June 30, 1964 P. SWYDEN 3,139,292

FORM GUIDE

Filed June 12, 1961

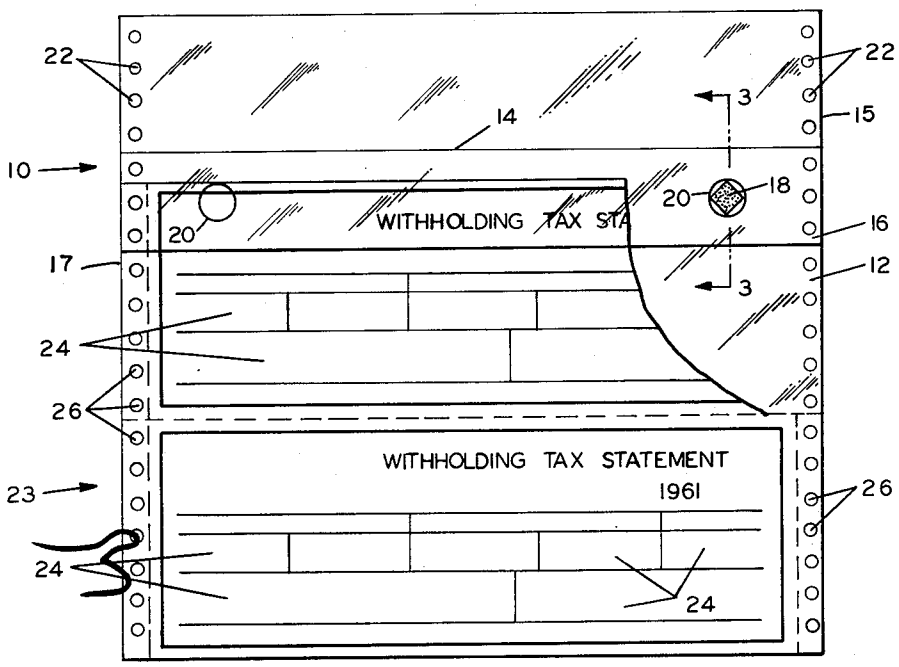



FIG. 1

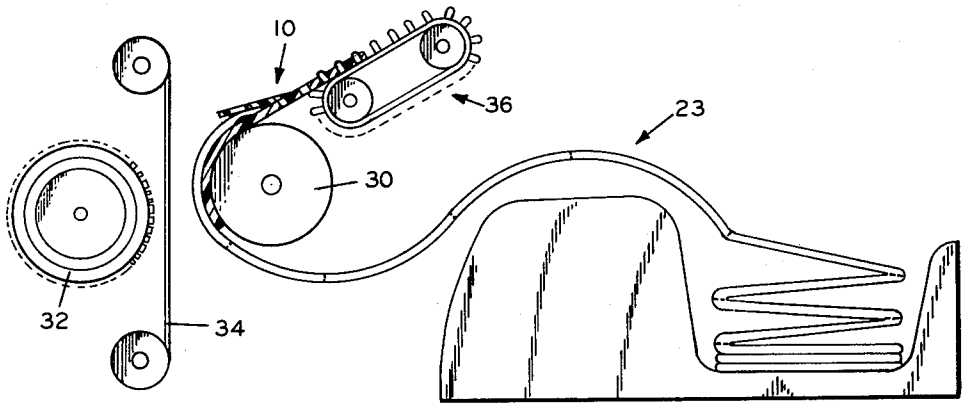



FIG. 2

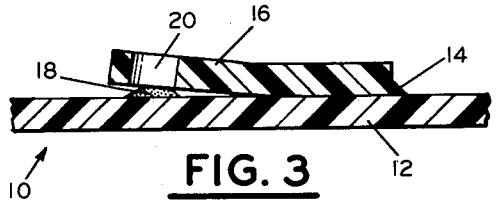



FIG. 3

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3,139,292

# FORM GUIDE

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1 Claim. (Cl. 282—29)

This invention relates to a guide for use with automatic data processing business machines. More particularly, it relates to a guide for continuous business forms which are used in automatic data processing machines.

A typical automatic data processing business machine includes a feed mechanism contiguous with a platen and print wheel system through which a typical continuous business form is threaded and fed. An electro-mechanical system transfers information stored on punched cards, for example, to the form as it passes through. The distance between the feed drive system and the platen and printing portion is of necessity such distance that it is virtually impossible to print the first and sometimes second sheet of a given continuous form which are wasted.

Accordingly, it is a primary object of this invention to provide a form guide which permits the first sheet of a continuous form to be printed upon and hence overcome the limitations of the machine.

Another object of this invention is to provide a guide for continuous forms for use in automatic data processing apparatus which can be easily attached and detached to the form without harm. Additionally, the form is firmly clasped and held to prevent unwanted movement during the threading, printing and feeding operations.

Another object of this invention is to provide a guide for continuous forms used in automatic data processing machines which is economical and reuseable for many operations.

These and other objects of this invention will become more apparent upon further reading of the specifications and claim when taken in conjunction with the following illustrations, of which:

FIGURE 1 is a top plan view of the form guide of this invention as used with a typical continuous form which is partially cut away.

FIGURE 2 is a diagrammatic elevation view depicting a typical installation for use of the form guide of this invention.

FIGURE 3 is an enlarged partial sectional view taken along the line 33 of FIGURE 1.

The form guide of this invention is represented generally by the numeral **10**, and specifically includes a base portion **12** to which a flexible clasp or flap portion **16** is hingeably attached, such as by solvent welding or the like, along upper edge **14**. The clasp portion **16** extends transversely between parallel guide edges **15** and **17**. Pressure sensitive adhesive **18** is positioned at various intervals under the clasping portion **16** opposite which an opening **20** is provided in clasping portion **16** to prevent it from being held by the pressure sensitive material **18**. The form guide is formed of a synthetic resin material typically thermoplastics, such as a clear vinyl or polyethylene. Although the preferred embodiment is to use a translucent form guide, this is not to be held as limiting the use or construction of the invention.

The important characteristics of the form guide include having a material of sufficient rigidity yet flexibility to withstand many uses with continuous automatic data processing machines and further have the property of being able to hold the form to be used in starting the printing position.



The form guide includes pin feed holes **22** parallel and adjacent guide edges **15** and **17** respectively. These holes are adapted to match with the pin feed guide or drive system found in typical data processing machines for pulling the continuous form through the print system.

The continuous forms adaptable to use with the form guide of this invention include a multiplicity of blank areas **24** in which predetermined numerical or word information needs to be filled from heretofore gathered and stored information. The form likewise includes matching pin feed holes **26** for use with the pin feed drive system of the data processing machine. Although the simulated withholding tax statements are shown in the drawing, it is understood that other types of continuous accounting forms, checks, invoices, etc. are adaptable for use with the form guide of this invention.

A typical use and installation is best shown in FIGURE 2 wherein a continuous blank form **23** is folded and stored with the starting edge threaded within the data processing machine. As diagrammatically shown, such a machine includes a platen **30**, juxtapositioned with respect to a multiplicity of print wheels **32** and inking ribbon **34** therebetween. A pin feed drive and guide system **36** of a tractor style as shown or cylindrical style, not shown, is likewise positioned with respect to the printing mechanism. Before the form **23** is threaded around the platen, the form guide of this invention is attached to the starting end of the continuous form by placing that end under the clasping portion **16** such that guide holes **26** are in alignment with guide holes **22** of the form guide. By application of slight pressure from the clasping portion **16**, the pressure sensitive adhesive grasps the bottom side of the form to hold it with respect to the form guide. The combined continuous form **23** and form guide **10** are then threaded about the platen **30** and attached to pin feed mechanism **36** ready to begin the printing operation upon the first and succeeding forms.

The enlarged partial sectional view of FIGURE 3 describes an important feature of this invention. The interrelationship of pressure sensitive adhesive mass **18** and the clasp portion **16** with respect to opening **20** permits a firm gripping force to the first form to hold same in the print position. Albeit there is a wedging action of the normally downward spring force of clasp **16** with respect to any mass **18** and opening **20**.

Although this invention has been described in relation to specific embodiment, it is understood that other modifications and changes can be made without departing from the spirit and the scope of the appended claim.

What is claimed:

A retaining guide for the starting end of a continuous form used in automatic data processing and printing machines of the type wherein parallel pin feed drive sprockets are spaced from transverse printing type comprising,

a unitary flexible back sheet defining a top end and parallel outer edges perpendicular to said end,

a multiplicity of pin feed drive openings adjacent said parallel edges to engage with said drive sprockets,

a clasping flap extending parallel to said top end and hingably attached to said back sheet to open away

from said top end to receive and retain said starting end under said flap,

at least two openings in said flap,

pressure sensitive adhesive portions on said back sheet exposed opposite said openings, and

said flap located from said top end such that said guide is retained in said machine to bridge that space between said drive sprockets and said printing type until at least one form has been printed.



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