WIPO

PCT/MIA/VI/7
ORIGINAL: English
DATE: January 21, 1997

WORLD INTELLECTUAL PROPERTY ORGANIZATION
GENEVA

INTERNATIONAL PATENT COOPERATION UNION
(PCT UNION)

MEETING OF INTERNATIONAL AUTHORITIES UNDER THE PCT

Sixth Session
Canberra, February 17 to 21, 1997

USE OF THE INTERNET DURING INTERNATIONAL SEARCH AND INTERNATIONAL PRELIMINARY EXAMINATION

Document prepared by the International Bureau

1. Several International Authorities appear to have gained significant experience related to the use of the Internet as a resource in the work of search and examination. For example, the European Patent Office, the Japanese Patent Office and the United States Patent and Trademark Office, in the course of their trilateral cooperation, have been studying the use of the Internet in connection with Trilateral Project 14.6 (Common Search Tools).

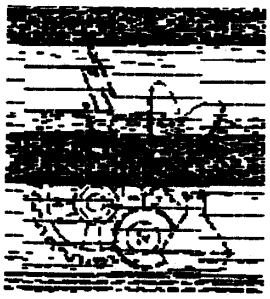
2. Because that experience may be of interest to the other Authorities, it is proposed that the Meeting discuss the use of the Internet during international search and international preliminary examination, and particularly, whether, and along what lines, modifications should be made to the PCT Search Guidelines and PCT Preliminary Examination Guidelines in relation to the use of the Internet.

3. The Annex to this document contains a copy of a paper, prepared by the United States Patent and Trademark Office, entitled “Use of the Internet in the USPTO for the Patent Examination Process,” which is included as background for the purposes of discussion.

4. The Meeting is invited to discuss the matter outlined above and to consider, in particular, whether and along what lines any modifications should be made to the PCT Search Guidelines and the PCT Preliminary Examination Guidelines.

[Annex follows]

ANNEX



Use of the Internet in the USPTO for the Patent Examination Process

November 8, 1996
developed by
Search and Information Resources Administration
U.S. Patent and Trademark Office

A Discussion Paper In Support Of International Harmonization of Patent Systems

TABLE OF CONTENTS

. SECTION 1. INTRODUCTION
. SECTION 2. USEFULNESS OF INTERNET IN FINDING PRIOR ART
. SECTION 3. WHAT SEARCH AIDS/TECHNIQUES ARE USED?
. SECTION 4. PROCEDURES USED TO OBTAIN BIBLIOGRAPHIC DATA
. SECTION 5. HOW ARE REFERENCES BEING CATALOGUED/SAVED BY USERS?

SECTION 1. INTRODUCTION

1.1 Background. Additional information on the effectiveness of the Internet as a tool for locating prior can be found in the Trilateral Project 14.6 report titled *Common Search Tools, Focus Report - Internet Search Facilities* , dated May 1, 1996. That report contains a wealth of information on current Internet use, effectiveness, potential for the future, and valuable Internet sources of, and tools for locating, prior art.

The USPTO's initial Internet Access System has been operational since June 1992. It provides USPTO users with access to the Internet. It also supports a World Wide Web (WWW) server that provides both USPTO staff, and the public, access to USPTO documents and other patent and trademark-related materials. It may be accessed at the USPTO Web site **(http://www.uspto.gov)** .

As has been discussed in the Trilateral Project 14.6 report, *Common Search Tools, Focus Report - Internet Search Facilities* , the Internet offers a highly effective means of identifying and retrieving prior art as well as information about advancements in many technology areas. Improving access to global information for non-patent prior art searching is a highly desirable and achievable goal. This paper highlights some of the successes and problems encountered to-date. In addition, it includes preliminary statistics produced by a software monitor which has recently been installed to provide feedback on how the USPTO examiner resource Web pages are being used.

The general goals of the Pioneer Project when it began in 1991 were to explore the uses of the Internet by an intellectual property organization, and to identify the ramifications of Internet access in the USPTO's technical, legal, and business environments. The major practical application contemplated was use of the Internet to conduct USPTO business. Functional system design, development, and implementation proceeded in parallel with technical and legal research and analysis. Activities ranged from local office system installation and support for creation of HTML documents to study of international cooperation issues. Five years after its inception, the Pioneer Project has produced a mature and stable USPTO Internet Access System, and transitioned its administration and daily operation to a successor organization. The Pioneer Project continues to pursue its broader goals and to envision new practical, cost-effective applications.

One objective of the Pioneer Project was to investigate the resources of the Internet for patent examination. The simple start was to set up Pioneer accounts with Internet newsgroups pre-selected to facilitate topical newsreading.

Organizing Internet resources, establishing examiner resources Web pages, and developing a prototype internal Web site for the AC Patents organization within the USPTO are major initiatives intended foster Internet use within the USPTO.

1.2 Purpose. The purpose of this report is to provide a status of the USPTO's use of the Internet, its vast information resources, communications facilities, and its search and indexing capabilities in order to help focus continuing discussions among intellectual property offices on the use of Internet and Intranet technologies for use in patent processes. This report begins to focus on the day-to-day usage of the Internet by our library, the Scientific and Technical Information Center (STIC) and the contributions by many levels of USPTO to the resource identification project.

SECTION 2. USEFULNESS OF INTERNET IN FINDING PRIOR ART

The Internet has been found to be an effective search tool in the USPTO for locating much information on many different subjects. As a retrieval tool, it poses some challenges due to inconsistencies in completeness and quality of the information and some difficulty in obtaining critical bibliographic information such as the names of authors and publication dates. Proper verification of bibliographic information must often occur off-line from the Internet, a process that can be time consuming and uncertain. Fortunately, most prior art found on the Internet has been published in paper at some point.

Information on the Internet is not permanent. Hence, material located by an Internet search on one occasion may not may not be found again if needed at a later time. Similarly, all of the Internet features and capabilities are changing constantly including, for example, search engines, links, information resource, and home pages. Briefly stated the Internet is an excellent tool for finding information but the reliability of information must often be substantiated by conventional processes.

The usefulness of the Internet can be substantially improved with training. Training is important to the development of user searching abilities and is particularly useful in helping users find important Web sites. The Scientific and Technical Information Center (STIC) provides Internet training for staff and "Just in time" training for patent examiners. Internet demonstrations and formal and informal presentations for examiners are conducted.

Sharing of information about new and useful Web sites and other Internet features is also very important. The organizing the Internet links collection effort is the primary product of this effort. In order to enhance this type of information sharing, the STIC publishes regular articles about the Internet for the benefit of examiners in various publications (STIC News, Biotech/Chem News, and the Parker Law Library News).

A few representative examples of the types of successful uses of the Internet to perform searches are briefly described below:

The WWW is useful for finding product information (specifications, software, etc.), subject related pre-prints, teaching/review articles, etc. The ability to retrieve copies of reprints of scholarly articles is particularly valuable since some of these reprints are no longer available in print. In general, the quality of the references varies and the exact date may have to be verified by conventional means.

The Internet is used for document retrieval purposes. Full text articles are retrieved in response to on-demand requests from patent examiners. Of particular value is the ability to obtain full-text copies of conference proceedings that are not published in paper form.

Patent examinations that involve software technology can be aided by Internet searches that lead to the retrieval of information on software products, and to downloading of actual software that can be examined.

Recently, the Manning and Napier Information Services (DrLink) has indicated an interest in obtaining from CompuServe, archival materials that deal with discussions on software technology.

Periodically, examiners utilize the Internet for obtaining answers to specific questions on various technical and legal subjects through a feature known as "frequently asked question" (FAQ). Many use the Internet Newsgroups for keeping current with certain areas in technology and many technical newsletters and magazines have WWW versions.

Translators are using the Internet to determine or confirm proper terminology in connection with certain translations. We have identified a collection of links to foreign language dictionaries.

SECTION 3. WHAT SEARCH AIDS/TECHNIQUES ARE USED?

The Internet offers an efficient and cost-effective means of conducting initial search operations and often provides the only avenue to information published only electronically. The STIC utilizes sources such as the *Science & Engineering Network News* which provides valuable information about new, worthwhile Web sites that contain relevant information in

several, if not most, science and engineering fields. Issues of this publication are kept conveniently accessible in the STIC, and these materials are often reviewed by examiners and staff prior to conducting electronic searches. In addition, a log of useful sites is kept in the STIC for staff and patron use. Examiners are further assisted by resource pointers and other valuable information on the USPTO's internal Web pages which are organized according to Examining Group and Art Unit. A software counter has recently been installed to record activity on these internal examiner resource pages in order to provide feedback so that this examiner resource material can be refined and improved.

Search engines used include Lycos, Alta Vista, Yahoo, Infoseek, etc. The search engine known as Metacrawler actually eliminates duplicate Uniform Resource Locators (URLs - Web site addresses) and is known for its speed. The problem with the search engines is that the trade-off between accuracy and precision often leads to poor results if the words which describe the concept sought are too common. Various different search schemes of relevancy ranking and strategies for indexing a WWW site are used to improve the quality of the search results, but often finding what you need takes great patience.

There are several WWW cataloging projects to create subject collections on the WWW, and often these are useful. The USPTO in its "Organizing the Internet" effort is collecting the links of interest to examiners and analyzing them by group and Art Unit.

In regard to biotechnology searches, all data providers such as the National Center for Biotechnology Information (NCBI), sponsor home pages with the facility to input various search parameters. NCBI also sponsors an RNA/DNA biochemical data base on the Internet known as Entrez which includes documents and articles that contain most published sequences, including patent sequences. The text of materials in Entrez which includes bibliographic information is searchable. The NCBI also provides access to public sequence search resources.

Early in its Internet experience, the USPTO initiated efforts to develop Web pages specifically targeted on providing quality links and pointers to relevant prior art resources. This tradition continues. The USPTO continues to solicit input and participation by the examiner corps and the examiner support community in the development and refinement of these examiner resource Web pages. Many examiners and Supervisors regularly contribute pointers and advice to the Web resource developers for improvement of these pages. Preliminary monitoring of the "hits" on these examiner resource pointers indicates that as the quality and amount of examiner resource pointers is enhanced, the number of "hits" on these resource pointers increases.

Section 3.1 Examiner Experience The following are typical examples of how USPTO examiners and Examining Supervisors are using the Internet.

1. Examiner, **Art Unit 2307** (Database and File Management Systems)

"... the directors need to know how useful a directed search on the Internet can be. Here is a screen snapshot of my APS search For Data Mining [see Appendix C]. As you can see there are no patents with the term "Data Mining" in them. [In] my lycos search... in which I searched for hits on the four terms "data mining knowledge databases" a free association of four terms, I got thirteen very relevant hits; one hit was downloaded; a 78 page scientific report at a Mining: the search for knowledge in databases" and used for prior art. The "Data Mining" link was added to our homepage. Most of the examiners in our art unit are not yet using Pioneer and the Internet, although we are urging them to begin." Sample printouts of the APS screens and Web pages can be found in APPENDIX C.

2. Examiner, **Art Unit 2411** (Computer Applications in business practices, life sciences, linguistics, word processing and earth sciences.)

Enclosed are the details of the search I performed on 8/1. This search involved the sponsor paid access to on-line help and on-line registration application in EIC and came across a reference which disclosed a company who was making software to do just such an operation. The company was Pipeline Communications, Inc., out of Atlanta. The article gave partial details of the system, so out of curiosity, I checked in Yahoo to see if this firm had a web domain. (Nearly all firms which make software do.) As it turned out, they did have a site and on it was detailed information describing the process which was discussed in the reference. The website material even included block diagrams detailing the process disclosed in the claims and will serve as a good reference in formulating my rejection. This is a good example of how the Internet can be used in tandem with traditional search mediums to achieve more comprehensive results.

3. Search results done by Summer Intern for **Art Unit 2411**

"I did an Internet search yesterday for an examiner, and I thought you might be interested in the results. He had an application, as you are probably familiar with, for a system, whereby you have a pay per view web site where you need a

password, or code to view the pages/download images from the site. The way you obtain this password or code is by calling a 900 number, alleviating the need to supply your credit card number over the web.

As far as a search strategy, I began by looking under the electronic shopping section of our website, though I was fairly certain that there was no such description on our page, as these systems are typically used for distributing pictures, etc. I then looked in Yahoo under 900 numbers, and quickly came across a company called Galaxy Net Telecommunications who was advertising services to create such a pay per view website, whereby the customer has to call a 900 number to gain access. The URL was www.galaxy-net.com, and it seemed to be exactly what he was looking for. I also found a couple examples of implementations of this type of system. [the examiner] is going to contact the company via e-mail to find out how long this system has been in place. His date is fairly recent, 5/95 and I am confident that this technology has been around well before then.

4. Example from Summer Intern, **Art Unit 2411**

"...in reference to search for [an examiner], after discussing the case with her I searched both in Yahoo and on our web site for related art. I was looking for any type of transaction notification system. In Yahoo I seared under credit cards, security, pagers, cellular phones, theft and application of electronic shopping whereby the credit card number is split into more than one field and sent to different locations. [The examiner] was mainly just inquiring as to whether or not I had heard of such a thing. I thought I had remembered something from the search I had just done for [an examiner] and this morning I did some more searches in Yahoo under security and credit cards, and I came across a site which detailed a secure system whereby the credit card number is broken into 4 separate fields and sent in separate messages. It appeared to be an exact implementation of the disclosed invention. The copyright date was just 95 and I believe [the examiner] needed April of 95. I recommended he e-mail the person who was detailing the system to make a general inquiry as the source of this system, since this person provided his e-mail address on the page and since [the examiner] had such a good response from doing this. In light of this I created a heading under Electronic Shopping entitled "Security and Secure On-Line Transactions" with some links to white papers and related sites which disclose protocol and methods of encryption, transfer, and server security. "

5. Supervisory Patent Examiner, **Art Unit 2411**

We just had a need [Nov. 1996] to find out if automobiles were sold on the Internet. We looked under Electronic Shopping on 2411's Home page, then under Virtual Shopping and presto the "Auto Mall" is there.

6. An examiner in **Art Unit 2306** , mentions several ways the Internet is being used:

"As far as what good the internet is as a resource. I recently worked on a case which claimed a type of business calculator. I could find no prior art in APS and began searching the internet. There, I found that Hewlett Packard had set up a web site they called their "HP Calculator Museum." The site had a comprehensive history of the development of calculators, e.g., what year each feature was added. Website like this are particularly helpful. In my case, I couldn't find the feature I was looking for so the website provided confirmation that what I was looking at was most likely novel and non-obvious. Other examiners in my group were very interested in reading the IEEE usenet newsgroups. Most of the discussions in technical newsgroups like that revolve around current research and keep examiners abreast of what's going on in the field."

7. An examiner in AU2106, who works in the laser heating art, has used the Internet effectively in finding good prior art. He:

- Found a 102(a) non-patent document that was published by a Government laser research lab that he cited in a case.
- Found a document entitled "Laser Drilling Techniques", published by Electro Scientific Industries, Inc. that is highly relevant to cases he has worked on. He, in fact, printed the document and classified it in 219/121.71!
- Searches a database, "InCite", maintained by the International Society for Optical Engineering that, to my knowledge, is not currently available from a commercial database vendor (STN, Orbit, Questel, or Dialog).
- Found an online European trade journal, "Opto and Laser Europe", which reguarly features content related to laser heating. It should be noted that "Opto and Laser Europe" is currently not available within the PTO, including STIC. Greg told me that on one particular case, he was looking for the concept of using a flexible mirror to change the laser focus, and found it in the March 1995 issue of "Opto and Laser Europe" on the Internet.
- Found an online trade journal, "Laser Report", published online by "Laser Focus World" magazine, which reguarly features content related to laser heating. After scanning the journal, he will copy the relevant technical articles for inclusion in the shoes.

- Found a British technical article, "Laser Processing of Diamond", relevant to a case he is working on.
- Found a complete listing of current technical projects of the Fraunhofer Resource Center, Michigan and the Fraunhofer Institute for Laser Technology, in Aachen Germany. Some of the projects described in detail on this site include metal forming with laser radiation, laser brazing of ceramic on stainless steel, laser cutting of aluminum sheet metal with a thickness of >10 mm, laser cutting of composites, laser drill control for cutting applications, laser control systems, soldering with laser diodes, laser surface treatment of shearing blades, hardening with laser diodes, welding applications, etc. For each project, the objective, procedures, and results are all outlined in full text. There is even an email address for the project leaders right on the web page!
- Found product brochures from manufacturers in the art. In one brochure, there was a "PATENT PENDING" statement, that was in fact a case on Greg's docket!

This examiner also stated, "My own personal success story is my heated wrist rest case. My claims called for a keyboard wrist rest with an embedded electric heater to provide therapeutic warmth to the wrists for preventing Carpal Tunnel Syndrome. One of the best references came from a Canadian company's online product brochure, 'Thermo-Pad,' which provided a clear teaching to heat the wrist rest! The company is 'Hood Thermo-Pad Canada.'"

"Those are just a few of the things we've experienced so far on the Internet. I think that as more and more manufacturers start putting catalogs and brochures on the internet, there will be a lot more good prior art out there to search in my art."

"Another interesting possibility is the use of information 'filtering' services, such as IBM's 'InfoSage', or SandPoint Hoover, who 'surf' the net (as well as proprietary databases) for you, and email you what they found corresponding to a search you give them. I'm planning to explore those resources in the near future."

Section 3.2 AIPLA Presentation

The Following section is a copy of a speech given by the Supervisory Patent Examiner in Art Unit 2411 to the AIPLA.

USE OF THE INTERNET AS A SEARCH TOOL

1. Document Search and Retrieval

A. Database Search

Some sites provide a searchable database for visitors allowing search and retrieval of full text documents or abstracts thereof. Because security issues concerning transmission and capture of search requests have not yet been resolved, examiners in art unit 2411 only make use of this feature to determine the general state of the art.

EXAMPLE

Prior to the advent of software based accounting systems, accounting functions were performed manually. Accountants made use of paper journals to enter the requisite data and performed computations manually through use of calculators. With the introduction of personal computers into the business environment, the burden placed on accountants was lessened to some extent. With automated accounting systems, the accountant could simply enter necessary into the computer and associated calculations would be automatically performed.

While these systems were an improvement for the performance of accounting functions, they still required that accounting personnel manually input data from income or order generating departments and to manually transfer data to various spreadsheets or word processing systems in order to generate reports for various departments.

What is claimed:

Automated accounting system for use by a business entity comprising:

accounting module means for performing accounting functions for activities performed by or within said business entity;

Internet ordering means for accepting customer orders over the Internet;

means for automatically transmitting said customer order data to said accounting module means;

word processing means for creating a report based on at least part of said activities; said report generated from accounting data output by said accounting module means;

spreadsheet means for creating a spreadsheet based on at least part of said activities; said spreadsheet also generated

from accounting data output by said accounting module means;

[http://www.cpaonline.com/Netscape20/resources.html]

B. Browse

Other sites do not maintain searchable databases but do provide listings of products and/or product manufacturers. This feature allows examiners to browse through the listings much as they would look through patents in various classes and sub/classes. In addition, if Applicant discusses the general state of the art in the background section of the application and the examiner wishes to have more information, he or she may perform an on-line search to identify specific pieces of prior art or obtain a more detailed discussion of the subject matter.

EXAMPLE

Same scenario as above however no searchable database exists.

[http://www.corpfinet.com/Fin_Software.html]

[http://www.uni.edu/schmidt/soft.html]

2. Identification of Associations

A. Industry associations or organizations, including academic institutions, maintain sites on the Internet as a way to provide information to their members and often to the general public. These sites are an excellent way to obtain documentation which is generally unavailable through other sources such as commercial databases . For example, an organization or its members may be able to provide the examiner with in-house literature distributed to customers or members, sales brochures, product manuals as well as written materials from conferences, seminars, speeches, etc.

EXAMPLE

An examiner wishes to determine if an applicant has published other works, or the examiner finds reference in the application or during a prior art search to someone who has written relevant technical reports or other papers at a university. As most technical reports published by colleges and universities are not found in commercial databases, the Internet may be the best way to locate these papers.

B. In addition, information obtained from these sites can be an invaluable source of educational material for the examiners (e.g., seminars, professional conferences, association newsletters, definitions, etc.).

[http://www.CPRI.org]

Last year examiners were able to join professional organizations identified on the Internet and as a result attended professional conferences held by these groups. Current cuts in the PTO budget may have a significant effect on this aspect of the pilot program since funds may no longer be available to support such examiner trips.

Example

The invention is directed to a system for automating patient records. While computerized patient record keeping systems are known, these system are normally stand alone and are incompatible with each other. The do not transmit data to or process data from other automated record keeping systems. Therefore systems located in various departments within a health care site or in various health sites cannot communicate with each other. This lack of communication decreases the efficiency of health care providers since they cannot access relevant information located in automated systems of another department or site.

What is claimed is:

An automated patient record system comprising:

a plurality of automated patient record keeping systems dispersed throughout various sites such that each health care site has at least one record keeping system;

each of said record keeping systems including a means for inputting patient related data; means for storing said input data, and means for receiving requests to output said stored patient related data;

each of said record keeping system includes means to input a request for data related to s specific patient and to output said request to a transmitting means in a standard format;

said transmitting means includes means for receiving data requests from any of said record keeping systems in said standard format and for transmitting the request from the requesting system to the system in which the requested data

is located and for transmitting said requested data to the requesting site.

[http://www.CPRI.org/standard.html]

3. Definitions

[http://www.banking.com/terminol.htm]

4. Sites as Prior Art

Often, it is the site itself which functions as the prior art. This is particularly true of areas involving electronic shopping, electronic banking, and Internet commercial applications.

[http://www.eden.com]

5. Government Agency Sites

Some government agencies have established sites on the Internet. While the type of information on these site varies from agency to agency, most tend to have information concerning recent developments which would effect the way business is done in a certain industry (e.g., new rules or regulations under which the agency must function, announcements, etc.).

[http://www.irs.us.tres.gov]

6. Discussion Groups

One potential use of discussion or news groups on the Internet is as resource for examiners to determine the state of the art, identify areas of research, and as a means of keeping abreast of developments in a particular area. However, concerns about the security of information discussed in these groups has not been resolved. Therefore, the PTO does not currently participate in these groups.

7. Establishing Dates For References or Prior Art Systems

An Examiner may have a particular reference or existing prior art system brought to his or her attention. The prior art may appear to be highly relevant but no date can be found for the reference or the system. The Internet allows for location of the author, or product manufacturer in order to establish publication or first use date.

8. Prior Art In the Form of Shareware can be retrieved,

[http://www.zip.com]

9. Problems

1. Transmissions on the Internet are not secure.

2. Frequently postings on Internet are not saved in archives.

The PTO is currently investigating the use of several options for problems with archiving:

(a) Construction of an in-house database of material retrieved from the Internet which is indexed by class and sub-class.

(b) Use Of Outside Vendors to construct these databases

10. Use In the PTO

Examiners may themselves make use of the Internet as a search tool. Otherwise, professional searchers from the Electronic Information Center will perform searches for the Examiner. Whether the Internet is regularly used as a search tool depends on the art involved. In the areas of games, business, simulation, multimedia , and networks, the use is fairly regular. Other areas are searched more infrequently but its use is expected to increase with the identification of appropriate search areas.

Section 3.3 Development of the Patent Examiner Resource Pages

The development of the Patent Examiner Resource Pages has been a contributory process involving Patent Examiners, Supervisory Patent Examiners, and In-Group Search Assistants, as well as a direct search and retrieval process involving the one Pioneer Internet staff member assigned to the project.

Patent Examiners and Supervisory Patent Examiners in Art Units 2411, 2306, 2307, 3102, and 3103 have all contributed the URLs for useful sites on the Internet. These sites have varied from technical report sites such as the Networked Computer Science Technical Reports Library at the University of Massachusetts, Amherst, to manufacturer's home pages.

In-Group Search Assistants in Groups 2400 and 3300 have contributed a variety of sites also that have been used by examiners in their groups.

These contributions have been augmented by the PTO Internet staff member, hereafter referred to as the Developer, who uses a variety of search tools to select sites for inclusion. The most frequently used tools are the Search Engines on the Web. AltaVista <http://www.altavista.digital.com/> and Infoseek Ultra <http://ultra.infoseek.com/> have proven to provide excellent search results since they have the capability of allowing the user to construct

a more highly sophisticated search statement. Subject Guides such as Yahoo <http://www.yahoo.com/>, World Wide Web Virtual Library <http://www.w3.org/vl/>, and the Argus Clearinghouse <http://www.clearinghouse.net/> are also used.

The Developer chooses the search terms from the Classification schedule, using the actual terms from the class and subclass descriptions for the art that is assigned each art unit. Examiners have assisted in providing the latest class numbers for their art units.

Resources are often divided into those that are "General," and those that are specific to class and subclass names. Some art Units have wanted to follow the order of the Patent shoes in grouping the classes and subclasses. Others have not used this organization method.

General resources are categorized by the type of resource: technical report, journal article, manufacturer's homepages, conference proceedings and papers, research sites, bibliographies and indexes, and discussion groups.

All resources are evaluated before being chosen for addition to Resource Pages. Research and other technical reports must come from a government or academic research institution. Sites are not limited to the United States. Journals must be published by a recognized publisher of

integrity. Where possible, sites that are searchable are chosen over those that are not. Links to specific reports that match terms from class and subclass definitions are added to those pages whose art units have requested this type of detailed organization.

The Examiner Resource Pages are a project that involves continual reassessment through feedback from the users. This project at the United States Patent and Trademark Office depends on the contributions and feedback from these individuals.

SECTION 4. PROCEDURES USED TO OBTAIN BIBLIOGRAPHIC DATA

Obtaining the bibliographic information needed to cite references retrieved from the Internet is a problem of growing concern as use of the Internet increases. Often, full bibliographic information is present only when the full text is also available in print form. However, when the information exists only in electronic form, the author and date must be obtained from the host site or from another source identified by the host site. Or, if the author and date are not easily obtained, it may be necessary to perform a commercial data base search for the information or contact the publisher (generally by telephone). In many instances, the process of obtaining appropriate bibliographic information is time consuming and the process can be fruitless. However, the overall picture is improving. There is a definite trend for serious authors to include dates, authorship, and copyright information with their electronic publications.

The STIC utilizes the Xia Li's *Electronic Style: A Guide to Citing Electronic information* , 1993, as an aid in citing documents retrieved through the Internet. Currently, ISO Standard 690 is undergoing revision in order to incorporate guidance for the bibliographic citing of electronic references. A separate Trilateral paper for the November 1996 meeting is available on the topic of problems of citation and accessibility of documents. Under US Law, publication requires that the documents be accessible to an interested party as explained in the paper. Thus, a document found on the Internet by chance may be challenged on the ground that it is not a publication under US Law.

In addition, an ANSI committee (C22) has been commissioned to develop a metadata standard which will provide a format and guide for including needed authorship, formatting, and temporal information electronic information. The standards subcommittee, known as REBI for reliability of electronic business information is sanctioned by ANSI and is coordinating with ISO for international interests. The project is just starting. A first draft of the standard is due soon.

SECTION 5. HOW ARE REFERENCES BEING CATALOGUED/SAVED BY USERS?

Within the USPTO, references obtained via the Internet are not formally cataloged, although a standard for cataloging

¶

Internet resources does exist under the generally accepted cataloging rules known as the Anglo-American Cataloging Rules 2, MARC standard. Some libraries that subscribe to electronic journals (E-journals) print out the issues, keep them in hard copy, and include the URL's (Web site addresses) in the catalog record according to MARC standards.

USPTO Internet users can save URLs on their desktop browsers (i.e., Netscape) under Bookmarks or on a home directory on Pioneer (the USPTO's primary Internet server). These bookmarks are normally the first "jumping off point" for users wishing to visit historically fruitful sites. "Bookmarking" is heavily used by the USPTO examiner community. Bookmarking is the normal method used by examiners and examiner support staff for tailoring reference pointers to meet individual examiner search needs. This is highly beneficial to the examiners and the overall patent application process but it turns out that it is difficult to assess the true effectiveness of the internal Web pages designed specifically for the examiners when the very act of bookmarking has the effect of bypassing the software monitor described earlier. Short of placing software which monitors individual workers, there is no practical way to obtain precise counts of usage of internal Web pages. Note that implementation of software which monitors individuals may not be appropriate considering current labor management agreements and the general management practices within the USPTO.

Bookmark files can be converted to a PC-readable formatted file and subsequently shared within the larger examiner and industrial and intellectual property practitioner community. Bookmark files are often shared among examiners and are made available by individual examiners to the internal Web page development team. The Netscape bookmarks can be subdivided into categories of interest to the user. An examiner or other user can create an HTML page that is a file on his local workstation, so the examiner can create his own annotated directory of resources.

As part of the Organizing the Internet effort, resource pages have been created for trademark examiners. Trademark web pages are organized in two categories: (1) Search Engines and Subject Guides, and (2) a Collection of Reference Pointers based on browser bookmark files provided by trademark examiners. Search Engines and Subject Guides includes some tutorial information on how to use the search engines. The Collection of Reference Pointers obtained from the trademark examiners has been augmented with previously identified pointers to valuable resource sites, such as other government information repositories and trade organizations.

The Organizing the Internet team has found it effective to work closely with examiners to obtain initial pointers, and subsequently refine and enhance that initial collection. This process includes an on-going review and assessment of the effectiveness and usefulness of resource pointers on the internal web pages. The USPTO experience is that this involves an on-going process of enhancing, reviewing, culling, adding, and deleting pointers based on use, effectiveness, etc.

[End of Annex and of document]