Jan. 3, 1967 R. W. DUNCAN 3,295,746

ENVELOPE

Filed Sept. 17, 1965 2 Sheets-Sheet 1

FIG. 1

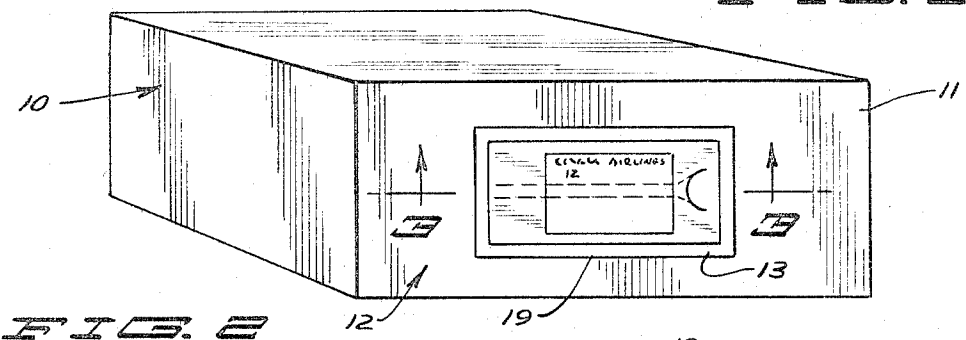
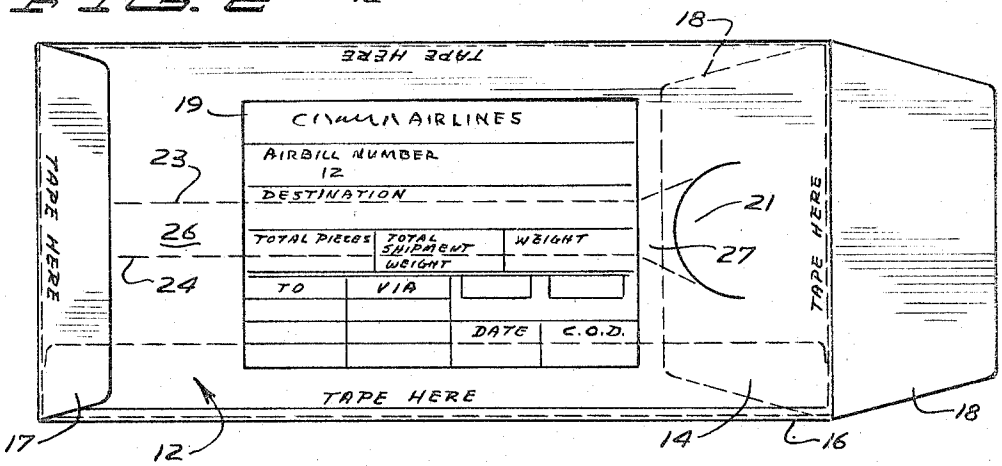


FIG. 2



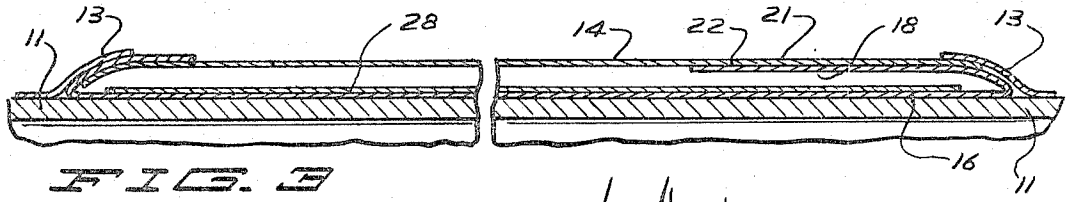
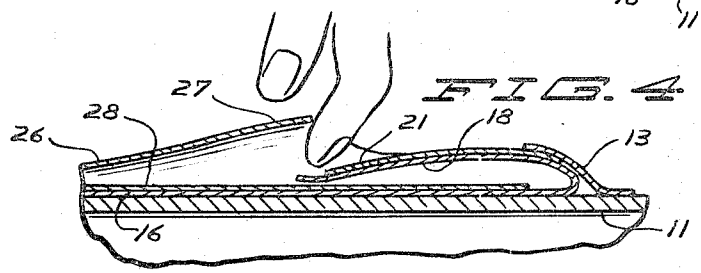


FIG. 3

FIG. 4



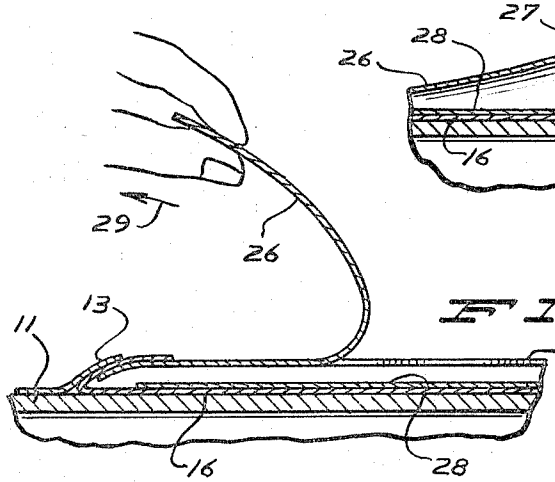


FIG. 5

INVENTOR.
ROBERT W. DUNCAN
BY
Braddock & Burd
ATTORNEYS

Jan. 3, 1967 R. W. DUNCAN 3,295,746

ENVELOPE

Filed Sept. 17, 1965 2 Sheets-Sheet 2

FIG. 6

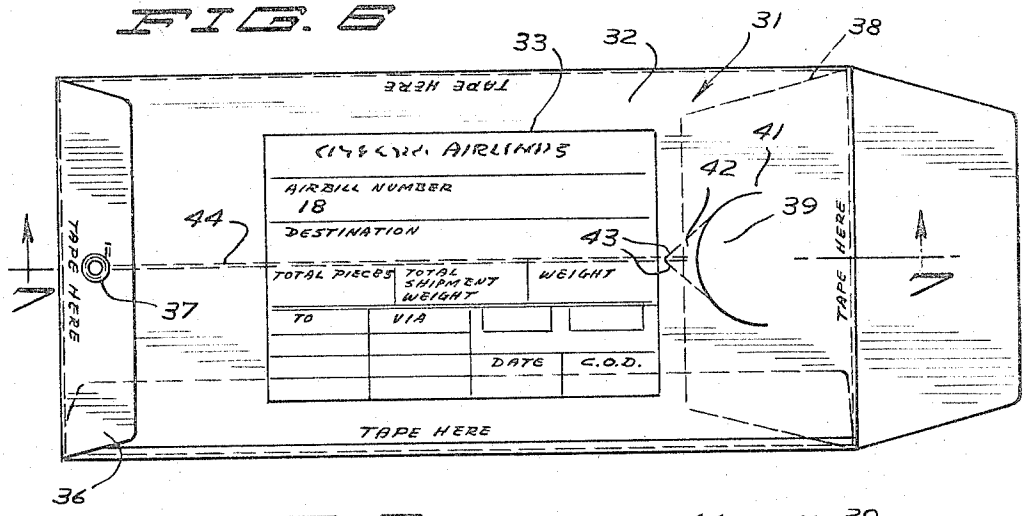
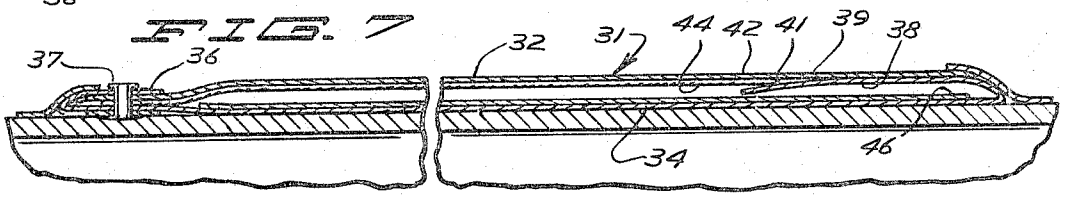


FIG. 7



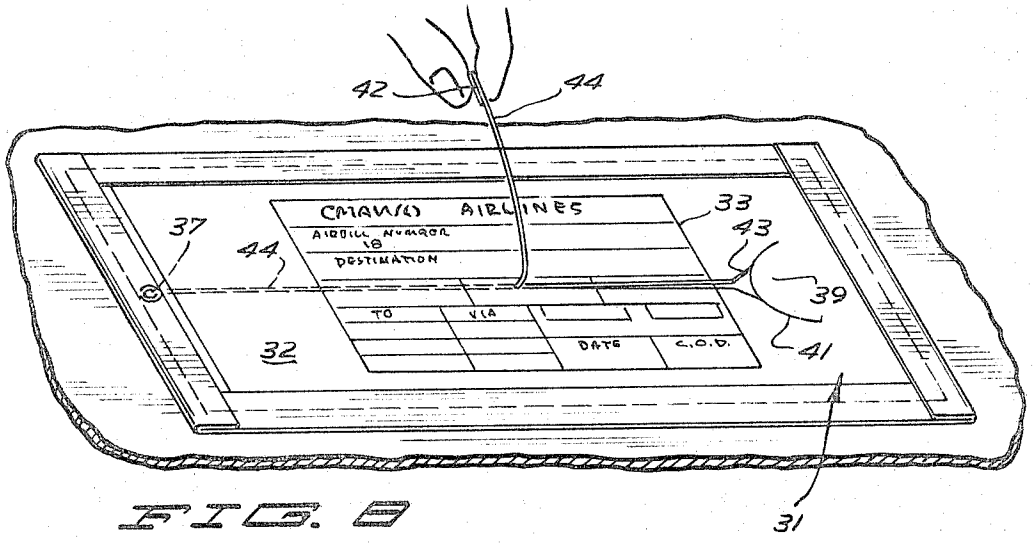


FIG. 8

INVENTOR.
ROBERT W. DUNCAN

BY Braddock & Burd

ATTORNEYS

United States Patent Office 3,295,746
Patented Jan. 3, 1967

3,295,746

ENVELOPE

Robert W. Duncan, 8600 Penn Ave. S., Minneapolis, Minn. 55431

Filed Sept. 17, 1965, Ser. No. 488,060
6 Claims. (Cl. 229—85)

This invention relates to an envelope and more particularly to a shipping envelope designed for holding a merchandise identification document, such as a bill of lading provided with opening structure permitting removal of the document from the envelope.

It is the object of the invention to provide an improved shipping envelope which can be easily opened without removing the envelope from a package and without destroying the legibility of the shipping information on the outside of the envelope while at the same time permit removal of the document within the envelope without danger of mutilating or tearing the document.

Another object of the invention is to provide a shipping envelope which can be effectively opened with a gloved hand in a minimum of time so as to reduce freight handling costs at point of destination.

A further object of the invention is to provide an improved method of opening an envelope permitting rapid and easy removal of the document in the envelope.

An additional object of the invention is to provide a low cost shipping envelope with printed information locations coordinated with opening structure to minimize destruction of information placed in the locations when the envelope is opened.

These and other objects and advantages of this invention are apparent in the following description and in the accompanying drawings, wherein:

FIGURE 1 is a perspective view of a package having the shipping envelope of this invention secured to the side wall of the package;

FIGURE 2 is an enlarged plan view of the shipping envelope of FIGURE 1 with the open end flap in the open position, shown in full lines, and in the closed position, shown in broken lines;

FIGURE 3 is an enlarged foreshortened sectional view taken along the line 3—3 of FIGURE 1;

FIGURE 4 is a fragmentary sectional view of the open end section of the envelope of FIGURE 3 showing the grasping position of the finger and thumb at the beginning of the opening of the envelope;

FIGURE 5 is a fragmentary sectional view of the closed end of the envelope of FIGURE 3 showing the opening of the envelope;

FIGURE 6 is a plan view of a modified envelope having elongated flexible opening structure;

FIGURE 7 is an enlarged foreshortened sectional view of the envelope of FIGURE 6 secured to a wall of a package; and

FIGURE 8 is a perspective view of the envelope of FIGURE 6 secured to a package showing the opening of the envelope with the flexible opening structure.

Referring to the drawing there is shown in FIGURE 1, a package **10** as a cardboard box used in transportation and storage of merchandise. Package **10** is a rectangular shaped box having a side wall **11**. A shipping envelope of this invention indicated generally at **12** is attached to wall **11** by staples or tape **13**, preferably pressure sensitive tape. The tape is placed over the peripheral edges of the envelope **12** to firmly secure the envelope to the side wall **11**.

It is the practice in the transportation of air freight to secure a shipping envelope to each package and place a merchandising document, such as a bill of lading, in the envelope. The outside of the envelope is used to

accommodate freight information, such as number, weight and destination of the package. When the package arrives at its destination the envelope is opened and the document is removed. This is done by freight handlers who customarily work with gloves and are not particular in the handling of the packages.

The shipping envelope **12** is provided with an opening structure which permits the freight handler to quickly open the envelope without removing the envelope from the package and without destroying the shipping information on the outside of the envelope. The shipping envelope can be quickly opened with a gloved hand. The result is a substantial reduction in freight handling time and cost.

The shipping envelope **12** is formed from a single blank of material, such as heavy paper or similar flexible material, folded in a rectangular envelope shape having a rectangular top panel **14** and a rectangular bottom panel **16** adhesively secured together in overlapped relationship as shown in FIGURE 2 adjacent one side of the envelope. The bottom panel **16** has an end flap **17** folded over the top panel **14** and adhesively secured thereto to close the end of the envelope. The opposite end of the bottom panel **16** has a large end flap **18** used to close the open end or inlet opening of the envelope. The end flap **18** has tapered sides enabling it to be easily inserted into the envelope between the top and bottom panels.

Printed on the mid-section of the top panel **14** is a freight information chart **19**. The chart shown in FIGURE 2 is designed for air freight shipment. The chart **19** has separate information blocks including the air bill number, the final airport destination, the total number of pieces in shipment, the total shipment weight, the weight of this piece, the date, as well as delivery information. The information spaces of the chart may be altered as required in accordance with the method of shipment.

The open end section of the top panel **14** has a downwardly projected semi-circular tab **21** separated from the top panel **14** by a semi-circular cut or score **22**. From the cut **22** the top panel **14** is perforated longitudinally of the envelope as indicated at **23** and **24**. The space between the perforations **23** and **24** is a strip **26** extended longitudinally along the center line of the envelope. The strip **26** has triangular shaped head **27** formed by outwardly diverging the perforations adjacent the cut **22**. The perforations **23** and **24** extend across the mid-section of the chart **19** and terminate at the closed end flap **17**. The air bill number is not on strip **26** as it is located laterally of the perforations **23**.

In use, the shipping document **28**, bill of lading, is initially placed in the envelope through the open end thereof. The large end flap **18** is then tucked in over the document as shown in FIGURE 3. The end of the flap **18** extends beyond the cut **22** to protect the document from any foreign material which may enter through the cut **22**. The envelope **12** containing the document **28** is then secured to the side of the package **10** with tape **13** as shown in FIGURE 1. To insure the proper taping of the envelope to the package without damaging the document **28**, the top panel **14** is printed along its peripheral edges with directions to indicate the position of the tape.

When the package arrives at its destination the envelope **12** must be opened and the document **28** removed. In addition, all pieces of the shipment must be checked to make sure that they have arrived. This can be quickly done by the freight handler without removing the envelope from the package. Document **28** is removed from the envelope **12** by the freight handler by pressing on tab **21** as shown in FIGURE 4 in a downwardly direction to provide a hole in the top panel **14**. A finger is then inserted in this hole to raise head **27** of the strip **26**. The

head 27 is then gripped betwen the thumb and forefinger and pulled in the direction of the arrow 29 as shown in FIGURE 5 to separate strip 26 from the top panel 14 along the perforations 23 and 24. The strip 26 is pulled until it reaches the end flap 17. As strip 26 is pulled a longitudinal opening is progressively made in the top panel 14. This exposes the mid-portion of the document 28 which can be readily removed through the longitudinal opening in the top panel 14 left by the strip 26.

In the event that it is necessary to recheck the freight information on the chart 19 the air bill number can be determined since it remained on the portion of the chart which does not form part of the strip 26. If it is necessary to determine the information on the strip 26 it can be pulled back and flattened on the package since it remains fixed at the closed end to the envelope.

A modified form of the invention is shown in FIGURES 6 to 8. The modified shipping envelope is indicated generally at 31 and is similar to envelope 12. The top of envelope 31 is a rectangular shaped top panel 32 printed with a freight information chart 33 identical to the chart 19 shown in FIGURE 2. A bottom panel 34 located below the top panel 32 has an end flap 36 folded over the top panel 32 and adhesively secured thereto to close one end of the envelope. A grommet 37 projects through the center of the end flap 36 as well as the top and bottom panels 32 and 34. The opposite end of the bottom panel 34 has a large end flap 38 used to close the open end of the envelope.

A section of the top panel 32 adjacent the open end has a semi-circular tab 39 formed by a half moon cut or score 41. Tab 39 is located along the center line of the envelope and faces away from the open end of the envelope. Immediately adjacent the mid-section of the tab 39 is a triangular head 42 formed by inwardly inclined perforations 43. The upper end of the head 42 is defined by a portion of the cut 41.

Positioned within the envelope below the top wall 32 is an elongated flexible member 44, such as a cord, string, wire and the like, secured at one end to the grommet 37 and secured at the other end by an adhesive or the like to the bottom of the triangular head 42. The flexible member 44 extends along the longitudinal center line of the envelope from the head 42 to the grommet 32. The flexible member 44 runs longitudinally of the chart parallel to the center dividing line of the chart 33.

The envelope 31 is used in the same manner as the envelope 12 shown in FIGURE 1 for containing a shipping document 46. As shown in FIGURE 7, the document 46 is located under the large end flap 39 which extends inwardly beyond the cut or score 41 to eliminate the ingress of foreign material into the envelope. In order to open the envelope the freight handler merely depresses the tab 39 and grips the triangular head 42. Since the flexible member 44 is secured to the triangular head 42 the freight handler merely progressively pulls member 44 as shown in FIGURE 8 splitting the top panel 32 along the longitudinal center line. In this manner the envelope is cut to the grommet 37. The document 46 may now be conveniently removed through the center slit in the top panel 32 made by the flexible member 44. Since the flexible member severs the top panel 32 along the mid dividing line of the information chart 33 the information on the chart is completely legible.

The novel features of the invention have been described with reference to preferred embodiments. It is understood that various omissions, substitutions, changes in material, form and use as well as details of the shipping envelope may be made by those skilled in the art without departing from the spirit of the invention. The invention is to be limited only as indicated by the scope of the following claims.

I claim:

1. A shipping envelope for holding a merchandise indentification document comprising: a rectangular shaped top panel integral with and positioned over a bottom panel, said bottom panel having a first end flap projected from one end thereof and folded over said top panel and secured thereto closing said one end of the envelope, and a second flap integral with the opposite end of the bottom panel and projected outwardly therefrom, said second flap adapted to be folded into said envelope to close the open end of the envelope, a tab member formed by a semi-circular cut in said top panel adjacent the open end of the envelope, said tab member directed toward the closed end of the envelope, said second flap when folded into the envelope having a length sufficient to extend beyond the cut, means extended longitudinally of the top panel from the cut to the first flap usable to provide an elongated longitudinal opening in the top panel permitting the removal of the merchandise identification document from the envelope whereby the envelope can be opened by pressing on the tab member and gripping a portion of said means and then pulling said means to longitudinally sever the top panel to provide the longitudinal opening therein.

2. The envelope structure defined in claim 1 wherein said means for opening the envelope comprise: at least one strip extended longitudinally of the top panel and partially separable from the top panel, said strip defined by a plurality of longitudinal perforations in said top panel extended from said cut to the first flap whereby the strip can be partially separated from the top panel by pressing on the tab member and gripping one end of the strip and then pulling the strip to tear the portions of the top panel immediately between the perforations.

3. The envelope defined in claim 1 wherein said means for opening the envelope comprises: an elongated flexible member longitudinally positioned under said top panel, means securing one end of said elongated member to the first flap and the top and bottom panels, the opposite end of said elongated member being secured to a removable portion of the top panel extended toward the closed end from the cut whereby the top panel may be longitudinally severed by pressing on the tab member and gripping a portion of the top wall and pulling on the same removing this portion from the top wall and moving the flexible member through the top wall forming an elongated opening therein.

4. A shipping envelope for holding a merchandise identification document comprising: a top panel positioned over a bottom panel, said bottom panel having a first end flap projected from one end thereof and folded over said top panel and secured thereto closing said one end of the envelope, and a second flap integral with the opposite end of the bottom panel and projected outwardly therefrom, said second flap adapted to be folded into said envelope to close the open end of the envelope, first means in said top panel adjacent the open end of the envelope providing admittance into the envelope, said second flap when folded into the envelope having a length sufficient to extend beyond said first means to cover said document, second means extended longitudinally of the top panel from the first means to the first flap usable to provide an elongated opening in the top panel permitting the removal of the merchandise identification document from the envelope whereby the envelope can be opened by gripping a portion of said second means and then pulling said second means to sever the top panel to provide the opening therein.

5. The envelope structure defined in claim 4 wherein said second means for opening the envelope comprise: at least one strip extended longtiudinally of the top panel and partially separable from the top panel, said strip defined by a plurality of longitudinal perforations in said top panel extended from said first means to the first flap whereby the strip can be partially separated from the top panel by gripping one end of the strip and then pulling the strip to tear the portions of the top panel immediately between the perforations.

6. The envelope defined in claim 4 wherein said second means for opening the envelope comprises: an elongated

flexible member longitudinally positioned under said top panel, means securing one end of said elongated member to the first flap and the top and bottom panels, the opposite end of said elongated member being secured to a removable portion of the top panel extended toward the closed end from the first means whereby the top panel may be longitudinally severed by gripping a portion of the top wall and pulling on the same removing this portion from the top wall and moving the flexible member through the top wall forming an elongated opening therein.

References Cited by the Examiner

UNITED STATES PATENTS

2,200,099	5/1940	Prentice	229—68
2,828,065	3/1958	Heywood	229—85
2,888,187	5/1959	Voege et al.	229—66
3,002,674	10/1961	Wright	229—66 X
3,199,769	10/1965	Hillman et al.	229—74

JOSEPH R. LECLAIR, *Primary Examiner.*

DAVID M. BOCKENEK, *Examiner.*