Oct. 15, 1974 B. FERGG ET AL 3,841,936
METHOD OF SEALING OPEN-ENDED ENVELOPES FOR PHOTOGRAPHIC FILM ON THE LIKE
Filed April 27, 1972

Fig. 1

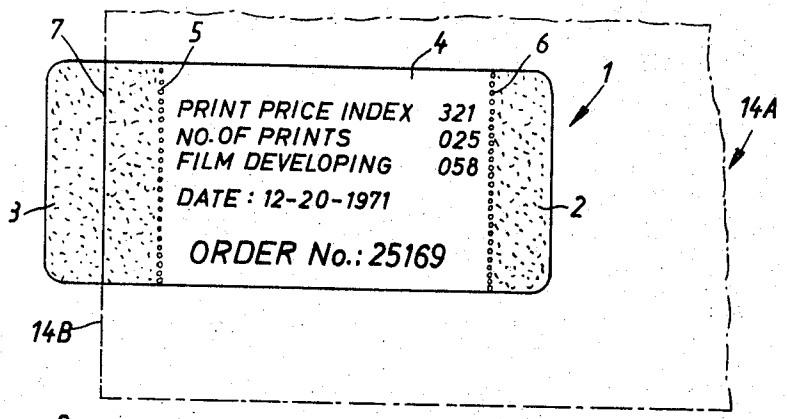


Fig. 2

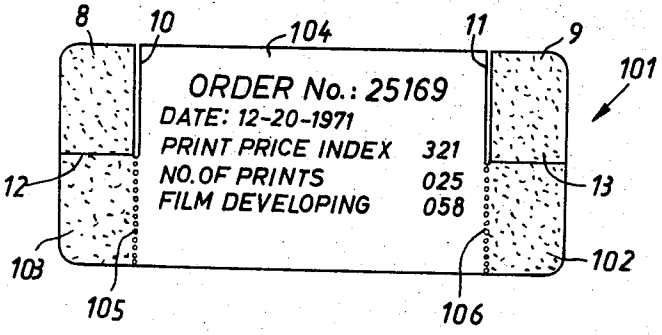


Fig. 3

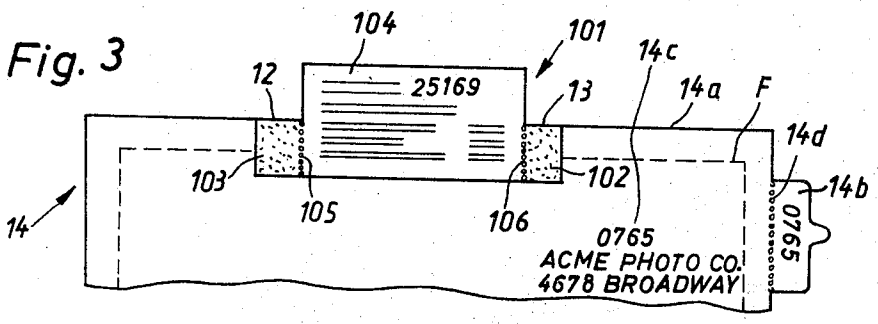
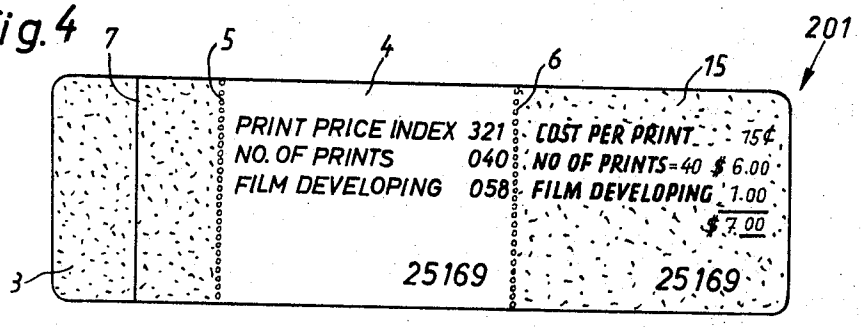


Fig. 4



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METHOD OF SEALING OPEN-ENDED ENVELOPES FOR PHOTOGRAPHIC FILM OR THE LIKE

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Int. Cl. B31d *1/02;* B32b *31/04*
U.S. Cl. 156—216 4 Claims

ABSTRACT OF THE DISCLOSURE

A rectangular label wherein a rectangular central portion is disposed between two rectangular sections having their rear sides provided with coats of adhesive. The front side of the central label portion bears imprinted information pertaining to the cost of developing of photographic film, the number of prints to be made from film, the price per print, the nature of film and/or the size of each print. The adhesive-coated sections are partially separated from the central portion by rows of perforations so that the central portion can be completely separated from the sections while the sections adhere to an envelope in order to at least partially close an open end of the envelope. Additional information may be imprinted onto the front side of at least one section to remain on the envelope, either as a bill to the dealer or as a bill to the customer. At least one of the adhesive-coated sections is provided with a fold line so that it can be readily folded over the open end of an envelope.

BACKGROUND OF THE INVENTION

The present invention relates to adhesive coated labels in general, and more particularly to improvements in labels which are provided with information or data and can be permanently or temporarily bonded to an article.

It is already known to employ adhesive-coated labels on articles in stores and to apply to the front sides of such labels information which can indicate the cost of articles, the dimensions of articles or the like. Furthermore, it is customary to use imprinted adhesive-coated labels on parcels and/or on envelopes which are to be mailed by a mail order house or a similar institution. However, adhesive-coated labels are not used at present in connection with the storage and/or shipment of photographic film and/or prints of film frames.

Labels which somewhat resemble the label of the present invention are disclosed in German Printed Publication No. 2,027,378, published Dec. 10, 1970.

SUMMARY OF THE INVENTION

An object of the invention is to provide a novel and improved label which can be used with particular advantage on envelopes or analogous containers for photographic film and/or photographic prints.

Another object of the invention is to provide a novel and improved method of manipulating the label in connection with the shipment of photographic material from a dealer to a processing plant and/or vice versa.

A further object of the invention is to provide a method of utilizing a specially designed label not only as a carrier of information for the dealer, developing plant and/or customer but also as an effective means for at least partially sealing envelopes or analogous containers for photographic materials, especially film and/or prints.

One feature of the invention resides in the provision of a label which comprises a first portion the rear side of

which is coated with adhesive and which preferably consists of two spaced apart rectangular sections, a second portion which is preferably located between the sections of the first portion and the front portion of which is provided with information or data pertaining, for example, to a transaction in connection with the development of photographic film and/or the making of prints, and a weakened portion which is disposed between the first and second portions and preferably consists of two rows of perforations allowing convenient separation of the second portion from the first portion while the first portion adheres to an envelope or the like in such a way that the open end of the envelope is overlapped and at least partially closed by the first portion.

Another feature of the invention resides in the provision of a method of sealing open-ended envelopes for photographic film and/or photographic prints by resorting to labels of the type having an adhesive-coated first portion, a non-adherent second portion and an elongated weakened portion between the first and second portions. The method comprises the steps of applying data to that side of the second portion which faces away from the adhesive-coated side of the first portion of a label, bonding the first portion of such label to an envelope so that the first portion overlies the open end of the envelope to thus at least partially confine the contents of the envelope, and separating the second portion from the first portion along the weakened portion of the thus applied label while the first portion continues to confine the contents of the envelope.

The data applying step may include applying to the second portion of the envelope information pertaining to the order or commission number of a dealer in photographic material, the nature of photographic film in the envelope, the number and dimensions of prints to be made from such film, encoded information for the dealer and/or processing plant, and/or others.

The method may further comprise the step of imprinting additional data on the adhesive-coated portion of the label. Such additional data may include information pertaining to the customer or dealer price for development of photographic film and/or the customer or dealer price for the making of prints from photographic film.

The novel features which are considered as characteristic of the invention are set forth in particular in the appended claims. The improved label itself, however, both as to its construction and its mode of operation, together with additional features and advantages thereof, will be best understood upon perusal of the following detailed description of certain specific embodiments with reference to the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a front elevational view of a label which embodies one form of the invention, further showing a portion of an envelope to which the label is about to be bonded;

FIG. 2 is a front elevational view of a second label;

FIG. 3 is a fragmentary front elevational view of an envelope, further showing on the envelope the label of FIG. 2; and

FIG. 4 is a front elevational view of a third label.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring first to FIG. 1, there is shown a rectangular label 1 which comprises a substantially centrally located non-adherent rectangular portion 4 which is provided with imprinted information or data, and another portion consisting of two adherent adhesive-coated rectangular mar-

ginal sections 2 and 3. The sections 2 and 3 (hereinafter called strips, for short) are disposed at the opposite sides of the central portion 4 and are adjacent to the short edges of the label 1. For the sake of clarity, the coats of adhesive are shown as being applied to the front or exposed sides of the strips 2 and 3; however, such adhesive coats are actually applied to those sides of the strips which face away from the observer of FIG. 1. The adhesive coats on the rear sides of the strips 2 and 3 preferably consist of a pressure-responsive adhesive which will strongly adhere to paper or a similar material in response to the application of moderate pressure. Neither side of the central portion 4 is coated with an adhesive, however, the rear side of the central portion 4 could be coated with a moisture-activatable adhesive which does not adhere to paper or the like without previous application of water.

The width of the strip 2 is about half the width of the strip 3, and the strip 3 is provided with a fold line 7 along which the outer part of the strip 3 can be readily folded over the inner part. The central portion 4 is separated from the strips 2 and 3 by an elongated weakened portion consisting of two rows of perforations respectively numbered 6 and 5. Thus, when the rear sides of the strips 2 and 3 adhere to a surface of a paper envelope or the like, the central portion 4 can be readily separated therefrom by tearing it away along the rows of perforations 5 and 6. As a rule, the width of the strip 3 will be at least twice the width of the strip 2.

The information or data which is imprinted onto the front side of the central portion 4 is self-explanatory. The label 1 is assumed to be utilized by a dealer in photographic material who accepts exposed and/or developed films for development and/or for the making of prints. The first line of information which is imprinted on the central portion 4 indicates the price index per print. The second line indicates the number of prints which are to be made, and the third line represents the code number for the developing of film, i.e., encoded information pertaining to the cost of development. The fourth line indicates the date on which the film was accepted for processing, and the last line indicates the order number which is different from label to label. When a clerk in a shop accepts an exposed film from the customer, the film is inserted into an envelope 14A and the label 1 is thereupon applied to one side of the envelope 14A adjacent to the open side or end which is indicated at 14B. The application of the label 1 is preferably such that the open end 14B registers with the fold line 7 whereby the rear sides of the strip 2 and of the inner part of the strip 3 adhere to one side of the envelope 14A. The clerk thereupon folds the outer part of the strip 3 over the open side 14B of the envelope 14A so that the strip 3 is folded along the line 7 and the outer part of the strip 3 adheres to the rear side of the envelope which provides a temporary closure for the envelope and confines the exposed film in its interior. The envelope 14A is then delivered or shipped to the developing plant where the film is developed and/or prints are made therefrom.

Certain information which appears at the front side of the central portion 4 of the label 1 can be applied (imprinted) thereto prior to attachment of the label to an envelope. Such information includes that which is in lines 1, 3 and 5 shown at the front side of the central portion 4. The number of prints (in the illustrated embodiment, the number of prints to be made is 25) is applied by the clerk. The same holds true for the date when the film was accepted for development and/or printing. In fact, certain information which appears on the central portion 4 can be imprinted on the label 1 prior to application of coats of adhesive to the rear sides of the strips 2 and 3. Such information may include the print price index, the number of prints, the cost of developing, the date and the order number. The label 1 can be attached with a large number of similar labels to an elongated carrier web of wax paper or the like to which the adhesive at the rear sides of the strips 2 and 3 adheres but can be readily separated therefrom without affecting the condition of the adhesive coats. Certain information on the central portion 4 can be imprinted onto the labels 1 prior to attachment to the carrier web of wax paper or the like. Certain other information, such as the order numbers, can be applied to the labels after they are attached to wax paper so that consecutive labels will be provided with successive order numbers, such as 25 169, 25 170, 25 171, etc. The carrier of wax paper can be introduced into an automatic printing machine which applies the order numbers in the desired sequence. The same holds true for the code number of the print price index and the cost of film developing.

FIG. 2 illustrates a modified label **101**. This label also comprises a non-adherent central portion **104** which is flanked by two marginal sections or strips **102, 103** of another label portion the rear side of which is coated with a suitable pressure-activatable adhesive. The width of the strip **102** is shown as being equal to that of the strip **103**, and each of these strips is provided with a transversely extending fold line **13, 12**. The rows of perforations which extend between the central portion **104** and the lower parts of the strips **102, 103** are respectively shown as **106** and **105**. The label **101** is further provided with two narrow slits **10** and **11** which respectively separate the upper parts of the strips **103** and **102** from the adjoining parts of the central portion **104**. The parts **8** and **9** which are respectively located above the fold lines **12** and **13** constitute two flaps which can be folded along the lines **12** and **13** so as to adhere to the rear side of an envelope to the front side of which the label **101** is applied by means of adhesive which coats the lower parts of the strips **102** and **103**.

FIG. 3 illustrates an envelope or container **14** of the type which is often employed by dealers in photographic material or the like for mailing of exposed photographic films to the developing and printing plants. The illustrated envelope **14** is provided with a tab **14*b*** which can be detached along the line **14*d*** and handed to the customer as a receipt for the delivered film. The number which appears on the tab **14*b*** is also applied to the envelope **14**, as at **14*c***, together with additional information such as the name of the dealer and his address. The reference character **14*d*** can indicate a row of perforations or an otherwise weakened portion of the tab **14*b*** which can be readily separated from the major part of the envelope **14** and handed to the customer. If desired, the number on the tab **14*b*** and the corresponding number on the face of the envelope **14** can appear in a coded form. Each envelope is provided with a different number.

When the envelope **14**, with the tab **14*b*** already removed therefrom and with a roll of exposed but undeveloped film contained therein, is received by the developing plant, the envelope is opened up preferably by severing or removing a narrow portion along the edge **14*a*** so that the exposed film can be removed therefrom. Such film is normally stored in a suitable cassette. Once the exposed film is removed from the envelope **14**, it is provided with a code number for identification in the developing plant, and such code number remains on the film during the processing which may include development and the making of a requisite number of prints. When the developing and printing operation is completed, the thus obtained prints and the exposed and developed film are delivered or automatically conveyed to a station where the number of prints is counted, where the dimensions of the prints are determined, and where a notation is made of the nature of film which was developed and further processed. The just-mentioned information can be obtained automatically by suitable equipment which is well known in the art. Certain information may be obtained by visual inspection or counting, and such information may be fed into a printing device similar to a typewriter which applies the information to labels **101** of the type shown in FIG. 2. At this station, the label **101** which

is subsequently applied to the envelope **14** is also provided with the date which can be imprinted onto the central portion **104**. Furthermore, the person in charge at such station may apply to the label **101** the order number which can also represent the commission number of the particular merchant. Such order number can be applied in the form of numerals or in encoded form. The exposed and developed film is preferably severed so as to form sections of desired length. For example, each such section may include six film frames. The sections of film and the prints are thereupon inserted into the envelope **14** and the label **101** is applied to the open end **14***a* of the envelope in a manner as shown in FIG. 3. Thus the flaps **8** and **9** are folded along the lines **12** and **13** so that they adhere to the rear side of the envelope **14** whereas the lower parts of the strips **102, 103** adhere to the front side of the envelope. The flaps **8** and **9** thereby partially seal the open end of the envelope so as to prevent unintentional removal or escape of film sections and prints. FIG. 3 further shows that the upper part of the central label portion **104** extends beyond open end **14***a* so that the order number, which happens to be 25 169, can be readily observed even if the envelope **14** is thereupon inserted into a drawer or a box, together with a number of similar envelopes, in such a way that the upper parts of the label portions **104** extend from the drawer or box. The envelopes **14** are then returned to the dealer and are held in readiness for the customer or customers. The customer presents his tab **14***b* and the number thereon is compared with the number on the envelope so that the dealer makes sure that the customer receives his film and proper prints.

It will be noted that, in contrast to the application of the label **1** shown in FIG. 1, the label **101** of FIG. 2 can be applied to the envelope **14** in such a way that the upper part of its central portion **104** extends beyond the open end **14***a* of the envelope. This is desirable because the order numbers can be readily observed without even partial withdrawal of envelopes from their drawer or box. Not only the label **1** but also the label **101** is attached to the respective envelope **14**A or **14** with sufficient force to prevent any unintentional or accidental separation. This can be readily achieved by applying to the strips **2, 3** or **102, 103** a moderate pressure so that the adhesive coats at the rear sides of such strips properly adhere to the adjacent portions of the respective envelopes.

Once the dealer has located the envelope **14** which belongs to a particular customer, the envelope is withdrawn from its receptacle and the central portion **104** is separated from the envelope by destroying the rows of perforations **105** and **106**. The information which is applied to the front side of the thus separated central portion **104** is evaluated to determine the cost to the customer. Alternatively, the thus separated portion **104** can be kept for later billing of a particular customer. The portion **104** is thereupon retained in the files of the merchant in proof of completion of the transaction.

FIG. 4 illustrates a third label **201** which is similar to the label **1** of FIG. 1 and certain parts of which are denoted by similar reference characters. The difference between the labels **1** and **201** is that the latter comprises a relatively wide adhesive-coated adherent section **15** which replaces the relatively narrow strip **2** of FIG. 1. The area of the section **15** is shown as being substantially equal to that of the non-adherent central portion **4**. The label **201** is assumed to be applied to an envelope in the printing and developing plant. When the envelope with the label **201** thereon is returned to the dealer, the dealer retains the cntral portion **4** which is separated from the remainder of the label along the rows of perforations **5** and **6**. The portion **4** then constitutes a receipt which the dealer retains in proof of completion of the transaction. The information which is imprinted on the section **15** remains on the envelope and is handed to the customer. Such information on the section **15** constitutes a bill which can be paid immediately or later on. The information which is shown at the front side of the marginal portion **15** can be imprinted in the developing and processing plant if the personnel at the plant is aware of the billing practice of the particular dealer. Alternatively, the developing plant will retain the central portion **4** as a receipt for completion of the transaction and the information which is imprinted on the section **15** will constitute a bill to the dealer. It is clear that the improved label is susceptible of many additional modifications without departing from the spirit of the invention. For example, the front sides of the adhesive coated marginal sections of each label can be provided with advertising matter or with other pertinent information. Furthermore, the improved label need not necessarily be used as a means for forming a closure for an open-ended or open-sided envelope which contains exposed but undeveloped film and/or developed film and/or prints. For example, the open end of an envelope can be sealed or partially sealed by a discrete label which does not bear any information or is provided only with advertising matter. The label **1, 101** or **201** is then applied to any other part of the envelope where it can be readily seen by the dealer. However, the simultaneous utilization of the label as a carrier of information as well as a means for at least partially closing an envelope or an analogous container for undeveloped or developed film and prints has been found to be of particular advantage because it saves an additional operation, namely, the sealing or closing of the open end of an envelope by a separate label or by a staple.

It is further clear that the improved label can find advantageous use in many other plants, not necessarily in photoshops or developing plants for photographic film or the like. For example, the label can be applied to envelopes which contain watches to be sent to a repair shop as well as any other relatively small articles which are to be transported or shipped between a receiving station, such as a dealer, and a repairing or processing station.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features which fairly constitute essential characteristics of the generic and specific aspects of our contribution to the art and, therefore, such adaptations should and are intended to be comprehended within the meaning and the range of equivalence of the claims.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.

What is claimed is:

1. A method of sealing open-ended envelopes for photographic film and/or photographic prints with labels of the type having an adhesive-coated first portion, a non-adherent second portion and an elongated weakened portion extending between the first and second portions, comprising the steps of applying data to one side of the second portion of a label; providing said first portion with a fold line so that said first portion includes two parts located at opposite sides of said fold line; bonding the first portion of such label to an envelope so that the first portion forms a closure for the open end thereof, said bonding step including pressing the two parts of the first portion so as to adhere them to the opposite exposed sides of the envelope at the open end thereof to thus confine the contents of the envelope; and separating the second portion from the first portion along the weakened portion of the label while the first portion continues to confine the contents of the envelope.

2. A method as defined in claim **1**, wherein said data applying step includes applying to the second portion of the label information pertaining to the order number of a dealer in photographic materials, the nature of photographic film in the envelope, and the number of and dimensions of prints to be made from such film.

3. A method as defined in claim 1, further comprising the step of imprinting additional data onto the first portion of the label.

4. A method as defined in claim 3, wherein such additional data includes information pertaining to the customer price for development of photographic film and/or the customer price for the making of prints from photographic film.

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