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[54] **POSTAL ADDRESS DEVICE**
9 Claims, 6 Drawing Figs.

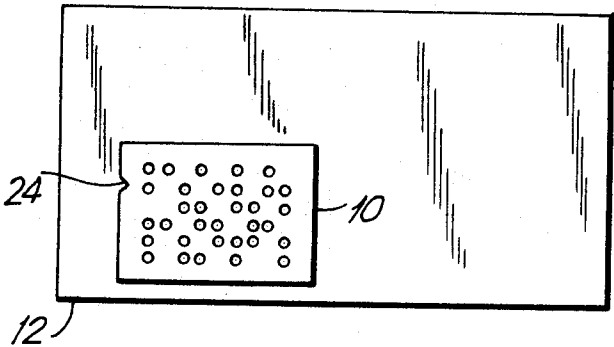
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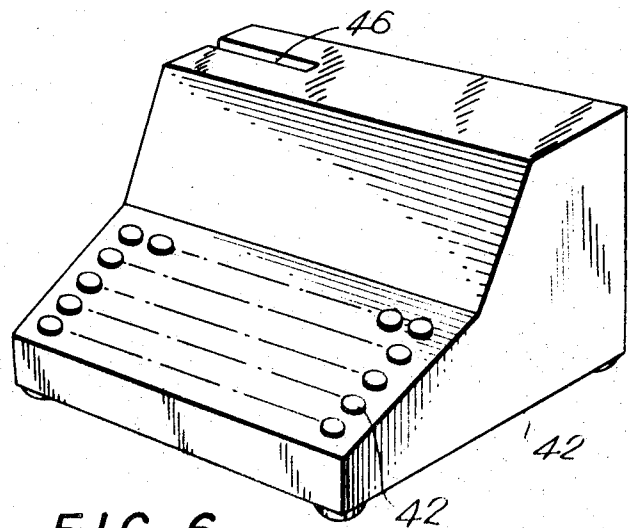
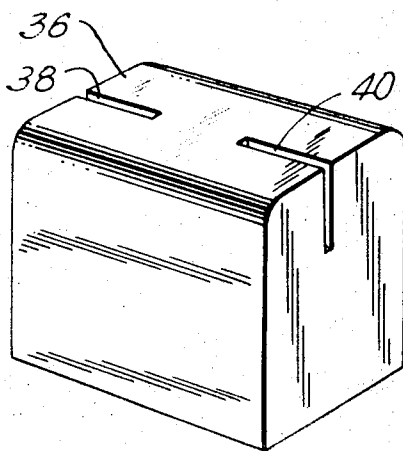
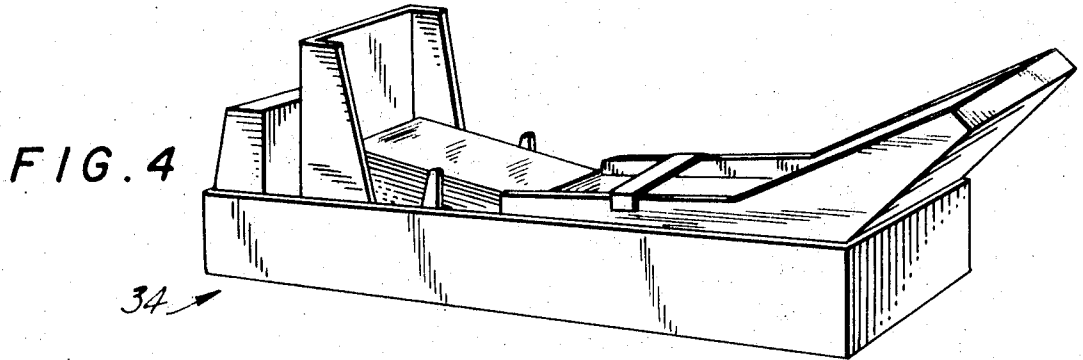
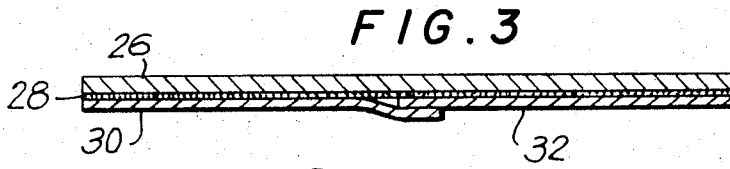
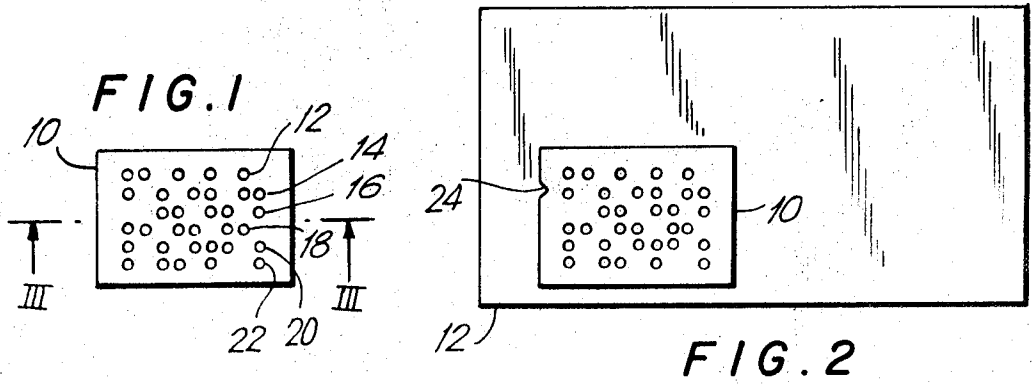
[50] Field of Search..... 235/61.11,
61.114, 61.115, 61.12, 91.14; 340/149A

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ABSTRACT: A rectangular metal foil or seal is used on envelopes, postcards and the like and is provided with coded arrangements of perforations indicating an address.





POSTAL ADDRESS DEVICE

DETAILED DESCRIPTION

This invention relates to the addressing of postal items, such as envelopes and postcards and, more particularly, to the provision of means to apply to an article of postage for purposes of addressing the same and facilitating the distribution and selection of the same.

It is an object of the invention to provide an improved means for addressing postal items in an economically feasible and advantageous manner.

It is also an object of the invention to provide improved means for addressing postal items while, at the same time, avoiding the use of complex and sophisticated mechanisms.

As will be seen hereinafter, the invention employs a seal prepared by the use of a simple punching machine thereby avoiding the use of magnetic records, printing machines, inking machines, photoelectric records, amplification circuits and the like.

Briefly, in accordance with the invention there is provided a metallic seal adapted for conducting electricity and/or provided with a polished surface and which may be applied to envelopes, postcards and the like, perhaps in the same way as a postage stamp and in which are provided perforations which permit a subsequent interpretation by means of a photoelectric device or an electric detector, the perforations being so arranged as will be discussed hereinafter so as to represent an address to which the item of postage is to be delivered.

Preferably the metallic seal of the invention is provided with a series of perforations varying in number between 18 and 54, which are furthermore preferably distributed in six lines, each having for example a minimum of three and a maximum of nine perforations.

The different combinations deriving from the positions of the perforations represent encoded combinations which correspond to different addresses. The lines of the perforations will correspond respectively to the following elements of an address: country, province or state, county, district, postal zone and street, avenue, lane, square, place, or the like.

For example, lists of addresses may be provided of international and municipal scope, identified by three decimal digits each represented on the seal of the invention by one, two or three perforations. Where nine perforations are available in a line, each line will correspond to a number of three decimal digits. The resulting three decimal digit figure will correspond to an address on the aforesaid lists.

The seal of the invention may be perforated by means of various generally conventional types of equipment, and in the post office the seals of the invention can be inspected by a selection mechanism which will be as noted hereinabove an electric or photoelectric device which will interpret the address represented on the previously perforated seals. This will be effected, as is well known, by the difference in electrical conductivity in the body of the seal as caused by the perforations, or by the difference in intensity of reflected light coming from the polished surface of the seal or from the paper appearing through the perforations.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 illustrates in plan view a seal or foil for providing an address in accordance with the invention;

FIG. 2 illustrates a seal in position on an envelope or postcard;

FIG. 3 is a cross-sectional view taken along line III-III of FIG. 1; and

FIGS. 4-6 diagrammatically illustrates means for perforating the seal of the invention.

In FIG. 1 appears a right quadrilateral or rectangular metallic foil 10 constituting the seal of the invention. The seal can be fabricated of aluminum foil or other suitable metals adapted for performing the electrical conductivity or light reflecting functions noted hereinabove. In its original state the

seal will be solid or unperforated. Thereafter, however, the seal will be provided with perforations appearing in lines 12, 14, 16, 18, 20 and 22. These perforations are arranged in coded combinations corresponding to digits which in turn correspond to addresses in the manner noted hereinabove. The seal may be applied to an envelope such as the envelope 12 appearing in FIG. 2 and may be located in a variety of positions thereon. The seal may also be applied to postcards, packages, magazines, and so forth.

The seal as applied to the envelope 12 in FIG. 2 includes a further feature, notably a reference mark 24. This reference mark is provided in order to facilitate the automatic scanning of the seal 10 and will indicate to the automatic scanning machine the point at which the encoded address begins. Alternatively, such reference marks may indicate the top, bottom or sides of the seal so that the scanning machine may automatically relate thereto.

The seal of the invention can be provided in various thicknesses, preferably of the range generally falling within the descriptive term "foil." Other sizes may alternatively be employed provided that the electrical conductivity or light reflecting functions noted above may be readily performed. A thickness range of, for example, 0.03 to 0.025 mm. is believed superior from the standpoint of durability and application.

As to the application of the seal of the invention to a postal item, there is proposed the application of a cement or adhesive in the same sense as a postage stamp, which cement or adhesive can be activated by the application of moisture thereto. An alternative appears in FIG. 3 wherein the foil is seen to consist of a metallic layer 26 beneath which is positioned a pressure responsive adhesive 28, the pressure responsive adhesive 28 being covered by two removable strips of paper 30 and 32 which are peeled off when the foil is to be applied to an envelope or the like.

FIG. 4 diagrammatically illustrates an address printing and seal punching machine attached together or not, according to preference; this machine being indicated at 34 and being operative by means of address plates kept in filing drawers and including perforating protrusions which are applied to seals of the invention manually or automatically inserted into the machine.

From the above it will be understood that the invention contemplates the alternative possibilities whereby seals of the invention are employed both in conjunction with printed or typed or handwritten addresses or, on the other hand, the seals are employed alone without the benefit of an accompanying conventional address.

In FIG. 5 appears a seal copying automatic machine, generally indicated, which can be employed for automatically applying perforations to seals of the invention. This machine 36 is provided with two slots 38 and 40 into one of which is inserted a seal and into the other of which is inserted an address card which causes the machine 36 to punch perforations into the seal.

FIG. 6 indicates at 42 a further type of machine which can be employed to punch perforations into seals of the invention, the machine 42 being provided with a keyboard 44 whereby perforations can be punched into a seal inserted into a slot 46.

The means for punching perforations into the seals of the invention are not disclosed herewith in greater detail, since they will be obvious to those skilled in the art. If further details are required in respect of printing perforations into the seals of the invention, reference is made to U.S. Pat. No. 3,096,016 wherein provision is made for punching holes into a conventional paper tape. The technique of this patent can be readily employed for the purposes of encoding addresses on the seals disclosed herein.

According to the invention, addresses can be encoded in the above-noted seals automatically in mail rooms by mail boys with address plates collected from filing drawers in a technique readily employable in large commercial and industrial firms. Addresses can also be encoded in seals automatically by the public, such as in post offices, drug stores, depart-

ment stores and the like, by means of a seal copying machine as shown in FIG. 5. The addresses can be manually punched into the seals by postal clerks and the like directly from the postal number written or printed on the envelope such as by the device indicated generally in FIG. 6. There will now be obvious to those skilled in the art many modifications and variations of the article of manufacture set forth hereinabove. Such modifications and variations will not depart from the scope of the invention if defined by the following claims.

We claim:

1. A postage article comprising an electrically conductive metallic seal provided with a plurality of perforations of predetermined address code, and adhesive means for connecting said metallic seal to a postage item, said metallic seal being of self-supporting thickness, and said perforations being arranged in a plurality of predetermined rows and columns.

2. A postage article as claimed in claim 1 wherein said metallic seal has a thickness of approximately 0.025 mm.

3. A postage article as claimed in claim 1 wherein said adhesive

sive means includes a layer of dry cement adapted for being activated by moisture.

4. An article as claimed in claim 3 wherein the seal has a polished surface so that the perforations can be photoelectrically detected.

5. An article as claimed in claim 3 wherein the perforations are arranged in six lines with a maximum of nine perforations in each line.

6. An article as claimed in claim 3 comprising a postal envelope to which the seal is connected.

7. An article as claimed in claim 3 comprising a postcard to which the seal is connected.

8. An article as claimed in claim 3 comprising reference means on said seal to facilitate examination of the perforations.

9. An article as claimed in claim 3 wherein the seal is a metal foil.

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