

STORAGE DEVICE AND ACCESS METHOD

ABSTRACT OF THE DISCLOSURE

A storage device and access method for performing hierarchical coding without the need for employing a circuit for a line delay, in addition to a memory for storing an image. Each of first and second memories is divided into two banks, a bank A and a bank B. A first layer pixel stored at the bank A in the first memory is read while a second layer pixel stored at the bank A in the second memory is read, and by subtracting the first layer pixel from the second layer pixel, a first pixel is finally determined and is written onto the bank A in the second memory that stored the second layer pixel. At the same time, a first layer pixel stored at the bank B in the first memory is read while a first layer pixel stored at the bank B in the second memory is read, and by summing these first layer pixels, the original second layer pixel is determined and the value stored at the bank B address in the second memory, which is the first layer pixel, is then rewritten to the original second layer pixel.

Figure 1