

MOS FET CAMERA CHIP AND
METHODS OF MANUFACTURE AND OPERATION THEREOF

ABSTRACT OF THE DISCLOSURE

An integrated circuit functions as an image detector providing an output signal representing the detected image. A two dimensional array of sensor cells is formed in rows and columns. A digital timing control means has outputs for providing timing signals. An address encoder is coupled to receive timing control signals from the digital timing control means. Each sensor cell has a photodiode and a first transistor having a first gate and having a source/drain circuit for precharging the cell and a second transistor having a second gate and a source/drain circuit for reading from the photodiode. The sensor cells are adapted for sensing electromagnetic radiation incident thereon. A plurality of sensor data amplifiers receives data from the cells. Means is provided for reading data from the cells into the sensor data amplifiers, and the sense amplifiers include an output circuit.

(FIGURE 1 IS SUGGESTED FOR PUBLICATION)