ORGANIZATION OF PATENTED INFORMATION

The importance of patents as source of S&T information has been emphasized. Policies regarding their procurement and organisation are discussed. Aspects of information service from the patent literature are dealt with.

1 DEFINITION OF PATENT
A patent is briefly defined as a “Government grant of exclusive privilege of making or selling the new inventions”. In this context, “invention” refers to something which concerns “Manufacture”. Essential requirements of a patentable invention usually are (i) manner of manufacture, (ii) novelty, (iii) inventive ingenuity, (iv) utility and (v) law and morality. Thus products, methodologies and inventions only can 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 operate 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”.(3) (see Table 1)

2 WHAT IS CONTAINED IN A PATENT
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 systems 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 & Serial No.
(4) Title
(5) Name of the Patentee

2.1 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 inventions could only be known through patents and no other form of scientific publication media. Studies in UK, USA 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…”(3)

The stock of information on new technological processes may be enriched by a good collection of patent documents relevant to the interest of that particular library and its users. The development of
Table 1: Patent publications issued upto 1980 (according to WIPO estimate)

<table>
<thead>
<tr>
<th>Country</th>
<th>Japan</th>
<th>F R G</th>
<th>France</th>
<th>U S A</th>
<th>USSR</th>
<th>U K</th>
<th>Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers</td>
<td>300,000</td>
<td>134,000</td>
<td>70,000</td>
<td>70,000</td>
<td>45,000</td>
<td>45,000</td>
<td>26,000</td>
</tr>
<tr>
<td>% of Total</td>
<td>11.1</td>
<td>4.96</td>
<td>2.59</td>
<td>2.59</td>
<td>1.66</td>
<td>1.66</td>
<td>0.96</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Italy</th>
<th>Australia</th>
<th>Spain</th>
<th>Canada</th>
<th>Switzerland</th>
<th>India</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25,000</td>
<td>25,000</td>
<td>22,000</td>
<td>20,000</td>
<td>4,000</td>
<td>3,000</td>
<td>215,000</td>
<td>27 million</td>
</tr>
<tr>
<td>0.92</td>
<td>0.92</td>
<td>0.81</td>
<td>0.74</td>
<td>0.14</td>
<td>0.11</td>
<td>0.79</td>
<td>100</td>
</tr>
</tbody>
</table>

such a patent based library/information service is essential for the furtherance of R&D projects. Patents, being one of the primary published sources of information, limited to new inventions, do have importance to the inventors as these aid in avoiding duplication by unfolding the so far advancements. This serves the interests of the nation and its economy. The information disclosed in a 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 source of information on technological development.

The industrialists, the manufacturers and the entrepreneurs will find in patent a major source of information which can accelerate the growth of patents for newer inventions, development of industrial products and inter- or intra-state technology transfer. So, the patent literature demands distinctive treatment in a technical library as it is a significant part of the library’s resources.

4 PROCUREMENT & ORGANISATION OF PATENT

Patent Offices are at the apex of the patent system. To know about the availability of new patents, one can depend profitably on various publications of patent offices, such as, Patent Office Handbook, Guide to inventors, notifications regarding new patents in the National Gazette, Patent Office Journal and Annual reports. For acquisition, it is necessary to scan these sources of information regularly.

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 (for example see Table 2). Regular scanning of 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 be searched. After collecting information regarding the publication of new patents, relevant to 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. So, approach is to be made direct to the office concerned without any intermediate vending agent unless otherwise specially engaged by the respective patent office. For any retrospect patent, rather than the recent ones, distributors/agents specialised in dealing with government publications should be contacted first and then only a rare book supplier may be engaged.

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 it may be possible to acquire a hard copy from the same office or any library. A special library need not col-
Table 2: Patent Information/Abstracting Services

(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 Auslegesohriften (Wila Verlag fuer Wirtschaftswerbung Wilhelm Lampl, 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)
- Referativniy Zhurnal
- Computer Abstracts (Technical Information Co., St. Helen, Jersy)
- Desalination Abstracts (Cent of Sc & Tech. Inf., Tel Aviv)
... etc.

41 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 way so as to complement each other in their objective of satisfying users’ need.

5 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 form of documents, the important factors to be kept in view are: a) library-users’ need, b) the overall nature of the library, c) other form of document collection and d) the available techno-economic facilities. However, mention may be made of the various available methods of storing/filing patents in a library. A particular library should think from its own perspectives before adopting any of these. Some of the available methods are:
1) Keeping the patents mixed with other form of documents like books etc. in the general stock, is the most conventional way, practiced in most libraries having a small collection of patents. Those following DC for their document classification, may assign either the number relevant to the subject content or the class number of patent in the technology class to a particular patent. The latter method will ultimately result in bringing all the patents in one position on the shelves. UOC's form division, if used, will indicate the form difference of patents. A further step may be attempted by distributing the patents of similar or allied subjects in the stack in packets, within BOX FILES assigning common class number/subject headings.

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. Hence, they should most conveniently be filed/kept in numerical sequence under country in vertical files/box files/or transfer cases. On the wide 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 sometimes kept in two sequences a) domestic and b) foreign. Foreign patents may be filed in separate places and arranged alphabetically within the class by country of origin. This procedure may successfully be practiced in libraries having both sizable and small collection of patents in their stock. A parallel stock for patents is thus established.

6 SHELVING
Unlike books, patents have poor physical rigidity. Hence, they need to be kept in specially designed folders. Each vertical file/folder or box file must bear the starting and the last serial/code numbers of the patents stored therein.

7 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 all libraries associated with R&D centres of industrial establishments and institutions conducting researches on "vendible product", it is always advisable to keep the patent documents in a parallel sequence completely segregated from general stock of other conventional types of documents. 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 titles and contents of patents. 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.

8 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. Information about the available patents may be disseminated to the users through abstracts issued by the patent offices, and abstracting journals (see Table 2).

The difficulties in retrieving technical information in patents arise from the patents’ legal jargon, juristic phraseology, language barrier etc. A patent document at times includes only the minimum specific information of the patented technology. It may not provide the general information 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 some other countries, this problem does not arise.

91 Suggestions
1. 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 matter. The State Library System through its “Package of information” should have provisions to make the relevant patents available to the rural areas.

2. For 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
ORGANIZATION OF PATENTED INFORMATION

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 will include the provision of reprographic, translation, indexing and abstracting services of the patents in co-ordination with the other institutions at the national level.

3. The schools of library and information science should train their students in the better handling of this form of documents so that they may provide best form of information when needed.

4. 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".(4)

92 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".(1) "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". (2) "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". (3)

A recent study(5) on the use of patent 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 opinion to include 97% of the printed primary literature (including patent) in the Current Awareness Service only.

REFERENCES CITED


(2) ibid.


FURTHER READINGS


### Appendix - 1

**Patent Associated Organisations & their Services**

<table>
<thead>
<tr>
<th>Abbrvn + Full Name</th>
<th>Activities/ Objectives</th>
<th>Services Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSPEC: Information Services for the Physics &amp; Engineering Communities (IEE, Hitchson, Herts, England)</td>
<td>Help patent searching authorities with most sought non-patent literature</td>
<td>Full text copy service, photocopy of article &amp; information sheet with English Abstract for non-English articles.</td>
</tr>
</tbody>
</table>
| ICIREPAT: International Co-operation in Information Retrieval among Patent Examining Offices. (Geneva) 1962 | Information file entitled IPADOC data base covering 90% world patent. Largest up-to-date collection of 16 mm microfilm copies of patents. | Publications:  
1) International Patent Gazette  
2) Patent Family Service  
3) Patent Classification Service  
4) Patent Application Service  
5) Numerical Data Base and  
6) Supply of copies of patent in microfiche. |