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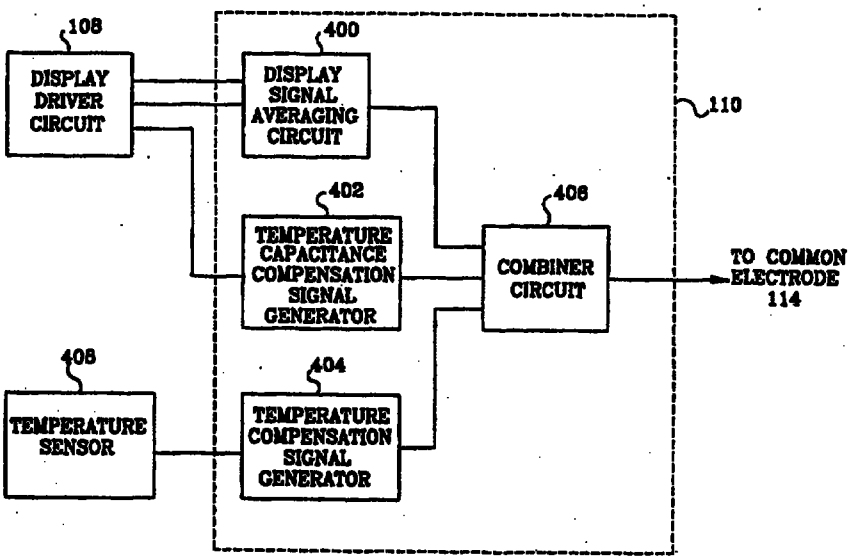
(54) Title: COMMON ELECTRODE VOLTAGE DRIVING CIRCUIT FOR A LIQUID CRYSTAL DISPLAY



(57) Abstract

A control circuit for providing a common electrode voltage for a liquid crystal display dynamically controls the voltage applied to the common electrode according to various factors that effect the capacitance across the liquid crystal layer. The common electrode control circuit dynamically adjusts the common electrode voltage according to the current maximum and minimum display voltages. In addition, the common electrode control circuit adjusts the common electrode voltage according to the gate–to–source parasitic capacitance, as well as temperature fluctuations. Thus, the control circuit compensates for the most significant factors which may cause the inadvertent accumulation of a charge across the liquid crystal layer.