United States Patent [19]

Preiss et al.

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[54] **SYSTEM AND METHOD FOR SMOOTHING THE LINES AND EDGES OF AN IMAGE ON A RASTER-SCAN DISPLAY**

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[52] **U.S. Cl.** **340/728**; 340/731; 340/723

[58] **Field of Search** 340/728, 723, 731, 744, 340/747, 803, 804, 811, 812

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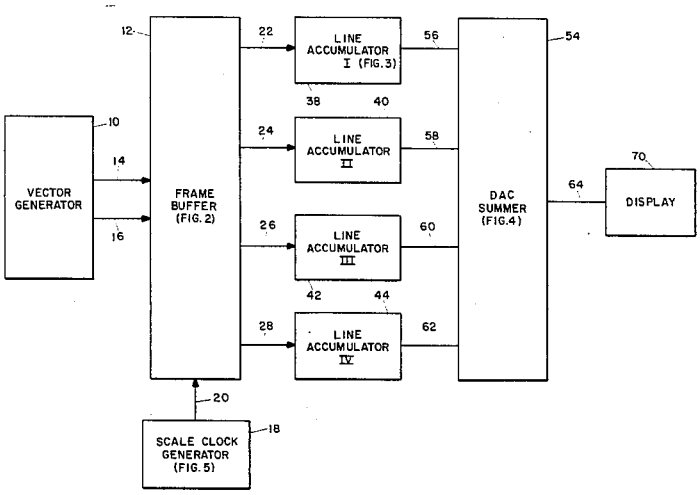
[57] **ABSTRACT**

In system and method for smooth line raster-scan display, a frame buffer containing a high resolution map of information of an image for display is read so as to furnish plural line stored information for each single line of the raster display. Display circuitry of the system receives the plural line stored information and varyingly weights same to furnish such single line Z-axis information (intensity control) for an X-Y display matrix, such as a CRT display terminal. Means are included in the system for display of the entire frame buffer content on a first fractional basis, e.g., a two thousand line resolution buffer to five hundred line raster. Selection circuitry of the system provides for reading out only a fraction of the frame buffer content, e.g., one-fourth or the five hundred lines thereof, on five hundred raster lines, thus providing true resolution zoom capability.

4 Claims, 5 Drawing Figures