

288 bits. After applying Repetition Coded Compression the memory required was 112 bits. This proves a great amount of compression achieved.

Figure – 11 shows the application of Repetition Coded Compression to the entire image and the size is compressed to 44,000 bits from the original 188,000 bits. Figure – 12 shows the complete principle for implementation of Repetition Coded Compression. The image matrix is encoded along the horizontal and vertical directions and the respective bit-planes are derived. Further compression is achieved by combining the horizontal and vertical bit-planes by a binary addition operation. This results in the RCC bit-plane, which is logically inverted and compared with the original image matrix to obtain the final RCC data values. These RCC data values along with the Horizontal and Vertical bit-planes are stored in the data memory for archival and future retrieval.

The coded data can be further compressed by Huffman coding. Thus compression of the image data is achieved using Repetition Coded Compression System. This System is easy to implement and is very fast, as it does not make use of any complex transform techniques. The real advantage is that, this method can be used for any type of image file. Here the system is applied only for Grayscale images. But in future it can be applied to color images also.