A container system (10) comprising a first half-shell (20) having a top-side and a bottom-side connected by side-walls (50); a second half-shell (30) having a top-side and a bottom-side connected by side-walls (50); a hinge mechanism (60) coupling the top-side of the first half-shell (20) to the top-side of the second half-shell (30), wherein the first half-shell (20) and the second half-shell (30) are operable to rotate with respect to one another between an open position and a closed position and the first half-shell (20) mates with the second half-shell (30) in the closed position and forms a substantially enclosed internal cavity; a locking mechanism (70) operable to lock the first and second half-shells (20,30) in the closed position; and at least one access point disposed in the first or second half-shells (20,30) that provides access to the internal cavity.
SPLIT SKIP CONTAINER

FIELD OF THE DISCLOSURE

The present invention relates to a container system for the collection of various items, including recyclable materials and/or garbage.

BACKGROUND

A growing and developing society as well as a society that is fully mature uses a large amount of natural resources. Some of these natural resources are renewable and some are not. Therefore, as a society recycling is becoming more and more popular. Particularly in countries that have limited resources. An example of natural resources that are used in today's society are water, trees and clean air. Some version of these natural resources are used in the production of almost all of the consumables that we use in today's society. While some of these resources are renewable, they require a number of years to renew. Other natural resources are not renewable. An example of a non-renewable resource would be oil and gas. These resources are also often used in the production of consumable products.

Recycling is a popular means of trying to reuse the consumable products that already exist and keep these products from ending up in landfills. Additionally, it allows the manufacturers to reuse the materials and not have to use more natural resources to remake the same products. While not all products are recyclable there are a number of products that are recyclable.

Recycling a largely dependent upon the ease of being able to recycle. For example, when a large group of people live together in a common place such as an apartment complex or a condominium is provides a larger audience for recycling. By placing recycling bins in an areas with a large audience, it is more cost efficient to recycle. While some cities encourage recycling it is much less efficient than places like apartment complexes. When you look at the number of individual homes that recycle and the amount of effort it takes for an individual home to recycle, the number of people recycling per capita decreases. First of all, the need for an individual to
have a number of different recycling bins proves to be problematic just based on storage space. Assuming that the city in which you live offers recycling, they do not always provide recycling containers. Not all cities actually offer recycling and not all collection agencies actually collect and keep recycling separated.

The current method for collection of these types of resources are either wheelies or skips. The wheelies are commonly used for homes or businesses. The skips are larger and hold between four and sixteen yards of refuse. With these types of collection devices, it is necessary to empty them wherein you experience spillage.
SUMMARY OF THE DISCLOSURE

In one embodiment the split skip would be a container operable for the collection of items.

In another embodiment the split skip would comprise two half-shells.

In yet another embodiment each of the half-shells would comprise a top side and a bottom side connected by sidewalls.

In another embodiment the top side of the half-shells would comprise a hinge mechanism.

In yet another embodiment the two half-shells operate independently to rotate between an open and closed position.

In another embodiment when the first and second half-shells mate the form an enclosed internal cavity.

In another embodiment the container would comprise a locking mechanism to lock the first half-shell and the second half-shell together when in a closed position.

In yet another embodiment the first half-shell and the second half-shell would substantially seal the internal cavity when in the closed position.

In still another embodiment the first and second half-shells are reinforced.

In yet another embodiment the first and second half-shells are comprised of a thermoplastic.

In another embodiment the container comprises a frame outwardly disposed from the first and second half-shells, operable to provide structural support to the first and second half-shells.

In yet another embodiment the frame would be comprised of metal.

In still another embodiment the container comprises an A-frame lift mechanism.

In yet another embodiment the A-frame lift mechanism operates to open and close the first and second half-shells.

In another embodiment the A-frame lift mechanism is attached to the container by a hinge mechanism.
In another embodiment the A-frame lift mechanism operates to lift the container for transportation.

In another embodiment the container comprises an access point.

In still another embodiment the access point contains a lockable hatch.

In another embodiment the container comprises a liner disposed on the inner side of the first and second half-shells and functions to seal the cavity.

Still other advantages of various embodiments will become apparent to those skilled in this art from the following description wherein there is shown and described preferred embodiments of this invention simply for the purposes of illustration. As will be realized, the invention is capable of other different aspects and embodiments without departing from the scope of the invention. Accordingly, the advantages, drawings, and descriptions are illustrative in nature and not restrictive in nature.
BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the split skip container; and
FIG. 2 is an end view of the split skip container showing the hydraulic A-
Frame carrier.
DETAILED DESCRIPTION OF THE DRAWINGS

In the following detailed description of the preferred embodiments, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration specific preferred embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that logical, mechanical and electrical changes may be made without departing from the spirit or scope of the invention. To avoid detail not necessary to enable those skilled in the art to practice the invention, the description may omit certain information known to those skilled in the art. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined only by the appended claims.

FIG. 1 depicts a slip skip container 10 operable to collect items. The container 10 comprises a first half-shell 20, a second half-shell 30, frame 40, sidewalls 50, a hinge mechanism 60, a locking mechanism 70, and a hydraulic A-Frame lift mechanism 80. The sidewalls 50 are attached to a frame 40. The frame 40 can be constructed of various materials including steel, aluminum or even a heavy plastic. The sidewalls 50 create a first half-shell 20 and a second half-shell 30. The sidewalls 50 are reinforced to provide extra support for the first half-shell 20 and the second half-shell 30 since these are the supporting elements for the collection of items. The sidewalls 50 can be constructed of a number of different types of materials, including polyethylene, polypropylene and other similar thermoplastic materials. The hinge mechanism 60 which operates to allow the first half-shell 20 and the second half-shell 30 to rotate between an open and closed position should be produced from a non-corrosive, durable strong metal. During the open position, the container 10 operates to collect items. Such items may include refuse for purposes of taking to a landfill or may include items that are recycleable. Because the split skip container 10 is designed to collect more the and current wheelies or skips, it reduces the number of trips to the landfill and/or recycling center. Additionally, the first half-shell 20 and the second half-shell 30 rotate by way of the hinge mechanism 60 to allow the entire
split skip container 10 to be open for purposes of collecting items and then closed and sealed along the point where the first half-shell 20 and the second half-shell 30 come together. When a liner is used in conjunction with the split skip container 10, the split skip container 10 is essentially sealed and will not allow leakage in the closed position. The liner could be constructed of a polyethylene material. Once the first half-shell 20 and the second half-shell 30 are in the closed position, the locking mechanism 70 is used to lock the first half-shell 20 and the second half-shell 30 into a closed position.

FIG. 2 is an end view of the split skip container 10 when it is attached to the hydraulic A-Frame lift mechanism 80. The split skip container 10 is locked into the closed position by the locking mechanism 80. The hydraulic A-Frame lift mechanism would then operate to move the split skip container 10 from one place to another. For example, in a factory, you may want to move the split skip container 10 from one part of the factory to another part of the factory. By attaching the hydraulic A-Frame lift mechanism 90 to the split skip container 10, the split skip container 10 can be carried or wheeled to the new location. Once the first half-shell 20 and the second half-shell 30 are locked into place with the locking mechanism 70, the split skip container 10 is essentially sealed and allows the split skip container 10 to be moved without leakage. For example, if the split skip container 10 is being taken to the landfill or recycling center, it would not be leaking on the highway.

Although an embodiment of the present invention has been shown and described in detail herein, along with certain variants thereof, many other varied embodiments that incorporate the teachings of the invention may be easily constructed by those skilled in the art. Accordingly, the present invention is not intended to be limited to the specific form set forth herein, but on the contrary, it is intended to cover such alternatives, modifications, and equivalents, as can be reasonably included within the spirit and scope of the invention.
What is claimed:

1. A container system comprising:
   - a first half-shell having a top-side and a bottom-side connected by side-walls;
   - a second half-shell having a top-side and a bottom-side connected by side-walls;
   - a hinge mechanism coupling the top-side of the first half-shell to the top-side of the second half-shell, wherein the first half-shell and the second half-shell are operable to rotate with respect to one another between an open position and a closed position and the first half-shell mates with the second half-shell in the closed position and forms a substantially enclosed internal cavity;
   - a locking mechanism operable to lock the first and second half-shells in the closed position; and
   - at least one access point disposed in the first or second half-shells that provides access to the internal cavity.

2. The container system of Claim 1, wherein the first and second half-shells are reinforced to provide additional support.

3. The container system of Claim 1, further comprising a liner disposed on an inner side of the first and second half-shells, and operable to substantially seal the first half-shell and second half-shell when in the closed position.

4. The container system of Claim 1, further comprising a frame outwardly disposed from the first and second half-shells, operable to provide structural support to the first and second half-shells.

5. The container system of Claim 1, further comprising a seal operable to seal the first half-shell to the second half-shell along the bottom-side.
6. The container system of Claim 1, further comprising an A-frame lift mechanism operable to rotate the first and second half-shells.

7. The container system of Claim 6, wherein the A-frame lift mechanism also operates to open and close the half-shells.

8. The container system of Claim 1, further comprising a metal frame wherein the sidewalls are attached.

9. The container system of Claim 1, further comprising attachment brackets coupled to the hinge mechanism, wherein the attachment brackets are operable to attach to a hydraulic A-frame lift mechanism.

10. The container system of Claim 1, wherein the hydraulic A-frame lift mechanism operates to lift the container for transportation.

11. The container of Claim 1, wherein the access point comprises a lockable hatch.
12. A container system comprising:
   a first half-shell having a top-side and a bottom-side connected by side-walls;
   a second-half shell having a top-side and a bottom-side connected by side-walls;
   a hinge mechanism coupling the top-side of the first half-shell to the top-side of the second half-shell, wherein the first half-shell and the second half-shell are operable to rotate with respect to one another between an open position and a closed position and the first half-shell mates with the second half-shell in the closed position and forms a substantially enclosed internal cavity; wherein the first half-shell and the second half-shell are sealed with is the closed position;
   a locking mechanism operable to lock the first and second half-shells in the closed position; and
   at least one access point disposed in the first or second half-shells that provides access to the internal cavity, wherein the access point comprises a lockable hatch.

13. The container system of Claim 12, further comprising a liner disposed on the inner side of the first half-shell and the second-half shell operable to seal the cavity.

14. The container system of Claim 12, wherein the liner is comprised of polyethylene.

15. The container system of Claim 12, further comprises a hydraulic A-frame lift mechanism operable for movement of the container.

16. The container system of Claim 12, wherein the first half-shell and the second half-shell are comprised of a thermoplastic.
17. A container system for the collection of refuse comprising:
   a first half-shell having a top-side and a bottom-side connected by side-walls;
   a second half-shell having a top-side and a bottom-side connected by side-walls; wherein said first and second half-shells are comprised of a thermoplastic.
   a metal frame connecting the thermoplastic sidewalls;
   a hinge mechanism coupling the top-side of the first half-shell to the top-side of the second half-shell, and wherein the first half-shell and the second half-shell are operable to rotate with respect to one another between an open position and a closed position and the first half-shell mates with the second half-shell in the closed position and forms a substantially enclosed internal cavity;
   a locking mechanism operable to lock the first and second half-shells in the closed position;
   a seal operable to seal the first half-shell and the second half-shell when in the closed position;
   a hydraulic A-frame lift mechanism operable to move the container; and
   at least one access point disposed in the first or second half-shells that provides access to the internal cavity.

18. A container of Claim 17, comprising a liner operable to seal the inner cavity; wherein said liner is comprised of polyethylene.
**INTERNATIONAL SEARCH REPORT**

**PCT/IB2005/002745**

**A CLASSIFICATION OF SUBJECT MATTER**

INV. B65F1/12  B65D88/58
ADD. B65F1/02  B65F1/14

According to International Patent Classification (IPC) into both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

B65F  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 practical search terms used)

EPO-Internal  , PAJ

**C DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
</tr>
</thead>
</table>
| X        | FR 2 758 802 A (J. DALLET)  
page 4, line 24 - page 7, line 6  
figures 1-6 | 1,2,4,8 |
| X        | PATENT ABSTRACTS OF JAPAN  
vol. 2000, no. 21,  
3 August 2001 (2001-08-03)  
-6 JP 2001 114389 A (KANEOKA HIDEYUKI),  
24 April 2001 (2001-04-24)  
abstract | 1,2,4,8 |
| Y        | DE 42 20 558 A (RUHRKOHLE AG)  
5 January 1994 (1994-01-05)  
column 2, line 45 - column 3, line 15  
figures 1,2 | 5,12,16,17 |

Further documents are listed in the continuation of Box C

See patent family annex

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Name and mailing address of the ISA/  
European Patent Office, P B 5818 Patentlaan 2  
NL-2280  DV Rijswijk  
Tel (+31-70) 340-2040  
Fax (+31-70) 340-3016

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<table>
<thead>
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<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
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<tbody>
<tr>
<td></td>
<td>page 4, line 8 - page 5, line 7 figures 1-6</td>
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<tr>
<td>X</td>
<td>DE 82 863 C (C. HEER) 4 September 1895 (1895-09-04)</td>
<td>1</td>
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<tr>
<td>A</td>
<td>the whole document</td>
<td>11,12,17</td>
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<tr>
<td>A</td>
<td>US 1 220 640 A (W. KELLY) 27 March 1917 (1917-03-27)</td>
<td></td>
</tr>
<tr>
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<td>Patent family member(s)</td>
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<td>FR 2758802</td>
<td>31-07-1998</td>
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<td>DE 4220558</td>
<td>05-01-1994</td>
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<tr>
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