**Conclusion**

This paper provides a new approach for graph matching that resembles the human thinking process. The image is represented by Fuzzy Attributed Relational Graph (FRAG) that describes each object in the image by all its attribute and spatial relation. This approach gives the user the flexibility to specify the attributes with which he wants to match similar images and weight the importance of each attribute. Another advantage is to enable the user to weight the objects in the query image according to their importance. The texture and color attributes are computed in a way that models the Human Vision System (HSV). A new color feature representation is proposed based on Fuzzy concepts. In this work we attempt to overcome the difficulty of evaluation in CBIR systems commonly encountered as there is no common image database for performance comparisons and a means of getting relevance judgments for queries. In particular, the proposed model is applied to real images evaluated by different users with different perspectives and gives satisfactory results.

It will be useful in the future to enhance the proposed system by modifying the fuzzy membership functions to improve the image feature representation. Also another attributes for both node (e.g.: shape attribute) and edge (e.g.: Adjacency between objects) can be added to improve the system.