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Hotto

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[54] DC INTEGRATING DISPLAY DRIVER EMPLOYING PIXEL STATUS MEMORIES

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[52] U.S. Cl. 345/94; 345/98; 345/148

[58] Field of Search 340/701, 784, 812, 811, 340/793, 719, 765

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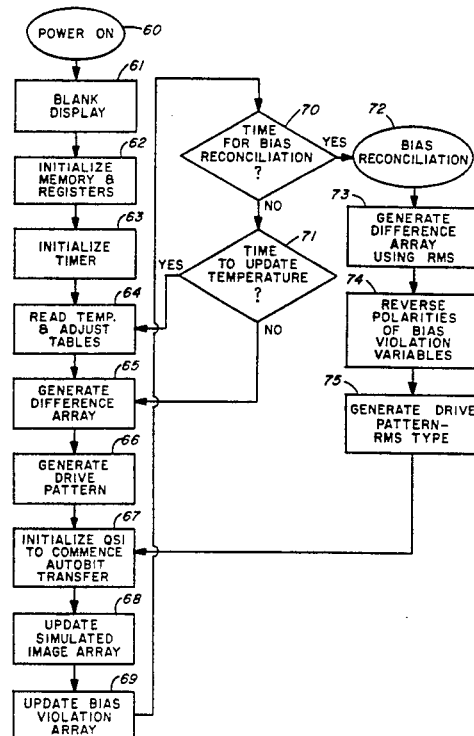
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Attorney, Agent, or Firm—Ellsworth R. Roston; Charles H. Schwartz

[57] ABSTRACT

This invention relates to an improved drive and control means for matrix addressable electro-optic displays, such as passive matrix LCDs and active matrix LCDs. The present invention achieves improved drive and control of displays through the use of real time computation and memory circuits to simulate the electro-optic condition and the accumulated DC bias of individual display elements. This eliminates the burden of frequent and symmetrical reversals of the drive polarity, and allows the implementation of flexible DC drive methodologies.

69 Claims, 8 Drawing Sheets



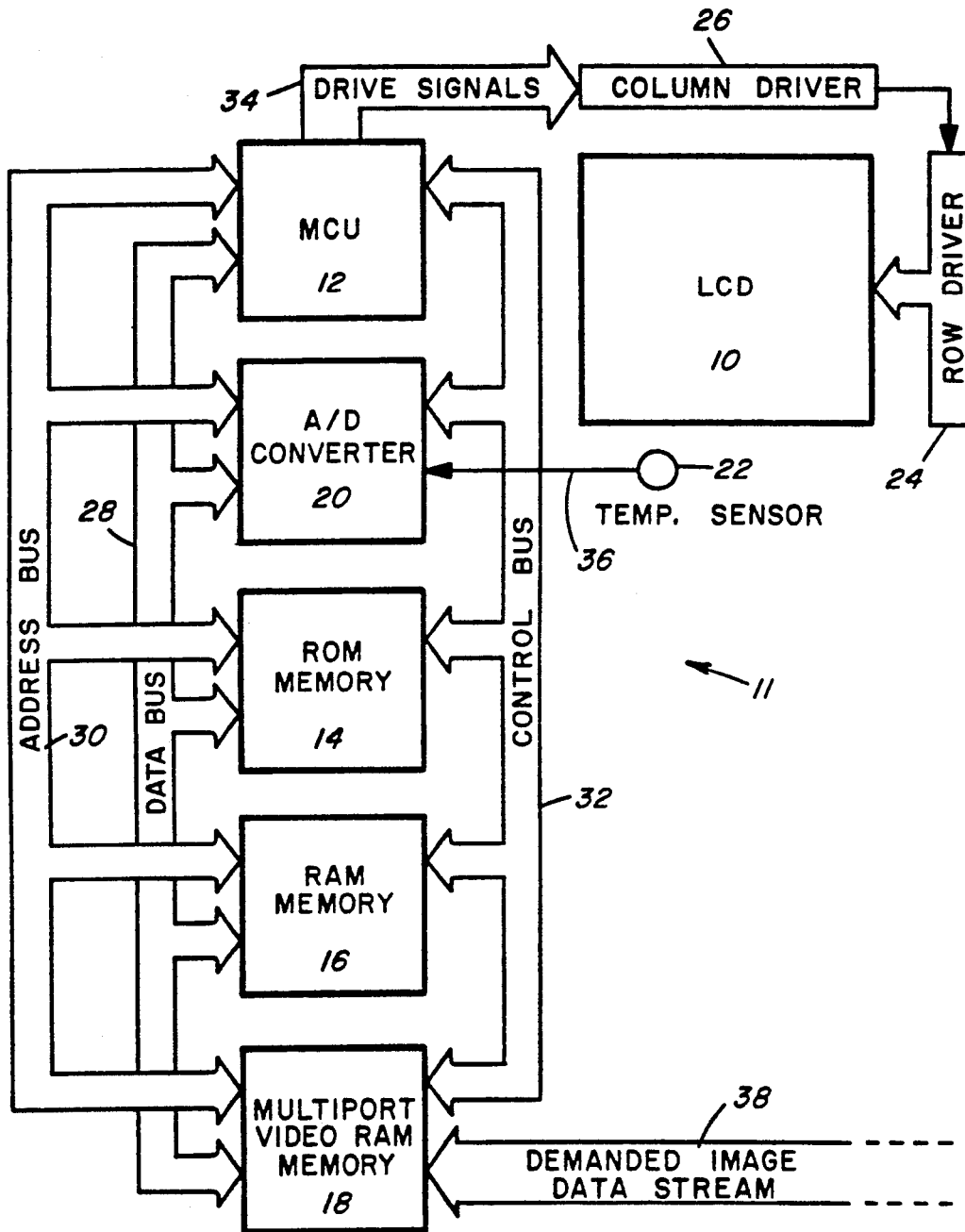


FIG. 1

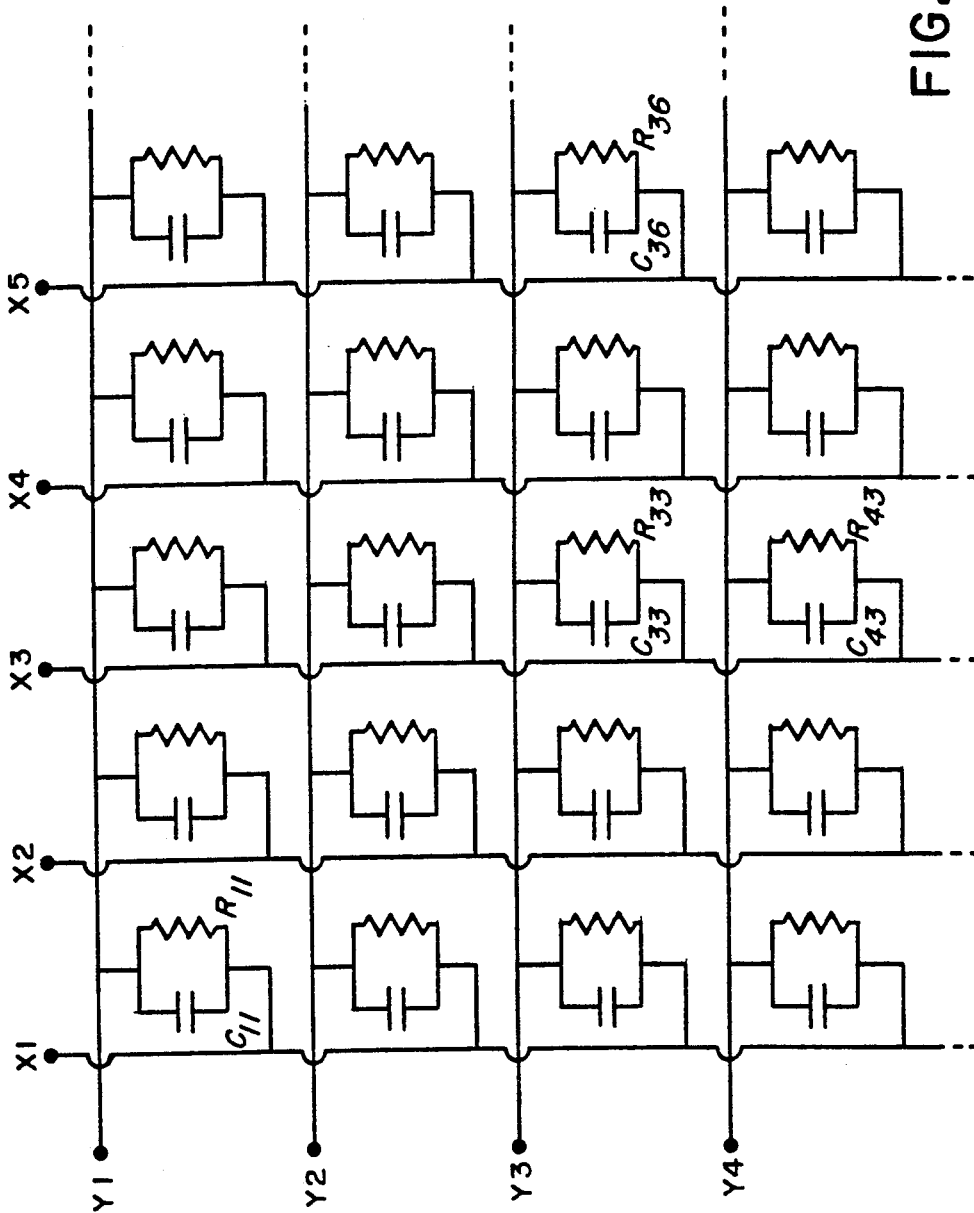


FIG. 2

FIG. 3B

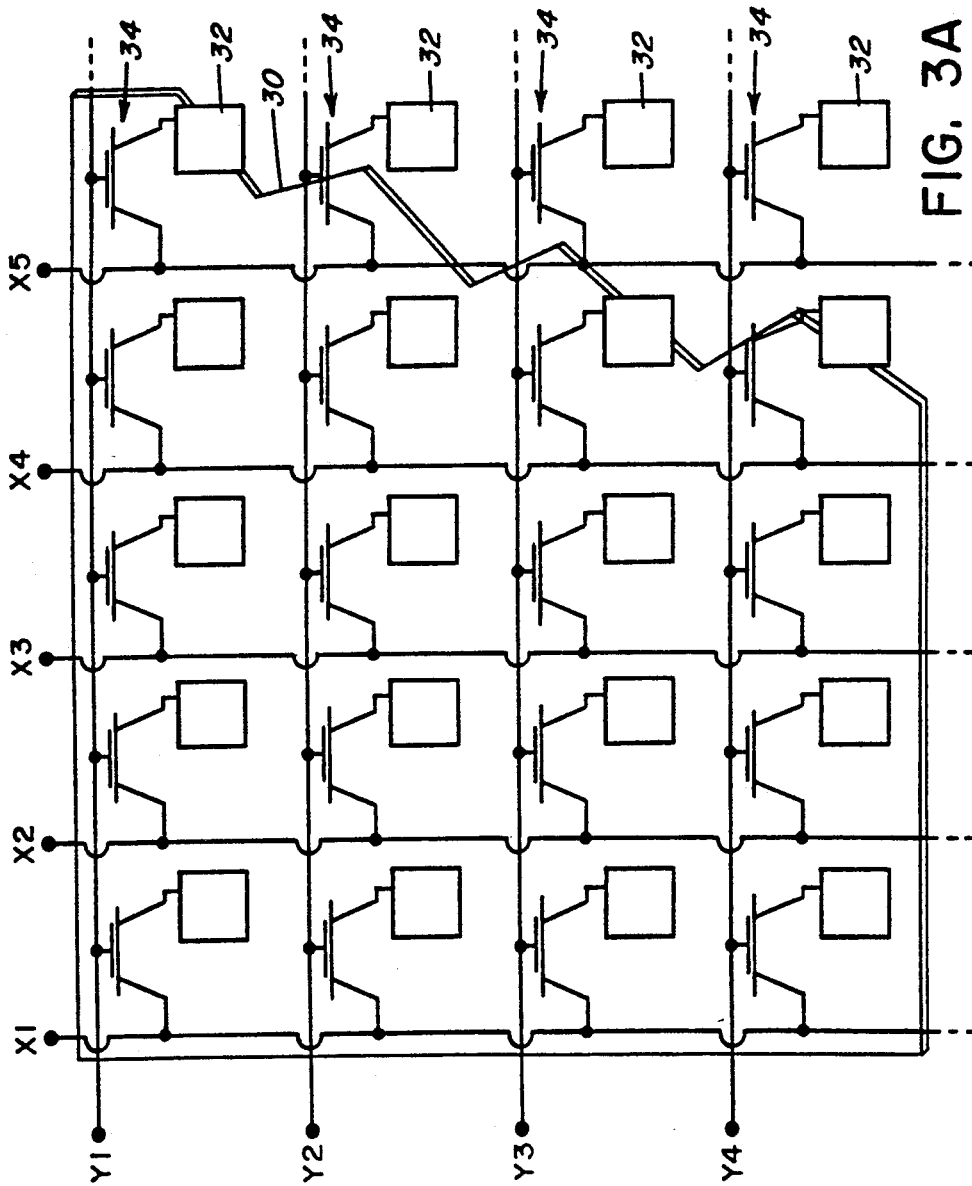
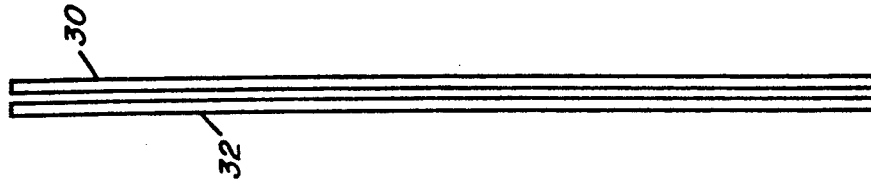


FIG. 3A

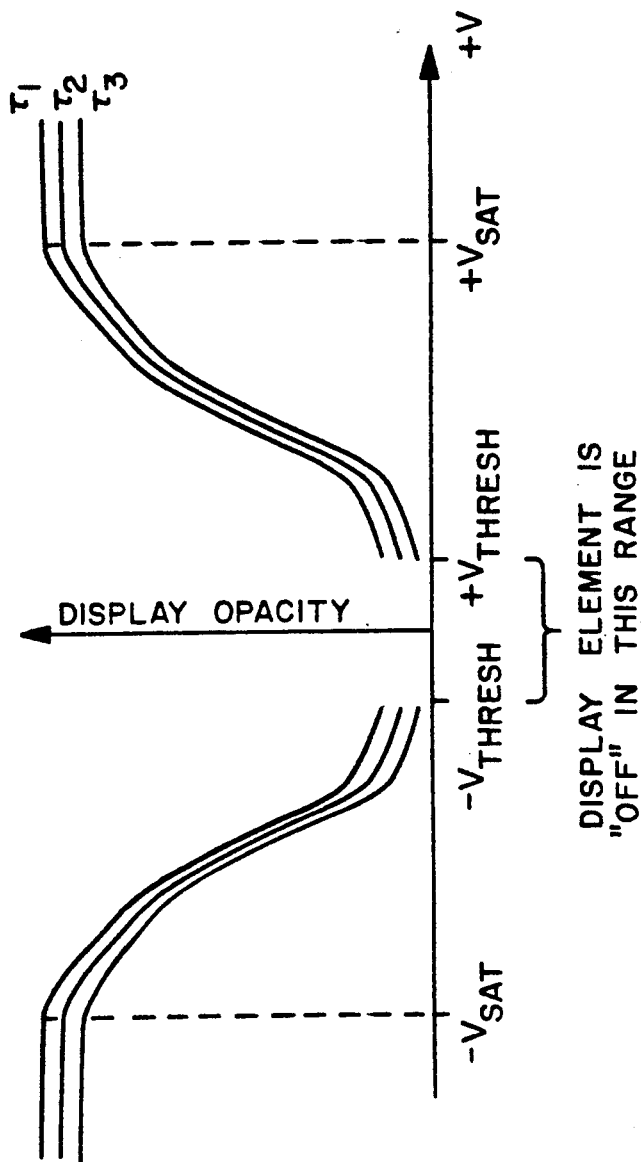


FIG. 4

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