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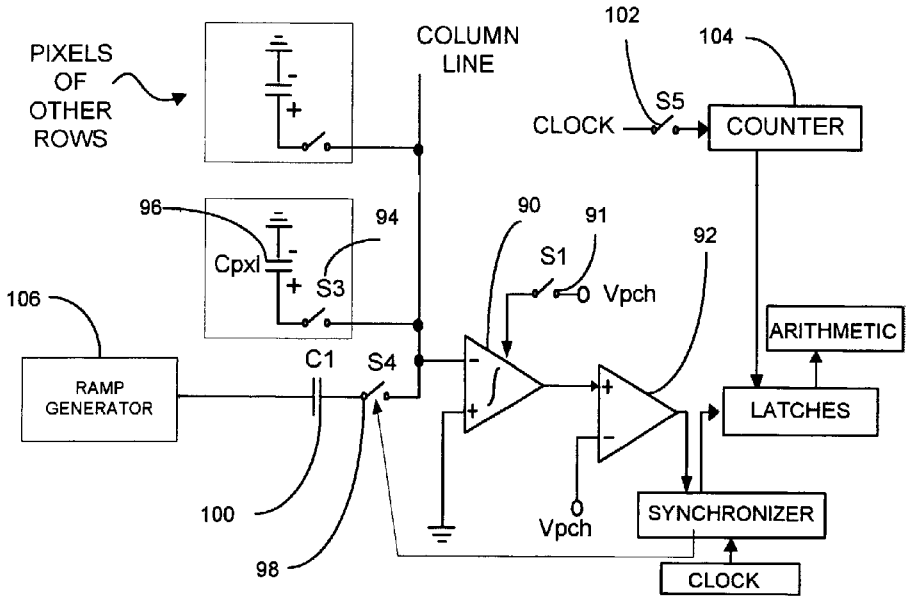
(54) Title: FOCAL PLANE PROCESSOR FOR IR DETECTION



(57) Abstract: A focal plane array detector in a sensor for IR imaging. Pixel readout and analog to digital conversion is performed in an integrated circuit which includes the imaging array. The charge of each pixel is accumulated in a capacitor and a digital to analog charge converter cancels this charge. A controller controls this charge converter providing the appropriate amount of charge. An analog to digital converter incorporating a comparator switches the controller on/off. In some embodiment a programmable device external to the sensor participates in the control of the analog to digital converter. In a typical em-bodiment of the invention a cycle generator controls the charge output of the digital to analog converter. In a preferred embodiment the analog to digital converters are grouped wherein all such converters group operate simultaneously.

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