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COMPOSITE IDENTIFICATION CARD

Filed Nov. 4, 1966

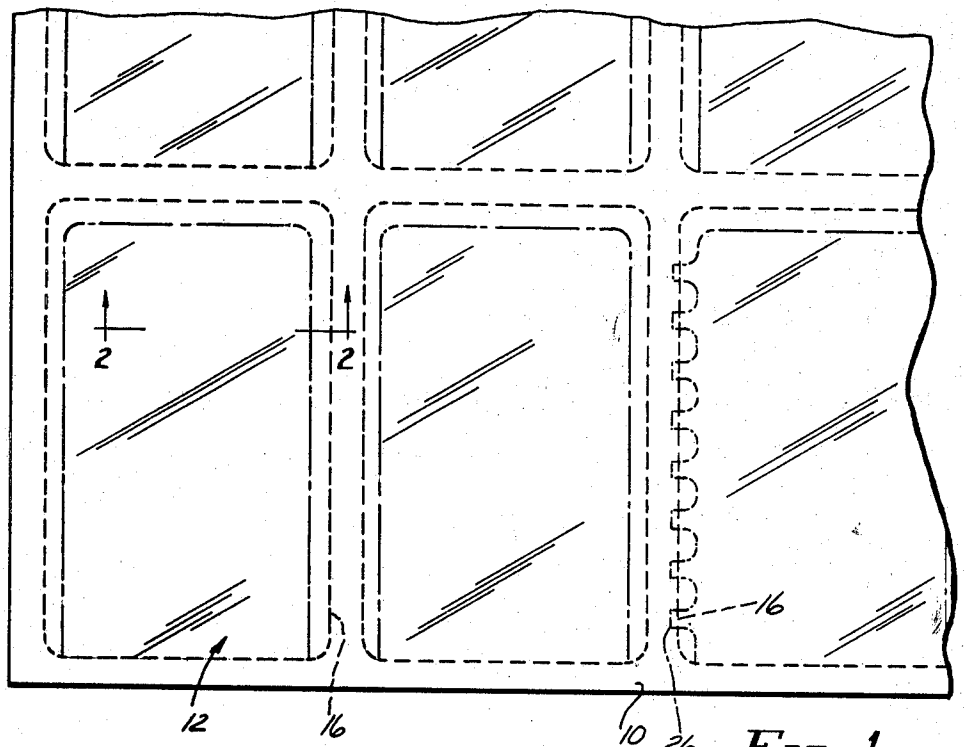


Fig. 1



Fig. 2

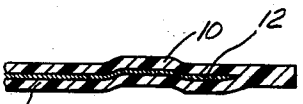


Fig. 4

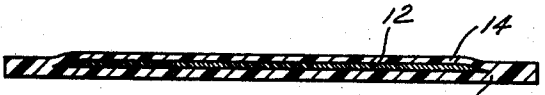


Fig. 3

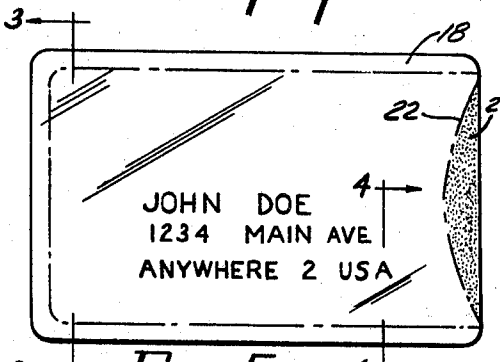


Fig. 5



Fig. 6

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COMPOSITE IDENTIFICATION CARD

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U.S. Cl. 156—220 3 Claims

ABSTRACT OF THE DISCLOSURE

Two sheets of heat and/or pressure bondable material coated with a parting agent in areas not to be bonded. Trim through the non-bonded area to create a pocket opening.

The metal address machine plate so familiar for many years in addressing machines, was adopted and has now become widely used as a personal identification device in the form of plastic cards embossed with letters and insignia to identify a particular person authorized to receive credit.

The original credit cards were merely printed devices which carried information for the individual purveyor to copy. In some areas, metal plates not unsimilar to the machine plates are provided for each customer and such plates were inserted into portable encoding machines for printing directly upon a purchase order or other credit memo. Now, it is common practice to employ the plastic cards embossed with the information needed for print out together with advertising or other indicia which is not encoded onto the memo.

In particular, it has been a recent development in business circles to provide identification cards for employes in a business enterprise, or for students in a university, and people in other similar circumstances. These cards not only identify the person, preferably by means of a photograph, but in addition are embossed with the desired encoding material. Thus, a person properly identified may also use the card to fill out required forms such as attendance forms and payroll slips. Other uses will suggest themselves and be quite apparent.

BRIEF DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a plan view of a sheet of clear embossable plastic material with phantom outline areas indicating the presence of printed parting agent areas and trim lines;

FIGURE 2 is a partial section greatly enlarged taken substantially along the line 2—2 of FIGURE 1;

FIGURE 3 is a section taken along the line 3—3 of FIGURE 5;

FIGURE 4 is a fragment of the section of FIGURE 3 as it appears after being embossed through that section;

FIGURE 5 is a top plan view of a completed cover pocket prior to insertion of an identification card; and

FIGURE 6 is a plan view, partly broken away, of an identification card bearing a photograph of the authorized person.

DESCRIPTION OF PREFERRED EMBODIMENT

The preferred embodiment of the invention illustrated in the drawing is made by the steps of providing a base sheet **10** of a clear plastic material which is capable of being heat sealed to another sheet of material, and also capable of being embossed by equipment normally used to emboss opaque plastic credit cards. The nature of the sheet **10** must be such that the embossing will withstand repeated use in an encoding machine of well-known types normally used to encode information from personal credit cards. The type of plastic material is not specified because it may be selected from a number of different materials made by various manufacturers and readily selectable by anyone reasonably skilled in the art.

The base sheet **10** is coated with parting material in imprint areas **12** by printing techniques. In the FIGURE 2, the parting material in the imprint area is indicated in greatly exaggerated thickness by cross section lines proceeding away from the surface of the base sheet **10**. The material imprinted into the areas **12** is a parting agent which will prevent heat and pressure sealing of the sheet **10** to another sheet, even though the other sheet may be the identical type of material and normally readily heat sealable. Waxes and soap are examples of materials suitable for such purposes, and may be selected from a wide range of available materials. For example, a light emulsion of ordinary floor wax will suffice. The parting material is to be transparent after the welding and separating operation in order to offer no impairment of the sheet transparency.

The sheet **10** is capable of being produced in large sizes on conventional printing presses in order to create a multiple number of the imprint areas **12**. Then, a cover sheet **14** is placed in superposed relationship with the sheet **10** and the two sheets are subjected to heat and pressure in a flat bed press. The heat and pressure is sufficient to cause the areas outside of the coated area, where the two sheets come into direct contact, to blend into substantially one homogenous mass. The parting agent, however, prevents welding of the imprint area.

The cover sheet **14** may also be selected to fulfill particular needs. In the FIGURES 3 and 4, the sheet **14** is shown a being thinner than the sheet **10**. It is desirable in many instances to make sheet **14** of considerably thinner stock than sheet **10**. The embossing of the finished jacket will produce an embossing area on the sheet **10** suitable to withstand the crushing forces of encoding. The act of encoding sheet **10** will emboss the sheet **14** and cause projections to extend into the pocket of the finished structure. However, the sheet **14** is flexible and thin enough that the embossing will not withstand pressure. Thus, whenever a paper identification card is used in the finished pocket, the paper is stronger than the embossing in sheet **14**, and the pressure of encoding will flatten the remnant of encoded area on the sheet **14** and not cause undue marking or deterioration of the enclosed identification card. The sheet **14** may be chosen in cloudy or opaque material, rather than clear, in order to make a more pleasing back surface which does not reveal the back of an identification card carried therein.

After the sheet **14** is placed upon the base sheet **10** and subjected to the pressure and temperature referred to for welding the uncoated areas, the resultant product is a large sheet of composite nature wherein unbonded areas are completely outlined by bonded areas.

In FIGURES 3 and 4, the sections indicate that the cover sheet **14** bulges outwardly over the areas **12** to accommodate the parting material. This is necessary in any practical illustration, but in actual practice the areas **12** are so extremely thin that there is no perceptible change in thickness from the border areas to the unsealed areas. This fact is a condition to be especially desired. Prior art devices have employed outline dies in the desired form of the card. Such dies produce a change in thickness in the area of sealing, and hence produce an area which fails in service. The present invention is highly desirable in that the change in thickness from the welded to the unwelded area is essentially non-existent and, therefore, a point of weakness is avoided. Thus, the pocket of the present invention has been proven to withstand infinitely more bends and stresses such as a card receives in a billfold or purse, than the previous devices made by local sealing techniques.

The reference character **16** indicates a line spaced around three sides of the coated area along which an individual unit may be severed from this large composite sheet. The line **16** is coincidental with the coated area outline along one end of the area **12**. Thus, the severed section removed from the large composite section will have a sealed border **18** around three sides and an unsealed mouth portion **20** where the severing coincides with the area **12**. In severing along the mouth edge wherein the line is exactly coincidental with the termination of the imprint area **12**, the action of severing will tend to separate the two sheets a slight amount, and although normally the degree of separation varies from card to card, and is usually somewhat irregular, the line **22** suggests the extent of an area of partial separation. This partial separation makes possible the facile insertion of a flat identification card without the problem of attempting to find the division line between the closely positioned base **10** and cover sheet **14**.

Although a great variety of possible inserts are available to use in the pocket thus created, one of the most useful combinations is a photograph of the person together with pertinent data which is not necessarily desired to be encoded into every form in which the identification card is to be inserted. For example, a Polaroid (registered trademark) camera has been devised which will photograph a card of information and the person simultaneously and produce a finished color print of the person and the information within one minute. This identification card is highly suitable for use in combination with the pocket described, and the pocket described will provide not only the available encoding information, but will protect the color photograph and identification area against being marred in storage or in use. After the card is installed in the case, it may be locked in place by a rivet or other means.

In FIGURE 1, one of the printed sections **12** is shown to have a series of side areas **26** which extend out beyond the severing outline **16**. This particular area, when severed from the large sheet, will thus provide a series of small entrance openings. Identification tabs placed in these openings will enable a pocket made by this method to be classified for rapid identification, or to identify to sensing devices of handling equipment.

Whereas the present invention has been shown and described herein in what is conceived to be the best mode contemplated, it is recognized that departures may be made therefrom within the scope of the invention which

is, therefore, not to be limited to the details disclosed herein, but is to be afforded the full scope of the invention as hereinafter claimed.

What is claimed is:

1. The method of making an identification card, comprising the steps of:

providing a first and second sheet of material mutually bondable by heat and pressure;

coating an area within the boundries of said first sheet with a parting agent which prevents bonding between said sheets;

placing said first and second sheets in superposed relationship and pressing them together with a wide area surface pressure at a temperature to produce bonding of said first and second sheets in all areas in contact outside said coated area;

thereafter severing a portion of said first and second sheets along a line spaced from said coated area on three sides of said coated area and along the fourth side with no space to thereby produce a unitary pocket of said two sheets bonded on three sides and having an entrance on said fourth side;

preparing an insert data card; and

parting said first and second sheets from said entrance and inserting said data card into said pocket.

2. The method of making an identification card as defined in claim **1** including the step of applying embossing means to establish raised encoding areas extending from one surface of said pocket for use as a printing plate member.

3. The method of making an identification card as defined in claim **1** wherein said coated area is formed with a plurality of side extensions which project beyond the line of severing, whereby a plurality of side entrance openings are provided between the sheets for holding identification tabs.

References Cited

UNITED STATES PATENTS

2,802,418	8/1957	Carver et al.	156—220
2,898,257	8/1959	Carver	156—289
3,068,140	12/1962	Biddle	156—250
3,143,453	8/1964	Huston	156—289

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U.S. Cl. X.R.

156—250, 289