

IMAGE PICKUP APPARATUS HAVING AN INTERPOLATION FUNCTION

ABSTRACT

The present invention enables to obtain an image of a high resolution as reasonable costs by using an adaptive interpolation circuit which is supplied by image data R, G, and B which have been subjected to a white balance adjustment in a DSP and an R-G image is combined in an internal memory. The adaptive interpolation circuit calculates correlation degrees in a vertical direction, a horizontal direction, and diagonal directions. If an interpolation is executed according to the R-G image in the direction having the greatest correlation degree, no LPF processing is executed, i.e., no resolution deterioration is caused in a direction which orthogonally intersects the aforementioned direction. That is, the adaptive interpolation circuit enables to enhance a resolution by executing an interpolation according to the correlation of the image data around a portion to be interpolated.

Figure 12