United States Patent [19]

Mooney et al.

[11] **3,816,948**

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[54] **DATA CARD HOLDER**

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[52] **U.S. Cl.** **40/102,** 40/159, 40/124.2

[51] **Int. Cl.** **G09f 1/10**

[58] **Field of Search** ..... 40/102, 104.2, 104.17, 40/104.1, 104.19, 158 R, 158 B, 159, 124.2

[56] **References Cited**

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Primary Examiner—Wm. H. Grieb
Assistant Examiner—J. H. Wolfe

[57] **ABSTRACT**

A holder having open pockets for accommodating data cards. Flaps adjacent the open tops of the pockets retain the cards in the pockets. The holder has two sections articulately joined together allowing the sections to be located in a first aligned position and a second side-by-side position. Separate pockets located on the outside of the holder accommodate sheet material, as blueprints, routing sheets and the like.

4 Claims, 4 Drawing Figures

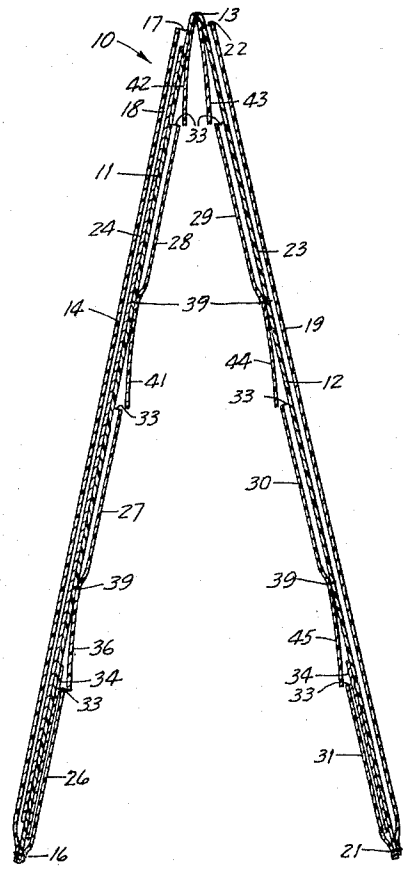


FIG. 1

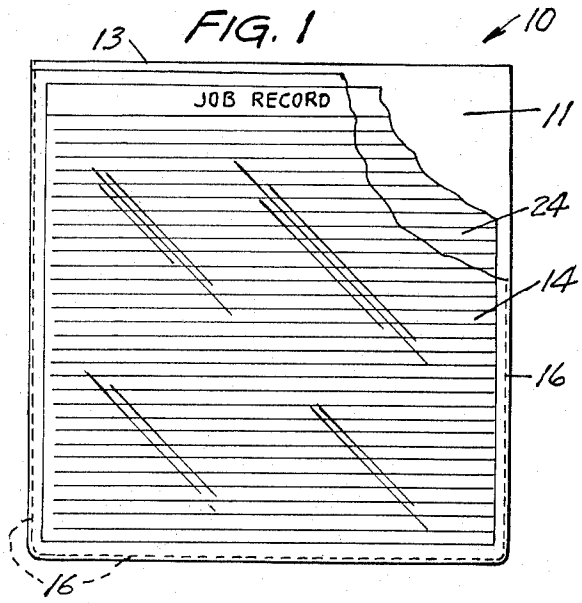


FIG. 2

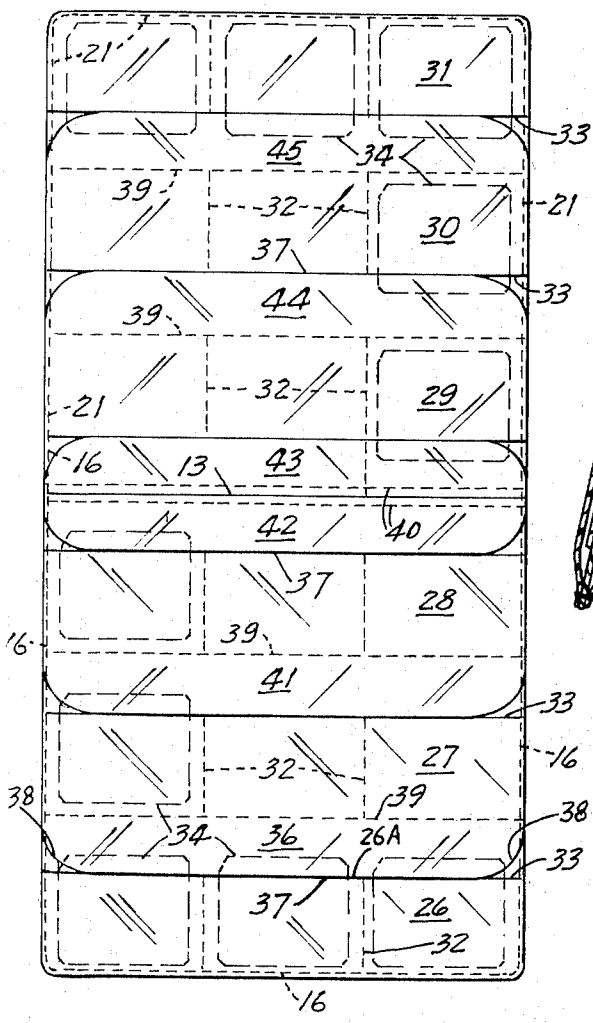


FIG. 3

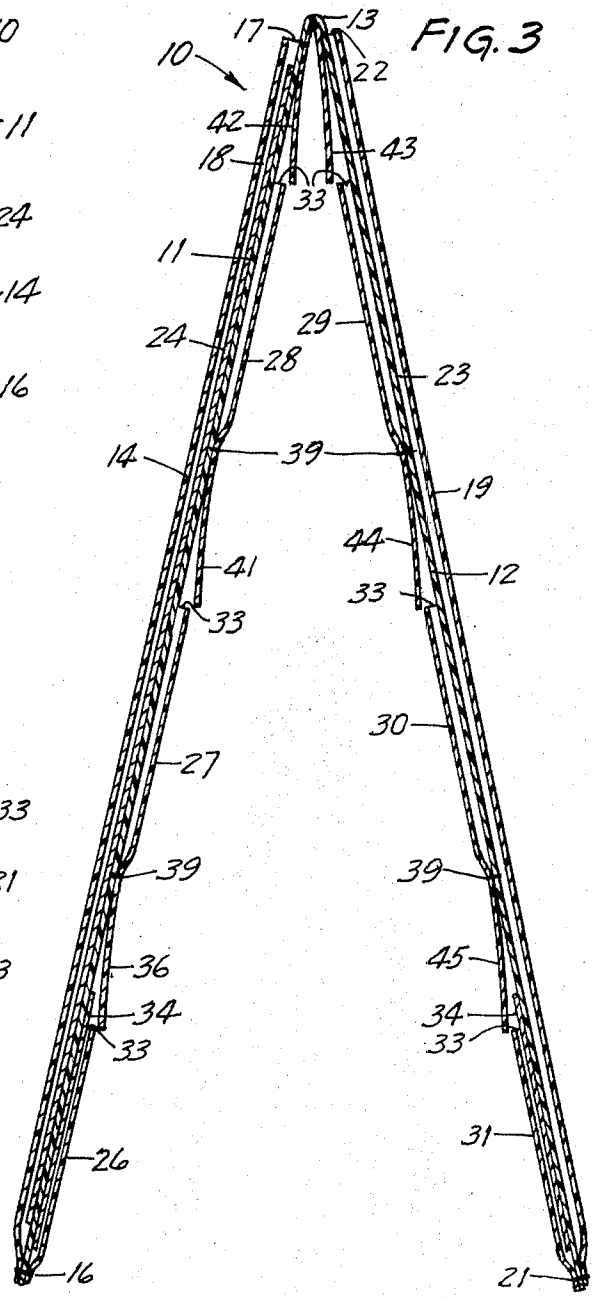
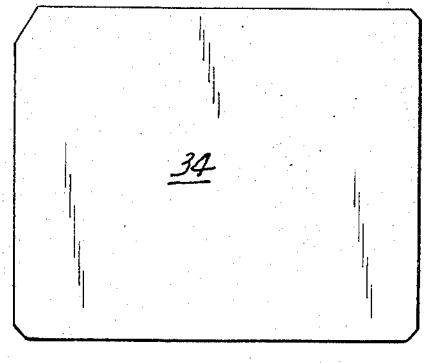


FIG. 4



DATA CARD HOLDER

BACKGROUND OF THE INVENTION

Modern business requires timely and meaningful data related to the operation of the business. Meaningful data can pinpoint problem areas without the need of poring through voluminous stacks of papers and figures. Data processing equipment is presently being utilized in business to obtain significant data faster and with greater accuracy to provide the business with the needed information. The data is collected in various forms. In one form, the data is collected on cards which are coded. For example, data cards used in a machine shop business would contain a number of cards indicating inventory, machine operations, labor time, scrap and finished product. The cards must move with the job from machine to machine, from the rough product to the finished product. The cards must be stored in a convenient place where they are readily available to the machine operator.

SUMMARY OF THE INVENTION

The invention relates to an apparatus having separate pockets for holding decks of data cards. Each pocket has an open end located adjacent a flexible flap which prevents the cards from falling out of the pockets. The apparatus has a base holding a sheet member forming the pockets on one side of the base. On the opposite side of the base is a large pocket for holding sheet material, as routing sheets, blueprints, notes and the like.

IN THE DRAWINGS

FIG. **1** is a plan view of the front of the data card holder of the invention in the closed position;

FIG. **2** is a plan view of the inside of the data card holder of FIG. **1** in the open position;

FIG. **3** is an enlarged sectional view of the data card holder in a folded back position; and

FIG. **4** is a plan view of a data card.

Referring to the drawings, there is shown in FIGS. **1–3** the data card holder of the invention, indicated generally at **10**, for storing a card or separate sets of data cards used with data processing equipment. For example, the data card **34** shown in FIG. **4** can be a 96-column card used with an IBM Systems/3 computer. Other card sizes and other data processing equipment can be used.

Holder **10** has relatively rigid flat base members **11** and **12** which are connected with a transverse hinge **13** which permits the base members to be moved or pivoted relative to each other about hinge **13.** As shown in FIG. **1,** the base members **11** and **12** are in a folded side-by-side closed position while in FIG. **2** the base members **11** and **12** are in an end-to-end flat open position. Each base member **11** and **12** is a relatively rigid and flat plastic sheet member. The plastic material is heat sealable material. Hinge **13** is integral with the plastic sheet members and has a transverse score line to permit flexing of the hinge. Other types of hinges can be used to articulately connect the base members together.

The outer side of base member **11** is covered with a sheet member **14.** The sides and bottom outer peripheral edges of the sheet member are attached to the base member with a continuous heat seal seam **16,** shown with a broken line. The top edge of sheet member **14**

is spaced from base **11,** forming an opening or mouth **17** into a generally flat pocket or space **18** for accommodating sheet material **24,** as route sheets, blueprints, notes and like printed materials. Preferably, sheet member **14** is a transparent, tough polyethylene which will protect the contents of the pocket from foreign materials, as grease, dirt and the like.

The outer side of base member **12** is covered with a sheet member **19.** The outer peripheral sides and bottom of the sheet member **19** are attached to the base with a continuous heat seal seam **21,** shown in FIG. **2** with broken lines. The upper end of sheet member **19** is not attached to the base and forms therewith an opening or mouth **22** into a generally flat pocket or space **23** for accommodating sheet material or other generally flat objects, as sheet material **24.** Stiff sheet material can be placed in pockets **18** and **23** to add to the rigidity of the base members **11** and **12.** The stiff sheet material can be enclosed and sealed within the base members **11** and **12.** Alternatively, the base members **11** and **12** can be made of relatively rigid material.

Referring to FIGS. **2** and **3,** a sheet means having a plurality of transverse sheet members **26, 27** and **28** are attached to the inside of the base member **11.** In a similar manner, a sheet means having a plurality of transverse sheet members **29, 30** and **31** are attached to the inside of base member **12.** Sheet members **26–31** are preferably heat sealable plastic sheet material, as transparent polyethylene. Members **26–31** may be made of paper, leather, fabric, and like materials. Each sheet member has three pockets for accommodating the data cards **34.** As shown in FIG. **2,** vertical heat seal seams **32** continuously attach vertical strips of the members **26–31** to the base members **11** and **12** to form the separate pockets. Each pocket has a top opening or mouth **33** leading to a pocket space to accommodate the card **34** or a set of cards. Sheet members **26-31** are separated into six transverse rows and eighteen separate pockets with vertical seams **32,** as indicated by vertical broken lines in FIG. **2.** The size and number of pockets can vary according to the requirements of the cards and use of the holder.

The openings **33** of the pockets formed by sheet member **26** are substantially covered with a transverse flexible flap **36.** Flap **36** extends the full width of the base member and has a transverse edge **37** in alignment with the transverse top edge **26A** of the sheet member **26.** The edge **37** is linearly aligned with the edge **26A** on member **26** and cooperates therewith to retain cards in the pockets. The edges can engage each other or be spaced from each other. Opposite ends of the flap **36** are not attached to the base and have convex curved corners **38** which enable the ends of the flap to be gripped so that the flap can be folded back, providing access to the pockets. The corners may be beveled in lieu of round. Once the flap is released, it will move back toward the base member **11** closing mouth **33** of the pockets. Flap **36** is a lower extension of the transverse sheet member **27** and is attached to base member **11** with a transverse heat seal seam **39,** shown in FIG. **2** as a horizontal broken line.

The pockets formed in transverse sheets **28, 29, 30** and **31** are closed with similar transverse flaps **41, 42, 43, 44** and **45.** Flaps **42** and **43** are heat sealed with seams **40** together to base members **11** and **12** adjacent the transverse hinge **13.**

In the fabrication of the holder, transverse sheet members **26–31** and flaps **36** and **41–45** are a single sheet member which is heat seamed and die cut on the base members **11** and **12.** Heat seams **16** and **21** secure the sides and ends of the single sheet member to the sides and ends of the base members **11** and **12.** Vertical heat seams **32** and horizontal seams **39** and **40** are used to secure the internal vertical and horizontal strips of sheet member to base members **11** and **12** to complete the separate pockets. Other types of attaching means, as stitches, rivets, staples and the like can be used to attach sheet members **14, 19** and **26–31** to the base members **11** and **12.** The flaps do not overlap the transverse sheet members forming the pockets. This permits the flaps and sheet members to be cut from a single sheet of plastic material.

A specific example of the holder has the following features. The base members **11** and **12** are twelve inches square and are a single plastic sheet having a transverse score line forming the hinge **13.** Each pocket is 3.5 inches wide and 2.5 inches deep. Each sheet member **26–31** has three pockets. The flaps extend the width of the base members and have a width of 1⅝ inches. The lower or outer linear edge of the flap generally follows the adjacent edge of the sheet member at the openings into the pockets. The sheet members **26–31** are linearly heat seamed to the base members. The ends of the flaps have an arc of one-quarter of a circle. The arc has a radius of one inch.

In use, the large pockets **18** and **23** are used to store large sheets, as route sheets, blueprints, notes and the like. Packs of data cards are placed in the sequential pockets according to the job route. As the job progresses through the shop, the cards are used to store data, as time, number of pieces, scrap, completion and location of the job. The entire holder moves with the job through the shop from station to station until the job is complete. The completed cards are periodically removed from the holder and used in the data processing system to provide information as to the inventory and progress of the job. The corners **38** of the flaps, being separated from the transverse sheet members, permit the operator to grip the flap and peel it back so that the data cards **34** can be readily inserted into the pockets and removed from the pockets. The flap, being flexible, will return to their generally flat position and thereby prevent the cards from falling out in handling of the holder. Transverse sheet members **26–31,** being attached to the inside of the base members, are protected by the base members **11** and **12** during use. The data cards are readily available by merely unfolding the holder to the generally flat position, as shown in FIG. **2.**

While there has been shown and described a preferred embodiment of the invention, it is understood that various sizes and numbers of pockets may be used. It is understood that the only limitations of the subject matter of the invention shall be the claims or their equivalents.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A holder for data cards for use in maintaining job records, comprising: a first rectangular flat base member and a second rectangular flat base member each having a first side and a second side, and a transverse dimension and a longitudinal dimension, said base members having adjacent transverse edges, transverse hinge means cooperating with the adjacent transverse edges to pivotally connect the first and second base members, first and second sheets located in juxtaposition respectively to one side each of the first and second base members, transverse means attaching portions of each sheet to each base member to form a plurality of transverse rows of pockets, longitudinal means attaching transverse spaced portions of each sheet to each base member to form a plurality of pockets in each row, each of said sheets having a transverse edge adjacent the open end of each row of pockets, said open end of each row of pockets being open toward said transverse hinge means, flap means attached to the base members cooperating with the sheets to retain the cards in the pockets, said flap means having a transverse edge linearly aligned with and abutting the transverse edge of the sheets, said flap means having free ends adapted to be gripped whereby the flap means is foldable back to provide access to the pockets, a third sheet located in juxtaposition to the first base member substantially coextensive to the first base member on the side of the first base member opposite the first sheet; means attaching portions of the third sheet to the longitudinal edges of the first base member and to the lateral edge of the first base member opposite the lateral edge pivotally attached to the second base member to form a first single large pocket, a fourth sheet located in juxtaposition to the second base member and coextensive with the second base member on the side of the second base member opposite the second sheet, and means attaching portions of the fourth sheet to the longitudinal edges of the second base member and to the lateral edge of the second base member opposite the lateral edge pivotally attached to the first base member to form a second single large pocket.

2. The holder of claim **1** wherein: the transverse hinge means are continuous and integral with the adjacent transverse edges.

3. The holder of claim **2** wherein: the base members and the sheets are heat sealable materials, said longitudinal means and transverse means attaching portions of the sheets to the base members comprising heat seal means.

4. The holder of claim **1** wherein: the flap means ends have curved corners.

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PO-1050
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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,816,948 Dated June 18, 1974

Inventor(s) George W. Mooney et al

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

Claim 3, line 1, "2" should be --1--.

Signed and sealed this 1st day of October 1974.

(SEAL)
Attest:

McCOY M. GIBSON JR.
Attesting Officer

C. MARSHALL DANN
Commissioner of Patents