

compression. Because of the single mathematical operation involved for implementation of the present invention, the system is perfectly reversible and absolutely lossless. This is very important for many applications, which demand zero loss. The compression ratios are significantly higher than the existing lossless compression schemes. But if the application permits a lossy compression system, the present invention can also cater to the lossy requirements. In this case a slight modification is done to the mathematical operation so that certain amount of loss is observed in the compression and thereby resulting in much higher compression ratios. This lossy compression system would find great applications in entertainment and telecommunication systems.

#### **DISADVANTAGES OF CURRENT IMAGE COMPRESSION TECHNIQUES:**

There are various Image Compression Techniques. Familiar few are JPEG, JPEG-LS, JPEG-2000, CALIC, FRACTAL and RLE.

#### **JPEG**

JPEG compression is a trade-off between degree of compression, resultant image quality and time required for compression/decompression.

Blockiness results at high image compression ratios.