

SOLID STATE IMAGING APPARATUS

ABSTRACT

There is provided a solid state imaging apparatus which has realized sharing of signal charges without generation of a fault of image like a vertical stripe resulting from defective sharing of signal charges in a horizontal transfer register consisting of a pair of transfer sections for horizontal transfer by sharing therewith the signal charges of the same pixel. In this solid state imaging apparatus, a pair of horizontal transfer registers 4 (6) are provided to execute horizontal transfer by sharing the signal charges of the same pixel in the first horizontal transfer register 4 in the side of the image section with a pair of transfer sections 4a, 4b with the control gate section 5. For the sharing of signal charges, a transfer channel 17 is formed in the transfer gate section 5 between the bit ($\phi H2$) of the transfer section 4a and the bit ($\phi H1$) one bit after, in the horizontal transfer direction, the bit ($\phi H2$) of the transfer section 4b forming a pair with above bit of the transfer section 4a and thereby the signal charges are shared with a pair of transfer sections 4a and 4b through the transfer channel 17.

FIGURE 1

to be re-drafted
under 150 words