BACKING MEMBER FOR CHECKS

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ABSTRACT
A backing member for generally rectangular articles such as checks, credit card bills, and the like which are to be sorted by automatic magnetic character recognition sorting equipment. The backing member is formed of sheet material and includes a pair of spaced-apart generally parallel longitudinal edges and a transverse lead edge extending perpendicularly between the longitudinal edges. The sheet material is provided with a central opening to define a pair of longitudinal leg portions between the opening and the longitudinal edges and a transverse leg portion between the opening and the transverse edge. If desired, the sheet material can include a second transverse leg extending between the longitudinal legs to close the central opening, or the longitudinal legs can remain unconnected to form a generally C-shaped or U-shaped backing member. Adhesive is applied to one of the longitudinal legs in a manner to leave a portion of that longitudinal edge free of adhesive, and adhesive is applied to one or both of the other longitudinal legs and the transverse leg. The adhesive permits the backing member to be secured to a generally rectangular article with the adhesive-free portion of the first longitudinal leg extending below an edge of the article for the receipt of magnetic indicia.

3 Claims, 8 Drawing Figures
BACKING MEMBER FOR CHECKS
RELATED APPLICATION

This application is a continuation-in-part of our prior co-pending application entitled "Dispensing Apparatus," Ser. No. 59,068, filed July 29, 1970, now abandoned.

BACKGROUND

This invention relates to backing members, and, more particularly, to backing members which are particularly suitable for checks, credit card bills and the like which are to be sorted by magnetic character recognition sorting equipment.

The backing member disclosed herein is an improvement over the article described in U.S. Pat. No. 3,363,917 and the document carriers described in U.S. Pat. Nos. 3,043,506 and 3,431,404. As described in these patents, automatic sorting equipment is commonly used by banks, clearing houses, and other institutions for sorting checks with carry indicia printed in magnetic ink. However, some checks are rejected by the sorting equipment and will not be processed. A check might be rejected because of mutilation, improper encoding, lack of encoding, etc. When a check is rejected by the sorting equipment, some sort of correction device is generally used on which the correct information is encoded. The correction device is then processed through the sorting equipment, either with or without the check. It is preferable, however, that the check be carried through the sorting equipment along with the correction device to avoid the time-consuming operation of matching each check with the associated correction device after sorting.

One type of correction device can be described as a document carrier or envelope such as described in U.S. Pat Nos. 3,043,506 and 3,431,404. Certain problems have arisen, however, with carrier envelopes. For example, it is often necessary or desirable to be able to microfilm the check or other article carried by the envelope, and for this purpose a transparent front sheet is desired. However, the transparent material generally cannot be properly encoded with magnetic ink. If the document carrier is formed of a type of paper which is more readily encodable, this generally decreases the ability to microfilm through the paper.

Not only is it desirable to be able to microfilm the front of the check, but it is also desirable to microfilm the back of the check to obtain a permanent record of the endorsements or audit trail. The audit trail, i.e., the list of the banks through which the check has cleared, is particularly important when the check is drawn on an account with insufficient funds or when the check is stolen. A check is commonly sorted many times by several banks between the bank in which it is first deposited and the drawee bank, and the check might not be rejected by a sorter until some intermediate point in the sorting process. Some endorsements would therefore appear directly on the check, and these endorsements should be microfilmed.

Endorsements are commonly made on the check by the sorting equipment, but if a check is rejected by the sorting equipment, the endorsements might be made directly on the carrier envelope or other correcting device. At time the check will become separated from the carrier envelope either intentionally or accidently, and when this happens the chain of endorsements is interrupted. It is desirable therefore that endorsements be made directly on the check even when a correction device is used.

SUMMARY

The inventive backing member is adhesively secured to the check or other article to substantially eliminate the possibility that the backing member and check will become separated during the sorting process. The backing member is formed of paper which readily accepts the magnetic indicia, and the entire front surface of the check remains exposed for microfilming. Moreover, the backing member is provided with a substantial central opening to permit direct endorsement on the check and microfilming of almost the entire back surface of the check. The adhesive of the backing member may be heat activatable to eliminate the necessity of a protective covering sheet which must be removed before use and to allow the check and backing member to be precisely aligned before the adhesive is activated.

DESCRIPTION OF THE DRAWINGS

The invention will be explained in conjunction with illustrative embodiments shown in the accompanying drawings, in which

FIG. 1 is a top plan view of a backing member formed in accordance with the invention;
FIG. 2 is a top plan view of a check secured to the backing member of FIG. 1;
FIG. 3 is a bottom plan view of the check and backing member of FIG. 2;
FIG. 4 is a sectional view taken along the line 4—4 of FIG. 2;
FIG. 5 is a perspective view of a plurality of backing members provided in roll form on an adhesive-protecting strip;
FIG. 6 is a top plan view of another embodiment of the backing member;
FIG. 7 is a top plan view showing a credit card bill secured to the backing member of FIG. 6; and
FIG. 8 is a bottom plan view of the backing member and bill of FIG. 7.

DESCRIPTION OF SPECIFIC EMBODIMENTS

Referring to FIG. 1, the numeral 10 designates generally a backing member formed of sheet material which is readily imprintable with the magnetic ink used to form the magnetic indicia which are read by conventional sorting equipment. The sheet material may advantageously be paper of about 20 to 32 pounds weight and may advantageously be provided with vellum type of surface to accept the ink.

The backing member is generally C-shaped or U-shaped, having elongated upper and lower legs 11 and 12, respectively, joined by a transverse end or leg portion 13. The upper leg 11 includes longitudinally extending side edges 14 and 15 and end edge 16, and the bottom leg 12 includes longitudinally extending side edges 17 and 18 and end edge 19. The transverse leg portion has a straight end edge 20 extending perpendicularly to the longitudinal outer edges 14 and 17 of the sheet, and the inner edge of the transverse leg por-
tion is generally V-shaped provided by edges 21 and 22 which converge inwardly and to the right in FIG. 1 from the edges 15 and 18, respectively. The inner longitudinally edges 15 and 18 and the inner edges 21 and 22 of the transverse leg portion define a generally rectangular central opening 23 in the sheet material which extends longitudinally for substantially the entire length of the backing member.

Adhesive material 24 is carried by the upper longitudinal leg 11 along the entire length thereof between the inner edge 15 and a longitudinally extending line 25 adjacent to and the outer edge 14. Similarly, adhesive material 26 is applied along the entire length of the lower leg 12 between the inner edge 18 and a longitudinal line 27 which is spaced from the outer edge 17. Adhesive material 28 is applied to the transverse leg portion between the lines 25 and 27. The adhesive may be either pressure-sensitive adhesive or heat-activatable adhesive which is non-tacky at ordinary room temperatures and which must be heated before becoming tacky or sticky. Although in the particular embodiment shown in FIG. 1 the entire surface of the backing between lines 25 and 27 is coated with adhesive, it will be understood that the adhesive can be applied intermittently or discontinuously within this area.

The backing member is adapted to be secured to the back of an article to be processed by the sorting equipment and is sized so that the lower portion of the bottom leg 12 extends below the bottom edge of the article to provide an area on which magnetic indicia can be imprinted. For example, a conventional commercial-sized check may be about 8 1/8 inches by about 3 3/8 inches. A backing member 10 for use with commercial-sized checks might therefore have outer longitudinal edges 14 and 17 of about 7 1/4 inches to about 8 1/4 inches and an outer transverse edge of about 3 1/2 inches to about 4 1/2 inches. In one specific embodiment the upper leg 11 had a width of about three-eighths inch, and the lower leg 12 had a width of about 1 inch. The upper border 25 of the adhesive extended about equidistant between the longitudinal edges 14 and 15 of the upper leg, and the lower border 27 of the adhesive was spaced about three-fourths inch from the bottom longitudinal edge 17 leaving a lower portion of the leg 12 having a transverse dimension A of about three-fourths inch without adhesive.

The backing member is secured to the back of a check 29 by aligning the right transverse edge 30 of the check with the transverse edge 20 of the backing member and spacing the lower longitudinal edge 31 of the check from the lower longitudinal edge 17 of the backing member to expose a portion of the bottom leg 12 having a transverse dimension B on which magnetic indicia can be imprinted. Most sorting equipment will read indicia printed within about three-eighths inch to about five-eighths inch from the bottom edge of the item being sorted, and it is therefore preferable that the bottom edge of the check be spaced from the bottom member of the backing member by a dimension B of at least about five-eighths inch.

The adhesive-free dimension A of the lower leg is preferably slightly greater than the minimum spacing B desired between the bottom edges of the check and the backing member so that some range is permitted in the location of securement without exposing any of the adhesive on the lower leg.

In the particular embodiment illustrated in FIG. 2, the check 29 extends beyond the end of the longitudinal legs 11 and 12 of the backing member, and the upper edge 32 of the check extends above the upper edge 14 of the backing member. If desired, the longitudinal legs 11 and 12 can be lengthened to extend for the full length of the check, but we have found it desirable to have these legs somewhat shorter than the check to allow for variations in check length. Similarly, the transverse dimension of the backing member can be such that the backing member can be secured to the check with the upper edges thereof aligned, but we have found it desirable to reduce the transverse dimension of the backing members somewhat not only to accommodate checks of various sizes but to permit some margin of error in securing the backing member to the check. It is desirable that the adhesive on both the upper and lower longitudinal legs of the backing member be completely covered by the check to eliminate the possibility that the adhesive will affect the operations of the sorting equipment. However, even if the upper edge of the backing member did extend slightly above the upper edge of the check, the adhesive-free portion of the upper leg will generally be of sufficient width to prevent exposure of adhesive.

If the adhesive carried by the backing member is of the pressure-sensitive type, the backing member may be provided with a suitable protective strip or release member which covers the adhesive before use. For example, referring to FIG. 5, a plurality of individual backing members 10 are adhesively secured to an elongated strip or web 34, and the web and attached backing members may be conveniently provided in roll form. As each backing member is to be used, it is simply peeled from the protective strip and applied to the check. Alternatively, the backing members can be dispensed from a dispensing apparatus as described in our said co-pending application entitled "Dispensing Apparatus," Ser. No. 59,068, filed July 29, 1970.

If the adhesive material is of heat-activatable type, then no protective covering for the adhesive is needed. The backing member is simply aligned with the check as desired, and the check and backer are then advanced either manually or automatically to a heating device to melt the adhesive and secure the items. We have found that a heat-activatable or heat-seal type adhesive facilitates proper alignment of the check with the backer because the adhesive will not adhere to the check upon contact. The user can therefore put the two items together and align them perfectly before introducing the items to the heat-sealing device. Further, heat seal adhesive can be applied to the backing member in any pattern desired, either continuously or intermittently.

The check 29 generally carries some sort of magnetic indicia adjacent the lower edge 31 thereof, such as the numbers indicated generally by the reference numeral 35 (FIG. 2), which would ordinarily be read by the check sorting equipment. However, if the check is rejected by the sorting equipment, it may be secured to the backing member, and new magnetic indicia 36 can be applied to the exposed portion of the lower leg 12 which extends below the bottom of the check.

Referring to FIG. 3, the central opening in the backing member provided between the upper and lower legs 11 and 12 exposes substantially the entire
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back surface of the check, and endorsements 37 can be imprinted directly on the check. Even if the backing member is subsequently removed from the check, a complete chain of endorsements will remain on the check. The central opening also permits the back of the check to be microfilmed to record the endorsement information.

As the checks are delivered by the sorting equipment, they are generally stacked in vertical columns. Since the upper longitudinal leg of the backing member extends adjacent the upper edge of the check, a plurality of backing members and attached checks will stack evenly.

A modified backing member 40 is shown in FIG. 6 which is similarly formed of rectangular sheet material having longitudinal edges 42 and 43 and transverse edges 44 and 45. The sheet material is provided with a central opening 46 which defines upper and lower longitudinal leg portions 47 and 48 and a transverse edge portion 49. However, the central opening 46 terminates short of the left edge of the sheet material to provide a second transverse edge portion 50 extending between the longitudinal edges 42 and 43.

The particular member illustrated in FIG. 6 is provided with a central opening sized to accommodate a typical credit card bill 51, which is generally somewhat shorter than a commercial-sized check. Adhesive is applied to the front of the backing member between the longitudinal lines 52 and 53 and between the transverse line 54 and the right transverse edge 44. Preferably, the dimensions of the adhesive area are somewhat smaller than the dimensions of the article to which the backing member is to be attached to leave some margin for error or imprecision in securing the article to the backing member.

The bill 51 is secured to the backing member as shown in FIG. 7, and the backing member is sized to provide a lower portion 55 extending below the lower edge 56 of the bill for receipt of magnetic indicia. The vertical dimension of the lower portion 55 is preferably at least about five-eighths inch. The backing member 40 thereby adapts the bill to be processed by magnetic character recognition sorting equipment, and the amount of the bill, the account number, etc. can be encoded on the lower portion 55 with magnetic indicia.

Referring to FIG. 8, the central opening 46 in the backing member permits any information on the back of the bill to be read or microfilmed.

Although the particular backing member illustrated in FIGS. 6–8 extends substantially beyond the left side of the bill, it will be understood that the longitudinal dimension of the backing member can be substantially the same as that of the bill. In this event, the backing member can also be made substantially C-shaped by eliminating the left transverse leg portion 50.

Similarly, the backing member 10 illustrated in FIG. 1 can be provided with a second transverse leg portion extending between the left ends of the longitudinal leg portions.

The backing member 10 can also be sized for use with personal size checks, which are conventionally about 2 ¾ inches by about 6 inches. A backer for these checks could therefore have a longitudinal dimension of about 6 inches and a transverse dimension of about 3 to 3 ¼ inches.

While in the foregoing specification, detailed descriptions of specific embodiments of our invention were set forth for the purpose of illustration, it is to be understood that many of the details hereinafter may be varied considerably by those skilled in the art without departing from the spirit and scope of our invention.

We claim:

1. In combination, a check and a backing member to which the check is adhesively secured, the check being generally rectangular and having a pair of parallel longitudinal side edges and a pair of parallel transverse side edges and having encoded magnetic indicia imprinted on the front surface thereof adjacent one of the longitudinal side edges, the backing member being formed of sheet material capable of being imprinted with magnetic indicia and having a generally C-shape provided by a pair of spaced-apart longitudinal leg portions which extend generally parallel to the longitudinal side edges of the check and a transverse leg portion which extends adjacent one of the transverse side edges of the check, each of the longitudinal leg portions and the transverse leg portion having at least a portion thereof which is covered with adhesive and which is secured to the back surface of the check, one of the longitudinal leg portions extending transversely beyond the adjacent longitudinal side edge of the check for at least three-eighths inch to provide an adhesive-free area on which magnetic indicia can be imprinted, the spacing between the longitudinal leg portions exposing the majority of the back surface of the check whereby endorsements can be entered on the back surface of the check between the longitudinal leg portions and the back surface of the check can be photographed.

2. The structure of claim 1 in which the longitudinal leg portions extend for substantially the entire length of the longitudinal side edges of the check and the other longitudinal leg portion extends adjacent the associated longitudinal side edge of the check whereby a plurality of checks and attached backing members can be stacked evenly.

3. The structure of claim 1 in which the transverse leg portion includes a first edge extending substantially parallel and adjacent to said one transverse side edge of the check and a second generally V-shaped edge which extends between the longitudinal leg portions.