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(54) Title of the invention : ENHANCED IMAGE COMPRESSION SYSTEM WITH PARALLELIZED BINARY SEARCH TREE OPTIMIZATION METHOD FOR MEDICAL IMAGES

(51) International classification	:G06T0009000000, G16H0010600000, H04N0019167000, H04N0019137000, H04N0019115000	(71)**Name of Applicant :** 1)**Ms.Pavithra M** Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Jansons Institute of Technology, Karumathampatti, Coimbatore, Tamil Nadu, India. Pin Code: 641659 Tamil Nadu India 2)**Dr.Syed Jahangir Badashah** 3)**Dr.Tatiparti Padma** 4)**Mr.Sampath Dakshina Murthy Achanta** 5)**Dr.Prakash Kumar Sarangi** 6)**Ms.Ravula Divya** 7)**Dr.Rajesh Kumar Rai** 8)**Dr.Nazeer Shaik** 9)**Mrs.Binny.S** 10)**Dr.Shaik Bajidvali**
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(57) Abstract :

In recent days, Medical Images transmission over the internet increased rapidly as they are most significant in disease diagnostics. The Electronic Health Care Systems mainly depends on the medical images which are stored in digital form and transmission over the internet from one practitioner to another practitioner, to the authorized user for analysis of disease. The Memory or size of the Medical Image to be stored or transferred over the internet effects the transmission time and bandwidth. The Image Compression is used on the medical Images to reduce the size of the image which intern reduces the storage space required to store the image. The irrelevant data from the medical image should be removed by keeping the significant data required is the major challenge in Medical Image compression. The present invention disclosed herein is Enhanced Image Compression System with Parallelized Binary Search Tree Optimization method for Medical Images comprising of: Input MR Image (201); Preprocessing (202); Segmentation (203); Optimization on ROI (204); Optimization on Non-ROI (205); Fused Image (206); Compressed Image (207); Decompressed Image (208); enhances the image compression system for medical images compression. The present invention disclosed herein can achieve the compression ratio of 93% for 0.5 bits per pixels and the Relative Data Redundancy is 98.9%.

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