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(57) Abstract :

The present invention relates to a genetic coding video frame features for content-based video surveillance system, comprising: a video frame extraction module configured to convert a video into a plurality of frames; a person detection and coordinate recording module configured to detect individuals in each frame and record their coordinates in a coordinate database; a DNA encoding module configured to encode images from a person database into DNA sequences; an amino acid translation module configured to translate the DNA sequences into amino acid sequences; a feature extraction module configured to segment and bin the amino acid sequences and generate feature vectors using probability calculations; a CBIR algorithm module configured to employ the feature vectors to identify similar individuals to a query image in every I-th frame; a bounding box generation module configured to generate a bounding box around the identified person using information from the coordinate database. Figure 1 to 9

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