

## Organisation of Patent Information

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Different kinds of patents are defined. Its importance as a source of S and T information has been emphasized. Policies regarding the procurement and organisation of it are discussed. Aspects of information service from the patent literature are also dealt with.

### 0 DEFINITION OF PATENT

According to COD "Government grant of exclusive privilege of making or selling the new inventions" is known as *Patent*. In the present context, "invention" refers to something which concerns "manufacture". Essential requirements of a patentable invention usually considered are (i) manner of manufacture, (ii) novelty, (iii) inventive ingenuity, (iv) utility and (v) law and morality. Thus pro-

ducts, methodologies and inventions can only be patented. Theories and ideas are always excluded. The inventor(s) is/are guaranteed with the sole right for certain period of years (14 years in India) to use or sale the invention (s). "Patent system now operates in most countries of the world. Each year more than a million patent documents are published by some 70 countries, with Japan leading the field"<sup>3</sup>. (see Table 1)

Table 1  
*Patent Publications Issued upto 1980 (according to WIPO estimate)*

Country	Japan	F R G	France	U S A	U S S R	UK	Netherlands
Numbers	300,000	134,000	70,000	70,000	45,000	45,000	26,000
% of Total	11.1	4.96	2.59	2.59	1.66	1.66	0.96
Italy	Australia	Spain	Canada	Switzer-land	India	Others	Total
25,000	25,000	22,000	20,000	4,000	3,000	215,000	27 million
0.92	0.92	0.81	0.74	0.14	0.11	0.79	100

\*Indian Statistical Institute Library, 202 Barrackpore Trunk Road, Calcutta 700 035.

## 1 WHAT A PATENT CONTAINS

A patent document contains the following information :

- (1) *Patent Number*—Serial number assigned to a patent with the name of the country at the time of issue. Under ICIREPAT system a two-letter country code has been developed.
- (2) *Date of issue*—The date from which the security is assured to the inventor(s) and the period of protection is calculated i.e. the *Priority Date*.
- (3) *Date of Application and Serial No.*
- (4) *Title*
- (5) *Name of the Patentee*
- (6) *Classification No.*—According to the Patent Office Classification and/or International Patent classification
- (7) *Specifications*—Body of the patent including detailed technical information both in literary and graphical form.

## 2 KINDS OF PATENTS

In addition to the conventional ones, there are three more special kinds of patents :

- (1) *Patents of addition*—Patented invention, further improved and modified either by the original inventor or some one else, is protected by it.
- (2) *Secret Patents*—Invention(s) relating to instruments and ammunitions of war is/are granted secret patent.
- (3) *Priority Patents*—These are granted under a reciprocal priority arrangements established between the home country and a few Commonwealth Countries.

## 3 IMPORTANCE OF PATENT

About one third of the S&T information generated is contained in the Patent documents

alone. About 500,000 patents of new solutions, trends and new techniques filed each year throughout the world is a mine of S&T information. It is also a practical truth that certain invention could only be known through patents and no other form of scientific publication media. Studies in U K, U S A show only 10 % of patented technology are reported in non-patent technology literature. "S&T information is primarily to be found in patent documents besides books, reports and periodicals. . ."

The stock of new technological process may be enriched by a good collection of patent documents relevant to the interest of that particular library and its users. The development of a patent based library/information service is an essential part of the libraries associated with R&D projects. Patents, being one of the primary published sources of knowledge limited to new inventions, do have importance to the inventor as these aid in avoiding duplication by unfolding the latest advancement. It serves the interests of a nation and its economy. The information disclosed in the patent, but not covered by the claims sections, may freely be used without permission. These ideas once known may stimulate developments in other fields.

There may be two circles of users of patents —(i) inner circle : who need them for legal /technical purposes and (ii) outer circle : who need them as general source of information or technological development.

The industrialists, the manufacturers and the entrepreneurs will find this unique publication as a major source of information which will accelerate the growth of patents of newer inventions, development of industrial product and inter—or intra-state technology transfer. So the patent literature demands distinctive treatment in a library, technical library in particular, as it is a significant part of librarians' resources.

#### 4 PROCUREMENT & ORGANISATION OF PATENTS

Patent Offices are in the apex of the patent system. For the procurement of new patents the profession must focus their attention on the different types of publications of patent offices eg. Patent Office Handbook, Guide to inventors, Notifications regarding new patents in the National Gazette, Patent Office Journal, Annual reports, etc. Scanning of these sources of information should regularly be carried out.

Other sources of information on new patents include—reviews published in scientific and technical journals of the relevant fields, indexing and abstracting journals, commercial periodicals devoted solely or partially to patents, patent digests, patent journals and lists published occasionally (see Table 2). Regular scanning through the lists of additions published by large libraries, keeping in touch with

the periodical publications of different research organisations and industrial houses, and looking through the stock of Patent Office and Patent Inspection Centres (58 such centres now exist in India) are to be regularly done. Many Patent Offices issue abridgements of patents granted. These may also be searched. After collecting information regarding the publication of new patents, relevant to the library's need, approach should preferably be made direct to the patent offices of the respective countries. The patents being mostly government documents, acquisition of these are not possible through other procurement methods. Approach is to be made direct to the office concerned without any intermediate vending agent unless other-wise specially engaged by the respective patent office. For any old patent, rather than the recent ones, distributors/agents specialised in dealing with government publications should be contacted first and then only any rare book supplier may be engaged.

Table 2  
*Patent Information/Abstracting Services*

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#### (A) Exclusive Patent Abstracts

##### (i) *Official Abstracts* :

Abridgements (British Patent Office)  
 Official Gazette of the US Patent and Trademark Office—Patents (USA)  
 Abridgements of Indian Patents (India)  
 Resumes *In Bull de la Propriete Industrielle* (French Patent Off) . . . etc.

##### (ii) *Commercial/Non-official Abstracts* :

Auszuege aus Auslegeschriften (Wila Verlag fuer Wirtschaftswerbung Wilhelm Lampf, Munich, FRG)  
 Basic Abstracts Jr. (Derwent Publications Ltd., London)  
 Airplane Patent Digest (Manufacturers Aircraft Assn Inc, NY) . . . etc.

#### (B) Abstracts which include Patents

Chemical Abstracts  
 Science Abstracts (INSPEC, IEE, England)  
 Referativnyi Zhurnal  
 Computer Abstracts (Technical Information Co., St. Helen, Jersey)  
 Desalination Abstracts (Cent of Sc & Tech Inf., Tel Aviv) . . . etc.

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When the interest of an organisation is well defined, it is advisable to place standing orders with the Patent Offices. If the required patent is not available with the Patent Office concerned, then to ask for a hard copy from the same office or any library is the only solution. A special library need not collect all the patents. Instead, they should attempt a sectoral comprehensiveness in the collection of patents having relevance to the research work done by the parent organisation. Special libraries need them for continuous and expeditious use by the researchers, scientists and technologists. The patents being usually made up-to-date, by 'amendments' and 're-issues', the special librarian should therefore keep a constant watch on such publications and take necessary steps to ensure their procurement automatically and quickly.

## 5 ORGANISATION OF PATENT LITERATURE

While deciding on the different steps in organising patent documents in a library, it should be kept in mind that these will generally be sought by the users for patentability search, state of art search, infringement search, validity search and index search. Different steps are to be co-ordinated in such a way so as to complement each other in their objective of satisfying users' needs.

## 6 STORING/FILING OF PATENTS

This form of document, being one of the essential reference tools to the professional experts associated with research, development and production line needs special attention. While deciding the methods of storing/filing in the library's stock together with other forms of documents, the main considerations are to be: (a) library-users' needs, (b) the overall nature of

the library, (c) other forms of document collection and (d) the available techno-economic facilities. However mention may be made here of a varied cross-section of patent storing/filing methods in a library. A particular library should think from its own perspective before adopting any of these. The methods are:

(1) Keeping the patents along with other forms of documents like books etc. in the general stock, is the most conventional way, practiced in libraries having a small collection of patents. Those following DC for their document classification, may assign either the DC numbers to the patents or the number of patent in the technology class to a particular patent. Later method will ultimately result in preserving all the patents in one position on the stack. UDC's forms division, if practiced, will indicate the form difference of patent. One more step may be attempted by distributing the patents of similar or allied subjects on the stack in packets, within *BOX FILES* assigning common class number/subject heading.

(2) Patents of all countries bear their own Patent Office Classification code numbers. They are universally referred to and usually known by their code numbers. So they can most conveniently be filed/kept in numerical order under country in vertical files/box files/ or transfer cases. On the outer cover of each box a complete list of specifications or the first and last numbers or code numbers of the patents may be pasted on. Patent documents are some-times kept in two main sequences (a) inland and (b) foreign. Foreign patents may be filed in separate places and arrange alphabetically within the class by country of origin. This procedure may successfully be practiced in libraries having both moderate and small collection of patents on their stock. A parallel stock for patents is thus created.

(3) The libraries (eg Patent Office, Patent Inspection Centre . . .) where only patents form the major collection, present trend is to keep them in bunches of 100 successive numbers, grouped into batches and stored in racks or pamphlet boxes.

## 7 SHELVING

Unlike books, patents having poor physical rigidity will be better kept in specially designed folders. Each vertical file/folder or box file must bear the starting and ending Serial/Code number of the patents stored therein.

## 8 INDEXING

Index to all patents in the library stock, referring to their contents and location is necessary. Apart from Patent Offices, or organisations similar to them, in libraries associated with R & D centres of industrial establishments and institutions conducting advanced researches on "vendible product," it is always advisable to keep these documents in a parallel sequence completely segregated from general stock of other conventional types of documents; and an independent organisational instrumentation system may preferably be maintained. As a complementary to the shelving system, an indexing system for retrieving the information regarding the patents for satisfying various queries should be maintained. Subject headings may be had from P. O. Classification schemes, general library classification or the title and contents itself. Reference may be made to Indian Institute of Petroleum which has been engaged in drawing up unique indexing scheme exclusively for patents. Approaches like, name of patentee, title, patent no. etc. should be satisfied by the index.

## 91 NOTES

In case all the patents are kept in a broken sequence the users must be guided from a prominent place (i.e. catalogue, circulation counter, etc.) to their physical location in the library. Instead of procuring all the relevant patents as such in a particular library, the information regarding these may be disseminated to the users by keeping the abstracts issued by the patent offices, and abstracting journals (see Table 2).

At times difficulties arise in retrieving technical information from a patent due to its legal jargon, juristic phraseology, language barrier etc. Perspective assessment of the status of the patent literature in the user's pattern have shown many times its degrading potentialities as a source of scientific and technical information contained in them. It may be presumed that this is due to the aforesaid inherent drawbacks of the patent literature.

Patent documents include only the minimum specific part of the patented technology. It lacks other general peripheral knowhow without which one cannot make ready use of the patented technology.

Indian patents are assigned serial numbers as soon as they are filed, and the final patents carry the same serial numbers. Since a number of them are not finally accepted, and declared void, there are usually many gaps in the serial numbers of the patents sealed. This creates a problem to the acquisition librarian, since an expeditious scrutiny has to be made before ordering a patent. In USA and in some other countries, this problem does not arise.

## 92 SUGGESTIONS

(i) The patents, at least those which are connected with the rural technology should be

translated in the local languages. The respective State Governments are expected to take initiative in this sphere. The State Library System through its "Package of information" should have provisions to make the relevant patents available to the rural areas.

(ii) For the patent information, a national information system having stock of both domestic and foreign patents is to be created and it should take full responsibility for the effective exploitation of this vast source of technological information with the help of other similar organisations. The national Patent Office Library should preferably be entrusted with this responsibility which includes the sectoral reprographic, translation, indexing and abstracting services of the patents in co-ordination with the other institutions at national level.

(iii) The schools of library and information science should train their students for improved professional methods of treating this form of documents so that the best information can be provided from patents.

(iv) Courses on patent information both at national and international level should be organised. Programmes of these courses should be worked out "so as to ensure theoretical background and practical skills for the office workers and specialists . . . whose present or future jobs are connected with patent information or many-sided examination of inventions."<sup>4</sup>

### 93 CONCLUDING NOTES

We are happy to know that "the Ministry of Industry and Civil Supplies has approved a scheme for setting up a sectoral centre for Patent Information which will be integrated

with the NISSAT sectoral system."<sup>5</sup> "A detailed plan has been prepared for the establishment of a Patent Library & Information Centre which will not only serve as a depository for Indian and foreign patents but also undertake patent literature search and information service."<sup>3</sup> "It is to be hoped that the proposed Patent Information System at Nagpur which will include Indian and international patent literature will achieve much in this country."<sup>3</sup>

A recent study<sup>8</sup> on the use of patents in industry conducted by New Castle-upon-Tyne Polytechnic revealed the general ignorance of any other function of patent than its protective role. Even the patentees make no use of the information freely available in the rival firm's patents. They design their products independently and finally conduct patent search as a measure against possible infringement. Some researchers are of the opinion to include 97% of the printed primary literature (including patents) in the Current Awareness Service.

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## Appendix—I

## Patent Associated Organisations &amp; their Services

<i>Abbryn. + Full Name</i>	<i>Activities/Objectives</i>	<i>Services Offered</i>
NRDC: National Research Development Corporation (New Delhi) 1953	Licensing and Commercial exploitation of patents arising from National Laboratories and Public Sector R & D Centres.	Patent-Know-How, training, help in importing equipments & raw materials.
INSPEC: Information Services for the Physics & Engineering Communities (IEE, Hitchson, Herts, England)	Help patent searching authorities with most sought non-patent literature.	Full text copy service, photocopy of article & information sheet with English Abstract for non-English articles.
JAPATIC: Japan Patent Information Centre 1971.	—	—
WIPO: World Intellectual Property Organisation. (Geneva) 1967	Protecting intellectual property throughout World, Development of IPC, World Patent Bibliographic Data Bank, Co-operative Patent Search.	
ICREPAT: International Cooperation in Information Retrieval among Patent Examining Offices (Geneva) 1962	Standardize patents, develop computerised patent searching system.	
INPADOC: International Patent Documentation Centre (Vienna) 1972.	Information file entitled IPADOC data base covering 90% of world patent. Largest up-to-date collection of 16 mm microfilm copies of patents.	<p><i>Publications:</i></p> <ul style="list-style-type: none"> <li>(i) International Patent Gazette</li> <li>(ii) Patent Family Service</li> <li>(iii) Patent Classification Service</li> <li>(iv) Patent Application Service</li> <li>(v) Numerical Data Base and Supply of copies of patents in micro-fische.</li> </ul>