

Patent Databases & Patent Information System

Lesson 5

KEY CONCEPTS

■ Patent ■ Patent Offices ■ Patent Database ■ Patent Information ■ Patent Information System ■ Territorial Jurisdiction ■ State of Art Search ■ Bibliographic Search ■ Patent Family Search ■ English Equivalent Patent Search ■ Assisted Search ■ Cross-Licensing ■ Compulsory Licensing ■ Patent Pool ■ WIPO ■ InPass ■ Patent Cooperation Treaty ■ Pre-Application Searches (PAS) ■ Patent Monitoring

Learning Objectives

To understand:

- The concept of patent databases and information system.
- The Intellectual Property office in India and familiarizing the students with the same.
- The importance of patent information in business development.
- The need of patent search and its importance.
- The various databases available for conducting patent search.

Lesson Outline

- Introduction
- Patent Offices in India
- Territorial Jurisdiction for Patent Applicants
- Patent Information
- Patent Documents
- Patent Information System
- Patent Search & Patent Databases
- Various types of Searches using Patent document
- Importance of Patent Search
- Global Patent Databases & Search Tools
- Lesson Round-Up
- Glossary
- Test Yourself
- List of Further Readings
- Other References (Including Websites / Video Links)

INTRODUCTION

Intellectual Property Rights (IPR) are considered to be the backbone of any economy and their creation and protection is essential for sustained growth of a nation. The intellectual property rights are now not only being used as a tool to protect the creativity and generate revenue but also to build strategic alliances for the socio-economic and technological growth. Accordingly, the Intellectual Property Office in India is dedicated to mobilize the use of such technological advancement for socio-economic development, which is a constitutional mandate, by creating the requisite IP culture.

PATENT OFFICES IN INDIA

The Indian Patent Office is in responsibility of upholding Indian patent law, and among many other things, it is in charge of overseeing the administration of patents, the tenure of patents, and patent renewal.

The Office of the Controller General of Patents, Designs & Trade Marks (CGPDTM) comes under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. Of late, the office of the Controller General has also been known as Intellectual Property Office (IPO). The Office is responsible for the administration of Patents Act, 1970, Designs Act, 2000, The Trade Marks Act, 1999 and Geographical Indications of Goods (Registration and Protection) Act, 1999 through its Intellectual Property Offices located at Mumbai, Delhi, Kolkata, Chennai and Ahmedabad.

The Office of the Controller General of Patents, Designs & Trade Marks (CGPDTM) is located at Mumbai. The Head Office of the Patent office is at Kolkata and its branch offices are located at Chennai, New Delhi and Mumbai. The Trade Marks registry is at Mumbai and its branches are located in Kolkata, Chennai, Ahmedabad and New Delhi. The Design Office is located at Kolkata in the Patent Office. A Geographical Indications Registry has been established in Chennai to administer the Geographical Indications of Goods (Registration and Protection) Act, 1999 under the CGPDTM.

The Controller General supervises the working of the Patents Act, 1970, as amended, the Designs Act, 2000 and the Trade Marks Act, 1999 and also renders advice to the Government on matters relating to these subjects. Mr. P.H. Kurian was the first IAS officer to serve as Controller General. Dr. Unnat P. Pandit has assumed charge as CGPDTM recently.

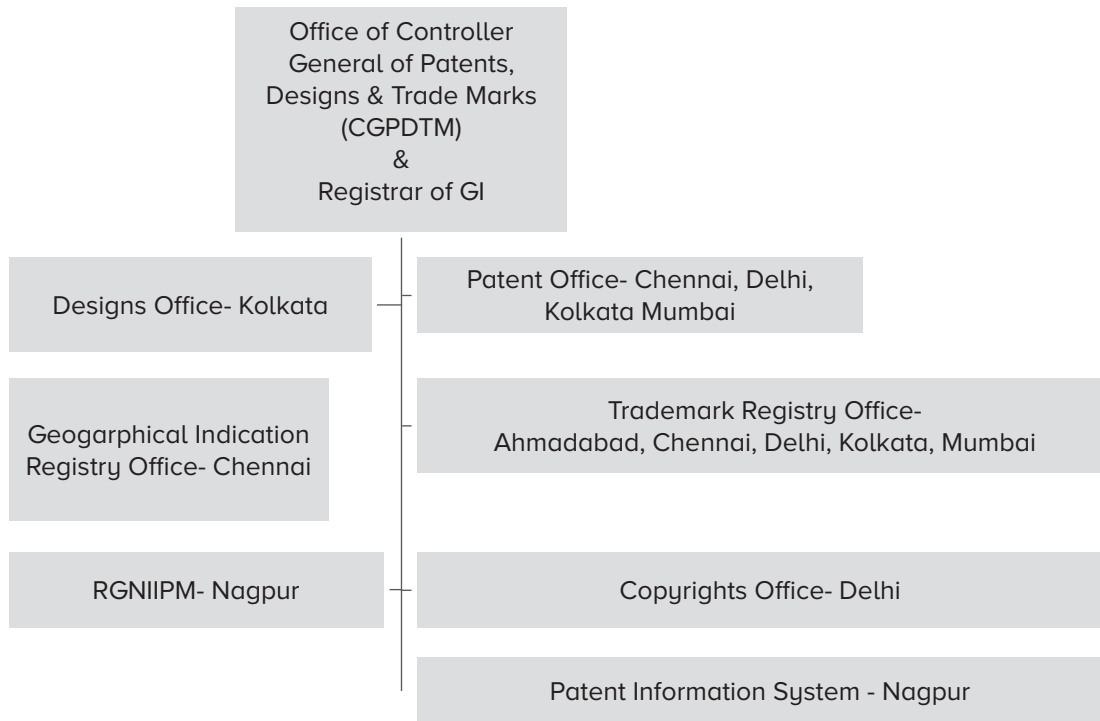
The Patent information System (PIS) and National Institute of Intellectual Property Management (NIIPM) located at Nagpur also come under the superintendence of CGPDTM. PIS maintains a comprehensive collection of patent specifications and patent related literature on a worldwide basis to meet the need for technological information of various users in R&D establishments, Government Organizations, Industries, Business, Inventors and other users enabling them to take informed business decisions.

National Institute for Intellectual Property Management (NIIPM) as a national centre of excellence for training, management, research, education in the field of Intellectual Property Rights related issues, caters to the training of Examiners of Patents and Designs, Examiners of Trademarks & Geographical Indications, IP Professionals, IP Managers in the country, imparting basic education to user community, government functionaries and stakeholders involved in creation, commercialization and management of intellectual property rights. The institute will also facilitate research on IP related issues including preparation of study reports and policy analysis of relevance to Government. These activities are not addressed to by any other agency in the country at present.

Does patent office help in finding users for patent?

The Patent Office has no role beyond grant of patent. Since patents are private rights the patent owner is responsible for commercializing the patent either himself or through licensee. However, the information relating to grant of patent is published in the Patent Office journal and also published on the Patent Office website which is accessible to the public worldwide. This certainly may help the applicant to attract potential user or licensee. The patent office also compiles and updates a list of patents which are lapsed / ceased in India.

Organizational Structure of Intellectual Property Offices in India.



DETERMINING TERRITORIAL JURISDICTION FOR PATENT APPLICANTS

An application for a patent in India must be filed before the Patent Office having appropriate jurisdiction. The jurisdiction of the relevant office is determined based on one of three criteria, as follows:

- The place of residence, domicile or business of the applicant (or the first mentioned applicant, in case there are joint applicants), or
- The place from where an invention actually originated, or
- For foreign applicants, the address for service in India given by the applicant, or the address of the patent agent on record.

It must be emphasized that the jurisdiction of the patent office for the purpose of administrative and prosecutorial actions pertaining to a patent differs from the jurisdiction of the courts for the purpose of enforcing patent (that includes filing of infringement suits). The jurisdiction for filing and infringement suit is determined by the conditions laid down under section 104 of the Indian Patents Act of 1970 and Section 20 of the Civil Procedure Code, 1908.

What is Territorial Jurisdiction?

Territorial Jurisdiction refers to the power of the court to preside over cases arising out of or a person/ company having domicile/ registered office within the defined territories of the court's jurisdiction.

As per Section 20 of the Civil Procedure Code, 1908, the defendant must dwell, do business, or personally work for gain within the jurisdiction of the court, where the cause of action first arises, in whole or in part. Separately, decisions made by the Patent Office may be challenged before the relevant High Court. The Patent Office where the patent application is lodged determines the High Court's jurisdiction.

Illustration-

If A, a patent holder, wants to file a suit against B for patent violation, then A will have to file a case in the court of territorial jurisdiction, where B has their office, reside, or work for gains. Patents officers' decision or order can be challenged in the High Court of jurisdiction, where the patent application was originally filed.

Office	Territorial Jurisdiction
Patent Office Branch, Chennai	The States of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and the Union Territories of Pondicherry and Lakshadweep.
Patent Office Branch Mumbai	The States of Maharashtra, Gujarat, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli.
Patent Office Branch, New Delhi	The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.
Patent Office, HO Kolkata	The rest of India

Does Indian Patent give protection worldwide?

No. Patent protection is a territorial right and therefore it is effective only within the territory of India. There is no concept of global patent. However, filing an application in India enables the applicant to file a corresponding application for same invention in convention countries or under PCT, within or before expiry of twelve months from the filing date in India. Patents should be obtained in each country where the applicant requires protection of his invention.

WHAT IS PATENT INFORMATION?

Patent information is all the data contained in patent applications and granted patents. It may include bibliographic data about the inventor, a description of the claimed invention, newest developments in a particular field of technology, or a list of claims indicating the scope of patent protection sought by the applicant. Being able to search through and use this information is vital to researchers, inventors and entrepreneurs alike.

Technical details contained in patent documents as well as information about them that is pertinent to law and business are collectively referred to as "patent information."

In recent years, economists, social science researchers, policymakers, businessmen and professionals have begun to make increasing micro-level and macro-level use of patent information. This is being done to analyze, for example, patenting activities of a country's technical patterns of internationalization; patenting activities in a sector, technology or company to ascertain or forecast the direction of technical change, or ascertain the relative technological position of a company in a marketplace; etc. As such, the use of patent information has expanded to many different tactical and strategic business, research, and policy making activities at national, institutional or enterprise levels.

Purpose of Patent Information

Traditionally, patent information searches are done, if at all, as a part of the application drafting process before filing patent applications, or while planning and preparing for patent litigation. With the rapid expansion of information technology resulting in increasing availability of on-line databases of patent information, this micro-level use of patent information has evolved into a much more strategic use of patent information.

Having patent information handy can be vital in many ways. For example, one can use it to-

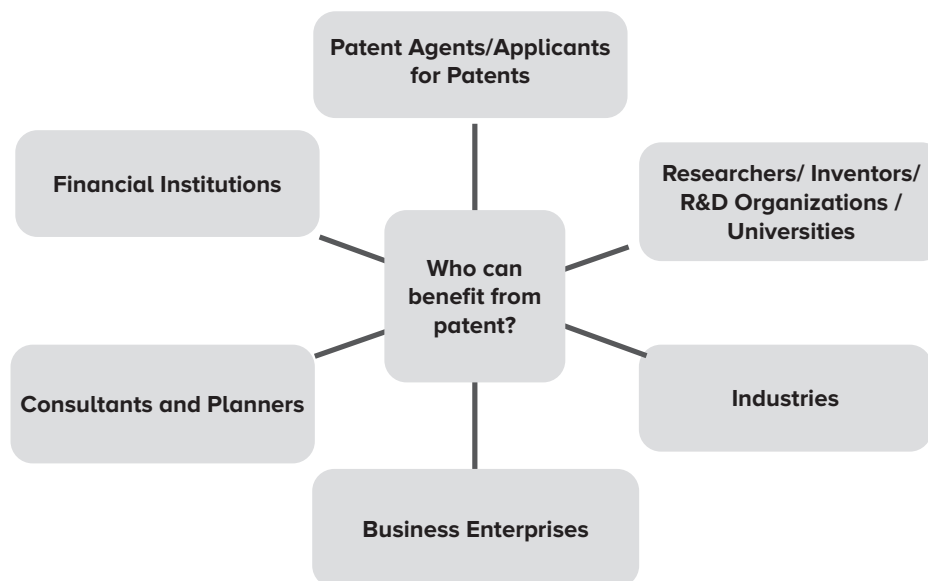
- find what is in existence and what can be further worked on.
- keep a detailed track of the market competitors or locate potential partners.
- avoid infringing on other people's patents.
- avoid duplication of research and development work.
- build on and improve existing products or processes.
- assess the latest developments in a particular field of technology.
- evaluate the patentability of inventions, in particular their novelty and inventiveness, before applying for patent protection.
- seek opportunities for licensing.
- monitor activities of potential partners and competitors both within the country and abroad.
- identify market niches or discover new trends in technology or product development at an early stage.

It is absolutely pertinent that every nation's patenting procedure must include the publication of patent papers. The whole technical information of an innovation is detailed in patent filings. About 60 million patent documents have been published so far and each year nearly one million new ones appear. As a result, patent papers are the most comprehensive single source of technological knowledge everywhere.

Government of India, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion established Patent Information System (PIS), in the year 1980 with the objectives-

- To obtain and maintain a comprehensive collection of patent specification and patent related literature on a worldwide basis to meet the needs for technological information, of various users in R&D establishments, Government Organizations, Industries, Business, Inventors and other users.
- To provide technological information contained in patents through, search services and patent copy supply service.

Who can Benefit From Patent Information?



Patent information can be beneficial for-

- A. Researchers/Inventors/R & D Organizations / Universities** - Researchers, inventors etc. can benefit from the patent information as it helps them:
- To avoid duplication of research.
 - To access state of the art before initiating a Research Project.
 - To find ready solution to technical problems in ongoing research.
 - To keep up-to-date knowledge about the technology.
- B. Industries**- Industries can be at an advantage, as patent information can help them:
- To improve existing technology for producing newer/better/cheaper products.
 - To find a ready solution to technological problems.
 - To assess the state of the art before initiating the project.
 - To identify and evaluate suitable technologies for adaptation/transfer.
- C. Business Enterprises**- It is advantageous for business enterprises to use the help of patent information as it helps them :
- To identify new products for marketing, licensing or distribution.
 - To locate patent owners and identify competitors.
 - To avoid possible infringement problems.
 - To locate areas of investment.
- D. Consultants and Planners**- It is beneficial for consultants and planners to use the help of patent information, as it gives them the edge, by helping them:
- To assess a technology for viability.
 - To undertake technology forecasting by identifying the trend of inventions in a given technology field.
 - To advise industry/R & D organization/financial institutions on issues relating to the technology.
- E. Financial Institutions**- In today's day and age, financial institutions have to rely on patent information :
- To assess a technology/ research project for financial support.
 - To monitor viability and progress of aided projects.
- F. Patent Agents/Applicants for Patents**- Patent agents or applicants can be at an advantage, as patent information will help them:
- To ascertain patentability and other aspects like opposition, infringement, revocation and other proceedings under the Patent Law.
 - To provide professional assistance to the Inventors/Applicants.

WHAT ARE PATENT DOCUMENTS?

Patent document includes not only the content of published patent documents but also bibliographic and other information concerning patents for inventions, inventors' certificates, utility certificates and utility models. It is the largest, well-classified and most up-to-date collection of technical documents on new and innovative technologies.

Patent applications are filed in accordance with the requirements of national or regional patent laws. An applicant may be a public and private company, government agency, researcher in a university or in a research and development institution, or even individual inventors Patent documents consists of-

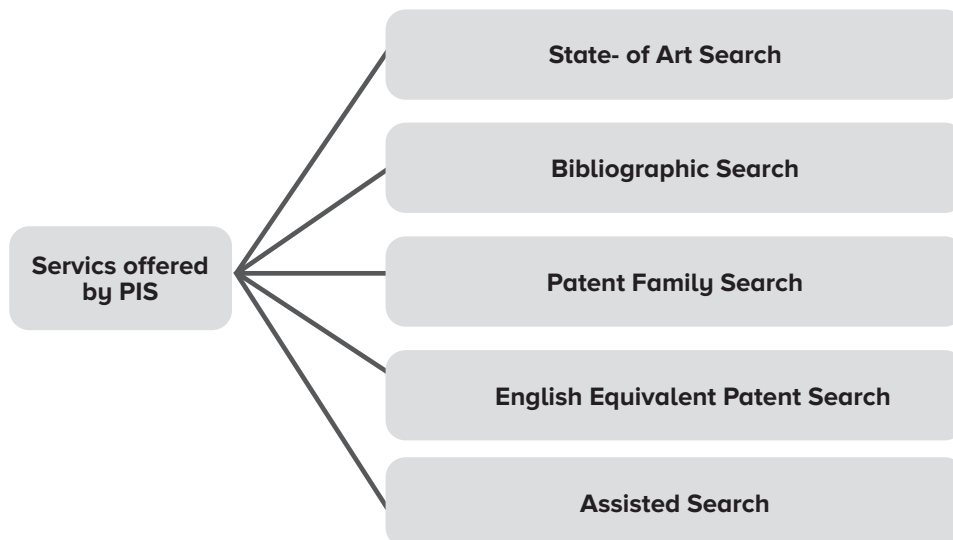
- A First Page- This consists of basic information of the invention, such as title and the name of the inventor
- Detailed description of the Invention- This indicates what are the current day uses and the benefits it has to offer, in comparison to that already existence. It also specifies the construction of the structure.
- Drawings
- Claims- It contains a clear and a concise definition of what the patent will be legally protecting

A patent document contains in a standardized form, a wealth of information about the state-of-the-art, adjudged in the international context, in technological developments in that area of technology. The Patent Information System (PIS) was established in 1980 by the Government of India at Nagpur with the objective to obtain and maintain a comprehensive collection of patent specification and patent related literature on worldwide basis to meet the needs of technological information of various users in R & D establishments, Government organizations, Industries, businesses, Inventors and other users and to provide technological information contained in patents through search services and supply of copies of patent specifications.

SERVICES OF PATENT INFORMATION SYSTEM

A Wide variety of Patent Information services are readily available at **Rajiv Gandhi National Institute of Intellectual Property Management (PIS), Nagpur**. All correspondence in respect of patents/ inventions, etc, is kept confidential by PIS.

The List of Services which was offered by PIS are as under:



1) *State - of Art Search :*

- Identifies current level of technical development in user's special area.
- Avoid expensive and unnecessary duplicate developments.
- Assess risk of infringing a patent.
- Search terms including keywords, Inventor name, Applicant name, and Classification symbols.
- Charges approx. Rs. 2000/- + Rs. 20 per document reported.

2) *Bibliographic Search :*

- Identifies the Inventor/ Applicant.
- Provides bibliographic status of the patent.
- Provides bibliographic data of patent documents retrieved.
- Search terms including inventor name, Applicant name and Classification symbols are used.
- Country coverage extends to more the 60 countries.
- Charges Rs. 500/- + Rs. 5 per document reported.

3) *Patent Family Search :*

- Identifies global picture of protection of invention.
- Indicates the existence of corresponding patent elsewhere.
- Helps in estimating the importance of the invention.
- Provides bibliographic details of the desired family members.
- Country coverage extends to more than 60 countries reporting data to EPIDOS-INPADOC database.
- Charges for providing bibliographic data of a family member, a uniform, rate of Rs. 50/- per family member located will be levied.

4) *English Equivalent Patent Search :*

- Identifies the patent family member in English language.
- Identifies English language Equivalent for Non-English patent.
- The country coverage extends to more than 60 countries reporting data of EPIDOS-INPADOC data base.
- Charges: Rs. 50/- for locating one English language equivalent/family member.

5) *Assisted Search :*

- Users will be allowed to use CD-ROM data of PIS, Nagpur to conduct search & also overseas data bases on internet can be accessed.
- General assistance in performing search will be provided.
- Charges: Rs. 250/- per hours per person of the facilities used.

REASONS FOR USING PATENT INFORMATION

Patent information is more than just technological or legal information. When developing a new product, comparative technological information may determine the success or failure of the product and, in turn, the success or failure of the company itself. Some of the practical applications of patent information include:

Tool for Creative Thinking

Patent information provides a source of technological information that can be used by researchers and inventors to find new solutions to technical problems. A specific methodology developed on the basis of patent information is the TRIZ methodology (Russian acronym for 'Teorya Resheniya Izobreatatelskikh Zadatch', Theory of the Solution of Inventive Problems). Based on the study and analysis of a set of worldwide patent documents, Genrich Altshuller and his colleagues developed the TRIZ methodology. Starting in 1946, TRIZ began with the

hypothesis that there are universal principles of invention that are the basis for creative innovations which advance technology, and that if these principles could be identified and codified, they could be taught to people to create or enhance their inventive capabilities.

The TRIZ research has proceeded in several stages and more than 2 million patent documents have been examined, classified by level of inventiveness and analyzed to look for principles of innovation.

TRIZ is currently being applied internationally to create and to improve products, services and systems. Large and small companies, including many Fortune 500 companies are using TRIZ on many levels to solve real and practical problems and to develop strategies for the future of technology. Based on one of the conclusions of the theory, that inventiveness and creativity can be learned, universities worldwide have introduced undergraduate courses related to the TRIZ methodology to enhance creativity and inventive thinking abilities of students.

Patent information, therefore, provides an extremely useful source of information for learning and developing creative problem solving and innovation strategies.

Input for Licensing Strategy

When considering “licensing in” of technology owned by others, “licensing out” owner’s technology or “cross-licensing” between two patent portfolio owners, the concerned parties must collect reliable information on the target or key technology in order to take the right decision. If the technology in question is valuable enough, it will generally be protected by a patent because of the intrinsic insecurity and difficulty of keeping it as a trade secret. Therefore, the analysis of patent information provides them with valuable technical and business information regarding target or key technology. Before entering into licensing negotiations, it is most important that the parties have a very good understanding of the target technology itself, its value, in terms of its strengths and weaknesses, which is aided considerably by a thorough and careful analysis of relevant patent information.

While preparing to ‘licensing in’ of technology, analyze patent information to consider:

- Whether the technology in question is in the public domain in your target market due to its non-protection, expiration, non-payment of maintenance fee or invalidation of the patent in a court proceeding;
- Whether there is a possibility of someone else bringing an action for infringement against you to make you liable for payment of any damages;
- Whether the technology is overvalued or undervalued by comparing it with other related or alternate technologies, etc.

Similarly, while preparing to ‘license out’ your technology, analyze patent information to consider:

- Who could be prospective licensees in the market place;
- How valuable is your technology in order to prepare an attractive offer; and
- Whether it is a core technology in your business, which if licensed out might become an obstacle to continue to practice this technology, etc.

‘Cross-licensing’ is an exchange between two companies to license one or more patents to each other, which gives the companies the freedom to operate; that is, without any fear of being accused of violating the patent rights of the other party. Payment(s), if any, in a cross-licensing agreement is/are made by the party, which is perceived to have a patent portfolio of lesser value.

When two parties enter into a cross-licensing contract, they agree to award each other patent licences. Such agreements essentially entail the sharing of crucial, patent-protected information between two parties wherein each of them wants to advance their own technological advancements by sharing their respective technology with one another.

The agreement could be a private one, between two particular corporations or a small group of businesses. It might be a public arrangement like a patent pool, in which IP administration is distributed among a sizable number of patent owners who also own the same patents.

Illustration-

Let us say that Company X is negotiating with Company Y. If Company X argues that its portfolio is more valuable than that of Company Y, it may require Company Y to fill the gap in the form of one time or recurring payments. Here, patent analysis plays a role in comparing the patent portfolios of the two companies and in identifying key patents, so that it can help to decide who should pay whom and how much.

What is a patent pool?

Patent pool is an arrangement between two or more patent owners to pool their patents and licences either among themselves or to a third party on predetermined licencing conditions is known as a patent pool. They serve as a method for gaining patent rights jointly. Thus, a patent pool is created when more than two businesses cross licence their patents with regard to a specific technology.

A patent pool's goal is to encourage innovation by making patent licences simple to obtain. Patent pools and multilateral cross-licensing agreements can be distinguished by the fact that in the former, a third party who is unable to contribute any innovation can still benefit from the pool simply by being a member, whereas in the latter, only the party to the agreement can benefit as per the agreement.

Advantages of Cross-licensing:

1. Ensures mutual technology exchange to enhance products.
2. Reduces the price of product development.
3. Boosts growth by establishing IP sharing networks.
4. Lowers transactional expenses.
5. Provides protection from upcoming patentable inventions.
6. Assists in avoiding time-consuming legal battles over infringement allegations.

Disadvantages of Cross-licensing:

1. It may enable competitor to imitate patented product.
2. Dependency on other for growth.
3. Creates barriers for new and upcoming entrants.
4. It may lead to unhealthy growth of competition in marketplace.

Global Cases of Cross Licensing include-

Nokia and Lenovo: *Nokia, on April 7, 2021 declared, that it has reached a multi-year, cross-technology patent licence agreement with Lenovo. In accordance with the contract, Lenovo will pay Nokia a net balancing amount. The agreement's terms are kept private. The agreement resolves all pending patent litigation and other proceedings between the two parties, in all jurisdictions.*

Google and Samsung Electronics: *In January 2014, these two industry titans struck a comprehensive cross-licensing deal that covers both already-issued patents and those that are filed during the following 10 years. The partnership strengthened relations between the company that created the Android operating system and the biggest smartphone producer in the world at the time.*

Google and SAP: A long-term patent cross licencing agreement between Google and SAP has been reached at. Both businesses joined the LOT Network in 2014, a community-based patent licencing arrangement created to lessen for its members the escalating practise of IP privateering and patent troll lawsuits. They disclosed a long-term patent cross-licensing arrangement in October 2015, which covered numerous product and software patents.

Apple and Microsoft: Since the late 1990s, these corporations have had a long-standing cross-licensing arrangement. The agreement includes both design patents (aesthetic hardware/software characteristics) and worldwide utility patents (technical software features). Although technical and design patents are broadly covered by the licencing agreement between the companies, it nonetheless offers some protection against exact product duplication in the form of an “anti-cloning” clause.

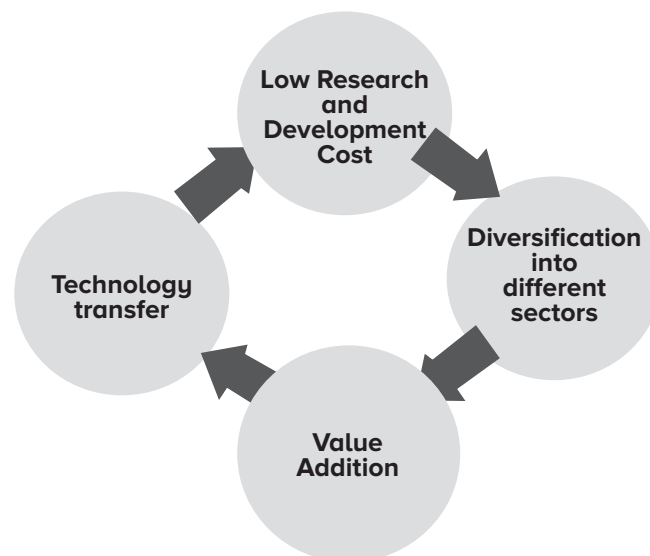
Supporting Mergers and Acquisitions (M&A)

If a company wishes to acquire a specific technology along with other complimentary assets and has no idea from where to obtain it, then it first needs to identify all the companies with relevant patents and related assets. A patent search help to identify all of the patents related to the area of interest. Once one or more potential target technologies/companies are identified, then the company can undertake additional patent analysis to narrow own its choices to decide which of the companies the best merger or acquisition target is.

Once a company identifies a target company, patent analysis can also address additional issues such as: Is the target’s technology as good as it is claimed to be? Is the company priced fairly? Who are the key inventors and will they stay with the merged or acquired company? Let us analyze a case. As part of a broad strategic plan to fill gaps in a company’s technology base, a large high-tech company acquired a small specialty business. Soon after completing the acquisition, the acquiring company discovered that R&D capabilities of the acquired company were quite limited, and certainly not consistent with the perception that it had bought a company with strong technological capabilities. Its technological capability was dependent on one key researcher and he did not come along as part of the deal. He was transferred to the parent company before the sale was completed. If patent analysis had been done before proceeding with the acquisition, the company would have been able to find out that who the key researcher is and then could have taken appropriate measures to retain him.

Merger is a technique to acquire outstanding inventors, scientists, information, and a collection of legal rights on the IP assets in numerous technology businesses.

Advantages of Patent information in instances of Mergers-



1. **Low Research and Development Cost-** Buying already developed technology rather than spending a fortune on personnel costs is the simplest way to boost the company's productivity and assets. This lowers research and development costs.
2. **Diversification into different sectors-** Purchasing pre-existing resources while investigating new market sectors is not only cost-efficient but also gives the acquirer a broader portfolio.
3. **Value Addition-** Adds value to the firm portfolio by transferring ownership of the selling company's entire intellectual property portfolio and any associated goodwill to the buyer.

For example, due to the goodwill associated with the name, Walmart chose not to change the trade name of Flipkart (trademark) after acquiring it. In addition, the purchase of Motorola by Google Inc., which gave the Google total ownership over Motorola's patents, thereby adding value to a company's asset portfolio.

4. **Technology transfer-** It enables appropriate exploitation and aids parties in making the most of their shared assets and resources, such as intellectual property.

Guiding Management of Research and Development (R&D)

In order to enter into a new business or to develop a new product, a company should be able to seize the overall image of the relevant technology field and accurately forecast the market needs. Patent analysis makes it possible to find out the flow of technology from elementary technologies along with the expansion of those technologies, the trend of technological change, the life cycle of a technology (consisting of growth, development, maturity and decline), problems and solutions in the development of a particular technology, competitors' technologies and solutions to cope with possible problems. Knowing the life cycle of a technology makes it possible to judge the timing of development policy and focus on certain development themes. It can also prevent an infringement from occurring, which would save a huge amount in litigation expenses and compensation for damages.

Patents are often linked to research and development and can be considered as indicators of R & D output. If one company has more patents than another does, then this suggests that the company has a stronger commitment to R&D. Not all patents, however, are equally valuable. A few patents are for radical inventions that change the world; most patents are granted for incremental but non-obvious inventions. A patent, which is more frequently cited than other patents of the same age, is regarded as a patent of greater impact or of higher quality. From links between patents revealed by patent citation analysis, it is possible to target the acquisition of strong patents, which results in the enhancement of R&D output and, consequently, much improved or new products.

Human Resources Management

It has been repeatedly shown that a small number of highly prolific inventors drive technological development and a much larger numbers of researchers produce only one or two patents in any laboratory or company. Patent analysis, such as a co-inventor brain map, can show the key inventors who are vitally important for the future of the company. Such brain maps can identify not only star inventors within a company, but key inventors in other companies, which is a useful analysis for headhunting and in developing an effective M&A strategy.

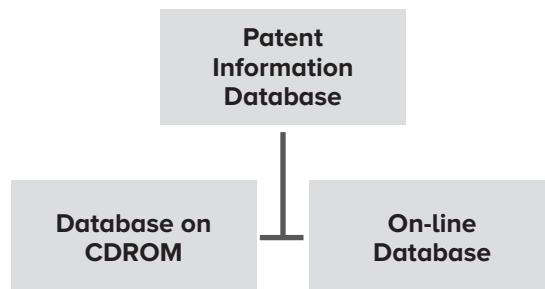
PATENT SEARCH & PATENT DATABASES

An important step before filing a patent application is to conduct a patent search. Just as companies need to do due diligence before taking on any business venture, likewise patent owners need to do patent due diligence before filing a patent application. A patent search is a search conducted in patent databases as well as in the literature available, to check whether any invention similar to the invention in respect of which patent is to be obtained, already exists. In other words, it evaluates inventor's chances of getting a patent grant. Therefore,

instead of going forth with the filing, if one conducts the patentability search, one can get a clear idea about the patentability of the invention; whether the application should be filed and the strengths and weakness of his invention.

Since patenting is an expensive procedure, it is prudent to conduct a patentability search before filing an application. Although there is an additional expense associated to have a patent search performed, it can potentially save the inventor's money down the road.

Patent information is made available to the public through a variety of databases. Each database covers a particular set of patent documents. At present no database has complete coverage of all patent documents ever published worldwide. Thus, it may be necessary to consult multiple databases in order to find and then access patent documents relevant to your interests.



Databases on CD-ROM

Information technology allows accessing patent data in text and picture form on CD-ROM. CD-ROM databases are very convenient for documentary searches. Users need no outside connections, and can work with simply a CD-ROM driver plus a computer.

CD-ROM databases, however, have some drawbacks. One problem is with their updating. As on-line databases can be easily updated on a regular basis, the information on CD-ROM rapidly becomes out of date, at least for certain types of analysis. It is also a problem to easily use CD-ROM databases to compile statistical series; hence, they are not yet suitable for statistical applications.

On-line Databases

Internet-based databases are on-line databases. Anyone who has access to the Internet may be able to browse the full text of published patent documents via free of charge databases or commercial databases. As access to these kinds of databases is not restricted across national borders, so users worldwide can very easily access patent documents from a computer connected to the Internet.

As of now, many national and regional patent offices provide free online access to their own patent collections as well as to selected patent documents from other offices. For example, the Full-Text and Full- Page Image Database of the United States Patent and Trademark Office (USPTO) is one of the earliest and free online patent information services. Another major on-line free patent database is Espacenet, provided by the European Patent Organization through the EPO (European Patent Office) and the national offices of its members states. Espacenet offers free access to more than 80 million patent documents worldwide, containing information about inventions and technical developments from 1836 to today. An extensive list of national patent Databases can be found at: www.wipo.int/patentscope/edbsearch/national_databases.html

WIPO offers free online access to all international patent applications within the framework of the PCT and their related documents and patent collections from National and Regional Offices through its PATENTSCOPE search service: (<http://patentscope.wipo.int/search>)

What is the Patent Cooperation Treaty (PCT)?

The PCT is an international treaty with more than 150 Contracting States which are bound with certain formal requirements set out in the Treaty and Regulations. The PCT makes it possible to seek patent protection for an invention simultaneously in a large number of countries by filing a single –international patent application instead of filing several separate national or regional patent applications however, granting of patents remains under the control of the national or regional patent offices after the corresponding – national phase application has been filed and the national phase application is assessed as per patent law of that jurisdiction. As per Indian Patent Act 1970 as amended and the Patents Rules 2003 as amended by (amendment) rules 2016, any PCT international application may be filed designating India and it shall deemed to be an application if the corresponding national phase application has also been filed.

International Patent Classification (IPC) is a hierarchical classification system used primarily to classify and search patent documents (patent applications, specifications of granted patents, utility models, etc.) according to the technical fields they pertain. It therefore serves as an instrument for an orderly arrangement of the patent documents, a basis for selective dissemination of information and a basis for investigating the state of the art in given fields of technology.

InPass or Indian patent advanced search system is a portal to search for and get data on Indian patents that have been issued and those that are still pending. Users of the tool can view the status of any Indian application as well as specifics of the pertinent papers submitted to the patent office, giving them access to the application's prosecution history.

InPass is the most reliable resource for locating data on Indian patents. While conducting patent searches on commercial databases is simpler and more thorough than those on other freely accessible databases, certain paid databases lag in delivering comprehensive information on Indian patent publications. Inventors and researchers can rely on the system to retrieve patent information at different levels. The approach makes it easy to search for both granted and published patent applications individually.

In compared to the EPO's ESPACENET and the USPTO's PatFT & AppFT, the InPass search interface is fairly user-friendly and shares some similarities with WIPO's Field combination search page. InPass enables users to get or filter search result sets using a variety of restrictions, including assignee name, applicant name, IPC code, application date, etc. A search strategy may be created to locate the pertinent search set depending on the searcher's objectives.

Is Indian patent database searchable? How can one find out whether an invention is already Patented?

The person concerned can perform a search free of cost on Indian Patent database consisting of published patent applications and granted patents. The said database is available on Patent Office website as inPASS <http://ipindiaservices.gov.in/public search>.

Further, the website (www.ipindia.gov.in) contains innovative tools under DYNAMIC UTILITIES which gives information about the patent applications at various stages of processing.

IBM Intellectual Property Network (free searching and full text and front page display), Intellectual Property Network (IPN) is a free IBM patent site provided by IBM (International Business Machines Corporation). The database contains:

- United States patents (US): 1971-present & updated weekly.
- European patents - applications (EP-A): 1979-present, updated weekly.
- European patents - issued (EP-B): 1980-present, updated weekly.
- WIPO (World Intellectual Property Organization) PCT publications (WO): 1990-present, updated weekly.
- Patent Abstracts of Japan (JP): 1976-present, updated weekly.

A number of commercial and non-profit providers also offer free patent information databases online. Certain commercial service providers have established value-added services for access on a fee-paying basis including translations of patent information and additional systematic classification, for instance by chemical structures and reactions or biological sequences.

Moreover, professional search services exist that can perform prior art searches on behalf of potential patent applicants and may be useful if an initial search does not produce desired results.

Though free on-line patent databases are available and anyone can access these databases, nevertheless, it is pertinent that a persons killed in conducting searches be given the task. The reason being, patent searches involves tedious, repeated searching through various patent and non-patent literature. An unskilled person would not be able to do justice to the vast amount of literature to be searched. Furthermore, a skilled person understands the importance of the claims of a patent. The claims of a patent are of utmost importance when a similar patent to your invention exists; in such a case, one needs to analyze the patent claims to determine the degree of similarity between the two. Furthermore, a skilled person would be able to counsel on the strength of your patent or on refining your patent so that it does not infringe other existing art. A non-skilled person may not understand these concepts.

Did you know?

That Google has created the most well-known, free database available through a private company. The database contains patent filings compiled from the major patent offices all over the world.

VARIOUS TYPES OF SEARCHES USING PATENT DOCUMENTATION

In practice, there are various more or less typical reasons for performing searches in collections of patent documents, each of them requiring a slightly different approach in the search method used. Some of the search types are basically concerned with technological information as such, while others are directed towards the processing of patent applications, or relevant to the legal state of a new technology. The individual types of searches are listed herein below separately, whereas it is a well-known fact that many items of bibliographic information may be combined in searching.

In general, searches performed by inventors are usually not as exhaustive as the searches done by professionals at patent offices. However, such insights into patent documents are often very useful for the inventor to determine whether someone has already patented a similar invention, or to obtain relevant information about other patents in the same category as his invention.

Pre-Application Searches (PAS)

At first, an invention is just an idea. Many details are not even known or recognized as relevant parts. A novelty search based on a vague idea can only result in a vague picture of the prior art. The patent application process is difficult, time consuming and expensive; therefore, the inventor should conduct a “Pre- Application Search” (PAS) before filling a patent application. In this search, the inventor should look for any printed publications, public knowledge, or patents already issued in his country or a foreign country that may relate to the particular invention.

Freedom to Operate Search

Before a breakthrough product or innovation is introduced to the commercial market, an FTO search also known as a right to use or patent clearance search is carried out to prevent patent infringement.

An FTO investigation is restricted to just issued or current patents, excluding expired or abandoned patents. To make sure that the suggested technique or product does not violate any other currently existing patents, the FTO search also examines both the granted patents and pending patent applications.

For instance, it is usually a great idea to do a patent search first in the country itself if an inventor plans to introduce a product or technique in India. Finding any potentially valid patents in the Indian Territory and learning about their legal standing can be greatly aided by the patent search.

State of the Art Searches

This kind of search, also referred to as “Informative Search,” is made to determine the general state-of-the-art for the solution of a given technical problem as background information for R&D activities and in order to know what patent publications already exist in the field of the technology or research. Further reasons for undertaking this kind of search could be the wish to identify alternative technologies which may replace known technology or to evaluate a specific technology which is being offered for licensing or which is being considered for acquisition. State-of-the-art searches are especially useful for technology development or technology transfer purposes.

Novelty Searches

The objective of a “Novelty Search” is to determine the novelty or lack of novelty of the invention claimed in a patent application or a patent already granted, or of an invention for which no application has yet been filed. The aim of the search is to discover relevant prior art. An early novelty patent search is usually discouraging. Normally, the basic inventive ideas are formulated in such an unspecified way that many publications will apply to this broad description. Dependent on the outcome of the novelty search, the next decision will be whether to stop or to go ahead in developing the invention. If nothing of relevance was found, it is easy and you should go ahead. The decision becomes more difficult if one or several pertinent documents have been found. Most important is to restrict the search to the appropriate area. This may be done by identifying a proper place or places for the subject of the search in the IPC.

Patentability or Validity Searches

A “Patentability or Validity Search” is made to locate documents relevant to the determination not only of novelty but also of other criteria of patentability, for example, the presence or absence of an inventive step (i.e., the alleged invention is or is not obvious) or the achievement of useful results or technical progress. This type of search should cover all the technical fields, which may contain material pertinent to the invention. Novelty and patentability searches are mainly being carried out by industrial property offices in the course of the examination of patent applications.

Name Searches

These are searches for locating information about published patent documents involving specific companies or individuals, as applicants, assignees, patentees or inventors.

Technological Activity Searches

They are to be understood as searches for identifying companies and/or inventors who are active in a specific field of technology. These searches are also suitable for identifying countries in which a certain technology is being patented, so as to know where to turn to for obtaining particular information in a given field of technology.

Infringement Searches

The objective of an “Infringement Search” is to locate patents and published patent applications, which might be infringed on by a given industrial activity. In this type of search the aim is to determine whether an existing patent gives exclusive rights covering that industrial activity or any part of it.

Patent Family Searches

This kind of search is carried out to identify a member of a “patent family.” Patent family searches are used in order to:

- find the countries in which a given patent application has been filed (if published);

- find a “patent family member” that is written in a desired language;
- obtain a list of prior art documents or “References Cited”; and
- estimate the importance of the invention (by number of patent documents relating to the same invention and being published in different countries or by industrial property organizations).

Legal Status Searches

A search for this type of investigation is made to obtain information on the validity (status) of a patent or a published patent application, on a given date, under the applicable patent legislation in one or more countries. Such information can assist in making decisions on, for example, exporting, or in the negotiation of license agreements. It can also give guidance on the value attached to a particular patent by the patentee.

Evidence of Use Search

The term “evidence of use search” refers to the proactive exploration by certain businesses and organisations of items or procedures that violate their patent rights. Companies and organisations search for proof of how a patent is being used in a way that violates the searcher’s exclusive patent rights by looking at comparable patents when they come across such items or methods. When the patent is issued and reaches maturity, this kind of search is conducted.

Patent Monitoring

For new businesses, patent monitoring is a useful and reasonably priced tool for keeping a current picture of the intellectual property rights of their rivals. Patent monitoring comprises conducting periodic patent searches to keep tabs on the state of existing established property rights, market competition, and desired technological domains. This might enable the early identification of potentially problematic patent applications filed by rivals, stop expensive duplication of work, and improve the protection of one’s own patent rights.

WHY IS PATENT SEARCH NECESSARY?

Filing a patent is an expensive process. Besides the official fees, the fees of the patent attorney or agent also need to be considered. Imagine spending money on trying to get a patent, only to find out that your invention was never patentable! A patent search avoids this situation.

Besides financial reasons, there are several other compelling reasons for conducting a search before filing a patent application in India or globally.

When you know what else is accessible, a patent search might help you improve your concept. You may assess the novelty and utility of your innovation by looking for related patents, and you can make any necessary adjustments.

Reasons:

1. A patentability assessment can help you understand whether your invention is patentable and if so, how far can it be protected. For example, computer programs, per se, are non-patentable but computer programs that are manifested in a useful way can be patented.
2. A patent search can help a company, researcher or an institution, around 30% of R&D budget, as the search will identify already existing patents, which in tune will help them not invest money developing that specific invention.
3. A patent search reveals the prior art in your field of invention. This will come in handy when drafting the patent specification. The knowledge of prior art will help you determine if your invention has any value addition over the prior arts. This will reduce the chances of rejection by the Patent Office.

4. If your invention has no value addition then understanding the prior art will help you refine your invention so as to make it patentable.
5. The patent search can also reveal certain companies who are keen on obtaining patents in the field of technology relating to your invention. In such cases, it gives you the lead on which companies to contact for licensing of your invention.
6. Ordinarily, every Applicant wants his patent to become commercial and therefore a source of finances. A patent search not only reveals inventions similar to your invention but also the commercial value of the invention in the economy. Based on this you can determine the commercial value of your invention.
7. A patent search helps in submitting a patent application for your work You may validate whether your work is original by conducting a patent search to see what others in your sector are up to. This is the initial phase of submitting a patent application.
8. Another important reason for conducting a patent search is that while applying for a patent, the applicant needs to describe his entire invention. Even if his patent gets rejected, his application would be considered prior art, open for all to see. This means that competitors can get free access to his hard work. A patent search helps avoid such a situation. Even if your invention is not patentable according to law, you can use it as a trade secret and gain revenue.
9. A patent search may help one to go through and find an opportunity to improvise the on the already existing.
10. Gain insights into future competitor product launches; determining which countries are being considered for manufacturing or marketing products.
11. Gain insights into future competitor product launches; determining which countries are being considered for manufacturing or marketing products.

In conclusion, although anybody may perform a patent search using free patent databases, it's crucial that a searcher with experience is assigned the job. The issue is that doing a patent search necessitates laborious, repetitive searching through a variety of patent and non-patent literature. Unskilled individuals would not be able to adequately search the enormous body of literature that has to be searched. A competent person is also aware of the significance of a patent's claims. When a patent that is comparable to your invention already exists, the claims of the patent are extremely important; in this situation, it is necessary to examine the claims of the patent to assess how similar the two are.

GLOBAL PATENT DATABASES AND SEARCH TOOLS

PATENTSCOPE

PATENTSCOPE is run by the World Intellectual Property Organization (WIPO), the specialized agency of the United Nations that deals with intellectual property (IP) issues. PATENTSCOPE is a truly global resource which lets one access patent information from many different countries. WIPO has developed a dedicated tool using state-of-the-art neural machine translation technology. It contains a huge amount of information. It includes-

- Patent applications under the Patent Cooperation Treaty, the global patent system which WIPO operates.
- Patent documents from participating regional patent offices, including the African Regional Intellectual Property Organization (ARIPO), the Eurasian Patent Organization (EAPO) and the European Patent Office (EPO).
- Patent documents from many national patent collections, including China, Japan, the Republic of Korea and the United States.

Altogether, there are tens of millions of documents in PATENTSCOPE and it is growing all the time.

Key Features-

- a) The PATENTSCOPE homepage features a simple search window. Just type in a term to search the patent title, date, number, abstract, inventor and applicant for every document in the system.
- b) One can choose one of seven other preset search fields in the Field Combination Interface, including full-text searching of many documents.
- c) One can narrow down their search by specifying particular national, regional or international data collections within PATENTSCOPE. One can sort search results by application or publication date, or relevant search terms.
- d) Whichever language one use to search, one can find relevant documents in more than a dozen languages.
- e) PATENTSCOPE includes a sophisticated multilingual search tool called CLIR. One can use this to search for up to five keywords.
- f) CLIR will automatically look for synonyms of the keywords in the original search language, then search for translations of those keywords and synonyms in many other languages, so one can be sure of finding all relevant results.
- g) The tool has been “trained” exclusively on patent texts, making it particularly accurate and reliable.
- h) With the free WIPO Translate tool, one can translate any patent documents from and to 14 different language pairs.
- i) Other free translation tools have also been integrated into PATENTSCOPE, so you can also translate documents using
 - Google Translate,
 - Microsoft Bing Translator, and
 - Baidu Translate.

ESPACENET

Espacenet offers free access to more than 130 million patent documents worldwide, containing information about inventions and technical developments from 1782 to today. It has a user-friendly interface available in almost all European languages. It enables users with little or no experience in patent searching to obtain an overview of the state of the art, to follow new developments or to find out who invented what.

New Espacenet, a substantially revised and improved version of Espacenet with state-of-the-art features and enhanced functionality, was released in November 2019.

Espacenet is a free patent search tool accessible to beginners and experts. Supporting information can help you understand whether a patent has been granted and if it is still in force.

It can be used to:

- search and find patent publications
- machine-translate patent documents
- track the progress of emerging technologies
- find solutions to technical problems
- see what competitors are developing.

Coverage by Espacenet-

The worldwide database contains information on published patent applications and granted patents from over 100 patent-granting authorities. It covers various methods of searches. They are -

- By Coverage, codes and statistics
- By bibliographic coverage
- By full-text coverage.

Key Features-

- Extensive coverage by the tool in various forms.
- Inexpensive, since it is a free tool launched by European Patent Office (EPO).
- Multilingual advanced search in languages English, French and German.
- Option to choose office/language for the Espacenet interface – with access to 38 offices, multiple languages and countries.
- It provides for Machine translation:
 - Espacenet will translate from English, French and German into 28 other EU languages (and vice versa).
 - Espacenet will also translate Chinese, Russian, Japanese and Korean into English, and vice versa.
- Database of Patent families and cited patents.
- It provides a Claims tree, which is the visualisation of the hierarchy of a patent's claims.

GLOBAL DOSSIER

Global Dossier is established by USPTO. It is a set of business services aimed at modernizing the global patent system and delivering benefits to all stakeholders through a single portal/user interface. Through this secure service, users have access to the file histories of related applications from participating IP Offices, which currently include the IP5 Offices.

By using this service, users can see the patent family for a specific application, containing all related applications filed at participating IP Offices, along with the dossier, classification, and citation data for these applications. This service also provides Office Action Indicators to help users identify applications that contain office actions, a Collections View for saving documents and applications for review later on in the session, and the ability to download the documents in an application.

Key Features-

- Global Dossier provides a simple information about the Patent family members such as their application number, applicant's name.
- It also provides more detailed access to the file wrapper of the family members including all the prosecution history and associated documents.
- It provides Cooperative Patent Classification (CPC) and International Patent Classification (IPC) Symbols associated with applications.
- It provides abstract, title, standardized applicant names, and application number.
- It provides machine translation, annotation, and sorting capabilities.

- It provides application name, filing dates, inventor, as well as IPC, CPC information.
- It provides access to Invention specification, claims, and other related text.
- It provides access to the prosecution history of all members of Patent Family.

WIPO INSPIRE

WIPO INSPIRE is a global knowledge center for innovation, helping innovators and entrepreneurs make informed decisions throughout the innovation cycle. It provides information on patent search, patent analytics, technology transfer, and institutional IP policies, combining reference data with expert insights into resources, tools, and good practice recommendations.

WIPO INSPIRE provides a unique blend of information and knowledge on patent search, patent analytics, technology transfer, and institutional IP policies, combining reference data with expert insights into resources, tools, and good practice recommendations.

This knowledge centre offers various searches such as-

- Database reports- A collection of reports on patent databases and their features, helping you to choose the right platform according to your needs.
- Patent registers- An overview of online patent registers, gazettes and legal status-related information from over 200 jurisdictions and patent information collections. Use it as a first step to identify what information can be retrieved online and how to access it.
- Patent analytics- A reference point for access to Patent Landscape Reports (PLRs) on specific technologies on the national, regional or global levels, and to WIPO Technology Trends reports on factual evidence on innovation in specific fields. It also provides access to PLR Guidelines and Manual on Open Source Patent Analytics, as well as Patent Analytics Handbook.
- Technology transfer- Patent information professionals support innovators and entrepreneurs to identify patent documents relevant to their research and business interests and gain an overview over complex relationships between technologies, individuals, and organizations.
- eTISC platform- A social knowledge platform that provides space for the TISC community and other IP users to share knowledge and best practices, and learn from their peers worldwide.

INCOPAT GLOBAL PATENT DATABASE

IncoPat is a patent database provider from China with a collection of patents from 120 authorities and is updated daily. The platform integrates functions like patent search, analysis, online cooperation and monitoring. It also facilitates the processing of value-added data like legal status, litigation's, corporate business information, technology operations, custom records, communication standards, declassified national defense patents, etc. IncoPat provides over 300 searchable fields, 50 analytical templates and 100 customized analytical fields for users to search and analyze patents. For example, the field on Technical Efficiency will support users to search or analyze patents on intelligent car technologies improving safety or lowering cost.

In addition to commonly provided semantic search or AI search on patent databases, IncoPat uses a proprietary DNA analysis technology, combining the technologies of AI, NLP and knowledge mapping to recognize key parts and relationships of a specific invention. Before running the search results, the system will display the input technology contents into a knowledge mapping showing the parts of the invention and relationships between inventions. Users will then operate on the map to revise those parts and relationships. This enables users to understand the process of AI search and optimize the process by editing the knowledge map. For the AI search results, IncoPat supports text comparison between the results with the input contents to show users the effect of the results.

Key Features-

- a) IncoPat provides 11 types of search features, including Simple Search, Advanced Search, Citation Search, Batch Search, Citation Search, Legal Search, AI Search, Semantic Search, Extended Search, Graph Search, and Chemical Search.
- b) Search Language- All patents' titles, abstracts and full-text are translated into English and Chinese to support searching and analyzing. Non-Latin text, such as Japanese and Korean can also be searched.
- c) AI Search for novelty, invalidation and clearance searches -Use of technology Knowledge Map and AI to identify the core structure in patent document and basic element of patent DNA. Knowledge Map to realize invention contents accurate identification and accurate matching
- d) Graph Search- Supports users to search design patents. Users could upload a picture and select Locarno Classification to carry out design similarity search.
- e) Semantic Search by using Operator RAD/RPD- User can combine manual search together with semantic technology to rank the patent search results e.g. RAD=(CN1325248C) AND TI=(laminated), the search results will comprise patents with titles containing laminated and similar to CN1325248C with the application date earlier than CN1325248C. The results will be in order according to the similarity to CN1325248C. RPD means the patents similar to the target patent with publication dates earlier than the target patent.
- f) Technical Efficiency Search- IncoPat uses NLP technology, machine deep learning together with manual intervention. It extracts content on function and efficiency from patents' abstracts, description contents and generates technical efficiency after simplification and normalization. Currently, technical efficiency index is applied to only Chinese patents.
- g) IncoPat provides the technical efficiency sentences and phrases, which can assist users to conduct indexing more effectively.

AUSPAT

AusPat is IP Australia's search database that allows inventors, industry and researchers to access patent applications filed and granted in Australia. IP Australia is the Australian Government agency that administers intellectual property (IP) rights and legislation relating to patents, trademarks, designs and plant breeders' rights. IP Australia has a wealth of patent data dating back to the inception of the patent office in 1904. In 2008 this information was consolidated into one search system for Australian patent data - AusPat.

AusPat is the comprehensive search system for Australian patent data, providing a single point of enquiry for information on Australian patents in a free online patent search tool. There are many ways you can search, including by:

- Invention title
- Applicant
- Inventor
- World Intellectual Property Organization (WIPO) or Patent Cooperation Treaty (PCT) number
- Filing date
- Priority date.

eDossier is inbuilt in AusPat. It provides customers with access to a suite of documents relating to the prosecution of patent applications dating back to 2006 and which are open to public inspection (OPI). This enhancement provides customers with the ability to access the following documentation online:

- requests for examination

- examination reports
- responses to examination reports
- amendments
- search results

eDossier- eDossier is a feature that displays documents associated with a case file. It can be found in the application details page. Key features are:

- view a suite of documents relating to the prosecution of patent applications dating back to 2006 which are open to public inspection (OPI).
- select documents for viewing/saving/printing.
- select and retrieve multiple available documents for viewing and/or downloading to a single bookmarked PDF (you may be asked to confirm you are a person as a security measure).
- sort documents by alphabetical order, date, type, status or file size.
- subscribe to our email notification service to receive early advice of changes to an application's case file.
- submit relevant material (s27, s28) relating to an application.

J-PLATPAT

J-PlatPat (Japan Platform for Patent Information) is a free of charge service for searching industrial property information over the Internet.

It provides industrial property information such as Japanese publications on patents, utility models, designs, and trademarks issued by the Japan Patent Office (JPO) and other foreign publications.

Additionally, it provides JPO dossier information, which allows easy viewing of the current progress of applications going through the examination process.

J-PlatPat also plays a significant and fundamental role in Japan as a patent information infrastructure that provides industrial property information through the internet with enhanced search functions and user interface, which enables users to efficiently find the industrial information they are seeking.

Key Features-

- Bibliographic data and classification are downloadable in a CSV format.
- CSV format files can only be output when there are 100 or fewer search results.
- Patent publications and dossiers are available and downloadable in a PDF.
- It provides J-GLOBAL, which is an online service, provided by the Japan Science and Technology Agency, through which domestic researchers and scholarly articles can be searched. Selecting "J-GLOBAL" in "Document types" and searching makes it possible to search J-GLOBAL for non-patent documents, science technology terms, chemical substances, and materials information.
- Journal of technical disclosure, manual, books, company technical report, proceedings, etc. which are approved to be made available in the J-PlatPat.

LESSON ROUND-UP

- The Intellectual Property Office in India is dedicated to mobilize the use of such technological advancement for socio-economic development, which is a constitutional mandate, by creating the requisite IP culture.

- The Office of the Controller General of Patents, Designs & Trade Marks (CGPDTM) comes under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. The Office is responsible for the administration of Patents Act, 1970, Designs Act, 2000, The Trade Marks Act, 1999 and Geographical Indications of Goods (Registration and Protection) Act, 1999 through its Intellectual Property Offices located at Mumbai, Delhi, Kolkata, Chennai and Ahmedabad.
- A patent application needs to be filed in its jurisdictional patent office. Keeping in mind territorial jurisdiction is of utmost importance.
- The Patent information System (PIS) and National Institute of Intellectual Property Management (NIIPM) located at Nagpur also come under the superintendence of CGPDTM.
- Patent information includes not only the content of published patent documents but also bibliographic and other information concerning patents for inventions, inventors' certificates, utility certificates and utility models.
- A patent document contains in a standardized form, a wealth of information about the state-of-the-art, adjudged in the international context, in technological developments in that area of technology. Some of the practical applications of patent information include that such information is a tool for creative thinking; provides input for licensing strategy; supports mergers and acquisitions and in human resources management helps in identifying key inventors other companies who are vitally important for the future of the company.
- A patent search is a search conducted in patent databases as well as in the literature available to check whether any invention similar to your invention already exists. Patent information is made available to the public through a variety of databases. Each database covers a particular set of patent documents.
- As of now, many national and regional patent office provide free online access to their own patent collections as well as to selected patent documents from other offices.
- A number of commercial and non-profit providers also offer free patent information databases online. Certain commercial providers have established value-added services for access on a fee-paying basis including translations of patent information and additional systematic classification.

GLOSSARY

Territorial Jurisdiction – It refers to the power of the court to preside over cases arising out of or a person/company having domicile/ registered office within the defined territories of the court's jurisdiction.

Patent document – It includes not only the content of published patent documents but also bibliographic and other information concerning patents for inventions, inventors' certificates, utility certificates and utility models.

Patent information system (PIS) – It is a system to obtain and maintain a comprehensive collection of patent specification and patent related literature on worldwide basis to meet the needs of technological information of various users.

Cross-licensing – It is an exchange between two companies to license one or more patents to each other, which gives the companies the freedom to operate; that is, without any fear of being accused of violating the patent rights of the other party. Payment(s), if any, in a cross-licensing agreement is/are made by the party, which is perceived to have a patent portfolio of lesser value.

Patent pool – An arrangement between two or more patent owners to pool their patents and licences either among themselves or to a third party on predetermined licencing conditions is known as a patent pool.

Patent Cooperation Treaty (PCT) – The PCT is an international treaty with more than 150 Contracting States which are bound with certain formal requirements set out in the Treaty and Regulations. The PCT makes it possible to seek patent protection for an invention simultaneously in a large number of countries by filing a single—international patent application instead of filing several separate national or regional patent applications.

International Patent Classification (IPC) – It is a hierarchical classification system used primarily to classify and search patent documents (patent applications, specifications of granted patents, utility models, etc.) according to the technical fields they pertain.

InPass or Indian patent advanced search system – It is a portal to search for and get data on Indian patents that have been issued and those that are still pending.

TEST YOURSELF

(These are meant for re-capitulation only. Answers to these questions are not to be submitted for evaluation.)

1. Discuss the organizational details of the Intellectual Property Office in India.
2. Explain the functions of the Patent information System (PIS) and National Institute for Intellectual Property Management (NIIPM).
3. What is patent information? Briefly explain the significance of using the patent information.
4. Why is patent search done? What are the various on-line databases available that provide access to patent documents while conducting patent search.
5. List out the individual types of searches in patent documentation
6. Write short note on use of TRIZ methodology in the field of Patent.
7. How people can benefit from patent information?
8. Write a short note on territorial jurisdiction with respect to Patents.
9. Give reasons as to why is patent search necessary?

LIST OF FURTHER READINGS

- Bare Act - Patents Act, 1970 and rules made thereunder.
- Indian Patent Law and Practice – Oxford Publishers
- Intellectual Property Laws and Practice – Elizabeth Verkey

OTHER REFERENCES (Including Websites / Video Links)

- <https://ipindia.gov.in/patents.htm>
- <https://ipindia.gov.in/writereaddata/images/pdf/2-particulars-of-organisation-functions.pdf>
