

SUMMARY OF INVENTION

Image data is a highly correlated one. This means that, the adjacent data values in an image are repetitive in nature. So, if it is possible to achieve some compression out of this repetitive property of the image and then apply Huffman coding or other source coding schemes, the method would be very efficient.

In this Repetition Coded Compression algorithm, each element is compared with the previous element. If both of them are equal then a value of '1' is stored in a Bit-plane. Otherwise a value of '0' is stored in the Bit-plane. This different value is only stored in a matrix instead of storing all the repeating values.

In one-dimensional RCC Method only one bit-plane is used to code the repetition in the horizontal direction.

But in two-dimensional RCC method, two bit-planes are used to code the repetitions in both the horizontal and the vertical directions. This is more efficient and gives a better compression ratio.

This clearly proves that the compression system is implemented without any multiplications and complex transformations. It is purely based on a mathematical comparison of adjacent image data values. The comparison is