4666059 A, US4421253 A, US4205775 A, US3123254 A,

**Forward Citations:** EP2628685 A3, EP2222505 A4, US2017144833 AA, EP2628685 A2, WO12140185 A1, WO09010545 A1, AT505397 B1, EP2222505 A2, US10815051 BB, US9945080 BB, USD801410 S1, US9567157 BB, US7975879 BB, US9538581 BB, US9533789 BB, US9392646 BB, CN102712415 A, US9290890 BB, US2010000994 AA, US2008190918 AA, US2008277393 AA, US2008277417 AA, US2007116811 AA, US2006251343 AA, US2014034629 AA, US2013001224 AA, US8459503 BB, US8167159 BB, US7681757 BB, USD490310 S1, US2010217155 AA, WO11018768 A1, USD495598 S1, CN102145796 A,

#### Abstract:

A **flexible** bladder is enclosed within a plurality of overlapping plastic sheets, with the ends of the sheets being secured in place by the weight of the **flexible** bladder, when filled. The preferred plastic is an extruded, twin-walled, fluted plastic based upon a polypropylene copolymer. In an alternative embodiment, a pair of hexagonal, coaxial sleeves of the preferred plastic have an internal bladder for shipping materials. With both embodiments, hot chocolate is pumped into the bladder and cooled, in situ, to stop the chocolate from cooking further. The container is shipped, and then the chocolate is heated to facilitate pumping the chocolate out of the container. The cooling and heating processes involve the use of a heat exchange pad located between the bladder and the inner sleeve.



**3) Family number: 44166613** (US2011099951 AA)

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**Title:** TRANSPORT CONTAINER FOR METAL ALCOHOLATES AND METHOD FOR TRANSPORTING METAL

## ALCOHOLATES

**Priority:** DE200810030765 20080628 WO2009EP58028 20090626

| Family: | Publication number     | Publication date | Application number   | Application date |
|---------|------------------------|------------------|----------------------|------------------|
|         | BRPI0915285 A2         | 20160216         | BR2009PI15285        | 20090626         |
|         | CN102076574 A          | 20110525         | CN200980124954       | 20090626         |
|         | EP2303717 A1           | 20110406         | EP20090769350        | 20090626         |
|         | <b>IN00436CN2011 A</b> | <b>20111118</b>  | <b>IN2011CN00436</b> | <b>20110120</b>  |
|         | JP2011526231 T2        | 20111006         | JP20110515398T       | 20090626         |
|         | KR20110036091 A        | 20110406         | KR20117002099        | 20090626         |
|         | RU2011103009 A         | 20130727         | RU20110103009        | 20090626         |
|         | <b>US2011099951 AA</b> | <b>20110505</b>  | <b>US20090001299</b> | <b>20090626</b>  |
|         | WO09156502 A1          | 20091230         | WO2009EP58028        | 20090626         |

**Probable Assignee:** EVONIK DEGUSSA GMBH

**Assignee(s):(std):** BAUER CLAUS ; EVGONIK DEGUSSA GMBH ; EVONIK DEGUSSA GMBH ; VIANDT MATHIAS

**Inventor(s):(std):** BAUER CLAUS ; CLAUS BAUER ; MATHIAS VIANDT ; VIANDT MATHIAS

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class (IPC 8-9):** B65B1/04 B65D5/56 B65D77/04 B65D77/06 B65D81/24

**CPC:** B65D77/061

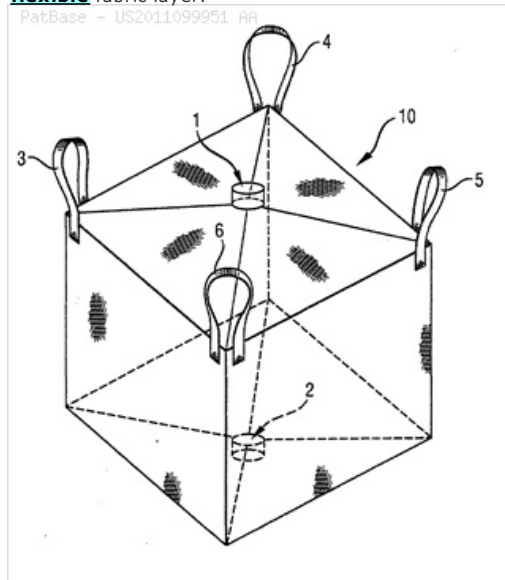
**US class:** 229/117.27 229/117.270S 53/467 53/467P

[Classification Explorer](#)

**Cited documents:** WO05080229 A2, DE8531565 U1, US6834792 BA, US2004251300 AA, US2329311 A, JP60019433 U1, JP2002337981 A2, JP9295673 A2, JP60019433 U, JP2000128277 A2,

**Abstract:**

A transport container for metal alcoholates, comprising a rigid outer container (11), which consists primarily of renewable raw materials, and a **flexible** bulk material container (10), which is inside the outer container, wherein the **flexible** bulk material container has at least one inner diffusion-impermeable layer and an outer **flexible** fabric layer.

**4) Family number: 55109024 (US2013292412 AA)**

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**Title:** BULK BIN AND BAG DISPENSING APPARATUS

**Priority:** US20120463871 20120504

| Family: | Publication number     | Publication date | Application number   | Application date |
|---------|------------------------|------------------|----------------------|------------------|
|         | TW201406611 A          | 20140216         | TW20130115146        | 20130426         |
|         | <b>US2013292412 AA</b> | <b>20131107</b>  | <b>US20120463871</b> | <b>20120504</b>  |
|         | WO13165622 A1          | 20131107         | WO2013US32788        | 20130318         |

**Probable Assignee:** INT PAPER CO

**Assignee(s):(std):** GILLARD DAVID ; INT PAPER CO ; JONES MARK A ; RACE MICHAEL

**Inventor(s):(std):** GILLARD DAVID ; JONES MARK A ; RACE MICHAEL

**Agent(s):** BARNES THOMAS W ET AL

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class (IPC 8-9):** B65B43/12 B65B67/00 B65D83/00 B65H35/10 B67B7/00 B67D3/04

**CPC:** B67D3/042 B67D3/047 B67B7/24

**US class:** 222/81

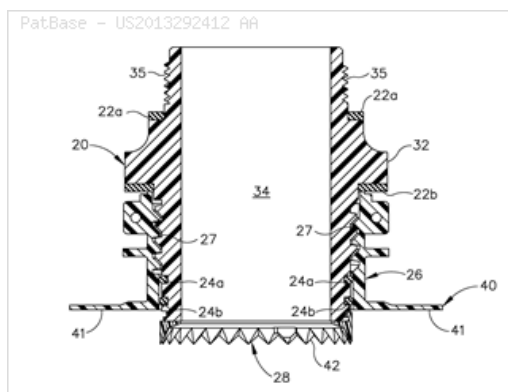
**Cited documents:** GB2468698 A1, WO9947432 A1, GB2172663 A1,  
DE102010028529 A1

US7712639 BB, US2009046958 AA, US2006144852 AA, US6883682 BB, US2002179605 AA, US6422412 BA, US6019253 A, US5944300 A, US5482176 A, US5370164 A, US5141133 A, US4624392 A, US4483464 A, US4469249 A, US3972450 A.

**Forward Citations:** US10737927 BB, US9862540 BB, US2017008697 AA,

### Abstract:

A bulk bin and bag dispensing apparatus comprises a bag fitment having an elongated buttress female thread and a nipple adapted to be joined to the bag fitment. The nipple comprises an elongated body portion having an axial flow passage therethrough and a projection portion extends radially therefrom. The body portion further includes a first end and a second end. The first end is defined by male buttress thread thereto and the second end is defined by NPT thread thereto. The first end includes a ring cutter and at least one sealing means attached thereto so that the nipple strokes threadedly within the elongated buttress female thread causing the ring cutter to puncture a bag membrane to thereby permit liquid to be dispensed through the flow passage.



**5) Family number: 52166692** (WO12141658 A2)

**Title:** DEVICE FOR HANDLING AN INTER-BOX CONNECTOR

**Priority:** SG20110027166 20110415

**Family:**

| Publication number   | Publication date | Application number | Application date |
|----------------------|------------------|--------------------|------------------|
| SG185151 A1          | 20121129         | SG20110027166      | 20110415         |
| <b>WO12141658 A2</b> | 20121018         | WO2012SG00133      | 20120416         |
| WO12141658 A3        | 20130228         | WO2012SG00133      | 20120416         |

**Probable Assignee:** MANIVANNAN S O CHELLAPPA

**Assignee(s):(std):** MANIVANNAN S O CHELLAPPA

**Inventor(s):(std):** MANIVANNAN S O CHELLAPPA

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN VZ ZA ZM ZW

**International class** B65D90/00  
(IPC 8-9):

**CPC:** B65D90/002

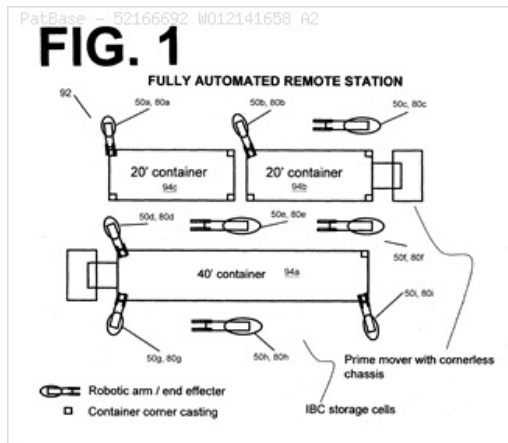
Classification Explorer

**Cited documents:** EP2216270 A1, DE10059260 A1,  
DE102008062854 A1

**Forward Citations:** WO20204822 A1, WO20009656 A1, WO20002727 A1.

### Abstract:

The present application discloses an automatic stevedore remote station (ASRA) (50) having a camera (60) that can detect the presence, distance, shape and orientation of an inter-box connector (twistlock) (52) via machine vision. The ASRA (50) also has a gripper (64) and a twister (66) which can move to the detected inter-box connector (52) and remove/install the inter-box connector from/onto a shipping container (94) according to detected results. The automatic stevedore remote station (ASRA) (50) is provided in the form of an industrial robot that can move both the camera (60) and its end effector (64, 66) together for handling the inter-box connector (52) at a busy wharf in a **flexible** and efficient manner.

**6) Family number: 13495235** (GB2311773 A1)

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**Title:** Bulk containers**Priority:** GB19960007037 19960403 GB19970006475 19970327**Family:**

| Publication number  | Publication date | Application number   | Application date |
|---------------------|------------------|----------------------|------------------|
| GB9607037 A0        | 19960605         | GB19960007037        | 19960403         |
| <b>GB2311773 A1</b> | <b>19971008</b>  | <b>GB19970006475</b> | <b>19970327</b>  |
| GB9706475 A0        | 19970514         | GB19970006475        | 19970327         |

**Probable Assignee:** SMITH DAVID S PACKAGING**Assignee(s):(std):** SMITH DAVID S PACKAGING**Assignee(s):** DAVID S SMITH PACKAGING LIMITED ; DAVID S SMITH PACKAGING LTD**Inventor(s):(std):** WONNACOTT ROGER JOSEPH**Inventor(s):** ROGER JOSEPH WONNACOTT**International class**  
(IPC 8-9): B65D88/00 B65D88/16**International class**  
(IPC 1-7): B65D5/36 B65D88/16**CPC:** B65D88/1625 B65D88/1668[Classification Explorer](#)**Cited documents:** US5090614 A, US4746059 A, US4411373 A,**Forward Citations:** WO12040372 A1, US9061815 BB,

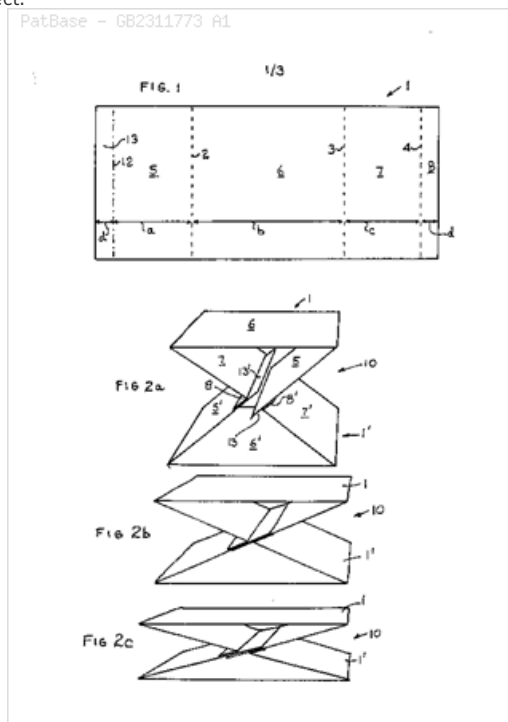
DE102007036914 A1

WO0029310 A1,

**Abstract:**

A tubular sleeve (10) for insertion in a **flexible** outer container (20) to provide the latter with rigidity is made of stiff material and has a longitudinal axis. The sleeve (10) has two side walls comprising stiff wall portions (5 1, 7; 5,7 1 ) hinged together about one or more longitudinal hinge axes to enable movement of the walls between unfolded and folded conditions, Extensions (13) of the wall portions (5,7 1 ) resist outward movement of the side walls when erect.

PatBase - GB2311773 A1



**7) Family number: 41619110** (US2008067176 AA)

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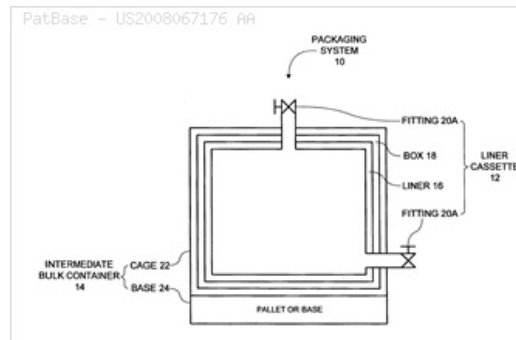
**Title:** COLLAPSIBLE BULK CAGE LINER  
**Priority:** US20060845251P 20060918 US20070898692 20070914  
**Family:**

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| <b>US2008067176 AA</b> | 20080320         | US20070898692      | 20070914         |
| US7766180 BB           | 20100803         | US20070898692      | 20070914         |

**Probable Assignee:** GREIF INC  
**Assignee(s):(std):** APOSTOLUK PETER ; GREIF INC ; MANSOURI JAMES ; NELSON ERIC  
**Inventor(s):(std):** APOSTOLUK PETER ; MANSOURI JAMES ; NELSON ERIC  
**Agent(s):** BAKER AND HOSTETLER LLP  
**International class** (IPC 8-9): B65D90/02 B65D90/04 G05D21/00 G05D21/02 G05D3/00  
**CPC:** B65D77/061  
**US class:** 220/23.9 220/495.01 220/495.06 220/676 229/117.3 220/495.060P 220/676S  
[Classification Explorer](#)  
**Cited documents:** US4786192 A, US7607564 BB, US6454113 BA, US6223903 BA, US2005051611 AA,  
**Forward Citations:** US10721909 BA, US10322843 BB, EP2765083 B1, EP2964541 B1, EP2964540 B1, RU2651257 C2, CN105564861 A, US2009114655 AA, GB2489604 A1, WO14135277 A1, WO14135275 A1, EP2765083 A1,

**Abstract:**

A liner cassette for use with an existing intermediate bulk container includes a box and a liner. The box is configured to unfold within the intermediate bulk container and the liner is configured to fit within the box. The liner cassette includes two configurations. In a first configuration, the box and liner may be folded substantially flat to facilitate transportation. In a second configuration, the box and liner are configured to provide a liquid containment system for the existing intermediate bulk container.

**8) Family number: 53039497** (US2013043241 AA)

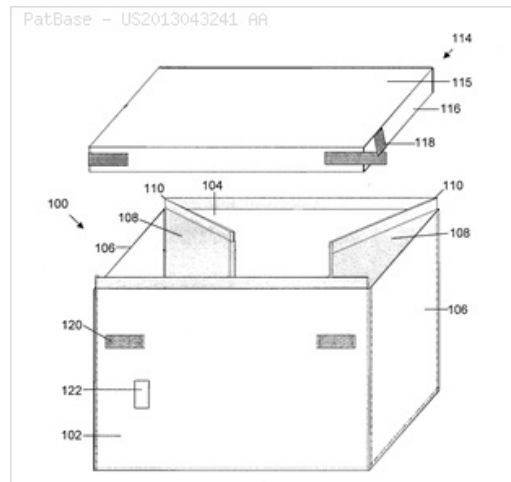
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**Title:** COLLAPSIBLE SEMI-BULK CONTAINER  
**Priority:** US20110211034 20110816 EP20120824453 20120814 WO2012US50754 20120814  
**Family:**

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| DE602012038765 D1      | 20171130         | DE201260038765T    | 20120814         |
| <b>EP2744717 A2</b>    | 20140625         | EP20120824453      | 20120814         |
| EP2744717 A4           | 20150408         | EP20120824453      | 20120814         |
| <b>EP2744717 B1</b>    | 20171018         | EP20120824453      | 20120814         |
| <b>US2013043241 AA</b> | 20130221         | US20110211034      | 20110816         |
| <b>US8602243 BB</b>    | 20131210         | US20110211034      | 20110816         |
| <b>WO13025693 A2</b>   | 20130221         | WO2012US50754      | 20120814         |
| WO13025693 A3          | 20130425         | WO2012US50754      | 20120814         |

**Probable Assignee:** COMPOSITE CONTAINERS LLC  
**Assignee(s):(std):** COMPOSITE CONTAINERS LLC ; HUNTER ANDREW  
**Assignee(s):** COMPOSITE CONTAINERS LLC WANDO  
**Inventor(s):(std):** HUNTER ANDREW  
**Inventor(s):** HUNTER ANDREW MOUNT PLEASANT  
**Agent(s):** ABG PATENTES SL; ANDREW D; FUIERER TRISTAN; MOORE AND VAN ALLEN PLLC  
**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW  
**International class** (IPC 8-9): B65B43/00 B65D19/06 B65D25/04 B65D25/06 B65D25/28 B65D6/16 B65D6/26 B65D88/00 B65D88/10 B65D88/16 B65D88/52 B65D90/02  
**CPC:** B65D19/06 B65D25/005 B65D25/04 B65D25/06 B65D2519/00124 B65D2519/00129 B65D2519/00134 B65D2519/00139 B65D2519/00174 B65D2519/00208 B65D2519/00333 B65D2519/00452 B65D2519/00502 B65D2519/00597 B65D2519/00641 B65D2519/00711 B65D2519/00805 B65D2519/0081 B65D2519/00915  
**US class:** 220/1.5 220/520 220/529 220/6 220/651 220/660 220/661 53/458  
[Classification Explorer](#)

**Abstract:** A [flexible](#), collapsible semi-bulk container for storing and transporting content is provided. The container has the strength to hold up to two tons of contents while being stacked up to five high. The container is also collapsible for ease of storage and transport. In some embodiments, the container includes swing walls that provide support to the side walls when positioned substantially adjacent to them. In another embodiment, the container includes partial swing walls that support cassettes for dividing the container into smaller compartments. In a still further embodiment, the container includes an interior baffle for dividing the container into smaller compartments.



| Family: | Publication number | Protein |
|---------|--------------------|---------|
|---------|--------------------|---------|

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | US2007102314 AA    | 20070510         | US20050270911      | 20051110         |
|         | US7337908 BB       | 20080304         | US20050270911      | 20051110         |

Classification Explorer

**Cited documents:** US5356029 A, US4793519 A, US4421253 A, US4706850 A, US4623075 A, US2005220369 AA, US5813562 A, US5799812 A, US5031792 A, US4850506 A, US3194471 A, US5526029 A, US4157609 A, USRE28846 E, US6223903 BA, US4516692 A, US6543495 BB, US5735429 A, US6533122 BA, US2926830 A, US5381915 A, US5377876 A.

**Forward Citations:** US10836569 BB, US10745196 BB, EP2539237 B1, US2016096654 AA, US9670049 BB, US9555920 BB, US9551525 BB, US2011215136 AA, US2011120151 AA, US2011120667 AA, US2010012550 AA, US2009114655 AA, US2009223420 AA, US2010025275 AA, US2009308289 AA, US8967407 BB, US201107737 AA, US2014252075 AA, EP539237 A4, US2013162119 AA, US8757440 BB, USRE44895 E, US8448457 BB, US8424682 BB, US8371132 BB, US8146771 BA, WO1106509 A1, US7958995 BB, WO10008616 A1, USD579203 S1, US2008283583 AA, US2011315689 AA, US8167159 BB, US2010000994 AA, US8028849 BB.

**Abstract:** A palletized shipping container for bulk handling of fluid materials has a rigid box-like outer shell within which is positioned a **flexible** bag and an intermediate **corrugated** liner sandwiched between the walls of the bag and shell. The bag has flap-like extensions at an upper end attached to the walls of the shell to maintain the bag in an erect uncollapsed configuration, a non-removable bung at its top end, and a non-removable discharge valve adjacent its bottom end. The bung is releasably retained at the top of the liner to maintain the bung in a proper position and prevent sagging of the bag. An inwardly and downwardly angled cushioned surface at the bottom of the shell supports the liner and bag, provides additional cushioning, facilitates emptying of the bag, and reduction of residual material. The pallet allows 4-sided entry of fork lift forks.



CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID  
IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN  
MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG  
SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class**  
(IPC 8-9):

B65D19/00 B65D19/02 B65D19/10 B65D19/38 B65D6/00 B65D77/06 B65D85/00 B65D85/84  
B65D88/12 C25B1/04 C25B15/02 C25B9/00

**International class**  
(IPC 1-7):

B65D77/06

**CPC:**

B65D19/0006 B65D19/10 B65D19/385 B65D2519/00129 B65D2519/00164 B65D2519/00199  
B65D2519/00208 B65D2519/00268 B65D2519/00512 B65D2519/00537 B65D2519/00711 B65D77/061  
B65D85/70 Y02E60/36 Y02W30/80

**US class:**

206/386 493/309

[Classification Explorer](#)

**Cited documents:**

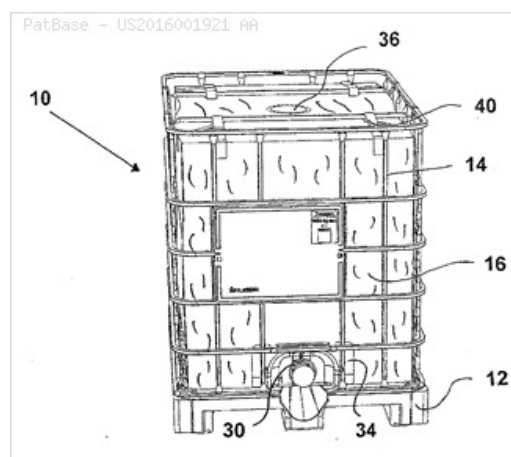
US3549050 A, US9321558 BB, US9278496 BB, US2016001951 AA, US9016555 BB, US8464908 BA,  
US2012067897 AA, US2010065466 AA, US2010025275 AA, US2009236344 AA, US2009223847 AA,  
US2006180589 AA, US2006113319 AA, US6962036 BB, US6390331 BB, US6360907 BA, US6294761 BA,  
US6155449 A, US6073804 A, US6032818 A, US5988422 A, US5730328 A, US5680955 A, US5622277 A,  
US5255808 A, US4850506 A, US4786192 A, US4322020 A, US4109827 A, US2008310766 AA,  
GB2268231 A1, EP0941946 A2, US2008067176 AA, US2006175385 AA, US2005145521 AA,  
US2005040063 AA, US4138036 A, US3143249 A, JP2005289464 A2, JP2004182275 A2, WO9324389 A2,  
WO07029011 A1, WO02074141 A1, WO9734794 A1, EP1103486 A1, EP0573230 A1, EP2149508 B1,

**Forward Citations:**

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DE102015001996 A1  
  
CN109071087 B, CN109071087 A, US2016217452 AA, US2016326728 AA, US2016001921 AA,  
EP3190144 B1,  
  
DE202019102702 U1  
  
DE202019102700 U1  
  
WO16045800 A1,

**Abstract:**

A pallet container for storing and for transporting liquid filling materials includes a base pallet, a lattice frame fastened thereon and made of metal bars, and a fabric cover suspended in the lattice frame for accommodating a liquid-tight inliner for receiving the liquid filling material. The fabric cover and the inliner with preassembled filling and removal fitting is provided in the delivery state as a separately premanufactured, flat-folded package in the form of a modular unit which can be exchanged only as a complete modular unit. To bring the pallet container into a use-ready state, the unfolded fabric cover is fastened by straps to the upper lattice frame, and the removal connection piece of the filling and removal fitting is fastened with an adapter plate to the lower area of the lattice frame by a snap/latching connection.



**11) Family number: 44245688** (US2010012550 AA)

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**Title:** BAG-IN-BAG CONTAINER FOR BULK HANDLING OF FLUIDS  
**Priority:** US20080081582P 20080717 US20090394039 20090226 WO2009US35361 20090227  
**Family:**

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| BRPI0910006 A2         | 20151027         | BR2009PI10006      | 20090227         |
| <b>US2010012550 AA</b> | 20100121         | US20090394039      | 20090226         |
| <b>US7958995 BB</b>    | 20110614         | US20090394039      | 20090226         |
| <b>WO10008616 A1</b>   | 20100121         | WO2009US35361      | 20090227         |

**Probable Assignee:** DEDMAN FRANKLIN

**Assignee(s):(std):** DEDMAN FRANKLIN ; DEDMON FRANKLIN ; HAMAGUCHI TONY T

**Assignee(s):** FRANKLIN DEDMAN ; TONY T HAMAGUCHI

**Inventor(s):(std):** DEDMAN FRANKLIN ; DEDMON FRANKLIN ; HAMAGUCHI TONY T

**Inventor(s):** FRANKLIN DEDMAN ; TONY T HAMAGUCHI

**Agent(s):** KENNETH A; KENNETH A RODDY; RODDY KENNETH A

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU  
CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL  
IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MW MX  
MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ  
TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class**  
(IPC 8-9): B65D19/00 B65D25/14 B65D33/00 B65D6/00

**CPC:** B65D77/061

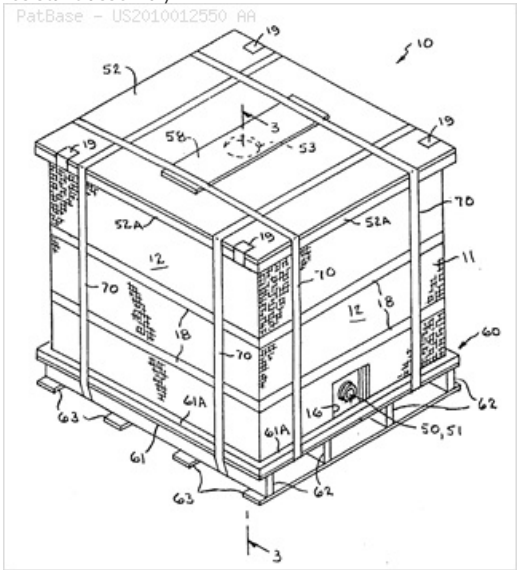
**US class:** 206/386 206/600 220/4.28 220/4.280S 220/495.06 220/495.060S 383/105 383/105S 383/5 383/5S

[Classification Explorer](#)

**Cited documents:** US5423611 A, USRE28846 E, US6000549 A, US4793519 A, US4421253 A, US4706850 A, US4623075 A, US2009250460 AA, US5356029 A, US5813562 A, US5799812 A, US6935508 BB, US7244064 BB, US5031792 A, US4850506 A, US3194471 A, US5323922 A, US5323911 A, US4157609 A, US28846 A, US6224260 BA, US5209364 A, US4516692 A, US6543495 BB, US6220755 BA, US5735429 A, US7337908 BB, US6533122 BA, US2926830 A, US6688471 BB, US6516965 BA, US5492270 A, US4903859 A, US2002008517 AA, US6015057 A, US5377876 A,

**Forward Citations:** US10836569 BB, US2019126545 AA, US10486861 BB, US10246843 BA, USRE47162 E, US2016096654 AA, US2017313474 AA, USRE46613 E, US9764875 BB, US9758939 BB, USRE46531 E, USRE46381 E, US9587366 BB, US9551525 BB, USD688772 S1, USD688351 S1, USD688350 S1, USD688349 S1, US9365338 BB, USRE45914 E, US9267251 BB, WO14059425 A3, WO13126503 A1, USRE45788 E, US9150350 BB, USRE45713 E, US2013017054 AA, WO14059425 A2, US2012234711 AA, US10807781 BB, US2018273269 AA, US10408521 BB, US2013097166 AA, US10221002 BB, US2018016077 AA, US9981794 BB, US9821954 BB, US9777955 BB, US2017174409 AA, US2016075510 AA, US2015003884 AA, US9310117 BB, US9296556 BB, US2015122826 AA, US2013269295 AA, CH706140 A1, US2011127275 AA, US2009304308 AA, US9061815 BB, US8844759 BB, US2012281935 AA, US8708199 BB, US8602243 BB, US2012067762 AA,

**Abstract:**  
A palletized shipping container (10) for bulk handling of liquids and fluent materials has a collapsible inner bag (30) enclosed in a **flexible** outer liner/bag (11) having rigid stiffener panels (20) in pocketed sides. The inner bag has a bung at its top end for filling or discharge and a valve fitment (50) near the bottom for receiving a discharge valve. Tape tabs (34, 19) at upper ends of the inner bag and outer liner/bag attach to the top panel and/or stiffener panels to maintain the bags in an erect uncollapsed configuration. The stiffener panels prevent bulging of the inner bag and provide vertical support, but their lateral sides are spaced apart and form non-structural "floating corners" to maximize volume, minimize shock, vibration and abrasive forces on the inner bag, yet maintain impact and compression strength meeting international certification standards. The bung is disposed beneath the top panel after filling the bag to prevent access and provide a tamper resistant assembly



**12) Family number: 79598895 (WO20131863 A1)** © PatBase

**Title:** STORAGE AND TRANSPORT SYSTEM AND METHOD FOR SOLID SODIUM HYPOCHLORITE PENTAHYDRATE

**Priority:** US20180780647P 20181217

| Publication number   | Publication date | Application number | Application date |
|----------------------|------------------|--------------------|------------------|
| TW202028106 A        | 20200801         | TW20190146167      | 20191217         |
| <b>WO20131863 A1</b> | 20200625         | WO2019US66840      | 20191217         |

**Probable Assignee:** OLIN CORP

**Assignee(s):(std):** OLIN CORP

**Inventor(s):(std):** CAWLFIELD DAVID W ; HILL MARY BETH ; MOCK JOSEPH R ; WHITE WILLIAM K

**Agent(s):** CRAWFORD BRADLEY ET AL

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class (IPC 8-9):** B61D5/00 B65D88/74 C01B11/06

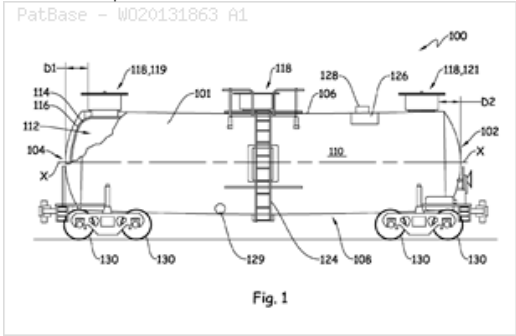
**CPC:** B61D5/002 B61D5/04 C01B11/062

[Classification Explorer](#)

**Cited documents:** US9434616 BB, US2014079964 AA, US5465753 A, JP2016106212 A2, US5152735 A, WO18105485 A1, US2019284050 AA,

**Abstract:**  
A storage and transport system for sodium hypochlorite pentahydrate (solid bleach) is provided. The system includes a container configured to receive and store crystalline solid bleach that includes of at least forty percent sodium hypochlorite, and to retain decomposition components from crystalline solid bleach stored in the container. The container includes a containment wall at least partially surrounding an interior containment space configured to receive solid bleach therein. A passage extends from exterior the container to the interior containment space. The passage is configured for solid bleach to pass therethrough. A liner is located at an interior surface of the containment wall. The liner is substantially non-reactive with solid bleach and, without leakage,

capable of retaining within the containment space: (a) solid bleach, (b) decomposition components of solid bleach and (c) liquid bleach formed when dissolving water is added to solid bleach within the containment space.



13) Family number: 74781479 (DE202019102702 U1)

© PatBase

**Title:** INLINER WITH A DEVOLATILIZATION LANCE AND PROVIDED WITH AN INLINER TRANSPORT CONTAINER (Machine translation)

**Priority:** DE201920102702U 20190514

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | DE202019102702 U1  | 20190627         | DE201920102702U    | 20190514         |

**Probable Assignee:** BAHR ULRICH

**Assignee(s):(std):** BAHR ULRICH

**Assignee(s):** BAHR

**International class** B65D19/02 B65D77/06

(IPC 8-9):

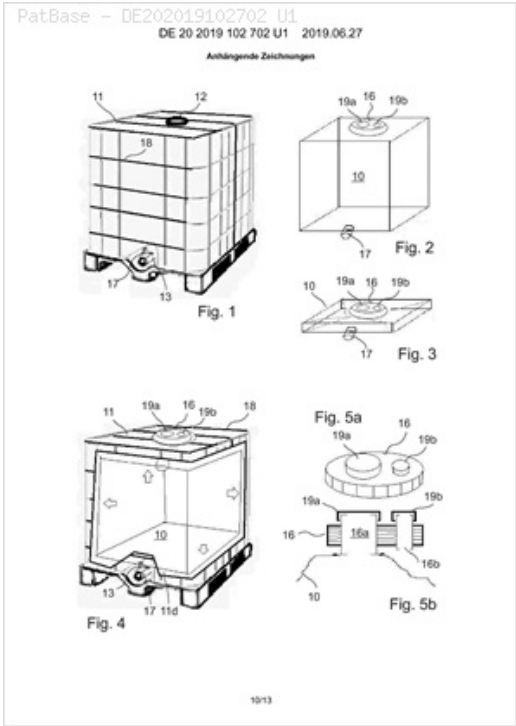
**CPC:** B65D77/061

[Classification Explorer](#)

**Cited documents:** DE202014105594 U, EP2964540 A1,

**Abstract:**

Source: DE202019102702 U1 **Machine translation:** Inliner (10) for receiving liquid or pasto esem cargo and adapted, for introduction through an opening (12) in a container wall (11a) of a transportation container (11), wherein the Inliner (10) comprises:- at least one adapter (14) for detachably mounting of the inliner (10) at the opening (12), wherein the adapter (14) for filling and/or draining of the inliner (10) through the adapter (14) and the opening (12) and adapted,- wherein the Inliner (10) and the adapter (14), a prefabricated composite form,- a purge aid in the Inliner (10) and (12) is fixable to the opening, wherein the evacuation aid degassing lance (15) which, for the degassing of the inliner (10) In the case of withdrawal of the inliner (10) from the transportation container (11) and adapted and, in the mounted state of a sealable opening (12), to the adapter (14), cover (16) is insertable, and with the environment of the transportation container (11) is in open communication.



14) Family number: 74781477 (DE202019102700 U1)

© PatBase

**Title:** INLINER AND EQUIPPED WITH AN INLINER TRANSPORT CONTAINER (Machine translation)

**Priority:** DE201920102700U 20190514

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | DE202019102700 U1  | 20190627         | DE201920102700U    | 20190514         |

**Probable Assignee:** BAHR ULRICH

**Assignee(s):(std):** BAHR ULRICH

**Assignee(s):** BAHR

**International class (IPC 8-9):** B65D19/02 B65D19/10 B65D77/06

**CPC:** B65D77/061

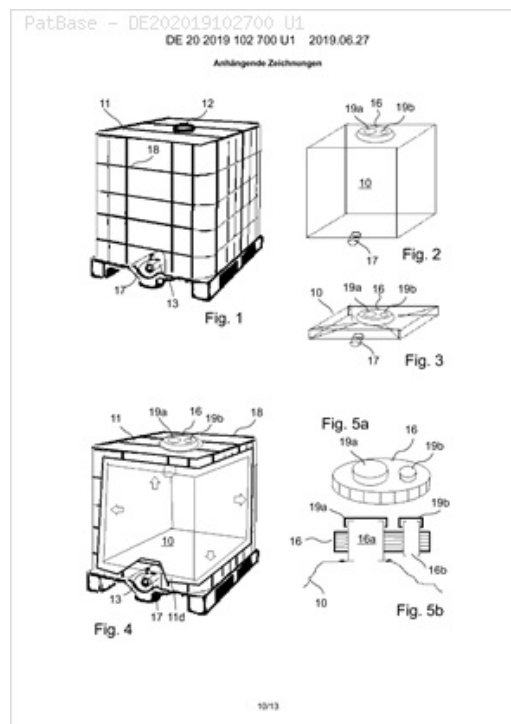
[Classification Explorer](#)

**Cited documents:** EP2964540 A1, DE202014105594 U,

**Forward Citations:** DE202020102645 U1

**Abstract:**

Source: DE202019102700 U1 **Machine translation:** Inliner (10) for receiving liquid or pasty cargo and adapted, for introduction through an opening (12) in a container wall (11a) of a transportation container (11), wherein the Inliner (10) comprises: - at least one adapter (14) for detachably mounting of the inliner (10) at the opening (12), wherein the adapter (14) and the opening (12) for filling and/or draining of the inliner (10) through the adapter (14) and the opening (12), wherein the inliner- are intended and suitable (10) and the adapter (14), a prefabricated composite form, characterized in that an adapter (14) cooperating with the cap (16) for releasable attachment of the inliner (10) at the opening (12) of the transportation container (11) is provided, which may include a plurality of lockable openings, at least one of which has a First opening (16a) (10a) with the interior of the inliner is in open communication (10) and at least further opening (16b) in the case of the terminal in the transportation container (11) to the interior space (11c) of the transportation container (11), (10) and the intermediate inliner transport container (11) is formed, in open communication.



**15) Family number: 56387082** (DE202012105050 U1)

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**Title:** CASES AND COMBUSTIBLE LIQUIDS filler neck (Machine translation)

**Priority:** DE201220105050U 20121221

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | DE202012105050 U1  | 20140328         | DE201220105050U    | 20121221         |

**Probable Assignee:** RIETBERGWERKE GMBH AND CO KG

**Assignee(s):(std):** RIETBERGWERKE GMBH AND CO KG

**International class (IPC 8-9):** B60K15/04 B65D90/00 B65D90/22

**CPC:** B65D90/22 B65D90/46 B65D90/54

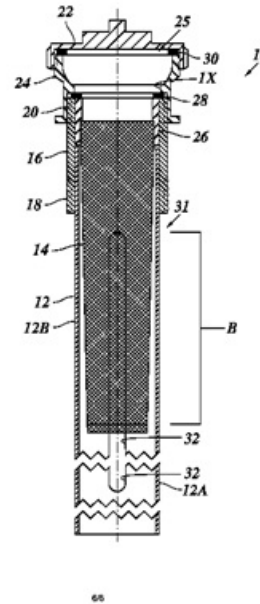
[Classification Explorer](#)

**Cited documents:** EP1462386 A1, US1974091 A, US2013092290 AA, DE205084 A, DE19511073 A1,

**Abstract:**

Source: DE202012105050 U1 **Machine translation:** Fueling point for vessels for flammable liquids, with a filling opening (25) having a wall structure (31) having a filling opening for (25) open portion of an interior of the filler neck (10) and laterally surrounds the bottom and a lower boundary of this open portion forms, with the wall structure (31) comprises at least one flame screen (14), and with an electrically conductive portion (12a) extending in its longitudinal extension of the filler neck (10) above the lower limit of the open portion extends past.

Fig. 1



66

**16) Family number: 53549630** (US2015239608 AA)

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**Title:** PALLET CONTAINER  
**Priority:** DE201220009327U 20120921 DE201320000624U 20130118 WO2013EP02753 20130913  
WO2013EP02764 20130913 EP20130765944 20130913 EP20130762751 20130913

| Family: | Publication number | Publication date | Application number | Application date |
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|         | AU2013320652 AA    | 20150409         | AU20130320652      | 20130913         |
|         | AU2013320652 BB    | 20160811         | AU20130320652      | 20130913         |
|         | AU2013320655 AA    | 20150409         | AU20130320655      | 20130913         |
|         | AU2013320655 BB    | 20170223         | AU20130320655      | 20130913         |
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|         | BR112015006168 B1  | 20210112         | BR20151106168      | 20130913         |
|         | BR112015006173 A2  | 20170704         | BR20151106173      | 20130913         |
|         | BR112015006173 B1  | 20201124         | BR20151106173      | 20130913         |
|         | CA2885586 AA       | 20150319         | CA20132885586      | 20130913         |
|         | CA2885586 C        | 20190827         | CA20132885586      | 20130913         |
|         | CA2885588 AA       | 20150319         | CA20132885588      | 20130913         |
|         | CA2885588 C        | 20190903         | CA20132885588      | 20130913         |
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|         | CN104936866 B      | 20171103         | CN201380060529     | 20130913         |
|         | CN104955740 A      | 20150930         | CN201380060559     | 20130913         |
|         | CN104955740 B      | 20170922         | CN201380060559     | 20130913         |
|         | DE112013004620 A5  | 20150603         | DE201311004620T    | 20130913         |
|         | DE112013004633 A5  | 20150625         | DE201311004633T    | 20130913         |
|         | DE202013000624 U1  | 20130307         | DE201320000624U    | 20130118         |
|         | DE502013005221 D1  | 20161215         | DE201350005221T    | 20130913         |
|         | DE502013005588 D1  | 20170112         | DE201350005588T    | 20130913         |
|         | DK2897882 T3       | 20170306         | DK20130762751T     | 20130913         |
|         | DK2897884 T3       | 20170206         | DK20130765944T     | 20130913         |
|         | EP2897882 A1       | 20150729         | EP20130762751      | 20130913         |
|         | EP2897882 B1       | 20161130         | EP20130762751      | 20130913         |
|         | EP2897884 A1       | 20150729         | EP20130765944      | 20130913         |
|         | EP2897884 B1       | 20161102         | EP20130765944      | 20130913         |
|         | ES2616433 T3       | 20170613         | ES20130762751T     | 20130913         |
|         | ES2610929 T3       | 20170504         | ES20130765944T     | 20130913         |
|         | HR20170065 T1      | 20170310         | HR20170000065      | 20170116         |
|         | HR20170235 T1      | 20170407         | HR20170000235      | 20170213         |
|         | HU031217 T2        | 20170728         | HU20130762751T     | 20130913         |
|         | HU030781 T2        | 20170628         | HU20130765944T     | 20130913         |
|         | ID201700489 A      | 20170203         | ID2015P0001646     | 20130913         |
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|         | IL237714 A0        | 20150531         | IL20130237714      | 20130913         |
|         | IL237714 A1        | 20200531         | IL20130237714      | 20130913         |
|         | IN02547DN2015 A    | 20150911         | IN2015DN02547      | 20150327         |
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|         | JP2015533734 T2    | 20151126         | JP20150532323T     | 20130913         |
|         | JP6223455 B2       | 20171101         | JP20150532323T     | 20130913         |

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| JP2015533736 T2   | 20151126 | JP20150532326T | 20130913 |
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| MX353013 B        | 20171218 | MX20150003615  | 20130913 |
| MX2015003617 A1   | 20150605 | MX20150003617  | 20130913 |
| MX355879 B        | 20180503 | MX20150003617  | 20130913 |
| MY167971 A        | 20181009 | MY20150700882  | 20130913 |
| PL2897882 T3      | 20170630 | PL20130762751T | 20130913 |
| PL2897884 T3      | 20170331 | PL20130765944T | 20130913 |
| RU2015114700 A    | 20161110 | RU20150114700  | 20130913 |
| RU2633243 C2      | 20171011 | RU20150114700  | 20130913 |
| RU2015114775 A    | 20161120 | RU20150114775  | 20130913 |
| RU2633232 C2      | 20171011 | RU20150114775  | 20130913 |
| SG11201501866Y A1 | 20150528 | SG20151101866  | 20130913 |
| SG11201502169P A1 | 20150528 | SG20151102169  | 20130913 |
| TR201701358 T4    | 20170221 | TR20170001358T | 20130913 |
| TR201702686 T4    | 20170321 | TR20170002686T | 20130913 |
| US2015246748 AA   | 20150903 | US20130430117  | 20130913 |
| US9394077 BB      | 20160719 | US20130430117  | 20130913 |
| US2015239608 AA   | 20150827 | US20130430132  | 20130913 |
| US9233777 BB      | 20160112 | US20130430132  | 20130913 |
| WO14044372 A1     | 20140327 | WO2013EP02753  | 20130913 |
| WO14044375 A1     | 20140327 | WO2013EP02764  | 20130913 |
| ZA201501727 A     | 20180926 | ZA20150001727  | 20150313 |
| ZA201501739 A     | 20170830 | ZA20150001739  | 20150313 |

**Probable Assignee:** MAUSER WERKE GMBH

**Assignee(s):(std):** MAUSER WERKE GMBH ; MAUZER VERKE GMBKH

**Assignee(s):** BISCHOFF SEBASTIAN ; WEYRAUCH DETLEV

**Inventor(s):(std):** BISCHOFF SEBASTIAN ; BISHOFF SEBASTYAN ; DETLEV WEYRAUCH ; SEBASTIAN BISCHOFF ; VEJRAUKH DETLEV ; WEYRAUCH DETLEV

**Agent(s):** FB RICE; FB RICE PTY LTD; GEORGE WIDJOJO AND PARTNERS; HENRY M FEIEREISEN LLC; LEHMANN MARIA ISABEL; MARKS AND CLERK; OOO YURIDICHESKAYA GORODISSKIJ I PARTNERY FA; REINHOLD COHN AND PARTNERS; TOLGA CAYLAK

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class (IPC 8-9):** B65D B65D19/00 B65D19/02 B65D19/06 B65D19/10 B65D19/38 B65D19/40 B65D19/44 B65D77/04 B65D88/12 B65D88/22

**CPC:** B65D19/06 B65D19/10 B65D19/385 B65D19/40 B65D19/44 B65D2213/02 B65D2519/00024 B65D2519/00059 B65D2519/00079 B65D2519/00094 B65D2519/00104 B65D2519/00164 B65D2519/00174 B65D2519/00273 B65D2519/00288 B65D2519/00333 B65D2519/00373 B65D2519/00407 B65D2519/00512 B65D2519/00552 B65D2519/00567 B65D2519/00572 B65D2519/0083 B65D77/0466 B65D2519/00378

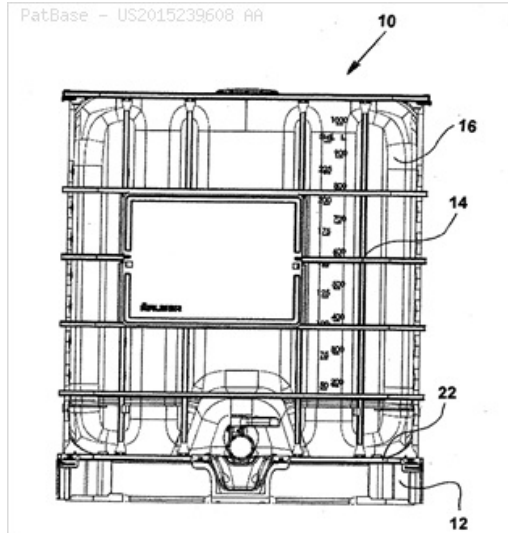
**US class:** 1/1 206/386 206/599

[Classification Explorer](#)

**Cited documents:** US7017499 BB, US6719164 BB, US6644220 BB, DE10060920 A1, CHEP2520512, US2012074138 AA, US2008257230 AA, US7908980 BB, US2004107879 AA, US2002112979 AA, US2002078558 AA, US8919562 BB, US8863978 BB, US8708150 BB, US8505721 BB, US2010200579 AA, US2009008397 AA, US7296374 BB, US2006011637 AA, EP2520512 A1, US2009152151 AA, US6293400 BA, US2007199845 AA, US2004195129 AA, EP1481918 A2, US5673630 A, RU2242413 C1, US5253777 A, DE202006001222 U, JP5077832, JP47034954 U, JP55115937 U, JP7329971, US5358137, EP0989071, JP47034954 U1, JP5077832 A2, JP7329971 A2, US5358137 A, JP6506901, JP55115937 U1, JP2009523674 T2, JP6506901 T2, JP2009523674, EP0989071 A1, EP2433880 A1, EP1481918 B1, EP1982924, EP1426299, DE4206945 A1, DE4108399 A1, EP0673846, DE202006001222 U1, EP1982924 A1, EP1426299 A1, EP0673846 A1, DE4108399 C1, DE10050920 A1, DE502004006297 D1, CN1231261 A, CN102159472 A, CN101857122 A, WO12085941 A1, DE4206945 C1, CN1509947 A, CN102442458 A, EP1232961 A1, US5738240 A, US2009000525 AA, JP6488496 B2, JP2017537038 T2, JP2019501084 T2, EP3400181 B1, US10464709 BB, WO17118599 A1, DE102016000072 A1, KR20160031950 A, KR101699169 B1, US10611547 BB, US2019382177 AA, US2018346220 AA, US10669087 BB, US10618715 BB, US10343831 BB, US2018186539 AA, US9931175 BB, JP2018527268 T2, US10144557 BB, KR101759026 B1, JP2019509225 T2, EP3231724 B1, EP3231724 A4, CN108473246 A,

#### Abstract:

A pallet container for storing and transporting liquid filling materials includes an exchangeable thin-walled inner container of thermoplastic, and a tubular lattice frame closely enclosing the inner container and made of vertical and horizontal tubular bars. The tubular lattice frame is fastened to the upper outer rim of a bottom pallet having a flat pallet top deck which includes a sheet-metal plate for supporting the inner container and a pallet substructure having four corner feet, four middle feet arranged there between, and a steel-tube base ring that is horizontally peripheral on the bottom side. The pallet substructure has four individual tube sections which extend diagonally directly beneath the metal plate and are each fastened to two adjacent middle feet to form a diamond-shaped supporting frame beneath the bottom plate. The tube sections are connected to base ring in an electrically conductive manner via corresponding screw connections.

**17) Family number: 72983215** (AU2018241046 BA)

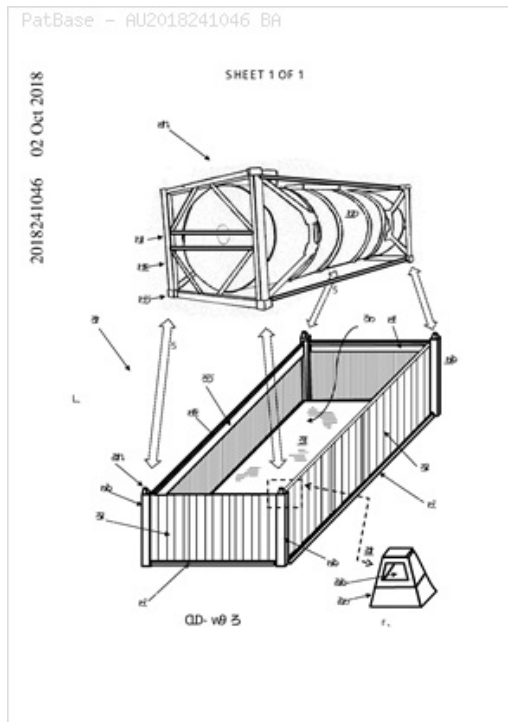
© PatBase

**Title:** CATCHMENT CONTAINER FOR AND METHOD OF CONTAINING ESCAPED CONTENTS**Priority:** AU20180901708 20180516**Family:**

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| <b>AU2018241046 BA</b> | 20190124         | AU20180241046      | 20181002         |

**Probable Assignee:** DIRECT LOGISTICS PTY LTD**Assignee(s):(std):** DIRECT LOGISTICS PTY LTD**Inventor(s):(std):** VELLA FRANK**Agent(s):** ASHBY KEVIN MR**International class**  
(IPC 8-9): B65D90/24**CPC:** Y02W30/80[Classification Explorer](#)**Cited documents:** US5323903 A,**Abstract:**

A relocatable reusable secondary containment device for supporting a tank container charged with a hazardous substance provides emergency containment for escaping tank contents in event of tank rupture or leakage, the device comprising a receptacle locatable beneath the tank container and having docking means on an upright wall that is adapted to support the container in releasable engagement.



**Title:** Bulk Goods Pack  
**Priority:** AU2001PR07236 20010816  
**Family:**

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| AU2001007236 A0        | 20010913         | AU2001PR07236      | 20010816         |
| <b>AU2002300607 AA</b> | 20030612         | AU20020300607      | 20020816         |

**Probable Assignee:** IBC MAN SYSTEM PTY LTD  
**Assignee(s):(std):** IBC MAN SYSTEM PTY LTD  
**Assignee(s):** HAZPAK PTY LTD ; IBC MANAGEMENT SYSTEM PTY LTD  
**Inventor(s):** ENGLISH NELSON  
**Agent(s):** SANDERCOCK AND COWIE  
**International class (IPC 8-9):** B65D19/06 B65D88/22 B65D90/02 B65D90/20

[Classification Explorer](#)

**Abstract:**

A pack for the carriage of bulk materials retains its shape so that 20 fit reliably in a freight container. The pack consists of a carton sleeve 4 which fits over a separate pallet 2 and a **flexible** bag 16 with lifting loops 20. The sleeve has reinforcement 6 and the bag also has reinforcement 36, 6 to resist bulging. The bag and the sleeve are connected together so that the bag and sleeve can be lifted at the user's premises as a pair from the underlying pallet. After the bottom of the bag is opened for discharge, the bag and sleeve are separated and collapsed for disposal or return. Copyright. All rights reserved. Sandercock Cowie 2002-08-16.A:\399ibc.complete.wpd,

**Title:** SUMP BASE DISPENSING SYSTEM FOR BULK BIN AND BAG COMBINATION  
**Priority:** US20150233613P 20150928 WO2016US53922 20160927 EP20160779271 20160927  
US20160277302 20160927

| Publication number     | Publication date | Application number | Application date |
|------------------------|------------------|--------------------|------------------|
| CA3000380 AA           | 20180328         | CA20163000380      | 20160927         |
| <b>CA3000380 C</b>     | 20190716         | CA20163000380      | 20160927         |
| DE602016032130 D1      | 20200409         | DE201660032130T    | 20160927         |
| <b>EP3356254 A1</b>    | 20180808         | EP20160779271      | 20160927         |
| <b>EP3356254 B1</b>    | 20200318         | EP20160779271      | 20160927         |
| ES2790529 T3           | 20201028         | ES20160779271T     | 20160927         |
| MX2018003915 A1        | 20180906         | MX20180003915      | 20160927         |
| <b>US10099913 BB</b>   | 20181016         | US20160277302      | 20160927         |
| <b>US2017088411 AA</b> | 20170330         | US20160277302      | 20160927         |
| <b>WO17058767 A1</b>   | 20170406         | WO2016US53922      | 20160927         |

**Probable Assignee:** INT PAPER CO  
**Assignee(s):(std):** INT PAPER CO  
**Assignee(s):** INT PAPER CO MEMPHIS ; OOSTVEEN ELMAR ; QBIG PACKAGING BV  
**Inventor(s):(std):** ELMAR OOSTVEEN ; OOSTVEEN ELMAR  
**Agent(s):** BARNES THOMAS W ET AL; GOWLING WLG CANADA LLP; JESUS ELADIO SANCHEZ SILVA; KUNZ HERBERT; WALLINGER RICKER SCHLOTTER TOSTMANN PATENT U RECHTSANWAELTE PARTNERSCHAFT MBB  
**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**International class (IPC 8-9):** B65D77/06 B67D3/00  
**CPC:** B65D77/061 B65D77/065 B67D3/0067  
**US class:** 1/1 222/105

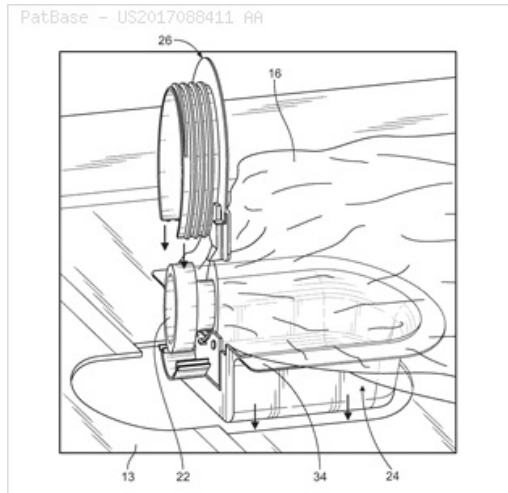
[Classification Explorer](#)

**Cited documents:** DE202014007695 U, US8002145 BB, US4850506 A, US2014231689 AA, US2012318824 AA, US2011017731 AA, US2006175385 AA, US2005040063 AA, US5813562 A, US4786192 A, US3448897 A, DE202014007695 U1

WO9324396 A1,  
**Forward Citations:** US2020062478 AA, US10597212 BB, US10822162 BB,

**Abstract:**

A sump base dispensing system for dispensing a flowable material includes a bulk bin container having a bottom wall and a plurality of upstanding side walls foldably joined to the bottom wall to form an interior space. One of the plurality of the side walls includes a dispensing opening. A cassette is configured to be disposed into the interior space bulk bin container and is positioned within the bottom wall of the bulk bin container. The cassette includes a product bag having a respective inlet and outlet ports used for respective filling and dispensing the flowable material from the product bag. A sump base dispensing apparatus is configured to be attached to the product bag via a dispensing fitment so as to assist in removing the flowable material residual through the dispensing fitment by gravity force.



## 20) Family number: 64626791 (US2017008697 AA)

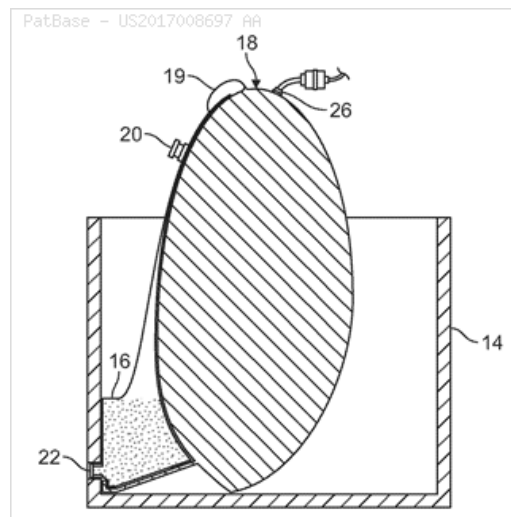
© PatBase

**Title:** SYSTEM FOR COMPLETE DISPENSING OF FLOWABLE MATERIALS FROM A BULK SHIPPING CONTAINER  
**Priority:** US20150190955P 20150710 WO2016US41441 20160708 US20160205103 20160708  
**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AR105259 AA        | 20170920         | AR2016P102034      | 20160705         |
| CA2993406 AA       | 20180122         | CA20162993406      | 20160708         |
| CA2993406 C        | 20190730         | CA20162993406      | 20160708         |
| US2017008697 AA    | 20170112         | US20160205103      | 20160708         |
| US9862540 BB       | 20180109         | US20160205103      | 20160708         |
| WO17011287 A1      | 20170119         | WO2016US41441      | 20160708         |

**Probable Assignee:** INT PAPER CO  
**Assignee(s):(std):** INT PAPER CO  
**Assignee(s):** GILLARD DAVID FREDERICK  
**Inventor(s):(std):** DAVID FREDERICK GILLARD ; GILLARD DAVID FREDERICK  
**Agent(s):** BARNES THOMAS W ET AL; GOWLING WLG CANADA LLP; MATTHEW M; THOMAS W  
**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW  
**International class** B65B69/00 B65D77/06 B65D83/00 B65D88/16 B65D88/62 B67D1/08 B67D7/02 B67D7/32  
**(IPC 8-9):**  
**CPC:** B65B69/005 B65D77/061 B65D77/067 B65D83/0072 B65D88/1612 B65D88/62 B67D2001/0828 B67D7/0244 B67D7/3254 B67D7/3263  
**US class:** 1/1 222/95  
[Classification Explorer](#)  
**Cited documents:** GB1241162 A, US2008310766 AA, US5335820 A, US2013292412 AA, US7954670 BB, US8141750 BB, US6481598 BA, US6427873 BB, US6234351 BA, US5096092 A, US4796788 A, US3294289 A, US2956839 A, US2001002675 AA,  
**Forward Citations:** US10822162 BB, WO19028218 A1, WO18217751 A1,

**Abstract:**  
The present invention is directed to a system for fully dispensing liquid from a bulk shipping container. The system includes a bulk bin and a cassette disposed therein. The cassette includes a cassette board, a liquid bag having inlet and outlet ports and an air inflated bag that is attached to the liquid bag. The air bag includes an air inlet port formed at one end thereof and used for inflating the air bag from a source of pressurized air. The air bag further includes an obstruction region defined by a weld line that is formed on an opposite end from the air inlet port to redirect the pressurized air within the air bag when inflating the air bag reaches a level at which the pressurized air counteract the liquid pressure within the liquid bag so as to urge the liquid toward the outlet port of the liquid bag.



## 21) Family number: 54982312 (US2013277364 AA)

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**Title:** COLLAPSIBLE CONTAINER  
**Priority:** US20120452240 20120420 CA20132810347 20130322 EP20130164625 20130422  
 EP20150187253 20130422

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | AR090734 AA        | 20141203         | AR2013P101276      | 20130418         |
|         | AU2013202079 AA    | 20131107         | AU20130202079      | 20130327         |
|         | BR102013007688 A2  | 20150804         | BR20131007688      | 20130328         |
|         | CA2810347 AA       | 20131020         | CA20132810347      | 20130322         |
|         | CN103373515 A      | 20131030         | CN201310139603     | 20130419         |
|         | CN103373515 B      | 20160420         | CN201310139603     | 20130419         |
|         | DE602013003949 D1  | 20160107         | DE201360003949T    | 20130422         |
|         | DE602013040695 D1  | 20180816         | DE201360040695T    | 20130422         |
|         | EP2653064 A1       | 20131023         | EP20130164625      | 20130422         |
|         | EP2653064 B1       | 20151125         | EP20130164625      | 20130422         |
|         | EP2997849 A1       | 20160323         | EP20150187253      | 20130422         |
|         | EP2997849 B1       | 20180718         | EP20150187253      | 20130422         |
|         | HU039565 T2        | 20190128         | HU20150187253T     | 20130422         |
|         | IN01002DE2013 A    | 20150206         | IN2013DE01002      | 20130403         |
|         | KR20130118814 A    | 20131030         | KR20130043406      | 20130419         |
|         | MX2013004113 A1    | 20140918         | MX20130004113      | 20130412         |
|         | MX337336 B         | 20160225         | MX20130004113      | 20130412         |
|         | MY164668 A         | 20180130         | MY20130700543      | 20130408         |
|         | PL2997849 T3       | 20181231         | PL20150187253T     | 20130422         |
|         | TR201514889 T4     | 20151221         | TR20150014889T     | 20130422         |
|         | TR201810323 T4     | 20180921         | TR20180010323T     | 20130422         |
|         | US2013277364 AA    | 20131024         | US20120452240      | 20120420         |
|         | US9044082 BB       | 20150602         | US20120452240      | 20120420         |

**Probable Assignee:** DART IND INC  
**Assignee(s):(std):** BAREA HECTOR J ; DART IND INC ; KUSUMA DAVID D ; TRUDEAU RAYMOND J  
**Assignee(s):** ALTER DOMUS US LLC ADMINISTRATIVE AGENT AS ; DART IND INC ORLANDO ; DART INDUSTRIES INC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS  
**Inventor(s):(std):** BAREA HECTOR J ; DAVID D KUSUMA ; HECTOR J BAREA ; KUSUMA DAVID D ; KUSUMA DAVID DAUD ; RAYMOND J TRUDEAU ; TRUDEAU RAYMOND J  
**Inventor(s):** BAREA HECTOR J ORLANDO ; KUSUMA DAVID D ORLANDO ; TRUDEAU RAYMOND J ST CLOUD  
**Agent(s):** BARTON MATTHEW THOMAS; BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB  
 PATENTANWALT RECHTSANWALTE; EVIN KAZMIRCI; GOWLING LAFLEUR HENDERSON LLP; HANDE MUMCUOGLU; PHILLIPS ORMONDE FITZPATRICK; TAYLOR J  
**Designated states:** AL AT BA 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  
**International class (IPC 8-9):** A45C7/00 A45F3/20 A47G19/22 A47G29/00 B29C45/14 B29C45/16 B29D B65D21/08 B65D35/00 B65D6/16 B65D8/14  
**CPC:** A45F2003/205 A45F3/20 B65D21/086  
**US class:** 1/1 220/8 264/250

[Classification Explorer](#)

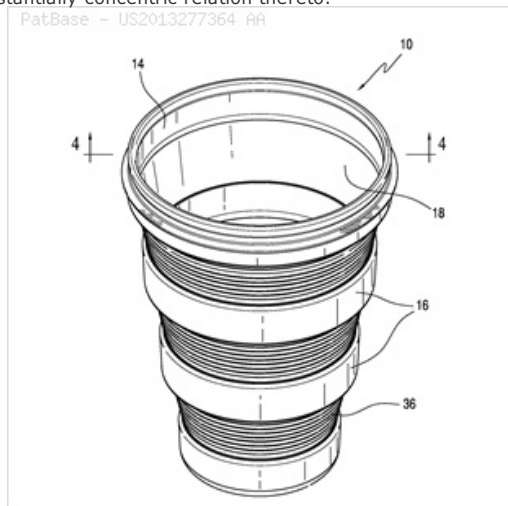
**Cited documents:** EP1972242 A3, US2012227860 AA, US2011248037 AA, US2010140279 AA, US2009183565 AA, US2009114657 AA, US2008099476 AA, US2006081555 AA, US2005127074 AA, US2005127073 AA, US2003230588 AA, US8313000 BA, US8061548 BA, US7866500 BA, US7678271 BB, USD607692 S1, USD580799 S1, USD550036 S1, USD507458 S1, USD483225 S1, US6554154 BA, US6520365 BB, USD441252 S1, US5669520 A, USD381559 S1, US5549213 A, US5384138 A, US5348173 A, USD347359 S1, US5002193 A, US4955493 A, US4930644 A, USD219475 S1, USD219473 S1, US3285459 A, US3220544 A, US3009603 A, US7350385 BA, US7815069 BA, US2009101641 AA, US2008135550 AA, US2004155038 AA, US2003183630 AA, US6612453 BB, US6616004 BA, US2003106895 AA, US6431393 BA, US1454388 A, US1233117 A, US216227 A, JP3054459 U, KR20030009023 A, US4953673 A, US2008164264 AA, US7654402, US5575398 A, US2880902 A, US7654402 BB, US5439128 A, EP1972242 A2, CN1095031, US20100183773, CN101268903, US5960983, FR1124843, US2010183773 AA,

FR1124843 A, US5960983 A, CN101268903 A, CN1095031 A,

**Forward Citations:** US10875076 BB, USD906056 S1, US2018199742 AA, USD903424 S1, USD894685 S1, US10513388 BB, US10507970 BB, US10479550 BB, USD850863 S1, US10196169 BB, US10167114 BB, USD825995 S1, US10029144 BB, USD818229 S1, USD817092 S1, US9926105 BB, USD805423 S1, USD796905 S1, US9723942 BB, US2016228741 AA, US2015251795 AA, USD747925 S1, US2015251808 AA, USD902656 S1, USD901253 S1, GB2569166 B2, USD895919 S1, USD895918 S1, USD895372 S1, USD883453 S1, US10611564 BA, USD871151 S1, USD867606 S1, USD861435 S1, US10408522 BB, US10390644 BA, US10363878 BA, USD854324 S1, USD853663 S1, GB2569166 A1, US10226108 BB, US10206468 BB, US10192462 BA, US10144332 BB, USD828068 S1, US2017258188 AA, US9752306 BB, US2017101769 AA, US2014224760 AA, USD779886 S1, US2015250277 AA, USD777520 S1, US2015253055 AA, USD748929 S1, US9221582 BB, USD731685 S1, USD731096 S1, US2015083736 AA, US2013264340 AA, WO16204343 A1, KR101649585 B1, RU179566 U1, US10421581 BB, EP2938549 B1, WO19005836 A1, CN107149359 A, CN109805688 A, CN106714640 A, CN106455537 A, CN107443768 A, CN107928056 A, CN106794920 A, CN104223690 B, CN104223690 A,

**Abstract:**

A collapsible container having a rigid base, a rigid top ring, and rigid intermediate rings extending therebetween. A **flexible** peripheral wall is intimately bonded to the base, top ring, and intermediate rings, to form wall sections having alternating sections of **flexible** material and **flexible** material intimately bonded to the intermediate rings, whereby the container is adjustable between an expanded position with the top ring spaced upward from said base and forming a container interior, and a collapsed position with said top ring surrounding said base in outwardly spaced substantially concentric relation thereto.



**22) Family number: 34486579** (WO07055692 A1)

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**Title:** CONTAINER FOR BULK HANDLING OF FLUIDS

**Priority:** WO2005US40753 20051110

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | WO07055692 A1      | 20070518         | WO2005US40753      | 20051110         |

**Probable Assignee:** DEADMON FRANKLIN

**Assignee(s):(std):** DEADMON FRANKLIN

**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

**International class**  
(IPC 8-9): B65D88/00

**CPC:** B65D2571/00111 B65D77/061

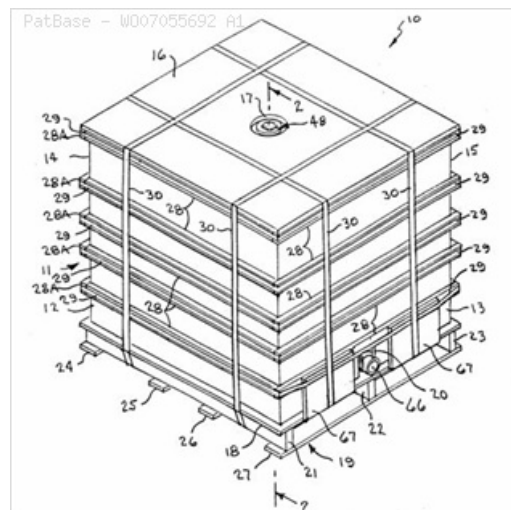
[Classification Explorer](#)

**Cited documents:** US5735429 A, US5356029 A, US5031792 A, US4706850 A,

**Forward Citations:** JP6622313 B2, CN106494777 B, EP3253676 B1, CN103395582 B, CN102459033 B, EP2440478 B1, CN106494777 A, JP2018503566 T2, WO16124267 A1, CN103395582 A, CN102459033 A, CH705673 A1, WO14199288 A1, WO14006444 A1, WO14006445 A1, WO10142856 A1,

**Abstract:**

A palletized shipping container (10) for bulk handling of fluid materials has a rigid box-like outer shell (11) within which is positioned a **flexible** bag (39) and an intermediate **corrugated** liner (33) sandwiched between the walls of the bag and shell. The bag has flaplike extensions (46) at an upper end attached to the walls of the shell to maintain the bag in an erect uncollapsed configuration, a non-removable bung (49) at its top end, and a non-removable discharge valve (66) adjacent its bottom end. The bung is releasably retained at the top of the liner to maintain the bung in a proper position and prevent sagging of the bag. An inwardly and downwardly angled cushioned surface (31,32) at the bottom of the shell supports the liner and bag, provides additional cushioning, facilitates emptying of the bag, and reduction of residual material. The pallet (19) allows 4-sided entry of fork lift forks.



### 23) Family number: 34029855 (US2007166436 AA)

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**Title:** FOOD PACKAGING  
**Priority:** GB20030014189 20030618 WO2004GB02611 20040618 EP20040253682 20040618  
**Family:**

| Publication number     | Publication date | Application number   | Application date |
|------------------------|------------------|----------------------|------------------|
| AT324260 E             | 20060515         | AT20040253682T       | 20040618         |
| AU2004249491 AA        | 20041229         | AU20040249491        | 20040618         |
| AU2004249491 BB        | 20080320         | AU20040249491        | 20040618         |
| BRPI0411457 A          | 20060718         | BR2004PI11457        | 20040618         |
| CA2529295 AA           | 20051214         | CA20042529295        | 20040618         |
| CA2529295 C            | 20090825         | CA20042529295        | 20040618         |
| CL2004001520 A1        | 20051216         | CL20040001520        | 20040618         |
| CN100503235 C          | 20090624         | CN200480016656       | 20040618         |
| CN1805848 A            | 20060719         | CN200480016656       | 20040618         |
| DE602004000736 D1      | 20060601         | DE200460000736T      | 20040618         |
| DE602004000736 T2      | 20070503         | DE200460000736T      | 20040618         |
| DK1488924 T3           | 20060724         | DK20040253682T       | 20040618         |
| EA009628 B1            | 20080228         | EA20050001779        | 20040618         |
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| EP1488924 A1           | 20041222         | EP20040253682        | 20040618         |
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| EP1736310 A1           | 20061227         | EP20060003750        | 20040618         |
| ES2263113 T3           | 20061201         | ES20040253682T       | 20040618         |
| GB200314189 A0         | 20030723         | GB20030014189        | 20030618         |
| IL171860 A1            | 20091224         | IL20040171860        | 20040618         |
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| NO20042582 A           | 20041220         | NO20040002582        | 20040618         |
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| WO04113072 A1          | 20041229         | WO2004GB02611        | 20040618         |

**Probable Assignee:** BOREALIS AG  
**Assignee(s):(std):** BOREALIS AG ; BOREALIS AS ; BOREALIS AS TOMMEN GRAM HOLDIN ; BOREALIS TECH OY ; BOREALIS TOMMEN GRAM HOLDIN AS ; KVAMME LARS I ; KVAMME LARS INGE ; MULLER FINN R ; MULLER FINN ROBERT ; TOMMEN GRAM HOLDING AS ; TOMMEN GRAM HOLDINGS AS  
**Assignee(s):** BOREALIS AS TOMMEN GRAM HOLDING AS ; BOREALIS TECHNOLOGY OY ; BOREALIS TOMMEN GRAM HOLDING AS  
**Inventor(s):(std):** INGE KVAMME LARS ; KVAMME LARS I ; KVAMME LARS INGE ; MACËLLER FINN ROBERT ; MUELLER FINN ROBERT ; MULLER FINN R ; MULLER FINN ROBERT ; ROBERT KVAMME LARS INGE MUELLE ; ROBERT MUELLER FINN ; ROBERT MULLER FINN  
**Inventor(s):** FINN ROBERT MUELLER ; FINN ROBERT MULLER ; KVAMME LARS ; KVAMME LARS INGE MUELLER FINN ROBERT ; LARS INGE KVAMME ; MULLER FINN  
**Agent(s):** BERESKIN AND PARR LLP SENCRL SRL; GRIFFITH HACK; OHLANDT GREELEY RUGGIERO AND PERLE LLP; REINHOLD COHN AND PARTNERS; SARGENT  
**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU

ZA ZM ZW

**International class (IPC 8-9):** B32B27/32 B65D85/72 B65D85/78

**International class (IPC 1-7):** B32B27/32

**CPC:** B32B2323/043 B32B2323/10 B32B2439/70 B32B27/08 B32B27/32

**US class:** 426/132

[Classification Explorer](#)

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**Forward Citations:** CN104802485 A, CN102001207 A, CN107709011 B, US10569516 BB, EP3302974 B1, CN107709011 A, TWI657982 B, EP2836085 B1, JP5953968 B2, US2014255657 AA, WO16200363 A1, CN105150648 A, JP2015504687 T2, JP2013018547 A2, WO13112203 A1, CN104203009 A, US9802393 BB, US9169366 BB, WO09086604 A1, US10322567 BB, EP2554374 B1, EP1941999 B2, US9403347 BB, EP1941998 B2, WO08086294 A3, US9139709 BB, FR3007319 A1, US8759448 BB, US8686323 BB, US8674024 BB, US8461280 BB, WO13019848 A1, WO13017615 A1, WO08086294 A2, EP2554375 A1, EP2554374 A1, EP1941999 A1, US7919738 BB, US7812293 BB, RU2670886 C9, RU2670886 C1, CN106553417 B, CN102159396 A, CN106553417 A, CN103043299 A, CN103043300 A, CN103732400 B, CN103732400 A, CN103043299 B, CN103043300 B,

**Abstract:**  
The use of a polyolefin film comprising a polypropylene polymer and a polyethylene polymer for the packaging of fresh produce.



24) Family number: 19123227 (US4729505 A) © PatBase

**Title:** HEAVY-DUTY SHIPPING CONTAINER FOR FLOWABLE BULK MATERIALS

**Priority:** US19850807974 19851212 US19850080794 19851212 CA19860511856 19860618  
US19860930813 19861113 EP19870900498 19861205 WO1986US02645 19861205

| Family: | Publication number | Publication date | Application number | Application date |
|---------|--------------------|------------------|--------------------|------------------|
|         | AT55342 E          | 19900815         | AT19860900498T     | 19861205         |
|         | AU198659124 A1     | 19870618         | AU19860059124      | 19860620         |
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|         | AU582940 B2        | 19890413         | AU19870067750      | 19861205         |
|         | BRPI8604000 A      | 19870630         | BR1986PI04000      | 19860822         |
|         | BRPI8607077 A      | 19880119         | BR1986PI07077      | 19861205         |
|         | CA1268431 A1       | 19900501         | CA19860511856      | 19860618         |
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|         | DE3673414 D1       | 19900913         | DE19863673414T     | 19861205         |
|         | DK595786 A         | 19870613         | DK19860005957      | 19861211         |
|         | DK595786 A0        | 19861211         | DK19860005957      | 19861211         |
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| NO862873 A0     | 19860716 | NO19860002873  | 19860716 |
| NO862873 L      | 19870615 | NO19860002873  | 19860716 |
| NO170678 B      | 19920810 | NO19870003355  | 19870811 |
| NO170678 C      | 19921125 | NO19870003355  | 19870811 |
| NO873355 A      | 19870811 | NO19870003355  | 19870811 |
| NO873355 A0     | 19870811 | NO19870003355  | 19870811 |
| NO873355 L      | 19870811 | NO19870003355  | 19870811 |
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| US4729505 A     | 19880308 | US19860930813  | 19861113 |
| WO8703558 A1    | 19870618 | WO1986US02645  | 19861205 |

**Probable Assignee:** WEYERHAEUSER CO

**Assignee(s):(std):** ST REGIS PACKAGING LIMITED ; ST REGIS PACKAGING LTD ; TRI WALL INT CO LTD ; TRI WALL INT LTD ; TRI WALL INTERNATIONAL CO LTD ; TRI WALL INTERNATIONAL LTD ; WELLHOUSER CORP ; WEYERHAEUSER CO ; WEYERHAEUSER COMPANY

**Assignee(s):** NUGENT JOHN F ; REMAKS WILLIAM J ; TORAI UOORU INTERN LTD ; TRI WALL INT CO ; VISY BOARD PROPERTIES PTY LTD ; WEYERHAEUSER CO A CORP OF WA ; WEYERHAEUSER CO LOUISVILLE KY US

**Inventor(s):(std):** JIYON EFU NUJIENTO ; JOHN NUGENT ; NAGENT WILLIAM J RIMAKES JOHAN ; NEUGENT JOHN F ; NUGENT F ; NUGENT J F ; NUGENT JOHN F ; REMAKE WILLIAM J ; REMAKS J ; REMAKS W J ; REMAKS WILLIAM J ; REMARKS WILLIAM J ; UIRIAMU JIEI REMATSUKUSU ; WILLIAM EMARKS

**Inventor(s):** EMARKS WILLIAM ; JOHN F NUGENT ; NUGENT JOHN ; NUJIENTO JON EFU ; REMAKUSU UIRIAMU JEI ; WILLIAM J REMAKS ; WILLIAM J REMARKS ; WILLIAM J RIMAKES JOHAN F NAGENT

**Agent(s):** ASPEN PHARMA PTY LTD; RIDOUT AND MAYBEE LLP; SPRUSON AND FERGUSON

**Designated states:** AT AU BE BR CH DE DK FR GB IT JP KR LI LU NL NO SE

**International class (IPC 8-9):** B65D B65D3/00 B65D3/22 B65D5/00 B65D5/02 B65D5/12 B65D5/35 B65D5/40 B65D5/44 B65D5/56 B65D5/58 B65D77/06

**International class (IPC 1-7):** B65D19/20 B65D3/22 B65D5/00 B65D5/02 B65D5/12 B65D5/32 B65D5/35 B65D5/40 B65D5/44 B65D5/56 B65D5/58 B65D5/60 B65D6/02 B65D6/10 B65D6/14 B65D6/16 B65D77/04 B65D77/06 B65D8/06 B65D81/02 B65D88/00 B65D88/02 B65D88/12 B65D88/22 B65D88/52 B65D90/04

**CPC:** B65D5/566 B65D77/062 Y10S229/919

**US class:** 220/441 229/109 229/122.27 229/193 229/23R 229/4.5 229/41C 229/919

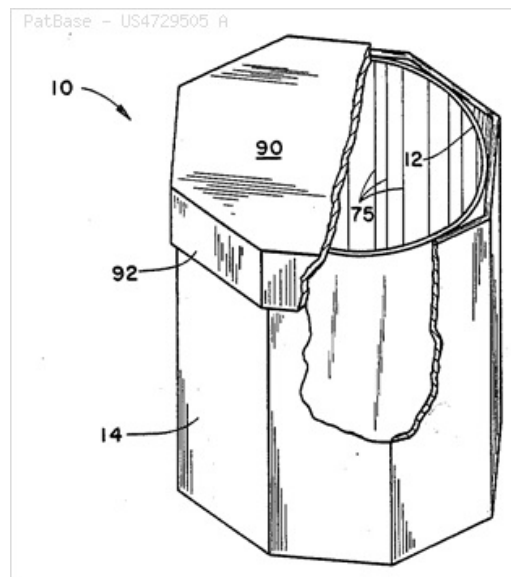
[Classification Explorer](#)

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**Forward Citations:** US9669982 BB, EP2900571 A4, US9284088 BB, US7975905 BB, US9114927 BB, TR27546 A, FR2652065 A1, EP0487156 A1, US5702052 A, US5282544 A, USD380153 S1, USD893997 S1, US10532854 BB, US10273070 BB, US10173801 BB, US2009271969 AA, US2010065466 AA, US2008257769 AA, US2008067181 AA, US2006181112 AA, US2006137560 AA, US2006043771 AA, US2011315749 AA, US5244108 A, US5353982 A, US5743422 A, US6575629 BA, US8016113 BB, US8006386 BB, US5683525 A, US5492747 A, EP0723920 A1, US7654390 BB, WO9745326 A1, US4901885 A, US4881683 A, US6516965 BA, US5630543 A, US5069359 A, US4890787 A, US4890873 A, US4850506 A, USD443760 S1, KR100778827 B1, KR101855699 B1, JP4097019 U1, JP6100043 A2, WO9803404 A1, DE20117512 U1, CN103946131 B, CN102730261 A, CN103946131 A,

#### Abstract:

A heavy-duty shipping container for bulk flowable materials is constructed with an inner tubular sleeve of substantially circular cross section and an outer sleeve of polygonal cross section; the inner and outer sleeves are composed of multi-wall **corrugated** fibreboard, each designed to accommodate and support a portion of the stacking load of a like heavy-duty shipping container; the inner sleeve being supported by a support pad initially with its upper edge extended outwardly of the upper edge of the outer sleeve; and the support pad being deformable to allow the inner sleeve to displace into the outer sleeve so that both upper edges are in the same horizontal plane after the application of a predetermined pressure of the inner sleeve.



## 25) Family number: 43825368 (EP2108598 A1)

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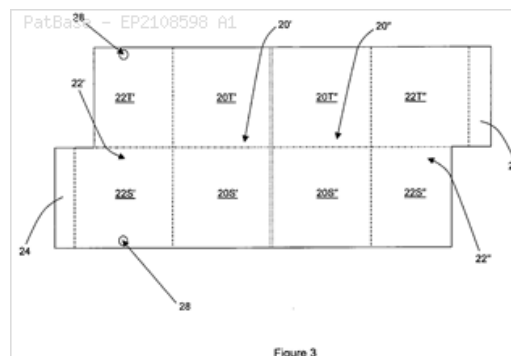
**Title:** BAG-IN-BOX PACKAGING SYSTEM FOR BULK FLOWABLE MATERIALS  
**Priority:** EP20080251361 20080408  
**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| EP2108598 A1       | 20091014         | EP20080251361      | 20080408         |

**Probable Assignee:** DLC DEVELOPMENTS LTD  
**Assignee(s):(std):** DLC DEVELOPMENTS LTD  
**Assignee(s):** DLC DEVELOPMENTS LIMITED  
**Inventor(s):(std):** STANLEY ROY MEAKINS  
**Agent(s):** MILLBURN JULIE ELIZABETH  
**Designated states:** AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR  
**International class** B65D5/02 B65D5/36 B65D5/56 B65D77/04 B65D77/06  
**(IPC 8-9):**  
**CPC:** B65D5/0281 B65D5/3621 B65D5/566 B65D77/061 B65D77/062  
[Classification Explorer](#)  
**Cited documents:** US5788121 A, US4863021 A, US4091923 A, US4087041 A, US2007095712 AA,

### Abstract:

A bag-in-box packaging system for bulk flowable materials comprising: a collapsible rigid outer carton of generally rectangular or square cross-section formed from non-laminated **corrugated** board, the rigid outer carton having four hingedly connected side walls (2S,4S,6S,8S); a collapsible reinforcing inner sleeve formed from non-laminated **corrugated** board within the rigid outer carton, the reinforcing inner sleeve having four hingedly connected panels (20',20'',22',22'';30',30'',32'32'') each with two section (20S',20T',20S'',...) to be doubled over at a central fold line to form an inner and an outer layer of four superimposed sections each, within and adjacent the four side walls (2S,4S,6S,8S) of the collapsible rigid carton, and a **flexible** inner liner within the rigid outer carton and the reinforcing inner sleeve, wherein the reinforcing inner sleeve comprises a first and a second flap (24,34;26,36) hingedly connected to opposite and sections (22S',22T''), corresponding end sections (22S'',22T'') being shorter than said opposite end sections.



## 26) Family number: 28329877 (US2002139702 AA)

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**Title:** MODULAR PALLET AND BULK BAG COMBINATION INCORPORATING SAME  
**Priority:** US20010824544 20010402 WO2002US09683 20020328  
**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| US20010824544      | 20010402         | WO2002US09683      | 20020328         |

|                        |          |               |          |
|------------------------|----------|---------------|----------|
| AU2002254429 AA        | 20021015 | AU20020254429 | 20020328 |
| <b>US2002139702 AA</b> | 20021003 | US20010824544 | 20010402 |
| <b>WO02079042 A2</b>   | 20021010 | WO2002US09683 | 20020328 |
| WO02079042 A3          | 20021212 | WO2002US09683 | 20020328 |

**Probable Assignee:** CABOT CORP  
**Assignee(s):(std):** CABOT CORP  
**Assignee(s):** GREENE STEVEN L  
**Inventor(s):(std):** GREENE STEVEN L  
**Inventor(s):** STEVEN L GREENE  
**Designated states:** AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

**International class (IPC 8-9):** B65D71/00 B65D88/00 B65D88/16

**International class (IPC 1-7):** B65D19/00 B65D33/14 B65D77/06

**CPC:** B65D2571/00055 B65D2571/00098 B65D2588/165 B65D71/0096 B65D88/16 B65D88/1687

**US class:** 206/386 383/24 383/245

[Classification Explorer](#)

**Cited documents:** US5746343 A, US5333757 A, US6000549 A, WO9737908 A1, US4054223 A,

**Forward Citations:** US2005173280 AA, US2005017000 AA, CN101966880 A, US7513365 BB, US6926144 BA,

#### Abstract:

The present invention provides a modular pallet having a guide channel-defining portion configured for defining at least one guide channel. A bottom wall at least partially defines the guide channel and includes at least one opening therethrough. The opening is adapted to receive therein a corresponding lift strap of a bulk bag such that the lift strap defines a loop in at least one guide channel. The modular pallet further comprises an insert member configured to be inserted into at least one guide channel for engaging the loop of the lift strap thereby fastening the bulk bag to the modular pallet for forming a bulk bag combination. The insert member is configured for engagement by a lifting device for lifting and maneuvering the bulk bag combination.

