Innovate from others' patents

Patent databases are a significant source of information if you know how to use them correctly.

By Mauricio Villegas-Rojas
Office for the Transfer and Management of Knowledge for Innovation
University of Costa Rica

The World Intellectual Property Organization (WIPO) defines a patent as "an exclusive right granted for an invention. Generally speaking, a patent provides the patent owner with the right to decide how - or whether - the invention can be used by others."[1]

The documentation related to a patent[2] is publicly available. This means that patent offices must give people access to these documents, and the technological tools available today enable people to consult this information online for free from their own workplace or home.

A patent right is only valid in the countries in which it is granted and for a limited amount of time[3], which means that if the invention is not patented in the country you have your business or the patent's term has expired, anyone is free to use it without the need of a license or permission form the patent owner.

Researchers and inventors that take full advantage of this can do things such as:

- Know the latest developments in any given field.
- Know the leading inventors, research centers and companies in any given field; these can be future research or business partners to do research, commercialize their products or to license your patents to them.
- Save time and money by not researching or applying for patents in technologies already patented by others.
- Know how patents are drafted in your field or in a specific country.
- If it's permissible, research and/or commercialize the patented technologies without need of a license, if your country's law enables a "research exception" or the patent was not requested or granted in it.

In alphabetical order, my top three free-access patent databases that cover a broad-range of countries are as follows:

---

[1] World Intellectual Property Organization. 2014. "Patents." http://www.wipo.int/patents/en/. Accessed on 29 January 2014.

[2] For example: the application, the international search report, and the published patent if its granted.

[3] Usually up to 20 years from the filling date, and in some countries requiring the payment of an annual fee to maintain the protection.

1. *Espacenet* of the European Patent Office: accessible at http://worldwide.espacenet.com/?locale=en_EP, its "Classification search" is the most user-friendly I've encountered, but the method to download a full document in PDF format is very tricky for new users.
2. *Google Patent Search* of Google: available at https://www.google.com/?tbm=pts, although it offers the least amount of countries amongst the ones presented in this document, it's very user friendly, it offers links to see the same patent document in other databases, other patents by the same inventors or assignees, and its "Referenced by" section is an invaluable tool for patent search.
3. *Patentscope* of WIPO: accessible at http://patentscope.wipo.int/search/en/search.jsf, its "Analysis" section from the search results is a very powerful tool to visualize and filter the leading countries, classifications, applicants and inventors, but the sheer amount of documents available for downloading may be frightening for new users.

In my years of experience using patent databases and teaching others how to use them, I always give people the following advice:

- Know exactly what and why you're looking for patent information and for who you are searching. Are you going to research, looking for a business partner, a license for yourself, or a potential licensee?
- Read the manuals or help sections of the databases to know what you're looking for, how to correctly use the Boolean proximity and truncation search (if they're available at all!), how to download the search results or documents.
- Keep a list of search terms you will use in the different search engines. As your search goes on, you may need to add, remove or alter your terms, and use the new terms in databases you've already searched into.
- Write down the bibliographical information and download the documents that interest you as soon as you see them. If you forget to do it, and need to find them again later, you may not be able to trace your steps back to it.
- Beware of the language barriers. If English is not your native language, it is worth checking if the database is available in your language. If the patent document you find wasn't filed in English and it was translated automatically by the search engine, the translation may contain critical errors.
- You don't always need to read the full document. Depending on your purpose and knowledge in the field, you can go directly to the claims, although to improve your understanding of them, you might need to trace back to other sections of the document.
- Confirm if the patent application was presented, granted or still valid in your local patent office. The databases are not 100% accurate in the legal status of any given patent.
- Prepare a report with your key findings. Remember that the report may be read by your partners or superiors, so it must be concise, precise and with your sources.

Even with all these advices, the best way to improve your patent searches is by doing your own.