Digital Library for Patents

Dr. Harish Chandra
Librarian
Indian Institute of Technology Madras
Chennai – 600 036
E-mail: hchandra@iitm.ac.in
URL: http://www.harishchandra.net

Abstract

The present paper discusses the concept of digital library and it's significance, various motivating factors for digital library application are also highlighted briefly. The uses of patents as a tool for protecting intellectual property rights (IPRs), major patents websites, and literature on patents are discussed.

Keywords: Digital Library, Patents, Central Library, IIT Madras, Web Resources, NIT, Patent Index, Industrial Designs, IPRs

1. Introduction

New information technology (NIT) has drastically affected the entire areas directly or indirectly including library & information science teaching and practice. The concept of digital library is getting fast momentum due to the application of new information technology and the increased information thrust in the area of science and technology. In this connection, various studies and efforts are on; some of them are referred in this paper like **Sairamesh.J.et al (5)** say that digital library will have a major influence on the design of future information system. They are the cradles from which future advanced information technologies will emerge to provide transparent services to a variety of users through housing information objects in various media, such as text, audio, video and image. **Kathleen Mckenown et al (6)** say that the digital library represents a paradigm shift in how we conceptualise in removing geographical and temporal boundaries, current technology now offers an unprecedented opportunity to bring vast research collection to every constituency, from the pattern of the local public library, to the fifth grade student, to the university scholar, **Mark S Ackerman (7)** mentions that the promise of the digital library is enormous. In a digital library environment information seeker can have access to materials whenever and however he wants it. There will be no shortage of copies, retreval can be instaneous, and the materials will not decay or fade. **Fox (1993) (3)** indicates that with regular libraries, the user goes to the information; requiring easy to use, easy to learn user interfaces. **The British Library Digital Library (2)** Program states that the term digital library is the widely

accepted technologies to acquire, store, consume and provide access to information and material in whatever form it was originally published. **Brandon Muramatsu (1)** says that digital library of the future will be a community of learners-encompassing faculty, students and life long learners. **Takeo Yamammoto (8)** stresses that a digital library means an institution or a mechanism which offers masses of digital information to end users over the network, and/or assist the end-users to retrieve necessary information from there, including those institutions where books, journals and other large body of information are created, collected and converted, or edited to form a large digital database to serve request over the network. **Hiroshi Mukaiyama (4)** defines the digital libraries as one of the central and most compelling applications for the 21st century's highly information based societies. .

Based on these studies, most of the countries have already realized the importance of digital libraries. Accordingly, efforts are on to create digital libraries for specific environment and collection at global level. Some of the motivating factors for creating digital libraries are listed below:

2. Motivating Factor

1. Immutability of the text
2. Large repository of electronic information
3. Effective tool for bridging the information gap
4. Interactive access to the collection
5. Instant access to the collection
6. Distributed knowledge environment
7. Fully automated indexing & intelligent retrieval
8. Digital reading and referencing of materials
9. Effective image search
10. Digital preservation
11. Reduced space problem
12. High update rate

Currently, intellectual property rights are globally discussed and debated with the objective to protect these rights through various methods and techniques and also to create awareness among R&D personnel, industries and other end-users. Patent is one of the most vital tools to protect IPRs at world level in all the areas. Some of the uses of patents are being given below:

3. Uses of Patents

1. Patent documents deal with technology. They protect the most recent technology and help the R&D workers to avoid duplication in R&D work.

2. Patent conveys the most recent information and the speediest form of technology disclosure.
3. Patent documents are uniform and give total description and background of the invention.
4. Patent documents contain information, which is not divulged in any other form of literature.
5. Patent documents often disclose not only the concepts concerning the general utility of the invention but also give information on the possibility of its practical application in industry.
6. The browsing of the patent on a specific subject can encourage the research workers to develop new ideas and re-orient their research efforts.

4. Patents Literature

4.1. ESPACE World

The ESPACE series of CD-ROMs provides comprehensive coverage of European, PCT and UK patent applications and granted patents. The ESPACE CD-ROM database is an excellent resource for:

a. Tracking research trends, competitive activity, the latest R&D and technological advances in the European union prior to their disclosure
b. Gaining a competitive advantage on your international rivials
c. Easy printing for patent documents

4.2. Patent Index

The Central Library subscribes Patent Index published by Chemical Abstracting Service (CAS) USA. It contains information on patent documents processed by CAS during the current volume period. It includes the entries for all newly abstracted patent documents on an inventions, cross references to the first abstracted documents on invention.

4.3. INPAT

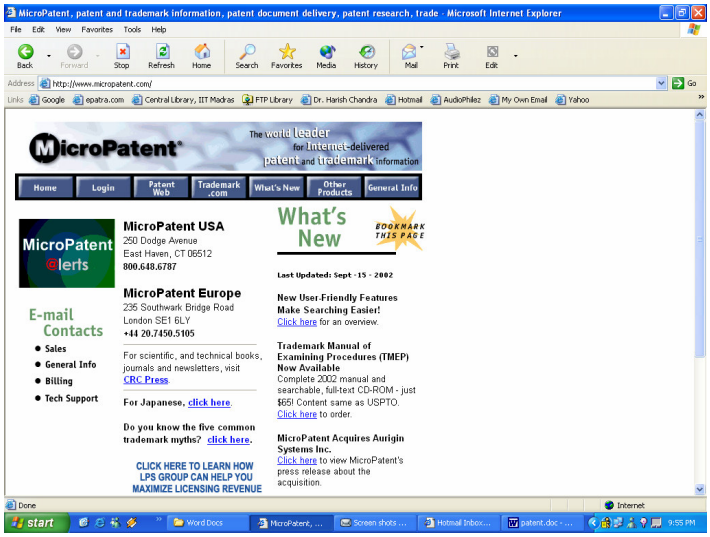
Indian Patents Data base contains nearly 50,000 records on the patents granted in India from 1972 to December 1997. The patents can be searched by the parameters like inventor, applicant, keywords (title words), subject, country, and patent No. The information for selected patents comprise patent No., application date & publication date, patent title, application number, International classification code, applicant name and inventor name.

5. Major International Patents Websites

The following major patents web sites are available for users for searching the patents literature available globally in all the areas.

5.1. http://www.micropatent.com

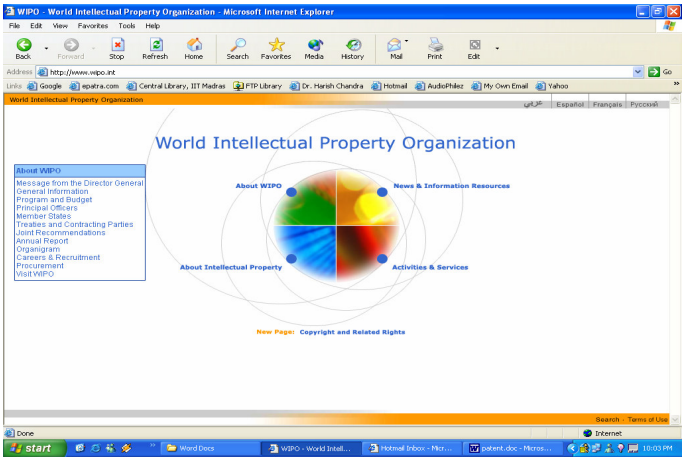
Micro patent is globally engaged in the production and distribution of patents and trademarks information through Internet, Intranet and CD-ROM database to R&D workers. It provides over 25 million full patent copies from its website with the help of a large collection from Japan, France, UK, Italy, Denmark, Spain, Finland, Switzerland, Belgium, Greece, Ireland, Portugal and selected authorities of Eastern Europe, Canada, Mexico, Australia, New Zealand, South America, Asia and Africa using easy search forms with the proprietary software and high-speed hardware for optimum performance satisfying the diverse needs of the researcher and the occasional end-users. It provides convenient access to high quality IP information 24 hours a day, 7 days a week. The use of Patent Web and Trademark Web requires the registration, which is free with signing an on-line service agreement against a non-refundable deposit of US$50. A Screenshot is given below



5.2. http://www.wipo.int

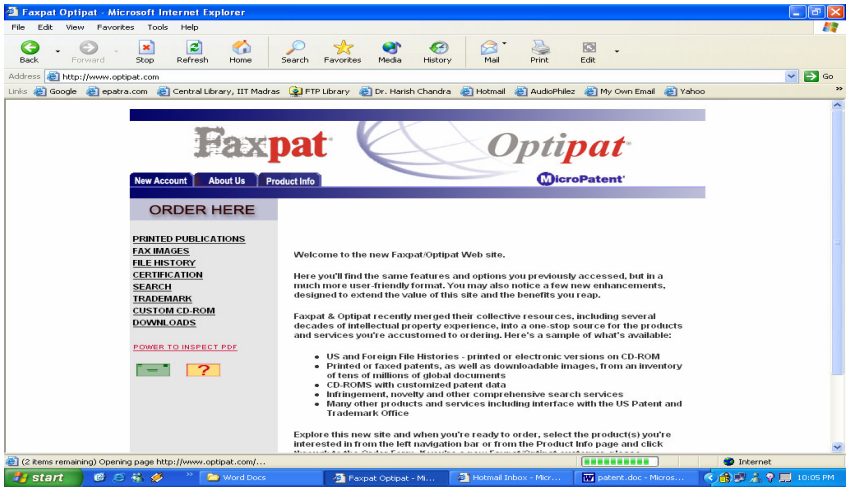
The website provides access to the collection and services on IPR maintained by WIPO Library. It also maintains a large number of journals on patents. The Library provides table of contents service through Internet to the journals like Canadian Intellectual Property Review; China Patents and Trademarks; Copyright World; European Intellectual Property Review; IP Asia; Journal of World Intellectual Property; Managing Intellectual Property; Patent World; Patents &

Licensing; Trademark Reporter; Trademark World; UNESCO Copyright Bulletin. A screenshot of the website is given below:



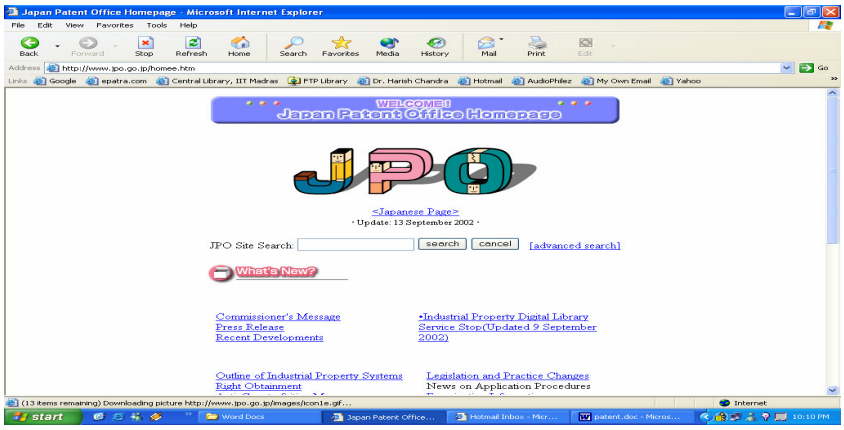
5.3. http://www.optipat.com

This website is of Optipat Inc which is an information company providing Internet downloaded US patents, printed documents, CD-ROM collections and a variety of other services on the intellectual property. This site allows accessing over 2 million US patents and also to download image files of issued US patents. It has 24 million images from 1974 to the current. The cost of each image file irrespective of number of page is $2.50. The users can also get full-text patents by e-mail in ASCII and HTML text format. A screenshot of the website is given below:



5.4. http://www.jpo.go.jp/homee.htm

Japanese Patent Office maintains this site. Users can find information through this site about Japanese patents information, guides searching Japanese patents, statistics, reports, policies, PAJ news etc. The status about the patents granted, registered and application received is also available which can be downloaded. A screenshot of the website is given below:

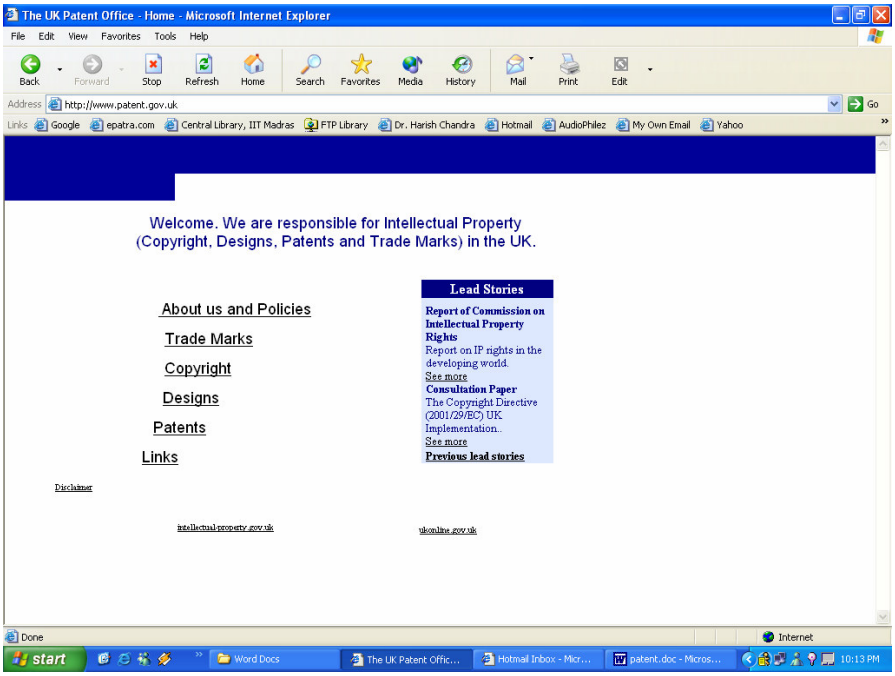


5.5. http://www.genomic.org

This website allows free public access to the full-text and analysis of all DNA patents issued by United States Patents and Trademark Office. This database enables users to conduct Boolean searches of the full-text of the patents and of delimited fields. Each individual patent claim has been coded into groups that relate to biological classification, function and application. A screenshot of the website is given below:

5.6. http://www.patent.gov.uk

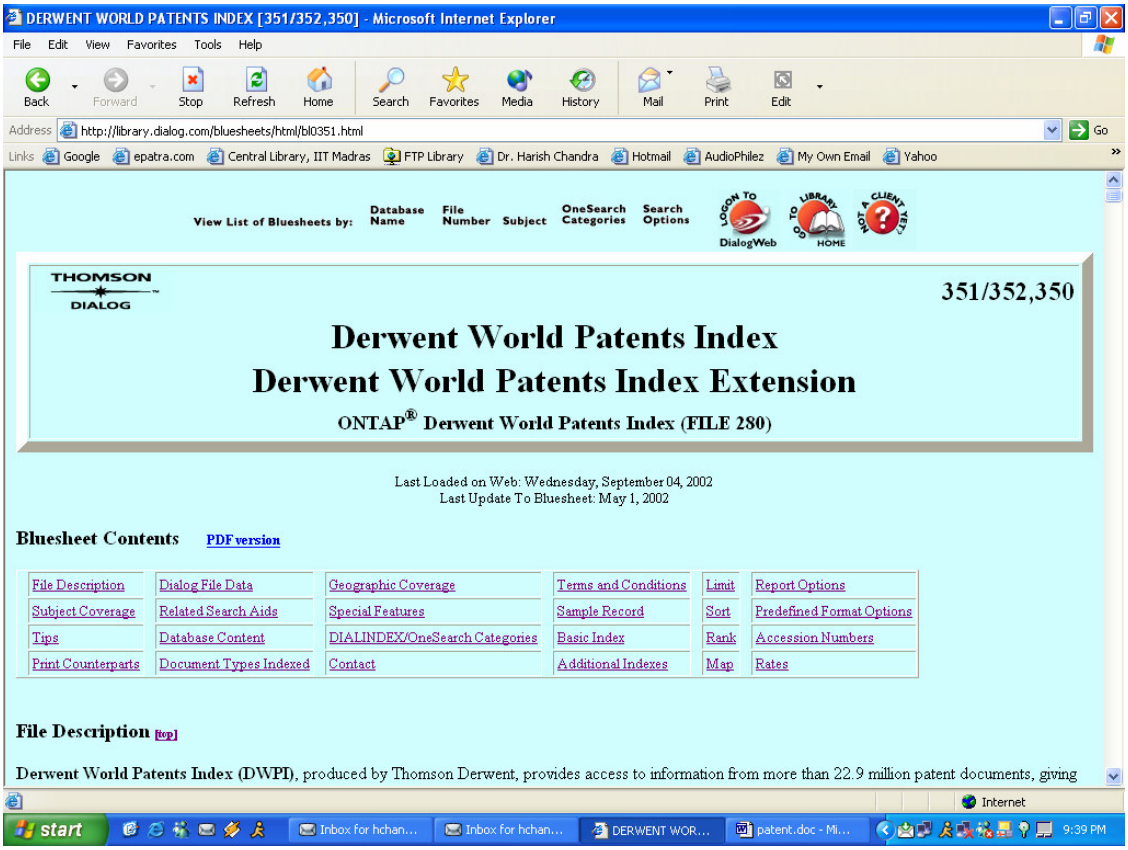
This site is maintained by UK Patent Office with the objective to stimulate innovation and the international competitiveness of industry through IPR. It offers bibliographic searches, patents watching, patenting status, family searching, and patent ability assessment. Users can also get information about special patents projects through a sophisticated concept based search. A screenshot of the website is given below:



5.7. **http://library.dialog.com/bluesheets/html/bl0351.html**

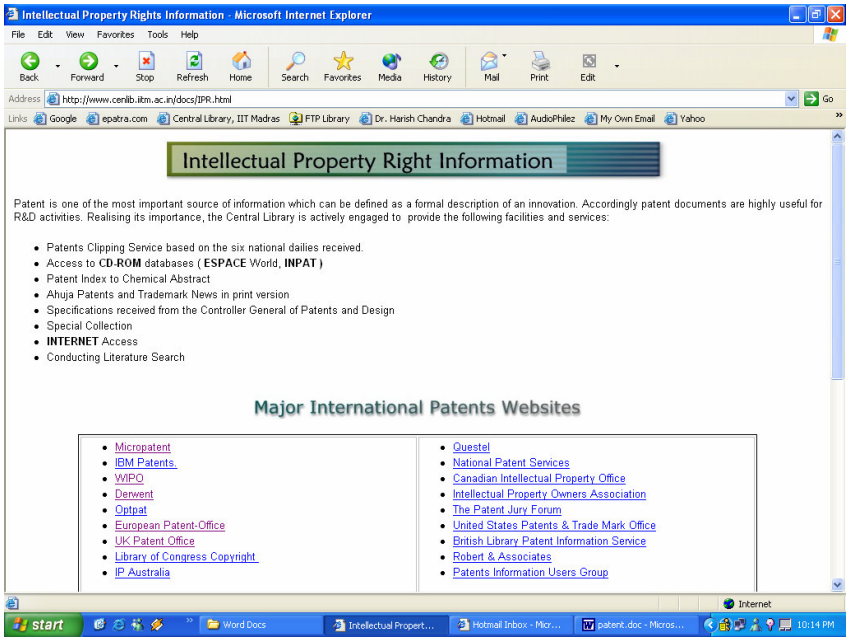
Derwent World Patents Index (DWPI) produced by Thomson Derwent, provides access to information from more than 22.9 million patent documents, giving details of over 11.2 million inventions. Each update, approximately 20,000 documents from 40 patent-issuing authorities are added to DWPI. Patents from the following patent authorities are covered: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Czechoslovakia, Czech Republic, Denmark, European Patent Office, Finland, France, Germany, Germany (East), Hungary, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, PCT, Philippines, Portugal, Romania, Russian Federation, Singapore, Slovakia, South Africa, South Korea, Soviet Union, Spain,

Sweden, Switzerland, Taiwan, United Kingdom, United States of America. Patent-related items from Research Disclosure and International Technology Disclosures (ceased publication June 1994) are also included DWPI covers pharmaceutical patents from 1963, agricultural patents from 1965, polymer & plastics patents from 1966, all chemical patents from 1970, and all patent able technology from 1974. A screenshot of the website is given below:



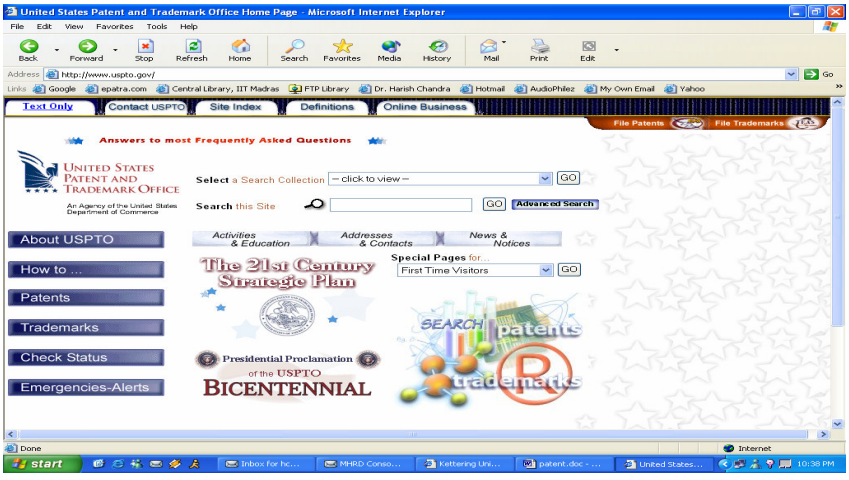
5.8. http://www.cenlib.iitm.ac.in

The website of the Central Library has separate dedicated web page under IPR info. This page contains further hyper links to all major IPR websites, IPR journals available on INTERNET. This page has been created with the objective to create awareness about the utility and the existence of various databases and other related literature on patents. The page is extensively used by the users and is very popular amongst the faculty, students, staff and industrial associates. The prototype of the page is given below:



5.9. http://www.uspto.gov

US Patent and Trademark Office promotes industrial and technological progress in the United States. It promotes the progress of science and the useful arts by securing for limited times to investors the exclusive right to their respective discoveries. It helps by disseminating both patent and trademark information. It promote an understanding of IP protection and facilitate the developments and sharing of new technologies worldwide. A screenshot of the website is given below:



5.10. http://patents1.ic.gc.ca/content-e.html#background

The Canadian Intellectual Property Office website is an interactive site. This site has been designed to help the users to create simple and powerful searches on Canadian patents information. The Canadian patents database contains documents from 1920 till present. The database is updated regularly. It contains images, text and bibliographical database.

Realizing the importance of patent, copyright, industrial designs, the Central Library of IIT Madras is deeply engaged in the following activities for the end users.

1. Providing INTERNET Access for Patents searching
2. Conducting Patent Literature Search
3. Online Document Delivery Service
4. Document Scanning
5. Virtual Reference Desk
6. Retrospective Literature Search
7. Current Awareness Service
8. Press Clippings Service
9. Conference Alert Service
10. Technical Translation Service
11. Video Screening
12. Photocopying
13. Microfiche Reading & Printing
14. Access to Chemical Abstract Patent Index

6. Conclusion

It can be concluded that the creation of a digital library for IPRs will provide an unlimited opportunities for R&D personnel, teachers, scholars and industries for effective preservation of patents information materials and also conducting comprehensive literature search using printed and digital resources.

7. References

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