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**APPLICATION NUMBER: 60/532,293**

**FILING DATE: *December 23, 2003***

**RELATED PCT APPLICATION NUMBER: *PCT/US04/43505***



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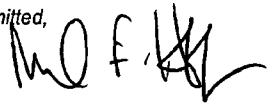
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PTO/SB/16 (5-03)  
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**PROVISIONAL APPLICATION FOR PATENT COVER SHEET**  
This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

| INVENTOR(S)   |   |   |  |
|---|---|---|--|
| Given Name (first and middle [if any])  | Family Name or Surname  | Residence<br>(City and either State or Foreign Country) |  |
| Thomas  | West  | Greenfield Center, NY                                   |  |
| <input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto                   |   |   |  |
| TITLE OF THE INVENTION (280 characters max)   |   |   |  |
| CARDBOARD LIFT VAN SYSTEM   |   |   |  |
| Direct all correspondence to: <b>CORRESPONDENCE ADDRESS</b>   |   |   |  |
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| ENCLOSED APPLICATION PARTS (check all that apply)   |   |   |  |
| <input checked="" type="checkbox"/> Specification   | Number of Pages   | <input type="text" value="6"/>                          | <input type="checkbox"/> CD(s), Number   |
| <input checked="" type="checkbox"/> Drawing(s)  | Number of Sheets  | <input type="text" value="7"/>                          | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Application Data Sheet.  | See 37 CFR 1.76   |   |  |
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| <input checked="" type="checkbox"/>   | A check or money order is enclosed to cover the filing fees   | FILING FEE AMOUNT (\$)                                  |  |
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| <input checked="" type="checkbox"/>   | No.   |   |  |
| <input type="checkbox"/>  | Yes, the name of the U.S. Government agency and the Government contract number are: _____                   |   |  |

Respectfully submitted,  
SIGNATURE 

Date

TYPED or PRINTED NAME **Michael F. Hoffman-**  
TELEPHONE **(518) 449-0044**

REGISTRATION NO.   
(if appropriate)  
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| <b>CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)</b> |  | Docket No. |
| Applicant(s): Thomas West                                     |  | NORA-0003  |

|                   |                         |                 |                       |
|-------------------|-------------------------|-----------------|-----------------------|
| Serial No.<br>N/A | Filing Date<br>Herewith | Examiner<br>N/A | Group Art Unit<br>N/A |
|-------------------|-------------------------|-----------------|-----------------------|

Invention: **CARDBOARD LIFT VAN SYSTEM**

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# **CARDBOARD LIFT VAN SYSTEM**

## **BACKGROUND OF THE INVENTION**

### **1. Technical Field**

The present invention relates generally to cardboard packaging, and relates more specifically to a cardboard lift van system.

### **2. Related Art**

Lift vans are widely utilized in the moving and transportation industries as containers for storage, packaging, and transport. Lift vans provide a relatively large (e.g., LWH of 88" x 45" x 88") uniform sized container in which items can be easily stored and moved. Because of their uniform dimensions, the containers can be easily placed on pallets (or incorporate a pallet) that allow the container to be moved with a forklift.

Most prior art lift vans are constructed from plywood. Accordingly, constructing, packaging and moving the lift vans involve costly operations. Also, some countries are beginning to place restrictions on the import of plywood.

Prior art cardboard lift vans have been utilized, however, their designs require many different cardboard parts that are expensive and complicated to manufacture. Assembly of the prior art designs is also complicated.

Accordingly, a need exists for a simple to manufacture and assemble cardboard lift van system.

### **SUMMARY OF THE INVENTION**

The present invention provide a cardboard lift van system that includes:

- (1) A top and bottom cap, each comprising a folded sheet of cardboard, wherein each folded sheet has substantially the same design specifications;
- (2) Side walls comprising two sheets of cardboard, wherein each sheet has substantially the same design specifications; and
- (3) A cardboard pallet, wherein the pallet can be snapped into a lip of either the top or bottom pallet.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 depicts an isometric view of a cardboard lift van system in a collapsed state in accordance with the present invention.

Figure 2 depicts an isometric view of a bottom of the cardboard lift van system of Figure 1 with the pallet being installed.

Figure 3 depicts an isometric view of a bottom of the cardboard lift van system of Figure 1 with a first part of a sidewall installed and an end flap folded down for loading.

Figure 4 depicts an isometric view of an erected cardboard lift van system in a completed state in accordance with the present invention.

Figure 5 is design schematic of a top and bottom cap.

Figure 6 is a design schematic of a cardboard sidewall part.

Figure 7 is a design schematic of a cardboard pallet design.

## **DETAILED DESCRIPTION OF THE INVENTION**

Figures 1-7 depict an embodiment of the invention. Figure 1 depicts an isometric view of a cardboard lift van container in a collapsed state, suitable for storage and transport. As can be seen, the interlocking flaps of the top and bottom caps allow the container to be easily secured in a collapsed state, thereby obviating the need for any additional part to secure the top and bottom caps. Note that the top and bottom caps comprise the same design specifications - i.e., they are interchangeable and thus comprise the same (or substantially the same) part. See Figure 5, which shows a design schematic of a top and bottom cap.

Figure 2 depicts an isometric view of a bottom of the cardboard lift van system of Figure 1 with a cardboard pallet being installed. As can be seen, the pallet can snap into a lip of the bottom cap thereby obviating the need for any additional part to secure the pallet. Figure 7 depicts a design schematic of a cardboard pallet design.

Figure 3 depicts an isometric view of the container with a first part of a sidewall installed and an end flap folded down for loading. The flaps can be releaseably secured

into a folded portion of the bottom cap, thereby obviating the need for any additional part to secure/release the end flap.

Figure 4 depicts an isometric view of a completed cardboard lift van system in an erected state with both sidewall parts installed and the top cap installed. Note that both sidewall parts overlap with each other. Note also that both sidewall parts comprise the same design specifications - i.e., they are interchangeable and thus comprise the same (or substantially the same) part. See Figure 6, which shows a design schematic of a cardboard sidewall part.

The foregoing description of the preferred embodiments of the invention has been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise form disclosed, and obviously many modifications and variations are possible in light of the above teachings. Such modifications and variations that are apparent to a person skilled in the art are intended to be included within the scope of this invention as defined by the accompanying claims.



## CLAIMS

1. A cardboard lift van system that includes:

(1) A top and bottom cap, each comprising a folded sheet of cardboard, wherein each folded sheet has substantially the same design specifications;

(2) Side walls comprising two sheets of cardboard, wherein each sheet has substantially the same design specifications; and

(3) A cardboard pallet, wherein the pallet can be snapped into a lip of either the top or bottom pallet.

2. The cardboard lift van system of claim 1, wherein the top and bottom caps include nesting flaps that interlocks the top and bottom caps when the lift van system is in a collapsed state.

3. The cardboard lift van system of claim 1, wherein the top and bottom caps each includes a drop down wall having flaps that are releaseably securable with a fold of the cap.

## **CARDBOARD LIFT VAN SYSTEM**

### **ABSTRACT**

A cardboard lift van system that includes: (1) A top and bottom cap, each comprising a folded sheet of cardboard, wherein each folded sheet has substantially the same design specifications; (2) Side walls comprising two sheets of cardboard, wherein each sheet has substantially the same design specifications; and (3) A cardboard pallet, wherein the pallet can be snapped into a lip of either the top or bottom pallet.

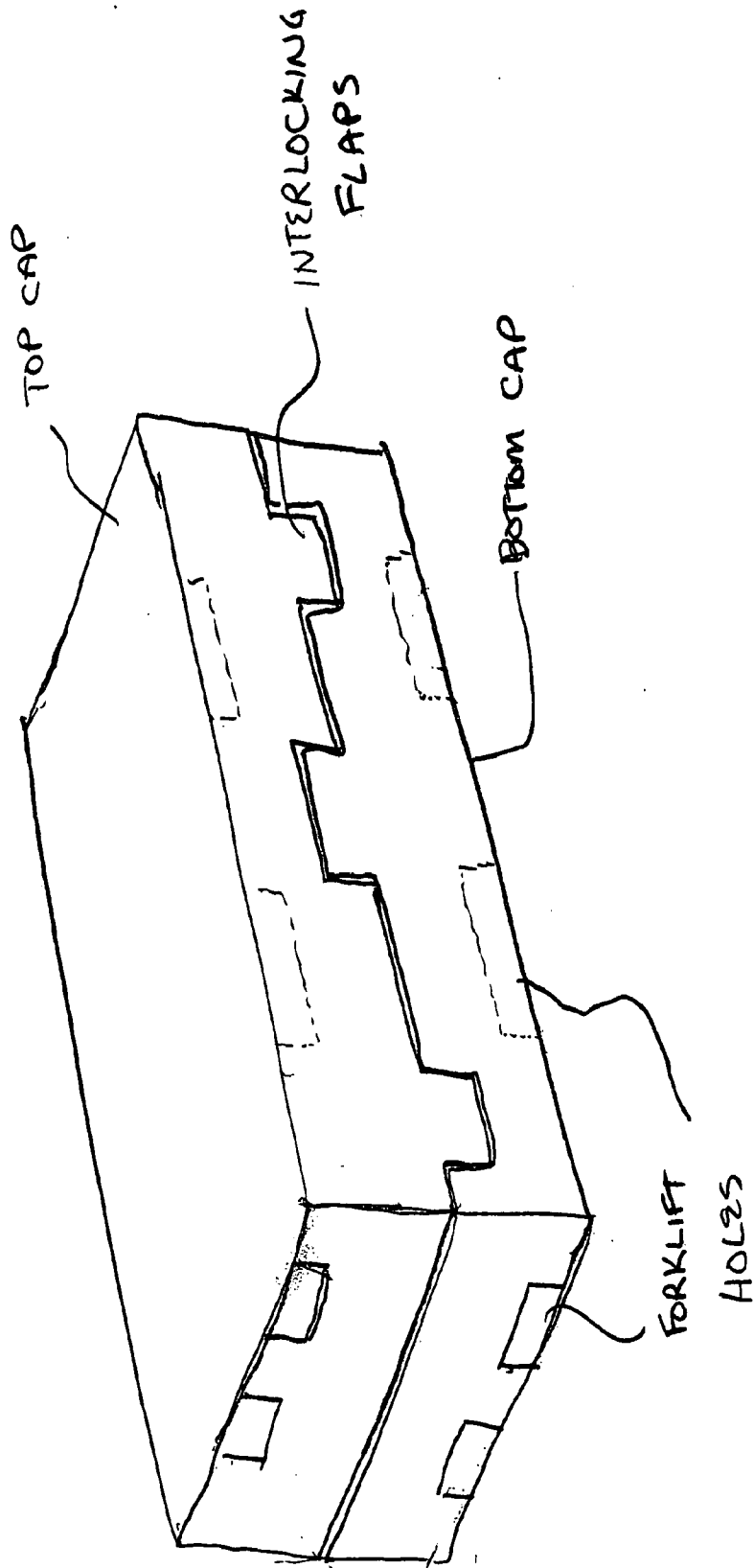


FIG. 1

COLLAPSED STATE

- [SIDE WALL] & PALLET → STORED WITHIN PARTS

FIG. 2

• PALLET EDGES  
SNAPS INTO  
LIP

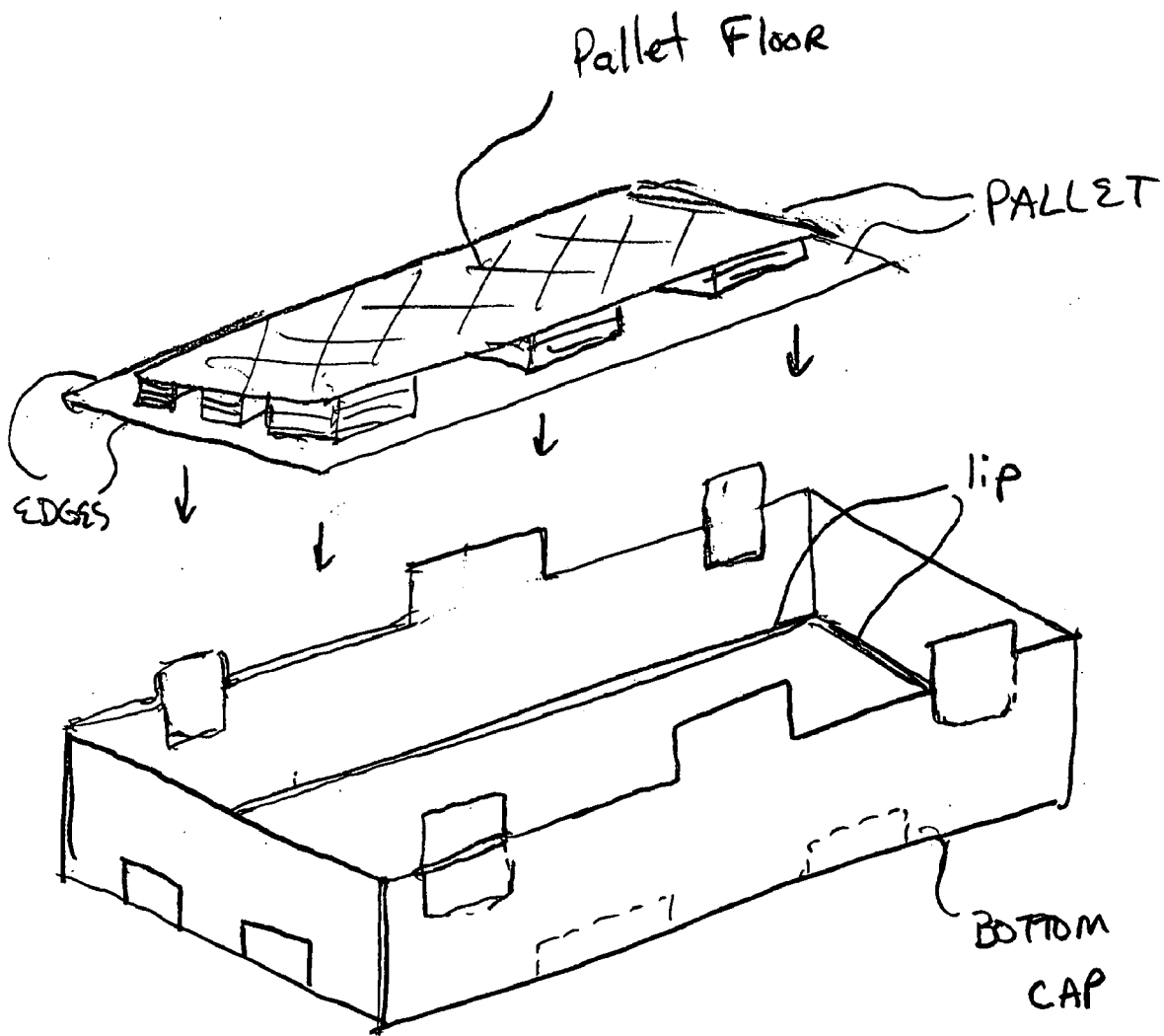


FIG. 3

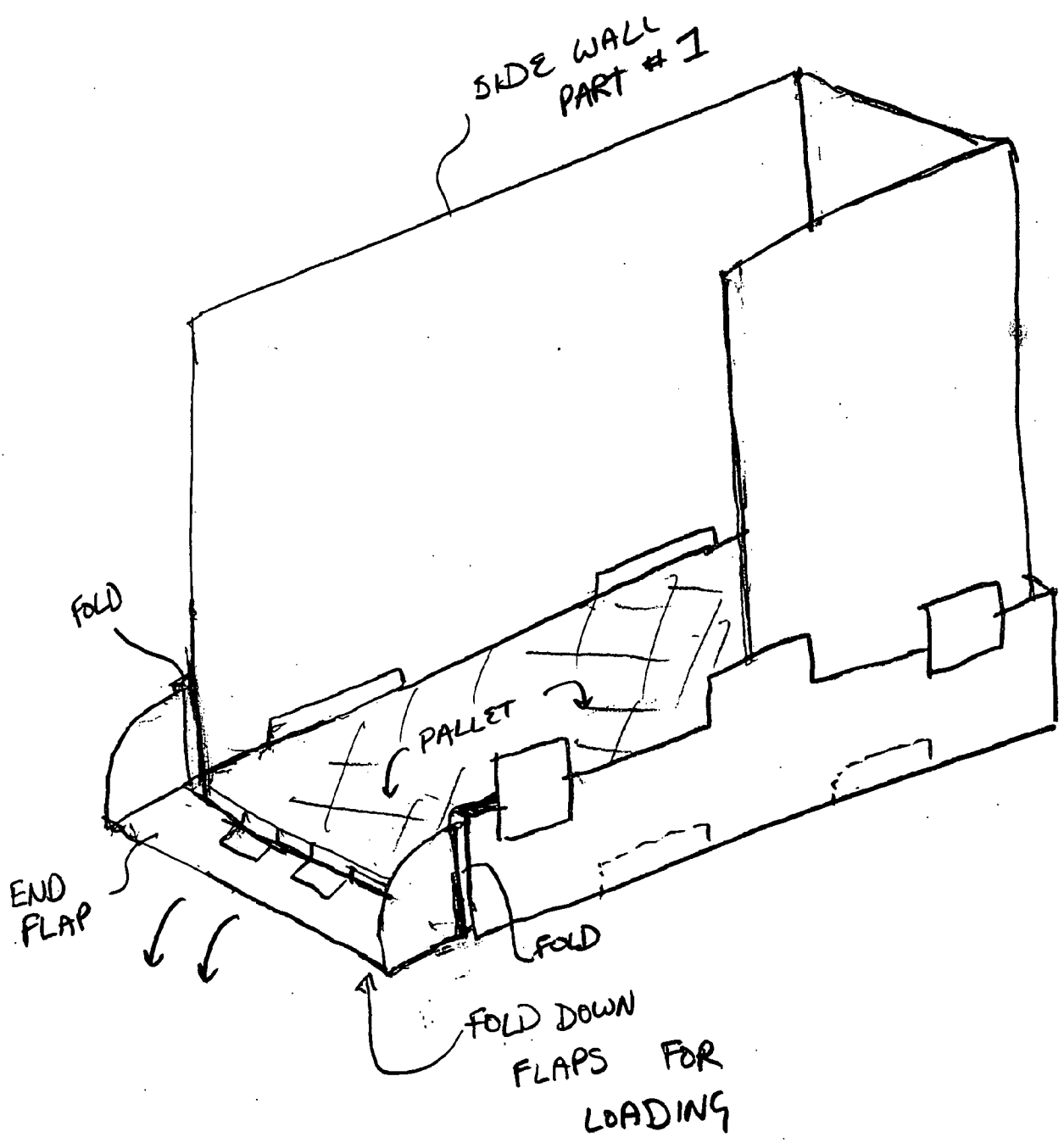


FIG. 4

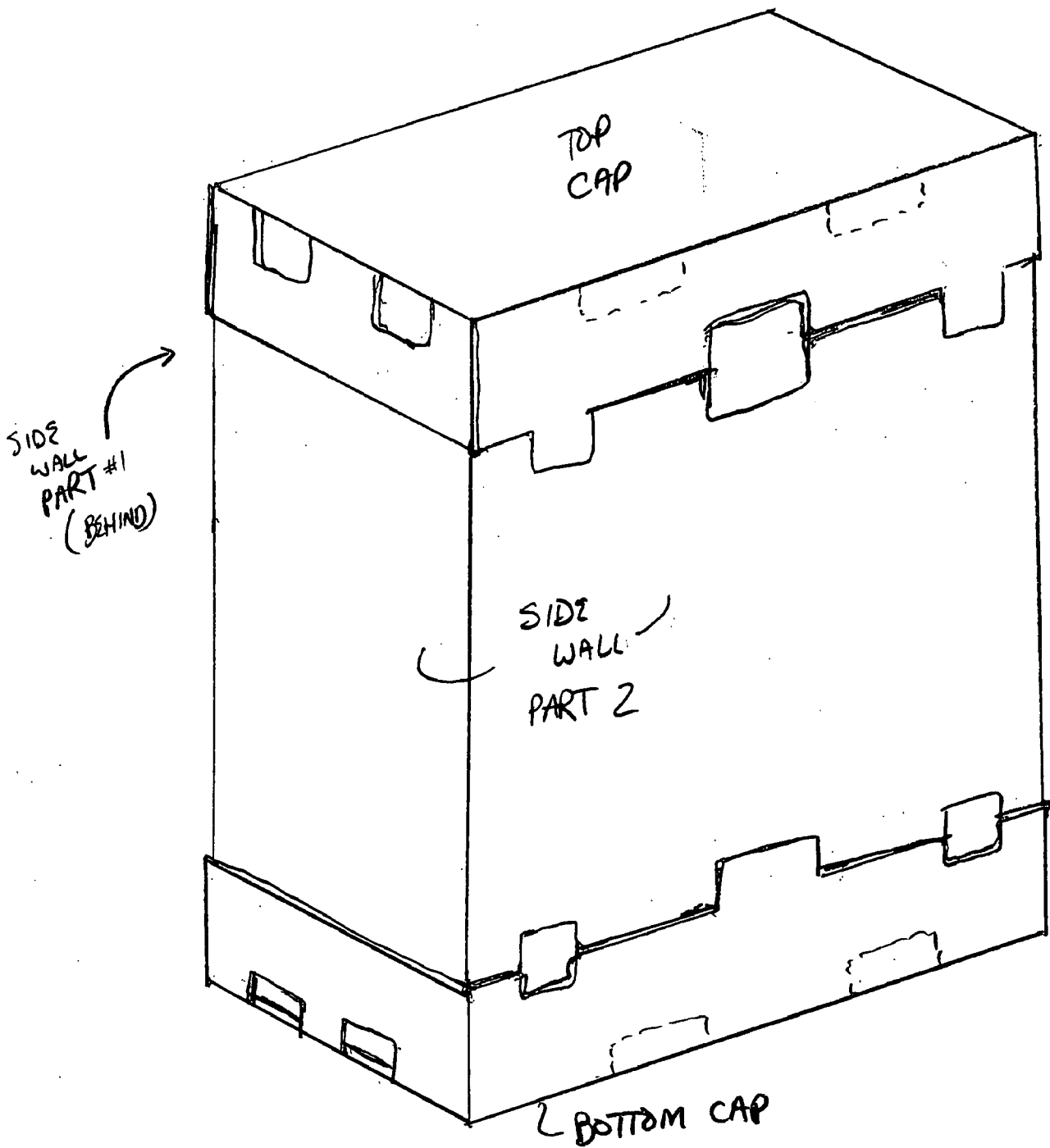
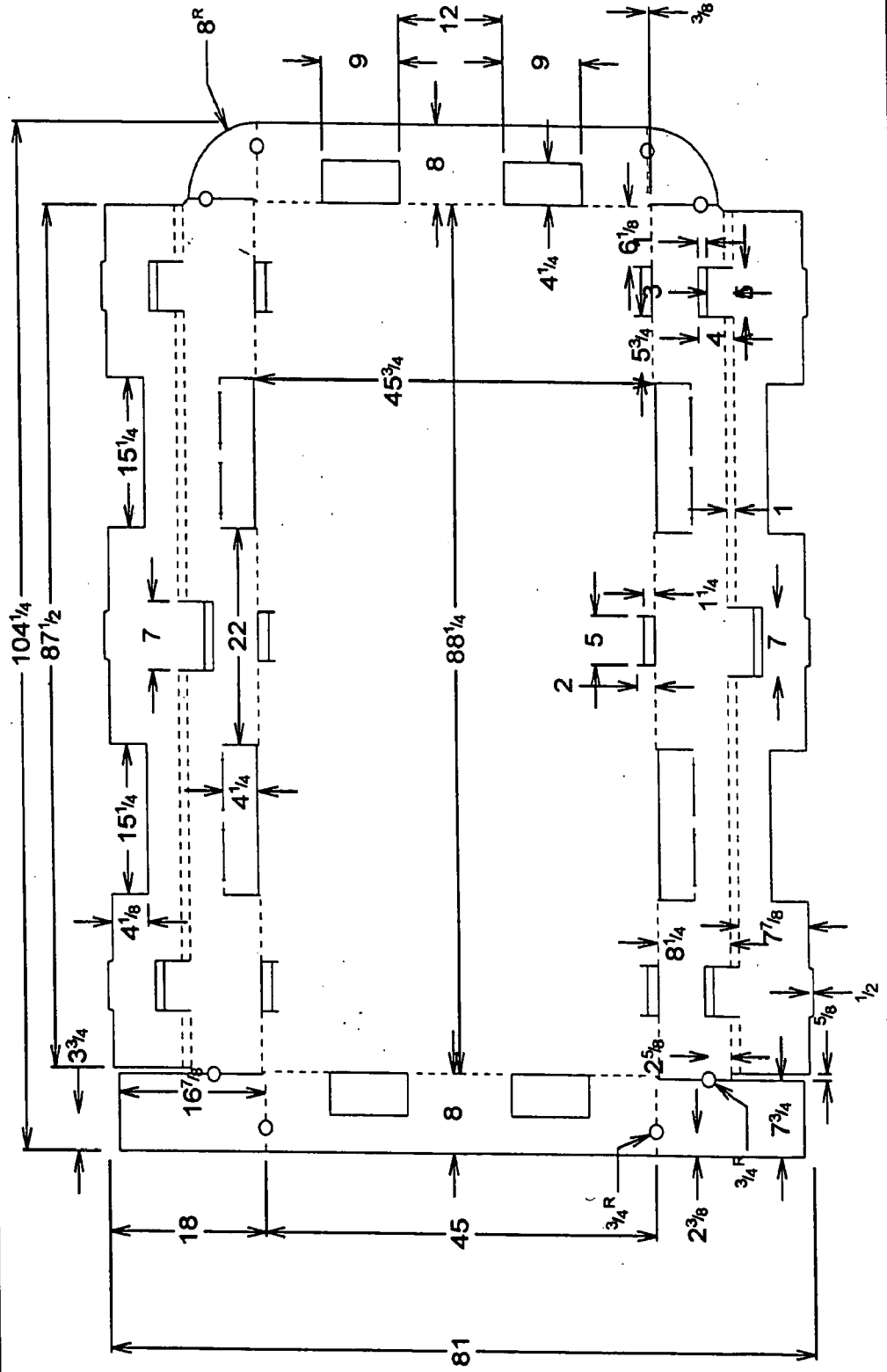


FIG. 5

|                             |   |                     |               |
|-----------------------------|---|---------------------|---------------|
| Customer: VICTORY PACKAGING | Board: E86AA  | Date: 12/10/2003    | Rev: 0        |
| Ident: CORRcrate base/cover | Market:   | Corr Dir.: vertical | View: outside |
| File Name: sche1082.ARD     | I.D.: $87\frac{3}{4} \times 43\frac{1}{4} \times 8$ | Sq. Feet: 58.64     | Designer:     |
| Project #:                  | Blank Size: $81 \times 104\frac{1}{4}$              |                     |               |
| Notes:                      | Style:  |                     |               |



# FIG. 6

Customer: VICTORY PACKAGING

Ident: CORRcrat body

File Name: SCHE1095.ARD

Project #:

Notes:

Board: E120CAA

Market:

I.D.: 86 x 41 x 83

Blank Size: 83 x 169 1/2

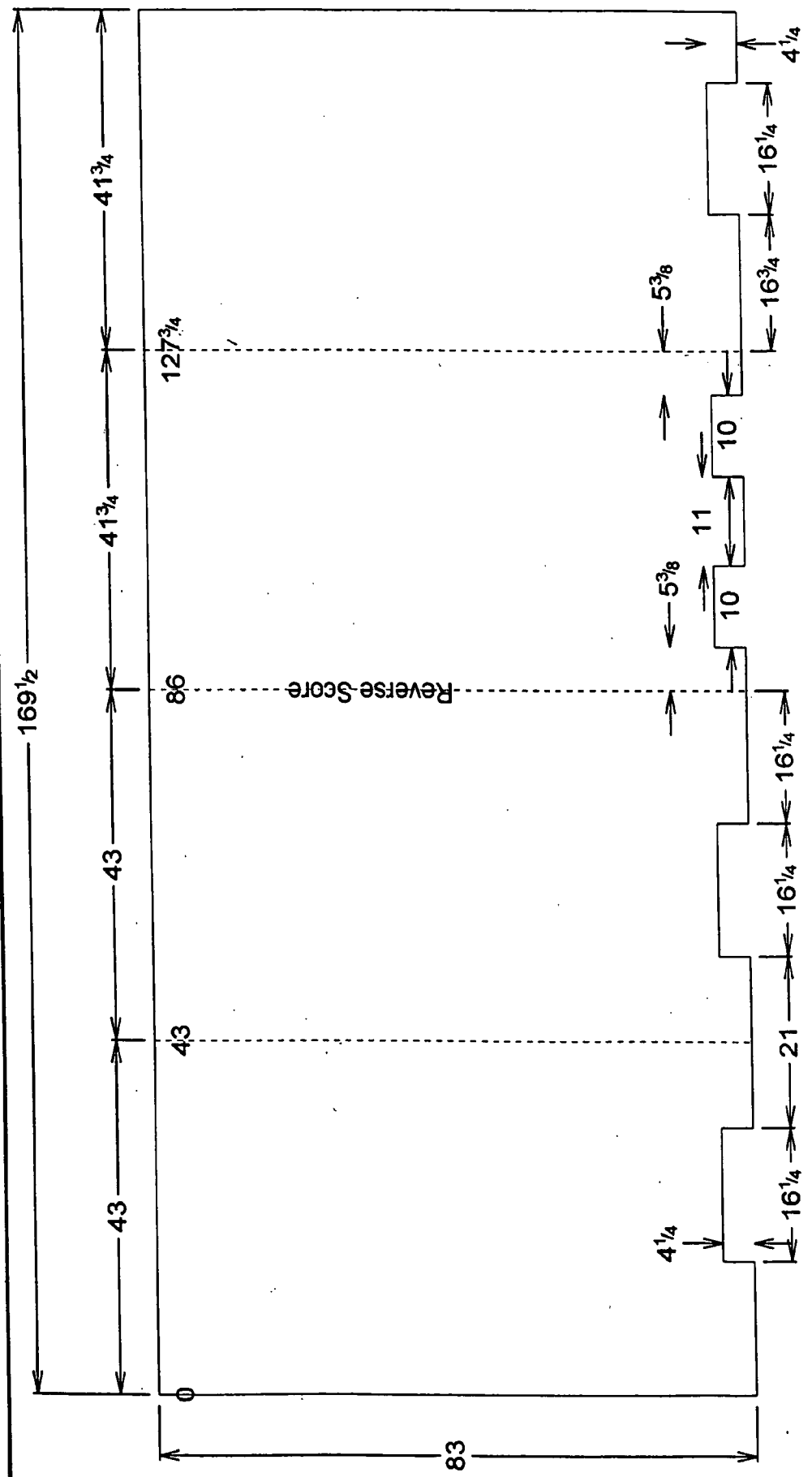
Style:

Date: 12/16/2003 Rev: 0

Corr Dir.: vertical View: outside

Sq. Feet: 97.7

Designer:





# FIG. 7

|                                |                            |                       |               |
|--------------------------------|----------------------------|-----------------------|---------------|
| Customer: Norampac/Schenectady | Board: ECT 112/1300 CAA    | Date: 12/16/2003      | Rev: 0        |
| Ident: Pallet                  | Market:                    | Corr Dir.: horizontal | View: outside |
| File Name: sche1073.ARD        | I.D.: 86 x 40 x 4          | Sq. Feet: 32.62       |               |
| Project #:                     | Blank Size: 87½ x 53 17/16 | Designer:             |               |
| Notes:                         | Style:                     |                       |               |

4-Way entry corrugated pallet

