A novel hybrid method in trademark image retrieval

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Abstract

This paper intends to propose an improved hybrid retrieval method in trademark image, and to build up a trademark image database to solve trademark image query problems. With the rapid increase of commercial activity in recent years, marks, logos and registered trademarks have been massively produced. Therefore, how to retrieve trademarks from a large database becomes a challenge. There are still some disadvantages of shape representations and retrieval methods. Some can well represent shapes, but are time-consuming in normalization or need to classify images before retrieving. In this paper, a novel *Fourier-Centroid-Histogram Descriptor* (FCHD) is presented to overcome the drawbacks of existing shape representation techniques. The FCHD combines the benefits of the contour-based and region-based descriptors, and needs no process of classifying. In this study, the retrieval efficiency of this FCHD is compared with that of *Fourier-Centroid descriptor* (FCD),

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