



OPEN ACCESS INTERNATIONAL JOURNAL OF SCIENCE & ENGINEERING

REVIEW OF SEMANTIC RETRIEVAL OF TRADEMARKS USING CONCEPTUAL SIMILARITY APPROACH

Sonali Rangnath Khamkar

P. G. Student, Department of Computer Engineering, VPKBIET, Baramati, India
khamkarsonali111@gmail.com

Abstract: The aim of this paper is to retrieve the user retrieval trademark system. Trademarks have different aspects. These are conceptual, phonetic and visual. The purpose of a trademark is to distinguish services or products uniquely. The number of infringement cases is happening because of trademark similarity. So, this technique represents user retrieval system for calculating text trademark similarity and suggestion to the user. The proposed system uses a conceptual model for computation of similarity. Also, the technique will be used for calculating logo similarity. The ranking result will be displayed with the help of histogram algorithm.

Keywords – Conceptual model, infringement, trademark, trademark retrieval, similarity of trademark.

I INTRODUCTION

The trademarks are used to distinguish the goods and services of the business. So, now each year numbers of trademarks are registered and used in the market place. But, IP crime takes place which create harm to economy of business or company. That is a trademark violation. It creates hegemony to serious financial issues in business. That's why understanding of trademark infringement is more important. It is a type of IP crime that involves a number of fraud cases.

For avoiding these fraud cases, it is necessary to analyze the trademark similarity. These similarities are measured on the basis of conceptual, phonetic and visual similarity. The trademarks are retrieved on the basis of conceptual model [1]. This paper describes the conceptual aspect of trademark similarity. This paper employs text trademark suggestion and ranking results on logo trademark similarity.

II RELATED WORK

The paper [2] presents a new approach of similarity sentence semantic and short text. The system combines and captures semantic and syntactic information. It computes the similarity of these sentences. The SyMSS technique produces and measure lexical better semantic similarity. This technique obtained information from WordNet. But the proposed methods are challenging tasks for setup data.

The trademark comparison process is developed in [3]. The existing system is based on text retrieval. It is not used for calculating conceptual similarity. This technique overcomes the problem of ambiguity of text trademark. It uses two modules: Indexing and Conceptual. The indexing module extracted trademark features are indexed in the database. The conceptual model used lexical ontology for retrieving similarity of text trademark.

Author proposed a rough ontology based approach [4]. The technology is retrieving information with the help of associative search. The system takes input in the form of keyword based queries. In this system are used different mechanisms. These are as keyword extraction, searching association and document indexing. Finally returns ranked result of similarity. The system has issue of making the attribute reduction.

In [5] described information retrieved system on the basis of semantic knowledge. It used the WordNet dictionary. Author proposed a new approach to compute concepts and word similarity on the basis of semantic approach [6]. Then new approach of semantic similarity of hierarchical structure and words is discussed.

The trademark retrieval system is based on the conceptual similarity. The system computed text trademark similarity on the basis of the conceptual model. The trademark retrieval text system is based on keywords. It is not useful for retrieving conceptual similarity of trademark.

These problems overcome into this paper [1]. The system uses semantic retrieval algorithm. This algorithm basically uses following steps. These are as: Feature extraction, Hash indexing, Distance computation. In feature extraction, extract the feature of text trademark in the form of token set and synonym sets. It uses an external WordNet dictionary for generating these sets. The token synonyms are passed to hash mapping function. It generates keys and tokens of trademarks. This function reduces the time of computation in the search process. Then the trademark distance is computed on the basis of similarity. It measured score of conceptual similarity between query trademark and trademark database.

The trademark image retrieval is challenging task in [1, 2, 3, 4]. These problems are overcome by proposing feature matching and shape description of image [9]. In shape

description of image, boundary point and moment based features are computed. The feature matching method presents an effective solution to compute dissimilarity value of images. The system has based on edge and corner detection. The results are satisfactory. The system only handles rotational challenges.

The trademark retrieval system to compute the similarity of trademark images [9]. The system uses two techniques. These are: Local and Global shape descriptors. The system improved performance with the help of proposing shape descriptor. In global descriptor to compute coefficients of Zernike moment. The local descriptor is based on edge-gradient co-occurrence matrix. It is based on contour information. This system gives better results.

III REVIEW OF LITERATURE

Paper	Technique	Advantages	Limitation
F. M. Anur and R. Setchi, "Semantic Retrieval of Trademark Based on Conceptual Similarity" 2015.	Paper proposed to retrieve text trademark on the basis of conceptual similarity.	Provide a simple and easy to understand trademark retrieval system.	Not used for logo trademark.
L. Sbattella and R. Tedesco, "A novel semantic information retrieval system based on a different-level model" 2013.	Paper proposed a fact and ideal for substance and listing information from main data. Use the conceptual level and lexical level for describes the main information.	Provided good precision compare to regular search engine that is a simple and well powerful system.	Not used put the bound on the accuracy of data.
M. Y. Pai, M. Y. Chen, "Development of a semantic based content mapping mechanism for information retrieval" 2013.	Paper proposed many data reflow systems use search information as user input data, but it is a mainly hard and complicated so use the semantic mechanism.	It has semantic advantage and good flow of the listing as the increasing the precision and fast searching.	Not allow fast recognizance and documentations.
C. H. Wei, Y. Li, "Trademark image retrieval using an integrated shape descriptor" 2013.	Author proposed trademark reflow technique to use the reform performance of expositor.	Used employed shape features and descriptor matching stage.	Indirect same events of minimum human understanding of parallelism.
J. Oliva, J. I. Serrano, M. D. del Castillo, and A. Iglesias, "SyMSS: A syntax based measure for short-text semantic similarity" 2011.	The proposed system to evaluate the semantic similarity between short texts and sentences by taking into account semantic and syntactic information.	The improvements produced by a better lexical semantic similarity measure.	The comparisons between methods are currently difficult to set up dataset.

<p>H. Qi, K. Q. Li, Y. M. Shen, and W. Y. Qu, "An effective solution for trademark image retrieval by combining shape description and feature matching" 2010.</p>	<p>The proposed system has studied different types of Trademarks having transformational changes.</p>	<p>The system has based on edge detection and corner detection, and the results are satisfactory.</p>	<p>To only handle the Rotational challenges.</p>
<p>Jun Hu, Xinzhou Lu and Chun Guan, "A Semantic Information Retrieval Approach Based on Rough Ontology" 2011.</p>	<p>The approach is a hybrid information retrieval technology combining rough ontology with classical search technology and association search technology.</p>	<p>The degrees of the similarities are then used to rerank the documents.</p>	<p>It allow more time to searching.</p>

IV CONCLUSION

The review of this literature gives new ideas for text trademark suggestion. According to my knowledge in the above survey observed that the logo retrieval trademark system is challenging task for rotation invariant local features. I will try to propose a trademark retrieval system of showing logo similarity ranking.

ACKNOWLEDGEMENT

This paper would not have been written without the valuable advices and encouragement of Mrs. S. S. Nandgaonkar, supervisor of ME Dissertation work. Author’s special thanks to all the professors of Computer Engineering department of VPKBIET, Baramati, for their support and for giving an opportunity to work on semantic retrieval of trademarks using conceptual similarity approach.

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BIOGRAPHY



Sonali Rangnath Khamkar completed a B. E (Computer Engineering) from Pune University in HSBPVT, Kashti. She is currently studying her ME in Computer Engineering from VPKBIET, Baramati.