

[54] **SYSTEM AND METHOD FOR THE CONTINUOUS MOVEMENT OF A SHEET HAVING GRAPHIC SUBJECT MATTER THEREON THROUGH A WINDOW OF A DISPLAY SCREEN**

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[58] Field of Search. **340/172.5**

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[57] **ABSTRACT**

A system which effects the displaying of a sheet having graphic information thereon by achieving its

movement in a continuous pass through a window on the screen of the cathode ray tube of a program controlled display unit. To accomplish this, the sheet to be displayed is divided into an orthogonal grid of square cells of a chosen area. There is provided appropriate storage of each of the cells which contains graphic subject matter therein such as the X, Y, coordinates of the cell and the display orders pertinent thereto. Such cellular structure and storage may conveniently be termed "pre-scissoring." By the use of appropriate registers, the information on the sheet is then displayed in a window of the screen by a continuous pass therethrough. Where there is available both primary and secondary storage, all of the cellular information can be contained in secondary storage and only a small portion thereof need be retained in primary storage, i.e., the cells being displayed in the window presently and cells abutting the displayed cells. Where there is available both primary and secondary storage, as cells are passed through the window, there are concurrently brought from secondary storage, cells which follow immediately upon those in primary storage. Consequently, with this arrangement, a smooth continuous pass of the sheet is achieved on the cathode ray tube screen. The cells, after being passed through the window, need not be returned to secondary storage since the readout from secondary storage is nondestructive. However, in the situation where information may be updated or changed when it is in primary storage, provision can be made to return the passed cells to secondary storage. Accordingly, with this system, in any event, there is enabled the continuous smooth pass on a sheet of graphic information through a portion of a cathode ray tube screen and where primary and secondary storage are both available, only a small portion of the information need be resident in primary storage at any one time.

15 Claims, 34 Drawing Figures

