"RETRIEVAL OF TRADEMARKS USING CONCEPTUAL SIMILARITY"

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ABSTRACT

A trademarks is a mark that you can use to recognize your business products or services from those of other vendors. The conceptual similarities among trademarks, is which more than two trademark are similar. A particular area of concern is the misuse of trademarks and trademark requires protection. Trademarks are possessory words with high reputation. The retrieval algorithm is based on a conceptual model of the trademark comparison process developed. The retrieval algorithm consists of three main steps: the feature extraction, the hash indexing and the trademark similarity comparison measure. The algorithm consists of natural language processing technique and lexical ontology. Similarity algorithm is used to implement the search and indexing technique.

Keywords*: - conceptual similarities, trademark comparison, feature extraction, lexical ontology.*

1. INTRODUCTION

The rapid development of simple ways has created new challenges in these regions for lots of companies who use the Internet to trade and employ trademarks as sell-out equipment. Trademarks is prescribed by the European Office of Harmonization in the Internal Market (OHIM). Trademarks are intellectual property (IP) goods that permit well or service to be well validated to clients. Each year many trademarks registered by OHIM. Trademarks are exclusive words or figures with advance reputational significance which is used in commerce to comparison between products and their service.

Searching for conceptually similar trademarks is a text retrieval problem, then traditional text retrieval systems based on keywords are not able to retrieving conceptually related text. This limitation motivates research in the semantic technology. Few common outcomes from trademarks infringement is lost income, low benefits, and need extra money of conservancy to stave off next infringement. The trademarks registered improve by 20 percent from last many years in the word. Trademark similarity problems for the other 70 percent stay deficiently researched in more that content-based retrieval goes from different limitations. When assessing trademark infringement cases then analysis several separate components, such as the same of the goods, the especial and main points of the different trademarks, and the similarity of the trademarks.

A trademark may be designated by the following symbols: is trademark symbol, which is the letters TM, for an unregistered trademark, a mark used to promote or brand goods is the letter R surrounded by a circle, for a registered trademark. Infringement may occur when the infringer, uses a trademark which is confusingly similar to a trademark owned by another party. These searches look for trademark that matches some or all words in a question line wording. As indicated in their latest printing on trademark knowledge-bases and look for systems. Two trademarks are necessary not same to make an infringement. The conceptual different of text files that part of same domain, utilization same notations, or demonstration same consideration has been used broadly.

1.1 Concept of similarity

The concept of similarity has become understood in trademark infringement cases. It is one of the most important analytical factors in such cases because it is in the similarity between trademarks that the roots of the confusion normally lie. Moreover, similarity, in the context of trademarks, is also not binary but a matter of degree. The rule of thumb is that the higher similarity between the trademarks, then they will cause confusion. This paper addresses one of the aspects of similarity assessed during trademark analysis, which is conceptual similarity.

The confusion in trademarks is based on the visual, phonetic or conceptual similarity of the marks. Issue is concerned, on the overall impression given by the marks, bearing in mind, inter alia, their distinctive and dominant components.

1.2 The Impact of Intellectual Property Theft on the Economy

1. IP infringement harms to companies by lost revenue, the costs of IP protection, damage to brand value, and decreased incentives to innovate because of potential theft.

2. Consumers are harmed when they purchase duplicate product of lower quality, some of which, such as duplicate medicines, may cause health or safety risks. Governments lost tax. IP infringement reduce economic growth, weaken the nation's competitiveness, and decrease job creation.

2. LITERATURE SURVEY

A recent system for counting short-text and sentence semantic similarity. The method is depends on the concept that the sense of a statement is create of nope mere the sense of its particular words, but also the anatomical path the words are concatenated. Thus hold on and connects syntactic concatenated. Thus hold on and connects syntactic and semantic data to count the semantic similarity of two phrases.

Semantic data is given from the lexical resources. Syntactic data is get from a strong parsing procedure that searches the sentences in every phrase. A syntax based providence to calculate the semantic similarity between phrases or short texts. The concept on which the system is based on the sense of phrases is creating of nope mere the senses of its particular words, but as well the different words are concatenated.

A method and a model for detracting and listing information from main language data. The main domain prototype depends on a hypothetic scale that is of a domain ontology, which define the domain information, and a lexical scale based on WordNet, that defines the domain glossary. The semantic data retrieval engine that created justification easy keyword-based problems, as well as natural language-based problems. The engine is also ability to develop the domain information, searching recent and same facts added to domain model. The in duration probe suggests that the method is efficient to many forms and define nations with accurate purity.

The data reflow technique utilizes keywords passed by the user as the find measurement to find documents. Nevertheless, the language used in files is mostly hard and unclear, and hereby the outcomes obtained by using keywords are mostly not good. The way of this issue, created a semantic-based content mapping mechanism for a data reflow technique. These views simplify the find process and improving the purity of the returned results.

The problems define during infringement litigation is the visible, hypothetic and phonetic similarity of different trademarks. This is focuses on important fact by defining a hypothetic model of the comparison process, target when retrieving hypothetic similar trademarks. The proposed model normal language accessing and semantic technology to get the hypothetic similarity between two or more trademarks. System proposes a hypothetic model of trademark retrieval based on the hypothetic similarity. The proposed model improves on already trademark finding models by providing find to hypothetically related trademarks.

2.1 Visual Similarity

Visual similarity is focuses on sequence of the letters in that trademarks and font style variations. This example shows that these both signs are visually similar.

Fig: visual similarity

2.2 Phonetic similarity

Phonetic aspect of similarity is common rhythm and intonation of the trademarks which considers the sound pattern and pitch variations in the syllable that form the trade marks.

Fig: Phonetic Similarity

2.3 Conceptual similarity

Conceptual similarity aspect focuses on the semantic content of the trademark such as the meaning of the trade marks.

Fig: conceptual similarity

2.4 Existing Trademark Search Systems

The existing trademark search systems is based on text-based retrieval. Such systems search for trademarks that match some or all words in a string text query. The advance search system that gives three types of search: word prefix, full phrase, and exact match. The most common retrieval method employed in the existing trademark search system, as well as in many other multimedia search systems, is known as the keyword-based search.

The need of semantic retrieval technology was inspired by the limitations of traditional keyword-based retrieval. Semantic retrieval employs external knowledge sources, such as ontologies, to overcome the limitations of keyword-based systems.
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3. CONCLUSION

The work was motivated by increasing fraud cases, where information retrieval system do not handle this particular issue and trademark similarity. The target on similarities during trademarks, which becomes when two or more trademarks like equal or relevant semantic implant. The advantages and limitations of each data similarity of reflow algorithm are described. The system work, conceptual similarities among trademarks like equal or relevant semantic implant.

The main model language processing technology, data paths and lexical resources to calculate hypothetic similarity between different trademarks. The system reforms on all ready trademarks find system by legislation a implementing of rectification the find to hypothetic same trademarks. The system employs natural language processing techniques, knowledge sources and a lexical resource to compute conceptual similarity between trademarks. Also confirm that the comparison of trademarks in terms of conceptual similarity. In future work to improve the precision of the proposed semantic algorithm should include a study comparing the use of various lexical resources.

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