

July 4, 1967

G. C. DAGHER, JR

3,329,332

SERIES ENVELOPE FORM

Filed June 4, 1965

2 Sheets-Sheet 1

FIG. 1

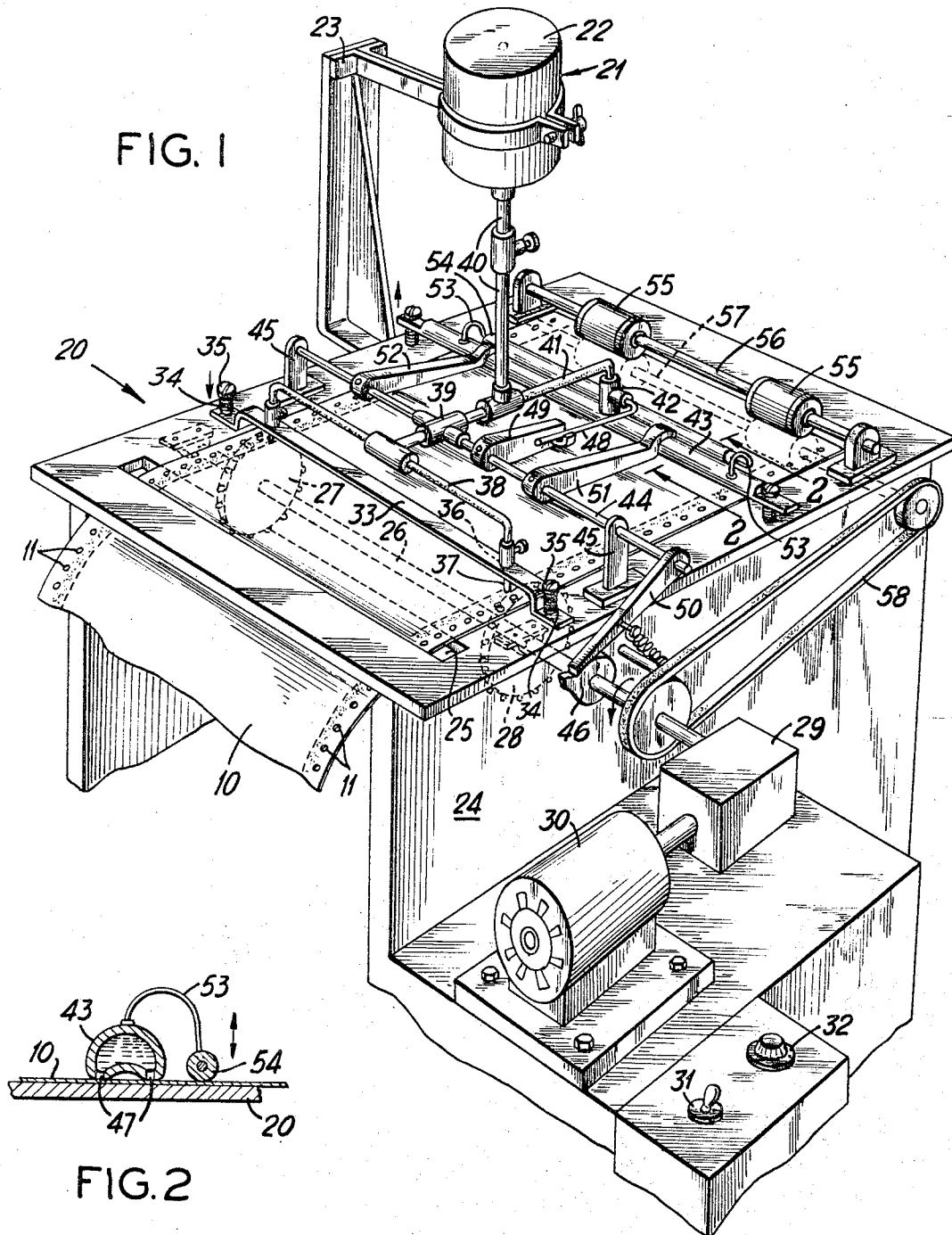


FIG. 2

INVENTOR.
GEORGE C. DAGHER, JR.

BY

Joseph J. Fallon

ATTORNEY.

July 4, 1967

G. C. DAGHER, JR

3,329,332

SERIES ENVELOPE FORM

Filed June 4, 1965

2 Sheets-Sheet 2

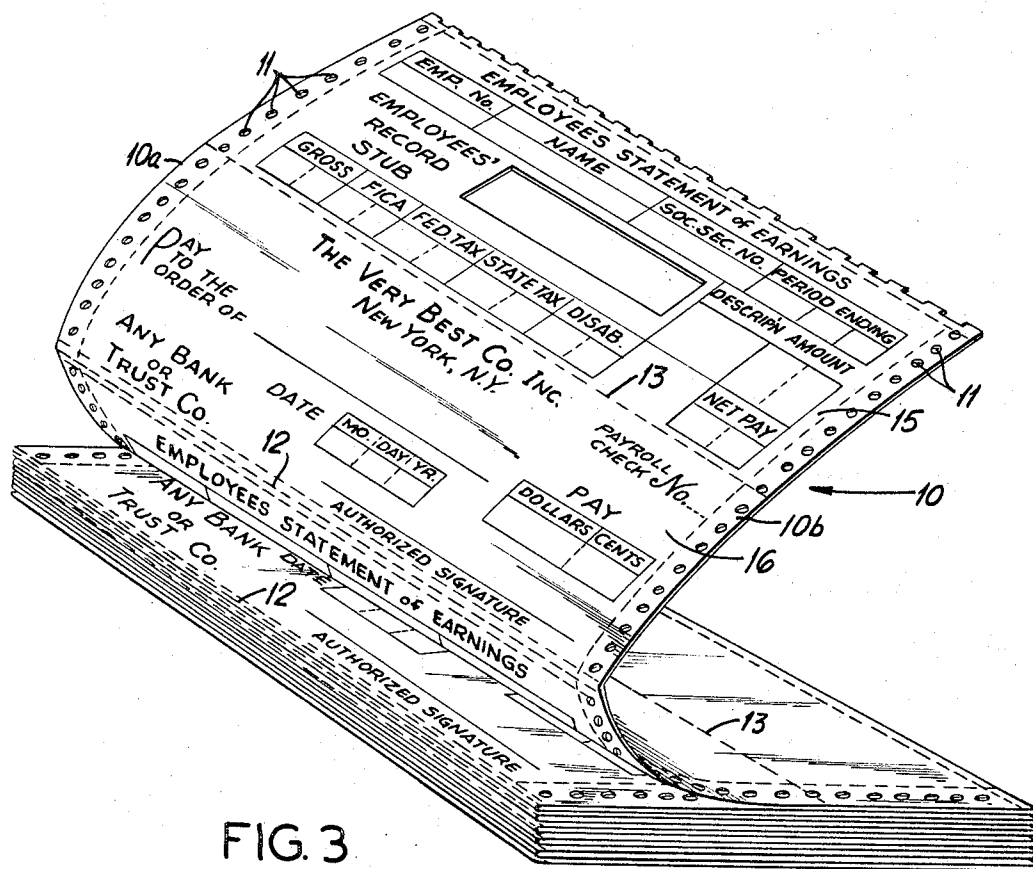


FIG. 3

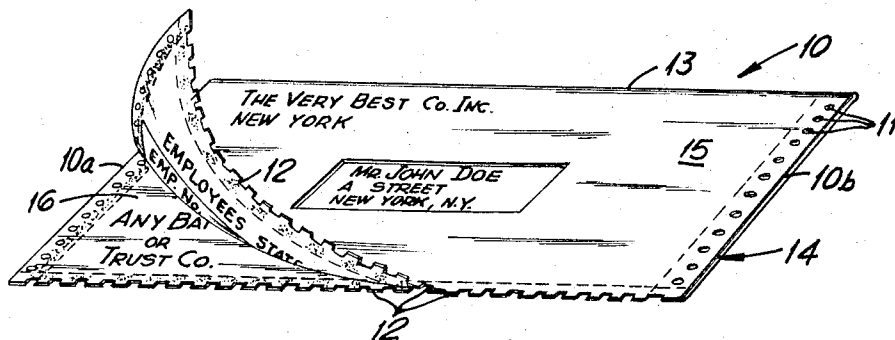


FIG. 4

INVENTOR.
GEORGE C. DAGHER, JR.,

BY *Joseph F. Baller*
ATTORNEY.

1

3,329,332

SERIES ENVELOPE FORM

George C. Dagher, Jr., 249 Gerritsen Ave.,
Bayport, N.Y. 11705

Filed June 4, 1965, Ser. No. 461,468
1 Claim. (Cl. 229-69)

This invention relates to a process of applying an adhesive to sheets or rolls of continuous data processing paper and to a product thereof.

In the production and formation of business forms, they require considerable processing as to printing and sometimes gluing to obtain a finished product such as in the form of an envelope with or without a window therein. Many of these forms require individual handling to obtain a finished product.

In accordance with my invention it is a purpose to treat continuous paper, printed or unprinted or card stock used on electronic data processing equipment or any other type of machine using same, with glue or any suitable adhesive, whereby the treated portions can be adhered together to form a novel type of envelope. Also, it is an object of my invention to produce a business form which can readily be used after it has been filled in with data and formed into an envelope.

Another object of my invention is to treat printed or unprinted forms or part thereof which are subject to use on the previously described equipment whereby one or more of the edges or an intermediate portion thereof are treated with an adhesive or glue and that it can serve the purpose of not only being a record, but also as an envelope which can be readily mailed as a unit or return envelope.

Another object of my invention is to treat a desired part of a continuous business form which can be data processed so that such form can be readily folded into an envelope or part letter, part check or record.

A more specific object of my invention is to provide a foldable business form which has been data processed and which has been treated with an adhesive on any desired portion of the form which ultimately is formed into an envelope.

A specific object of my invention is to treat a business form on which information or data are printed and is to be electronically processed, and is treated with any suitable adhesive so that after the form has been processed, it can be folded and the edges glued to form an envelope or closed containers.

Other objects and features of my invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings in which:

FIGURE 1 is a perspective view of a preferred embodiment for the treatment of business forms;

FIGURE 2 is a sectional view taken on lines 2-2 of FIGURE 1;

FIGURE 3 is a perspective view of a data processing business form in a pile preparatory to being treated according to the invention; and

FIGURE 4 is a perspective view of a form treated according to the invention and forming a product thereof.

Referring now to the drawings in which like numerals refer to the parts throughout, it will be noted that the continuous data processing business form 10 provided, can show any type of suitable information such as employee's name, social security number, withholding tax both federal and state, gross income etc. Also, the form whether in single or multiple sheet layer form is so made that its lateral marginal edges 10a and 10b contain a continuous series of equidistantly spaced openings of punched holes 11. These openings or holes are on each side of the form 10 permit the insertion of

2

sprocket or other suitable means which move the forms forwardly on data processing machinery permitting the equipment to fill in the information or legend on the form in the desired spaces.

Also said forms 10 are provided with transverse perforated tearing score lines 12 which permit separation of forms from each other, also, each form 10 is provided with transverse folding score lines intermediate the tearing score lines such as at 13 thereon to permit dividing and folding of the same into a compact unit or envelope 14 as shown in FIGURE 4 of the drawings. Furthermore, the form being foldable into two parts has one, the upper part 15 printed with the above noted data while the other or lower part 16 is provided as a check with the name of the employer, etc., as shown.

It is to be noted that the forms 10 are laid one above the other as shown in FIGURE 3 and in the process of their treatment with an adhesive or glue of any suitable type can be readily drawn over a flat surface as will be more specifically described.

The finished form as shown in FIGURE 4 with glued edges 10a and 10b and 12 is a compact unit ready for mailing as a letter. Such letter can be readily opened by tearing away the edges 10a, 10b and 12 whereupon one part, namely, 15 has the necessary information while the other part 16 constitutes a check.

In accordance with my invention, a continuous series of such connected forms 10 shown in FIGURE 3 are all of the same size and print and constitutes a pile. The forms in a pile are drawn along the top of a table 20 of any suitable length and size. These forms are as previously stated, are subjected to automatic data processing commonly in use today.

Extending above the forms pile 10 and at its beginning of a stack thereof is a glue or adhesive dispensing device 21 which is used to apply the glue or any of the suitable types of synthetic quick drying adhesives to the form. Said device 21 comprises a tank 22 containing the glue, not shown, and is installed at any suitable height on a stand 23 above the table 20. Said table 20 is mounted on a support 24 which can be of any suitable length for said table.

It is to be noted that the table is provided a slot 25 through which passes form 10 being treated. Adjacent said slot and underneath said table there is mounted a shaft 26 which contains a pair of opposed slidably adjustable sprocket wheels 27 and 28. Part of said sprocket wheels extend above openings in table 20 and can be accordingly adjusted to accommodate the width of the form 10. Sprocket wheels 27 and 28 are rotated by shaft 26, so as to move the succession of forms 10 in a forward direction. Said shaft is in connection with a gear reduction unit or box 29 which in turn is operated by motor 30. Furthermore, said motor is controlled by a switch 31, which is in connection with a source of electricity. In addition, there is provided a speed control rheostat 32 for the motor and gear reduction box 29.

The top of table is also provided with a plate or bar 33 held in position on said table by means of spring members 34 and retaining members or screws 35. Said plate is provided with a slot or groove 36, to accommodate adjustable nozzles 37 of flexible piping 38, which in turn is in connection with valve 39. Said valve is connected in turn with tubing 40 extending from tank or container 22. Said tubing 40 is in connection also with tubing 41 connected to a valve 42 on a cross member 43 which contains a supply of adhesive from tank 22.

Said valve 39 is mounted on a rotatable shaft 44 and is operable thereby when said shaft 44 mounted on supports 45 is actuated by means of cam 46 mounted on

3

shaft 26, so that a certain amount of adhesive or glue is expelled from nozzles 37 and from the minute openings 47 of cross member 43 via valve 42 which in turn is controlled by control rod 48 operated by lever 49 when it is moved by shaft 44 to which it is attached, said cam is in contact with spring tensioned lever 50 and as the cam is rotated by motor 30 it raises or lowers said lever 50 to operate valves 39 and 42.

Said shaft 44 has arms 51 and 52 which are pressed downward against cross member 43 at certain intervals in synchronism with the opening of valve 42 by rod 48 to emit adhesive through openings 47. Said cross member 43 is provided with bent spring wire 53 which has a roller 54 adapted to keep form 10 flat as it is being moved forward on table 20 by sprocket wheels 27 and 28.

Table 20 is provided with a pair of cushion rollers 55 mounted on a shaft 57 underneath the table. Said shaft 57 is operated by means of a belt 58 connected to driven shaft 26. Said rollers are intended to keep the forms 10 in flat condition during the operation wherein the forms are treated with adhesive.

From the foregoing description taken in conjunction with the accompanying drawings it will be noted that the application of adhesive to the edges 10a and 10b is continuous while the application to the lower part 12 on the form is intermittent. Furthermore, the valves and nozzles in the device can be readily adjusted so that forms of any width and size can be treated with an adhesive.

While a preferred method and product have been disclosed by my invention, it is to be understood that modifications as to form, arrangement of steps in the method, and of parts in the product may be made without departing from the spirit and scope of the invention as claimed.

4

What is claimed is:

A mailing envelope comprising a business form which has been separated from an elongated web of sheet material, said web having; a continuous line of equally spaced holes along each side edge thereof which are adapted to be engaged by the web advancing sprockets of a data processing machine, successive equally spaced transverse perforated tearing score lines dividing said web into a plurality of rectangular business forms, and a transverse folding score line intermediate each pair of tearing score lines dividing said forms into upper and lower equal sections, a continuous narrow strip of adhesive along each side of said web contiguous said lines of holes, and a continuous transverse strip of adhesive contiguous each side of said transverse tearing score line, each of said business forms having indicia applied to the adhesively coated side thereof, and a window centrally located in one of said sections; said form being folded face to face about said folding score line with the adhesive on the upper section adheringly engaging the adhesive on the lower section thereby forming a sealed window envelope.

References Cited

UNITED STATES PATENTS

1,932,989	10/1933	Rider	117—44
1,946,751	2/1934	McCarthy	229—92.3
2,302,455	11/1942	Mattson	229—92.3
2,312,162	2/1943	Heywood	112—34
2,895,534	7/1959	Steidinger	229—69
3,140,816	7/1964	Schultz	229—69

JOSEPH R. LECLAIR, *Primary Examiner.*

DAVID M. BOCKENEK, *Examiner.*