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(54) Title: A SYSTEM TO VERIFY, BY A CLICK ON A PROMPT FOR THE EXISTENCE OF LOOK-ALIKE WEBSITES TO A PARTICULAR WEBSITE
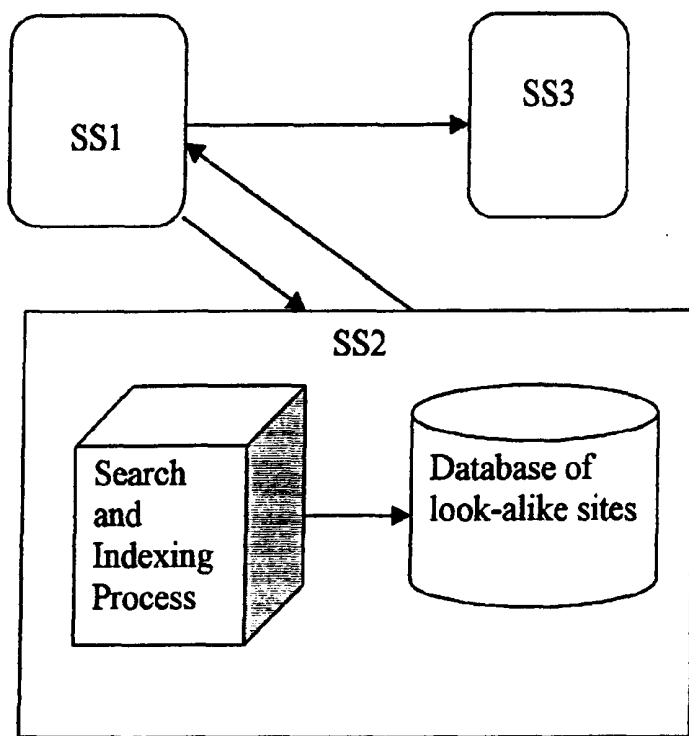
(57) Abstract: A system to verify, by a click, on a prompt for the existence of look-alike websites to a particular website is provided. The system comprises a netizen interface (SS1) linked to a data base system (SS2) created by a search for providing information on look-alike sites by virtue of similarity to the domain name of the site to any other domain names, trade marks, metal-tag or keyword linked to an advertisement in a device designed to locate information on the internet, and a dispute resolution system (SS3) linked to the said netizen interface (SS1). The netizen interface (SS1) ocmprises a visual or audio visual prompt on a website and clickable object such as a button, a picture, a phrase or a word which when clicked makes a request to the data base system (SS2) to provide information of look-alike sites and display the same on a computer screen operated by the netizen. The dispute resolution system (SS3) comprises a virtual arbitration center with a chat room where parties to an arbitration can log in with legally accepted mode of digital identity to resolve the dispute arising from look-alike sites.

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

A SYSTEM TO VERIFY, BY A CLICK ON A PROMPT FOR THE EXISTENCE OF LOOK-ALIKE WEBSITES TO A PARTICULAR WEBSITE

Background

Until recently, even well known entities carried on their business without any interaction with the medium of internet. In the meantime, early technology adopters started developing virtual businesses exclusive of the brick and mortar business. Many of them succeeded in establishing virtual empires which are as well known in the internet world as those of the brick and mortar business giants in the real world.

Of late, the established realworld business houses have realized that Internet has to be integrated to their existing business processes. Simultaneously, the dot com companies have also been increasingly using the traditional media for communicating their products and services to the consumers.

This convergence of the virtual and the real world businesses on the hitherto insulated media of internet has generated a new conflict zone concerning trademark rights over business or product names. Those who own the trademarks in the real world business, claim that they should be

entitled to the corresponding domain names in the virtual business place and vice versa. Today, if one wants to start a realworld bookshop called "Amazon Books", there may be an objection from Amazon.com. Similarly, if one obtains a domain name of "www.vw.com", Volkswagon has an objection.

Owners of registered trademarks claim that the registered name, along with all abbreviations and name extensions prefixed or suffixed with another generic word should be reserved for them and not be given out to others as domain names. Attempts are also made on trade marking words such as e-photo, which may be generic description of an activity.

The opposite school of thought strongly feels that the current trademark rights were not drafted with the Internet as a possible medium of expression. There is therefore no automatic right to a trademark owner to claim that any domain name incorporating the registered trademark as a component should be his exclusive property.

Accordingly, they hold the opinion that if the right of the trademark owner for corresponding domain name is recognized, then under the clause of "Confusingly similar names", a registered trademark owner such as Volkswagon can claim to block not only www.volkswagon.com, but also "www.vw.com", www.vw.net, www.vw.co.uk,

www.vwaustralia.com etc etc. They also feel that technically the domain name is only a string of electronic switches which are either in an "on" state or "off" state and they do not directly represent characters. Presently, domain name registrations are also being done in languages other than English and linking the trademark to the domain name is a narrow way of looking at technology according to this school of thought.

While there appears to be truth in both arguments, it is certain that automatic extension of trademark rights to the domain names is not a desirable proposition. It is being considered favourably by parts of the society today since there appears to be no other solution to guard the netizens from willful misuse of registered trademarks on the net. If there was an alternate method by which netizens could verify the identity of the trademark look-alikes, there is no reason for the society to unnecessarily worry about trademark infringements through similar looking domain names.

As an example we shall recall a similar situation in the real world concerning thce identity of individuals. If somebody walks up to us and introduces himself as Bill Clinton, we don't jump to the conclusion that he is the American President. Even if he is a look alike, and can reasonably pass off as the presidential dupe, we may demand a proof of identity before believing him. Society does not prevent a person from

owning a name or adopting a hair style or dress that makes him look like another famous personality unless it is done specifically to commit a fraud.

Similarly, when a netizen walks into the web site of the official Volkswagon site or a look alike site called www.vw.com, he should normally make out that the two sites are different. He would however be helped if there was a simple device to say "Hi, netizen, I am vw.com, but I am not volkswagon.com". In that case, there would be no need for Volkswagon to worry about the vw.com site affecting its business.

The system according to the invention is a tool for this purpose which provides a simple system for distinguishing a given web site from its lookalikes.

Disclosure of the invention

The invention provides a system to inform a netizen when he visits a site, of the existence of other sites which are the look-alikes of the site being visited. This would be available at the click of a button, which would appear on the homepage of a website. It can also be integrated with the browser so that it becomes a part of a standard menu bar. When clicked on, it would show other look alike sites along with hyperlinks to them. It

can even play a voice file which is activated when the person visits the page or actually clicks the button.

These look alike site list will be created by various means including registration by site owners who own a trademark name similar to the name of the website. Even owners of trade names used in the meta-tag of the site as a key word or in the key-word basket of search engines may also register their site as a look alike even if the domain name itself is not confusing.

In order to avoid disputes such as refusal by the site owner to add names offered for inclusion, or claims to include sites not in any way infringing the trademark rights, the look alike registrations may be serviced by a trusted third party certifier. Such a person or organisation will exercise suitable care to administer the system fairly.

The visitor to the site has the option to verify the "look alike list" if need be. A voice alert can be provided as an option on the existence of the facility on the site to check for "look alike sites".

The system provides a service different from the digital certification service for secured servers. While a digital certificate certifies "Who owns the domain", the system according to the invention displays all

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other sites which are likely to be confused with the subject site either because of the name similarity or due to the key word usage.

In view of the universal utility of the device to the netizens, the best mode of usage of the device is to incorporate it with the browser so that it becomes a standard icon on the menu bar. In this mode, the look-alike list can be maintained by a party other than the web site owner.

The system when activated, will search a designated information source and throw up the results. The information source is maintained by the system manager either as a simple web page or as a searchable database.

If the system according to the invention is maintained by a third party certifier, the data would be maintained in his server elsewhere and served dynamically when queried.

In the first instance, the look-alike list is generated by the system manager through a search process. Subsequently, any person who visits the site can click on the verification button to check the list and to suggest addition of any other site that he feels should be in the list.

Such "Add lookalike request" can be recorded in the log system. In case of subsequent infringement dispute, this may be treated as an

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infringement notice. In the best mode of operation, this notice would be duly acknowledged and filed with a regulatory authority meant for resolving IPR disputes. In the absence of a central IPR dispute resolution authority, it may be sent to an arbitration counter of the system and system manager may device his own methods to follow on such requests.

In the best mode of operation, the system manager may also offer domain name dispute resolution mechanism through online arbitration.

Once the usage of the system according to the invention is widely accepted, in any legal case by a trademark owner against a domain name owner, the defendant may be directed by the court to add the name of the trademark owner to the look alike list to prevent mis-representation. This may be construed as sufficient remedy against claims of infringement of trademark rights arising out of only having used the trademark name as a part of the domain name or the key word string.

The system according to the invention enables a netizen visiting a website to verify at the click of a button for the existence of look-alike websites that may be deceptively similar to the site being visited, by virtue of similarity of the domain name of the site to any other domain name or trade mark or by the use of such domain name or trade mark in

the key word meta tag or in a key word linked to an advertisement in a
search engine or in any other technical device or software code designed
to locate information on the internet and to participate in the process of
updation, as also to resolve disputes online.

Description with reference to the accompanying drawings

The system consists of a netizen interface, a lookalike database with an
updation system and an online dispute resolution system.

Figure 1 shows the system according to the invention.

Figure 2 shows the interconnection of the dispute resolution system.

Netizen interface (SS1) consists of a visual or audio visual prompt on the
web site which is being visited by a netizen consisting inter-alia, a
clickable object in the form of a button or a picture or a phrase or a word
which when clicked, calls for and causes to be displayed or otherwise
presented, the list of "look alike sites" from the "look alike database"
along with other information, hyper links, advertisements, by way of
text, audio, video or any other form. The interface can be rendered in
different forms based on the convenience of the web site owners.

One of the preferred embodiments of the netizen interface (SS1) consist of a pop up box that opens up whenever a person visits a web site where the system is installed. The pop up box will consist of text which introduces the service along with a clickable object to enable the service to be used. When this object is clicked, a request is sent to the data base and a preformatted page containing the "look alike and other related information" gets displayed. This system is created by use of any common scripting language including the universally used scripting languages such as Java Script and VB Script. A more advanced embodiment of the netizen interface rendition would consist of a distinguishingly looking button which is displayed either as a part of the page design or a part of the browser tool bar instead of the pop up box. Additional features that can be added to the netizen interface is a sound prompt which could either be a bell or similar mechanical alert and a voice message. A further enhanced multi media interface would consist of a video image which speaks out a message.

The results displayed can be presented with a pre-determined priority rule set by the service administrator.

Look alike data base creation and updation system (SS2) creates a database of look alike sites and keeps it updated and available for delivery when requested by netizen interface (SS1) from a member site.

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This subsystem will interact with a member applicant through the web site of the verify for look alike service provider, capture membership information through an online form, including the Uniform Resource Locator (URL) of the site for which the service is sought. The system will then parse the URL, filter out character strings specified in a reference list maintained for the purpose, and pick out the remaining string of characters which will form the essential part of the URL. These may be referred to as Verification Key Strings (VKS) for further processing This VKS will then be augmented by adding a pre set group of character strings from a reference list maintained for the purpose to obtain the list of Related Verification Key Strings (RVKS).

If the membership is for the URL http://www.cyberlaws4india.com, the filter will first remove "http://," "www", ".com","India" and "4" and pick "cyberlaws" as the VKS. In the next step specific strings from a reference list will be added to create a list of RVKS which inter-alia will include, http://www.cyberlaws.net,http://www.cyberlaws.co.in,http://www.cyberla ws4uk.com, http://www.cyberlaws-zone.com and several such combinations. The first set of such strings will contain http://www.cyberlaws.* to cover all known Top Level Domains (TLD). The next level would be http://www. *cyberlaws*.com. "*" represents wildcard search strings.

The depth to which RVKS would be set   is a variable parameter determined by the service provider.

This RVKS will then be fed into

A)   "Who Is search" of the domain name data base of all Top Level Domain (TLD) in use   such as .com, .org, .net, .ws, .tv,   as well as all the country code, TLD s such as .co.in, .co.uk and any new TLD s such as .biz,. info or any other TLD s that may be approved for use from time to time, and the sites already registered under any of the RVKS would be indexed after deleting the name of the member URL. This would give the "look alike sites by similarity of domain names".

B)   "Trade Mark Search" over all available Trademark registries some of which will be online and others   would   be maintained by the service provider to obtain a list of trade marks registered under any of the RVKS. The associated web site of the trademark owner will be gathered as additional information through the updation process "Suggest a Site" mentioned later in this document. This information would give the "look alike sites by similarity of Trade Marks".

C)   "Key Word Meta Tag Search" of all URLs excluding the member URL to index all sites where any of the RVKS have been used in the

default home page or any other page in the site. For this purpose the search algorithm will spider all web pages in public domain and parse the "Header" information under the meta tag "KeyWords" and index the main URL of the respective page sans the file extensions if any. This would give "look aike sites by usage in "Key Word Meta Tag".

D)   "Search Engines" chosen from a list of top search engines maintained for the purpose to identify the advertisements linked to any of the RVKS. The URL s linked to such advertisements sans the file extensions, would be treated as the "look alike sites" under this category. Key word Links to Advertisements" will be identified through a process of "Consistency test". Under this test, the RVKS will be applied repeatedly for a required number of times and checked if the same URL is returned through the advertisements appearing in the first page of the search results, for more than 50 % of the time or such other ratio which may be fixed from time to time by the service provider,   this would give "look alike sites by usage of "Key Word link in Search Engine".

The results of the above four searches would be combined to give the consolidated database element specific to the member site. This would be stored in a database table or in the form of individual html pages.

After preparation of the member specific data base for the first time, an "Activation Notice" is sent to the member by means of an e-mail as per address captured on the membership form along with a code snippet to be added to the source code of the member's website. Such code snippet would inter-alia contain a "Link URL" which would fetch the member specific look alike Information page when a 'http' request is received from the netizen interface (SSI).

Simultaneously, an updation schedule is created for updating the search results at periodical intervals. The above search processes are repeated at such periodical intervals as determined by the service provider and the information is updated with the new information.

Updations will also be triggered through submission of specific requests from the public under "Suggest a Site" plan. The look alike list that gets displayed at the member's site when called for will have a clickable link to "Suggest a Site" sub system which consists of a web form which captures the URL s of the suggested sites to be added to the list along with the name and e-mail address of the person suggesting and a brief comment on the reasons thereof. This would be manually handled at the service provider's end and if found suitable, the list would be suitably modifed.

A manual supervision of the list may also be scheduled to fine-tune the list depending on the policies of the service provider.

Dispute resolution system (SS3) provides for an online resolution of disputes, arising out of the existence of "look alike sites'. This system is activated through a clickable button in the look alike list generated by look alike data base creation and updation system (SS2) and displayed as explained earlier. On activation, the netizen is provided a web form interface to record his objection. The objection is noted in a "Dispute resolution Diary" and a note on the procedure for continuing the process is sent along with the acknowledgement. On receipt of the necessary registration fee, the arbitration process would be initiated by the authority appointed by the service provider, involving among other things, the service of the notice, selection and notification of the arbitrators and the scheduling of the arbitration process. The essential part of the dispute resolution system is a "secured chat room" where parties to an arbitration, their attorneys, the arbitrator and the registrar to the arbitration process would all simultaneously log on the chat room with their digital certificates and conduct the proceedings on the virtual arbitration center.

The system according to the invention provides an integrated service starting from the verification of look alike sites through a click of a button to registration of a dispute and its online resolution.

CLAIMS

1.   A system to verify, by a click, on a prompt for the existence of look-alike websites to a particular website, said system comprising a netizen interface (SS1) linked to a data base system (SS2) created by a search for providing information on look-alike sites by virtue of similarity to the domain name of the site to any other domain names, trade marks, meta-tag or keyword linked to an advertisement in a device designed to locate information on the internet, and a dispute resolution system (SS3) linked to the said netizen interface (SS1); said netizen interface (SS1) comprising a visual or audio visual prompt on a website and clickable object such as a button, a picture, a phrase or a word which when clicked makes a request to the data base system (SS2) to provide information of look-alike sites and display the same on a computer screen operated by the netizen; the said   dispute resolution system (SS3) comprising a virtual arbitration center with a chat room where parties to an arbitration can log in with legally accepted mode of digital identity to resolve the dispute arising from look-alike sites.

2.   A system as claimed in claim 1, wherein the said display of look-alike sites are listed on a predetermined priority rule.
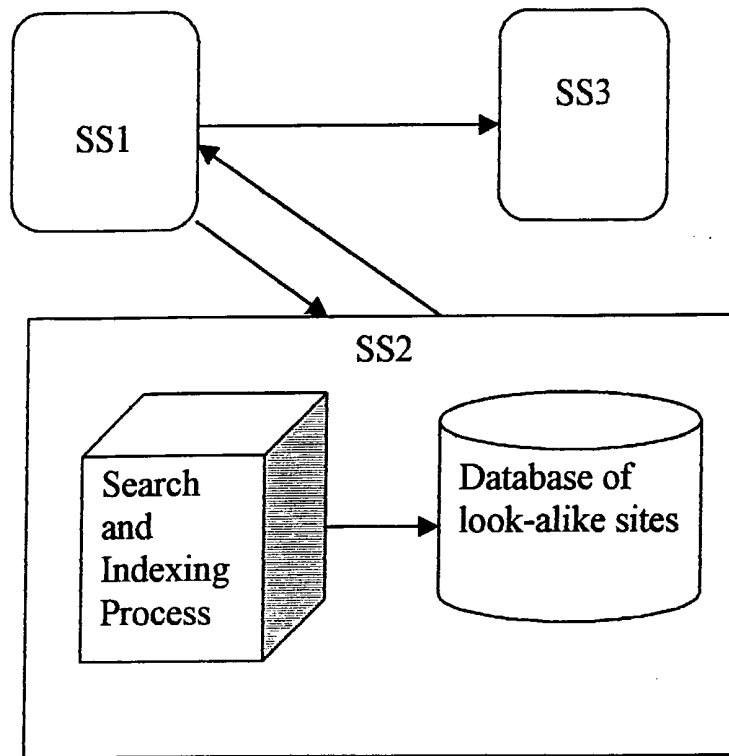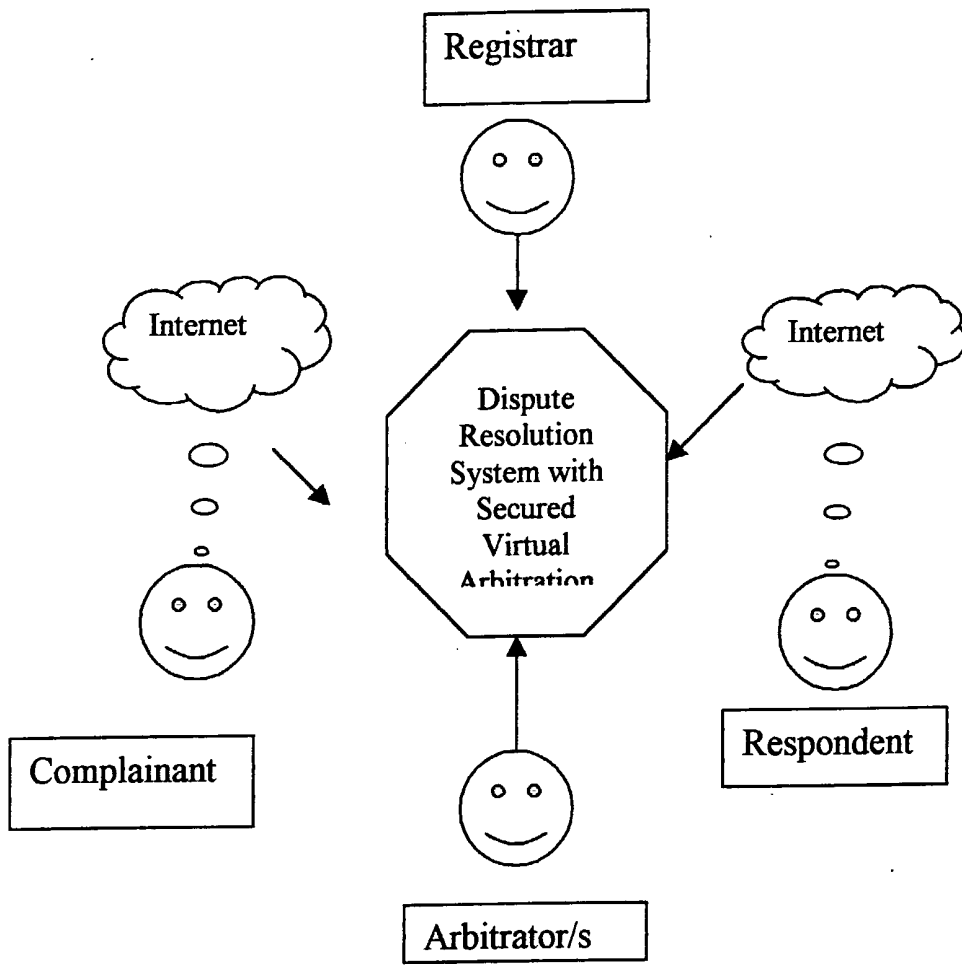
Figure 1

Figure 2

INTERNATIONAL SEARCH REPORT

A.	CLASSIFICATION OF SUBJECT MATTER

IPC(7)   :   G06F 17/30
US CL   :   707/10, 9

According to International Patent Classification (IPC) or to both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
     U.S. : 707/10, 9

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C.	DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,881,131 A (FARRIS et al) 09 March 1999 (09.03.1999), ALL.	1-2
A	COMER D. et al, Issues in Using DARPA Domain Names for Computer Mail, ACM 1985, pages 158-164.	1-2
T, E	NameProtect.com, Home page printed 30 August 2001 (30.08.20001), 1 page.	1-2
T, E	nameboy.com, Home page printed 30 August 2001 (30.08.2001), 1 page.	1-2
T, E	Whois.Net, Home page printed 30 August 2001 (30.08.2001), 2 pages.	1-2

☐ Further documents are listed in the continuation of Box C.   ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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