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## (57) Abstract:

The colour is a powerful descriptor used to simplify the object identification and extraction. The colour images are more effective than the gray scale images in understanding the features of an image. The connected pixels that are lie on the boundary between two regions in an image will form an Edge with strong intensity contrast. The Edge detection is extensively used in the high level Image Processing applications such as Image Segmentation, Data Extraction, Machine Vision, Computer Vision, Object Recognition, and Object Tracking. The present invention disclosed here is a Novel Improved Edge Detection System for Colour Images with Fuzzy Entropy comprising of: Input Colour Image (201); Decompose (202); Preprocessing (203); Enhancement (204); Fuzzy Entropy (205); Filter Mask (206); Morphological Thinning (207); Detected Edges (208); detects the fine edges from the colour images. The invention disclosed here uses Entropy as fuzziness measure and Histogram based membership function.

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