ABSTRACT: A retail merchandise price and data tag suitable for data processing, the tag being divided by tear lines into an upper section, a main section, and a lower section, the main section containing data related to an item of merchandise and being in coded punch hole or magnetic record form. The tag is partially inserted in an envelope formed by a rear panel and a transparent front panel releasably secured to the rear panel. The upper section of the tag, which extends outside of the envelope, and the rear panel of the envelope are permanently attached to the merchandise. By stripping off the front panel of the envelope, one then has access to the main section of the tag which may be torn from the upper section for data processing.
This invention relates generally to retail merchandise price and data tags which lend themselves to data processing, and more particularly to a removable tag and envelope assembly which is attachable to merchandise and is secure against mutilation and tampering.

In traditional retailing operation, each item of merchandise for sale carries one or more tags having color, size, style, price and other relevant information. After a customer has made his choice, a salesperson is then required to write out the details of the transaction on a sales slip which is thereafter processed in the accounting department of the store. Because of errors which may arise in recording the transaction and because of the time involved, conventional procedures are highly inefficient and add substantially to the cost of doing business, not only at the point of sale but also on the accounting level, for the entries on the sales slip must later be reentered in a form suitable for inventory and accounting operations.

In recent years, many large retail establishments and chain stores have replaced traditional methods with automatic data-processing systems dictating the use of special tags on which the style, color, size, price and other relevant data is presented in the form of coded punch holes or magnetic tape recordings. When a scale is made, the data section of the tag is removed for subsequent data processing wherein the punch holes or magnetic recording are sensed and converted into electrical signals.

While the data-processing technique represents a marked advance over traditional methods, it has certain serious drawbacks. Since the tag is removable from the merchandise, a dishonest person may be tempted to switch tags and to place on the item he purchases a tag taken from another item bearing a much lower price. This type of deception will usually not be detected by an inexperienced salesperson, and, even where an experienced salesperson is on duty, the deception may go undetected during busy periods when there is pressure to expedite sales.

Special price tags have a small upper section connected by a line of perforation to a large main section having the data encoded thereon, the small section being permanently affixed to the merchandise and the larger section being removable therefrom. The usual practice is to paste the small upper section to the wrapper of the merchandise. Because of the small area involved, if the adhesive is carelessly applied, as is sometimes the case, the tag may not hold and may fall off in the course of handling.

Another problem which arises with data-processing tags is mutilation, particularly with price tags in which the data is encoded by punch holes. Since these holes must later be sensed, any change in the hole pattern will produce false readings. With an exposed tag, such changes may arise by reason of dust or other foreign particles trapped in the holes, or because of scratches or distortions produced in the course of rough handling of the merchandise.

SUMMARY OF INVENTION

In view of the foregoing, it is the main object of this invention to provide a removable data-processing tag and envelope assembly which is attachable to merchandise and is secure against mutilation and tampering.

More particularly, it is an object of the invention to provide an assembly of the above type wherein the main section of the tag which contains the data is inserted in a protective envelope, the upper section extending therefrom, the rear panel of the envelope and the upper section of the tag being permanently attachable to the merchandise or its wrapper to afford a large area of contact, reducing the possibility of dislodgement.

A significant feature of the invention is that the front panel of the envelope is transparent to reveal the data on the tag, the front panel being strippable from the rear panel to provide access to the main section of the tag which is held to the upper section by a tear line permitting removal of the main section. Also an object of the invention is to provide a tag and envelope assembly which may be manufactured and sold at low cost.

Briefly stated, these objects are attained in an assembly comprising an envelope having an opaque rear panel and a transparent front panel whose sides and lower end are releasably adhered to the rear panel whereby the upper end of the envelope is open. Inserted in the envelope is a data-processing tag which is effectively divided by two tear lines into a relatively small upper section, a main section, and a lower section; the upper section extending from the envelope, the upper section of the tag and the rear panel of the envelope being permanently affixed to the merchandise or its wrapper. The main section bears encoded data related to the merchandise, whereas the lower section bears the price thereof, both the data and price being revealed through the transparent front panel.

OUTLINE OF DRAWING

For a better understanding of the invention as well as other objects and further features thereof, reference is made to the following detailed description to be read in conjunction with the accompanying drawing, wherein:

FIG. 1 is a front view of a standard merchandise tag suitable for data processing, the date being encoded in punch hole form;
FIG. 2 separately shows the main section of the tag;
FIG. 3 is a front view of another form of standard tag in which the data is recorded on magnetic tape;
FIG. 4 is a rear view of the tag shown in FIG. 3;
FIG. 5 is a perspective view of an assembly in accordance with the invention of a price tag of the magnetic tape type and an envelope;
FIG. 6 shows the assembly with the front panel of the envelope removed;
FIG. 7 is a longitudinal section taken in the plane indicated by line 7--7 in FIG. 6; and
FIG. 8 is a back view of the separated main section of the tag shown in FIG. 6.

DESCRIPTION OF INVENTION

Referring now to FIGS. 1 and 2, there is shown the front face of a standard merchandise tag, generally designated by numeral 10, suitable for data-processing applications. The tag is divided by two perforated tear lines 11 and 12 into a small upper section 10A, a large main section 10B and a small lower section 10C.

Imprinted on the upper section 10A is the name of the retailer establishment. The main section 10B contains a pattern of small punch holes 13 which, in coded form, provide data related to the article of merchandise to which the tag is attached, such as merchandise number, color, style, size, price, etc. Thus, by computer techniques, after the main section is separated from the upper and lower sections, the punch holes may be sensed to produce signals for data-processing equipment. The size, color and other data are also imprinted on the main section to provide the purchaser with pertinent information. On the lower section 10C, only the price appears.

The usual practice with a tag of the type shown in FIG. 1 is to affix only the upper section 10A to the goods or its wrapper. Then when a purchase is made, the main section is torn off the tag, and the lower section is removed from the merchandise. The separated main section, as shown in FIG. 2, is retained for further processing, and the lower section discarded.

In FIG. 3 and 4 the standard tag 15 is similar to that shown in FIG. 1, and includes an upper section 15A carrying the store name, a main section 15B, as shown in FIG. 4, is a strip 15D of magnetic tape recording material on which the data is stored in signal form for subsequent playback in the data-
processing equipment. This type of tag is also affixed to the goods in the same manner as a punch-hole type of tag, only the main section being retained after a transaction is completed. The invention is not limited to the tags shown and includes any known form of price tag having data thereon in a form which lends itself to automatic data processing.

As pointed out previously, tags of the type shown in FIGS. 1 to 4 are highly vulnerable and may be tampered with, as well as being subject to mutilation for lack of protection. To obviate these disadvantages, the invention provides an assembly as shown in FIG. 5 wherein a tag 15 of the type shown in FIGS. 3 and 4 is partially inserted in an envelope having a rectangular rear panel 16, preferably of opaque paper, and a matching front panel 17 of transparent material, such as tissue paper. The front panel 17 is marginally connected to the rear panel 16 along its sides and bottom edge by lines of releasable adhesive 18 making it possible to strip off the front panel.

The front face of the main section 15B of tag 15 and the front face of the lower section 15C are visible through the transparent front panel 17 of the envelope, whereas the upper section 15A, which extends above the open end of the envelope, is exposed. In permanently attaching the tag and envelope assembly to the surface 19 of an article of merchandise or to its box or wrapper, the rear panel 16 of the envelope and the upper section 15A of the tag are glued on their back side or otherwise connected to this surface, as best seen in FIG. 7. Since the front panel of the envelope is transparent, one is able to see the price and other data appearing on the portion of the tag lying within the envelope. Thus, even though the tag is protected by the envelope, it is not obscured thereby.

Because of the joint connection of the tag and envelope to the merchandise, detachment thereof will not occur even when subjected to rough handling. Nor is one able to transfer the tag and envelope assembly from one article of merchandise to another without detection, for the large envelope surface is such that even if the rear panel is carelessly adhered to the goods, some portion thereof will hold and be torn should a transfer be attempted.

When a sale is made, to obtain access to the data section of the assembly, one has merely to strip off top panel 17 of the envelope, thereby exposing the entire tag. One may then readily tear off the data section 15B from the attached upper section 15A of the tag and remove the lower section 15C, so that the separated main section 15B shown in FIG. 8 may be used for data processing. To facilitate stripping, upper panel 17 is provided with a tab 20.

While there have been shown preferred embodiments of the invention, it is to be understood that many changes may be made therein without departing from the essential spirit of the invention. Thus instead of having the front panel releasably secured to the rear panel of the envelope, it may be permanently secured thereon by a marginal adhesive connection. In order to open the envelope to release the tag, a pull string is incorporated in the envelope along one side thereof, the string being interposed between the laminated top and bottom panels, such that when the string is pulled out, it severs the top panel to open the envelope.

What we claim is:

1. A retail merchandise tag and envelope assembly comprising:
   A. a tag divided by tear lines into at least an upper section and a main section, said main section bearing data related to an item of merchandise, and
   B. an envelope having a rear panel and a transparent front panel detachably secured to the rear panel, said tag being partially inserted in said envelope whereby the upper section is extended therefrom,
   C. adhesive means bonding the back sides of said upper section and said rear panel to said item or its wrapper, access to said main section being had by detaching said front panel from said rear panel whereby said main section may then be torn from said upper section which with the rear panel, remains bonded to said item or its wrapper.

2. An assembly as set forth in claim 1, wherein said data is in the form of coded holes punched in said main section.

3. An assembly as set forth in claim 1, wherein said data is recorded on magnetic tape attached to said main section.

4. An assembly as set forth in claim 1, wherein said rear panel is formed of opaque paper and said front panel of tissue paper.

5. An assembly as set forth in claim 1, wherein said front panel is marginally secured by releasable adhesive to said rear panel along the sides and the lower end, whereby the upper end of the envelope is open to admit said tag and said front panel may be stripped from said rear panel.

6. An assembly as set forth in claim 5, wherein said front panel is provided with a tab to facilitate stripping.

7. An assembly as set forth in claim 1 wherein a pull string is interposed between said panels to facilitate said detachment.

* * * * *
UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,628,266 Dated December 21, 1971

Inventor(s) Lester V. Wise

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 2, line 3 from the end, after "15B" there should have appeared the following:

-- bearing printed data, and a lower section 15C showing the price. However, on the rear of the main section 15B, --

Column 3, line 28, "o" should have read -- on --

Signed and sealed this 13th day of June 1972.

(SEAL)
Attest:
EDWARD M. FLETCHER, JR. ROBERT GOTTSCHALK
Attesting Officer Commissioner of Patents