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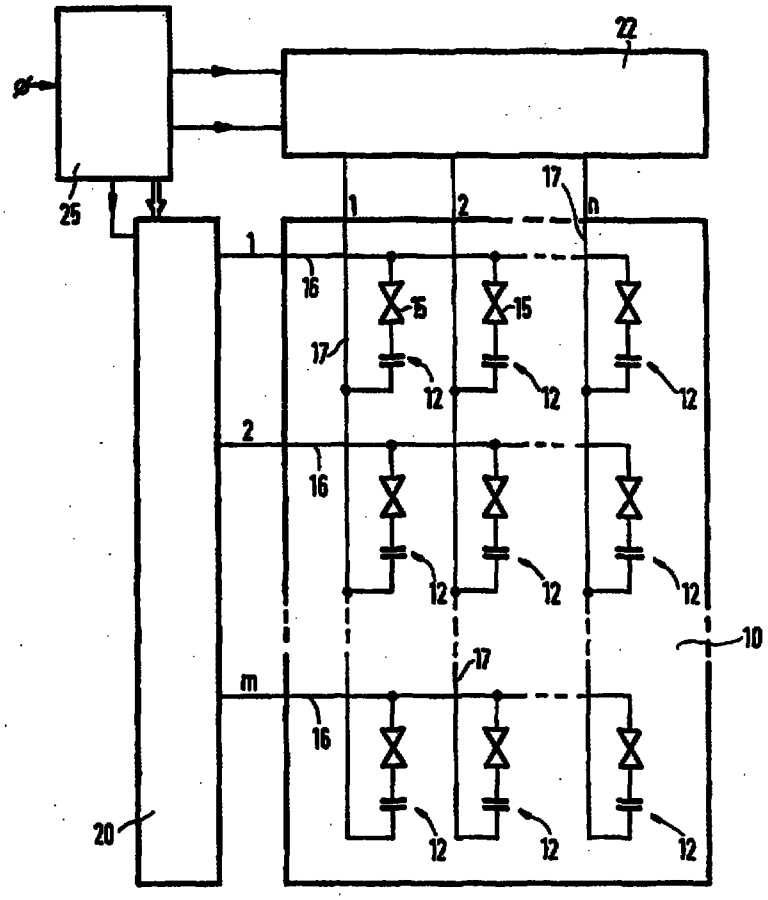
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(54) Title: ACTIVE MATRIX DISPLAY DEVICE AND METHOD OF DRIVING SUCH

(57) Abstract

In an active matrix display device having an array of electro-optic, e.g. liquid crystal, display elements (12) which are each connected in series with a two-terminal non-linear device (15), such as a MIM type thin film diode, between associated row and column address conductors (16, 17), and are driven by a circuit (20, 22) to produce a display effect by applying a selection signal to each row address conductor in turn and data signals to the column address conductors, a selection signal comprising a voltage pulse signal whose magnitude is increased gradually and in a controlled fashion to a maximum selection voltage amplitude is used so as to reduce the extent of ageing in the non-linear devices and differential ageing effects on display elements driven to different levels over a period of use by reducing peak currents flowing through the non-linear devices. The rising edge of the selection pulse signal is suitably shaped, for example by ramping or stepping, for this purpose. When using a five level row drive waveform comprising positive and negative selection signals and a reset signal, the reset selection signal can be shaped in this way, preferably together with the selection signal of opposite polarity.



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