(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 143 622**
A1

(12) EUROPEAN PATENT APPLICATION

(21) Application number: **84308133.2**

(51) Int. Cl.⁴: **B 65 D 27/10**

(22) Date of filing: **23.11.84**

(30) Priority: **01.12.83 US 556925**

(43) Date of publication of application: **05.06.85 Bulletin 85/23**

(84) Designated Contracting States: **AT BE CH DE FR GB IT LI LU NL SE**

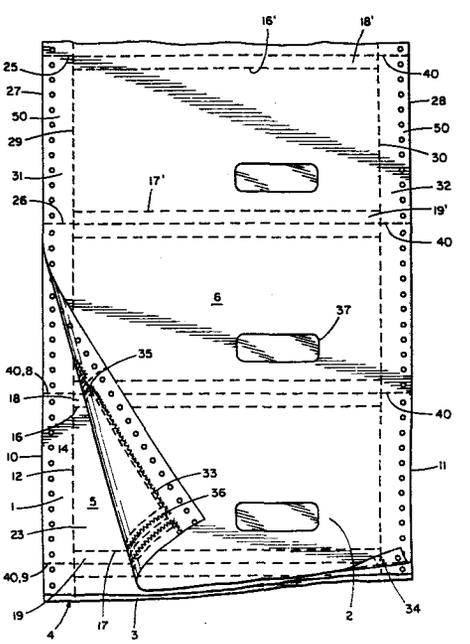
(71) Applicant: **Moore Business Forms, Inc., 300 Lang Boulevard, Grand Island, New York 14072 (US)**

(72) Inventor: **van Malderghem, Edmund G., 533 Morgan Drive, Lewiston New York 14092 (US)**
Inventor: **Eder, John C., 2740 Allenton Avenue, Hacienda Heights California 91745 (US)**

(74) Representative: **Townsend, Derek Thomas et al, Barlin Professional Services Barlin House 20 High Street, Carshalton Surrey SM5 3AG (GB)**

(54) Improvements in business form assemblies.

(57) A mailer business form assembly comprises message and cover sheets superimposed and capable of being adhered to provide mailers.



EP 0 143 622 A1

0143622

IMPROVEMENTS IN BUSINESS FORM ASSEMBLIES

This invention relates to business form assemblies, and more particularly, to such assemblies providing mailer assemblies.

An object of this invention is to provide an improved continuous business form assembly of at least two webs for collation and sealing into mailer assemblies.

In a principal aspect, the invention refers to an improved business form assembly comprising a message web having a message sheet and a cover web having a cover sheet. The message sheet has a longitudinal dimension between end edges along a longitudinal axis and a transverse dimension between marginal edges along a transverse axis. Marginal lines of perforations extend along the marginal edges fully between the end edges. Transverse, end lines of perforations extend along the end edges only between the marginal lines of perforations. The message cover sheet has a longitudinal dimension between cover sheet end edges equal to the longitudinal dimension of the message sheet, and a transverse dimension between cover sheet marginal edges equal to the transverse dimension of the message sheet. The cover sheet is superimposed upon the

message sheet and has marginal lines of adhesive along the cover sheet marginal edges. These adhesive lines extend fully between the cover sheet end edges and are nearer the cover sheet marginal edges than the message sheet marginal perforation lines are to the message sheet marginal edges. Transverse, end lines of adhesive are along the cover sheet end edges, extending fully between the cover sheet marginal edges and being nearer the cover sheet end edges than the message sheet end perforation lines are to the message sheet end edges. Preferably, cover sheet marginal and transverse, end lines of perforations are superimposed on the message sheet marginal and transverse, end lines of perforations. The marginal and end lines of adhesive adhere the cover sheet to the message sheet.

Other objects, advantages and features are part of the detailed description of the preferred embodiment. The detailed description follows a brief description of the drawing.

Brief description of the Drawings

The preferred embodiment a mailer business form assembly in accordance with the present inventionwill be described by way of example in relation to the accompanying drawing, in which:

Fig. 1 is a plan view of a preferred mailer assembly invention, with a corner of a cover sheet turned back to reveal detail; and

Fig. 2 is a second plan view of the mailer assembly of Fig.1,with the cover sheet and message sheet shortened to

reveal detail.

Detailed Description of the preferred Embodiment

Referring to Figs. 1-2, the preferred embodiment of the invention is a business form assembly 4 comprising a message web 1, a cover web 2 and a back web 3. The webs 1, 2, 3 have superimposed, spaced series of transverse, margin-to-margin perforation lines 40; and superimposed, marginal feed strips 50. The webs 1, 2, 3 provide mailer assemblies hereinafter referred to as mailers, each mailer extending between adjacent perforation lines 40. Each mailer comprises a message sheet 5, a top cover sheet 6 and a bottom cover sheet 7. As will be described, when the assembly 4 is completed, the sheets 5, 6, 7 are adhered to each other totally about their peripheries that is to say along their margins and across their centers. The message sheet 5 is rectangular. It has a longitudinal dimension between a straight upper end edge 8 and a straight and parallel lower end edge 9. It has a transverse dimension between straight, parallel, marginal edges 10, 11. The sheet 5 has (and also the sheets 6, 7 have) pin feed holes in the feed strips 50.

A first message sheet marginal line of perforations 12 extends along and spaced from the first message sheet marginal edge 10. A second message sheet marginal line of perforations 13 extends along and spaced from the second message sheet marginal edge 11. The lines 12, 13 extend longitudinally, fully between the message sheet end edges 8, 9. The marginal edge 10 and line 12 define a first longitudinally extending

margin 14 of the sheet 5. The edge 11 and line 13 define a second longitudinally extending margin 15.

A first, transverse end line of perforations 16 extends along but spaced from the end edge 8. A second, transverse end line of perforations 17 extends along but spaced from the end edge 9. The lines 16, 17 extend only between the marginal perforation lines 12, 13. The edges 8, 9 and lines 16, 17 define end strips 18, 19 on the sheet 5. Preferably, end strips 18, 19 have lonngitudinal widths approximately equal to each other.

The lines 12, 13, 16, 17 define a message area 23. The top cover sheet 6 has a longitudinal dimension between top cover sheet end edges 25, 26 equal to the longitudinal dimension of the message sheet 5 between its edge ends 8, 9. The top cover sheet 6 also has a transverse dimension between top cover sheet marginal edges 27, 28 equal to the transverse dimension of the message sheet 5 between its marginal edges 10, 11. Marginal lines of perforations 29, 30 extend longitudinally along the top cover sheet marginal edges 27, 28. The lines 29, 30 define marginal strips 31, 32 on the sheet 6, which have a transverse width less than the width of the message sheet margins 14, 15.

A first, transverse end line of perforation 16' extends along and spaced from the end edge 25. A second, transverse line of perforations 17' extends along and spaced from the end edge 26. The lines 16', 17' extend only between the marginal lines of perforations 29, 30. The edges 25, 26 and lines 16', 17'

define end strips 18', 19' on the sheet 6.

Within the marginal strips 31, 32, the sheet 6 has marginal lines of adhesive 33, 34. The adhesive lines 33, 34 extend fully between the top cover sheet end edges 25, 26. The adhesive lines are joined along the end edges 25, 26 by transversely extending, end lines of adhesive 35, 36. The lines 35, 36 are within the end strips 18', 19'. The adhesive lines 33, 34, 35, 36 circumscribe the periphery of the sheet 6 As most preferred, the adhesive lines 33-36 are a heat sealable adhesive. When heated, with the sheets 5, 6 separated from their webs or not, and the sheet 6 superimposed on the sheet 5, the adhesive adheres sheet 6 to sheet 5, outward of the perforation lines 12, 13, 16, 17 of the sheet 5 and in the margins 14, 15 and end strips 18, 19. The perforation lines 12, 13, 16, 17, 29, 30, 16', 17' remain useful to separate the message areas from the margins 14, 15 and end strips 18, 19. Pressure sensitive or remoistenable adhesive may be employed as an alternate to the heat sealable adhesive.

The sheets 5 and 6, so adhered, form a mailer assembly useful with or without the sheet 7. If used without the sheet 7, the assembly forms a message unit. Each message unit remains sealed, and may be opened by removal of the top cover sheet marginal strip 31, with the message sheet margin 14, along the perforation lines 29, 12. Since the perforation line 29 is offset from the line 12, an edge is created that can be manually grasped. A message area, such as 23, may then be

separated from its message unit, along other perforation lines. As most preferred, all the transverse perforation lines 16, 20, 21, 17 are progressive, in that perforation size is large toward the edge 10, and is progressively reduced toward edge 11. These progressive perforations facilitate separation of the message areas.

When the assembly has a back cover sheet, the preferred back cover sheet 7 has longitudinal and transverse dimensions equal to those of the cover sheet 6. The sheet 7 also has a pattern of adhesive lines identical to that of sheet 6, and the same reference numbers are used to identify the adhesive lines on sheet 7 as are used on sheet 6. The sheet 7 may be a combined second message and bottom cover sheet, and may be a reversed, or turned over, duplicate of sheet 6, without the glassine window.

The preferred embodiment of the invention is now described. The assembly may be fed into a collating and sealing machine with messages preprinted on the message areas. The sheets may be automatically collated, the message unit severed and sealed together. If preferred, the message units may be self-contained envelopes with transparent-covered windows, such as windows 37, shown on sheet 6.

The preferred embodiment may be varied, without departing from the invention. Therefore, to particularly point out and distinctly claim the subject matter regarded as invention, the following claims conclude this specification.

Claims

1. A business form assembly comprising:

a message web having a message sheet, the message sheethaving end edges, marginal edges, a longitudinal dimension between the end edges along a longitudinal axis, and a transverse dimension between the marginal edges along a transverse axis, marginal lines of perforations along the marginal edges of the message sheet extending fully between the end edges, transverse, end lines of perforations extending along the end edges between the marginal lines of perforations; and

a cover web having a cover sheet, each cover sheet having cover sheet end edges, cover sheet marginal edges, a longitudinal dimension between the cover sheet end edges equal to the longitudinal dimension of the message sheet, a transverse dimension between the cover sheet marginal edges equal to the tansverse dimension of the message sheet;

the cover sheet being superimposed upon the message sheet and further having marginal lines of adhesive along the cover sheet marginal edges extending fully between the cover sheet end edges and being nearer the cover sheet marginal edges than the message sheet marginal perforation lines are to the message sheet marginal edges, transverse, end lines of adhesive along the cover sheet end edges extending fully between the cover sheet marginal edges and being nearer the cover sheet end edges than the message sheet end perforation

lines are to the message sheet end edges, the marginal and end lines of adhesive adhering the cover sheet to the message sheet.

2. A continuous business form assembly comprising:

a message web having a series of spaced, transverse perforation lines and a plurality of message sheetsbetween the transverse perforation lines, each message sheet having end edges along the transverse perforation lines, marginal edges, a longitudinal dimension between the end edges along a longitudinal axis, and a transverse dimension between the marginal edges along a transverse axis, marginal lines of perforations along the marginal edges of the message sheet extending fully between the end edges, transverse, end lines of perforations extending along the end edges between the marginal lines of perforations; and

a cover web having a series of spaced transverse perforation lines and a plurality of cover sheets between the perforation lines, each cover sheet having cover sheet end edges along the tansverse perforation lines, cover sheet marginal edges, a longitudinal dimension between the cover sheet end edges equal to the longitudinal dimension of a message sheet, a transverse dimension between the cover sheet marginal edges equal to thetransverse dimension of a message sheet;

each cover sheet being superimposed upon a message sheet and further having marginal lines of adhesive along the cover sheet marginal edges extending fully between the cover sheet

end edges and being nearer the cover sheet marginal edges than the message sheet marginal perforation lines are to the message sheet marginal edges, transverse, end lines of adhesive along the cover sheet end edges fully between the cover sheet marginal edges and being nearer the cover sheet end edges than the message sheet end perforation lines are to the message sheet end edges, the marginal and end lines of adhesive adhering each cover sheet to a message sheet.

3. A business form assembly constructed and arranged substantially as herein described with reference to the accompanying drawings.

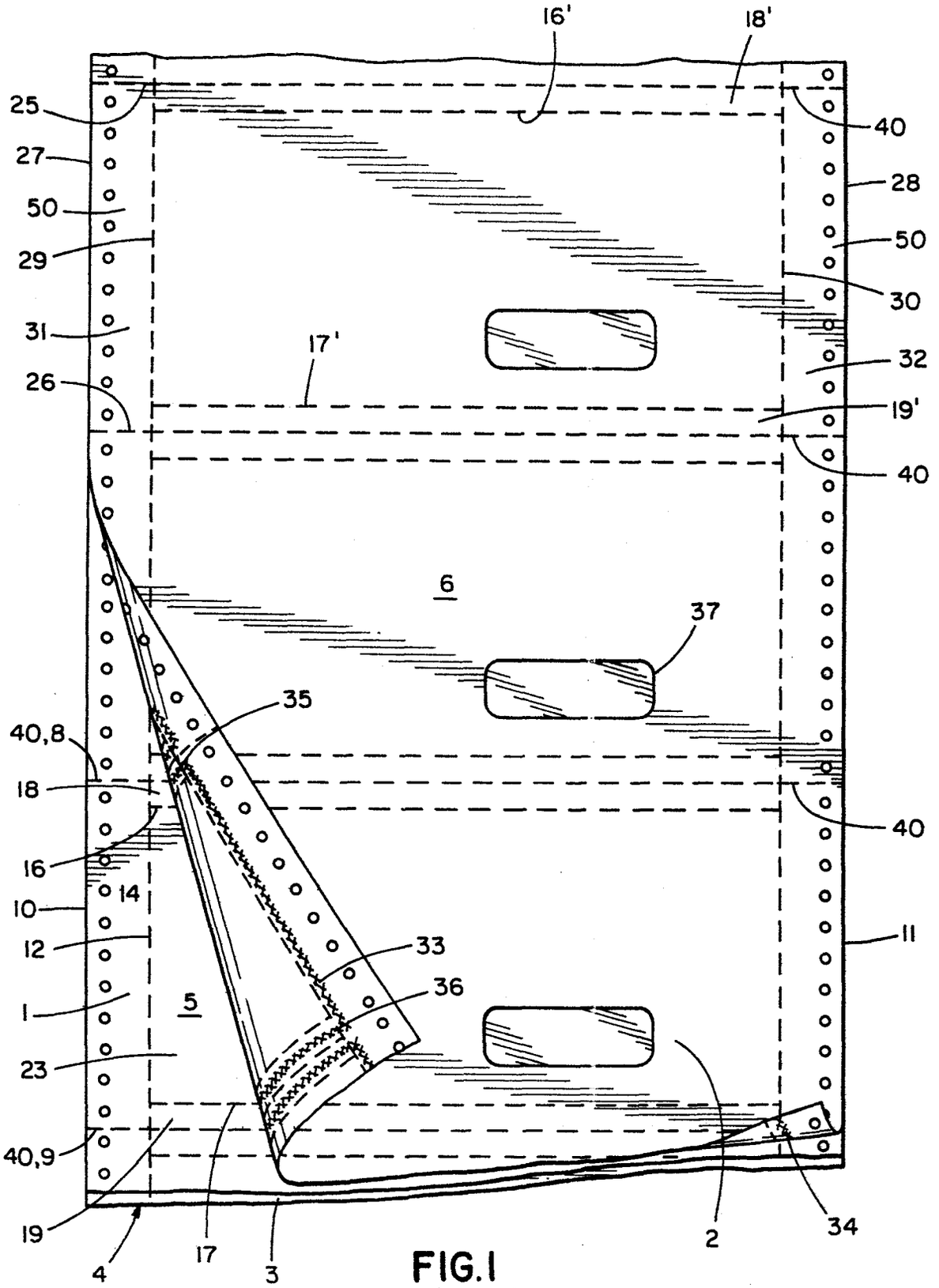

16'
18'
25
40
27
28
50
50
29
30
31
17'
32
26
19'
40
6
37
35
40,8
18
40
16
14
10
11
12
33
36
1
5
23
40,9
19
4
17
3
2
34

FIG.1

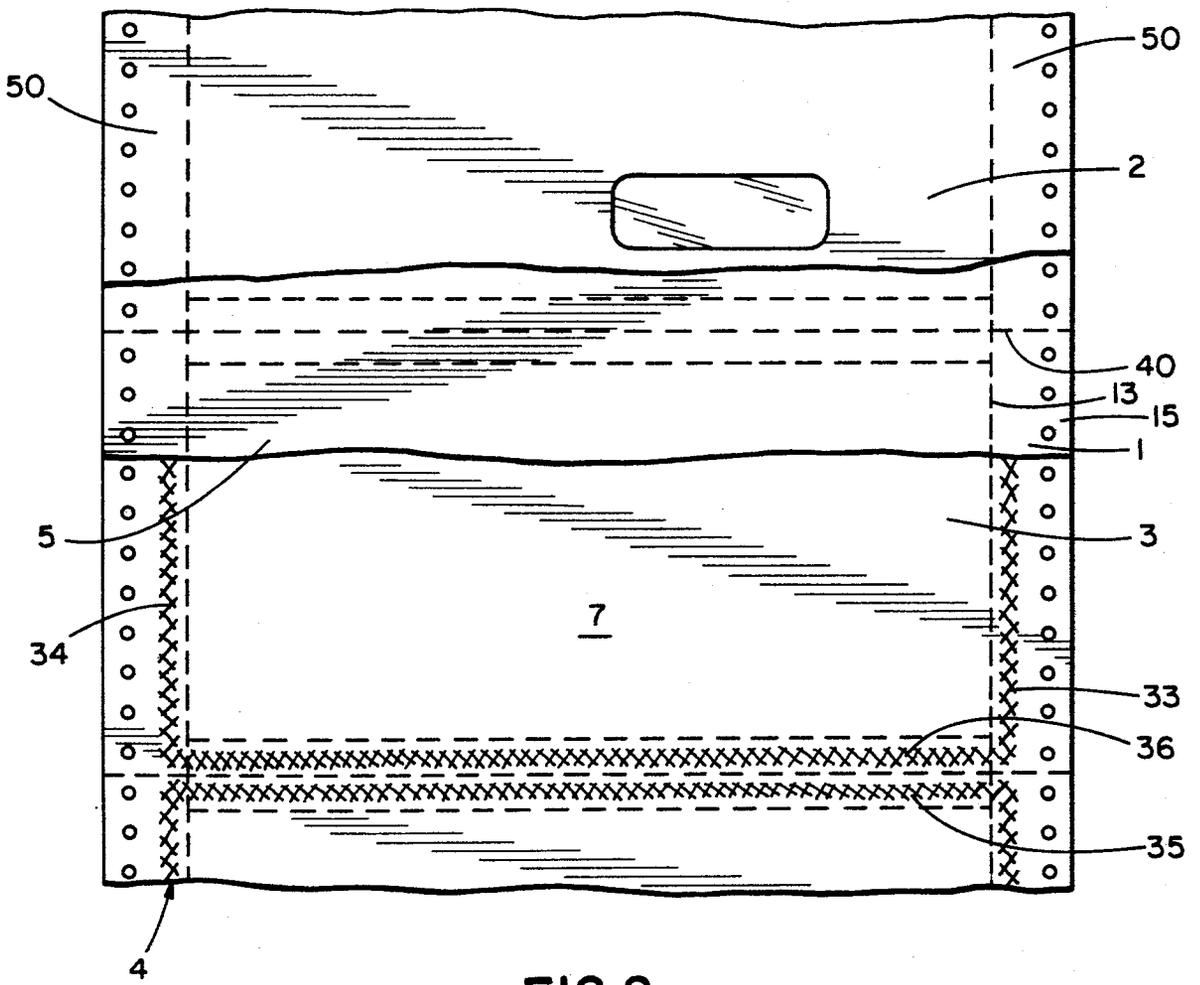


FIG. 2

European Patent Office

EUROPEAN SEARCH REPORT

0143622
Application number

EP 84 30 8133

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	FR-A-1 502 067 (J.A. BONNEAU) * Page 1, lines 18-21, 49-57; figures 2,3 *	1,2	B 65 D 27/10
X	GB-A-1 564 423 (MOORE BUSINESS FORMS) * Figures 2,4,6 *	1,2	
X	AU-B- 27 554 (THORNQUEST PRESS)(1977) * Whole document *	1	
Y		2	
Y	GB-A- 809 953 (FANFOLD LTD.) * Page 1, lines 41-47 *	2	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

B 65 D
B 41 L

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	05-03-1985	WEBER P.L.P.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO Form 1503 03.82