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The Wide World of esp@cenet: Basic Searching in the esp@cenet Worldwide Database

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Abstract

The esp@cenet worldwide database is a collaborative effort of the European Patent Office and the European Commission. It houses close to forty million patents from over 71 member countries. The user may search the database by publication number, priority number, title and abstract, country, or any combination of the above fields. Full bibliographic data including English title and abstract are available for most patents as is a PDF version of the patent itself. The esp@cenet database also allows for inventor and title searching of United States patents back to 1920. This feature is not present in the web-based patent databases of the United States Patent and Trademark Office.

Keywords: esp@cenet, Worldwide Patents, European Patent Office, United States Patents, Foreign Patents, Historical Patents

Introduction

To information professionals who are accustomed to using the United States Patent and Trademark Office's (USPTO) web-based patents database at www.uspto.gov, finding United States (US) patents and patent applications is a simple task. When library patrons ask for international patents, however, the search may prove more difficult. Each country has its own Intellectual Property Office (IPO), database, search criteria, application procedures, and language. The esp@cenet worldwide database simplifies the process of finding international patents by centralizing patent searching for over 70 countries and by creating an English-language title and abstract for most of the patents. The user may conduct searches by inventor name, publication number, and title and abstract, to name just a few. The database allows one to find a patent family by searching the priority number. The user may also search US patents by inventor name and title back to 1920.

About esp@cenet

The esp@cenet worldwide database is part of a joint effort between the European Patent Office (EPO) and the European Commission (EC). The database allows access to all patents published within the last two years by member states of the World Intellectual Property Organization (WIPO), the EPO, and the EC. It also houses a comprehensive collection of patents from 1920 forward. All patents published since 1970 have a representative document with a searchable English-language title and abstract. Most patents contain full-image PDF files. The database is updated once a week and English abstracts are loaded once a month.

The holdings in this database are based on the Patent Cooperation Treaty's (PCT) minimum, which is defined as the minimum documentation an Intellectual Patent Office must possess in order to perform effective prior art searching. The PCT minimum consists of complete documentation from 1920 to the present for France, Germany, the United Kingdom, Switzerland, the United States, the EPO, and WIPO, plus abstracts from Japan and the Soviet Union/Russia. The above is an incredible collection, but it is not all that esp@cenet carries. The database houses patents from countries all over the world for varying dates. By using country codes, one can find patents from Argentina that date back to 1973, patents from Zimbabwe starting in 1980, or any country and date in between. (see Figure 3) All in all the esp@cenet worldwide database provides access to close to 40 million patents from 71 countries. Of those 40 million patents, 22 million have a title, 17 million have European Classification System (ECLA) and more than 5 million have an English-language title and abstract.

Reference Documents

As mentioned earlier, all patents from 1970 forward have a representative or reference document. This is usually the first published document on a patent. Most of the time the document is in English. Criteria exist for finding and establishing a reference document. First esp@cenet will find the EPO document in English. If that fails it will search for the first US document published. If none exists, it will then look for the first document published in Great Britain. If all of these options fail, the EPO will create an English-language title and abstract for a patent.

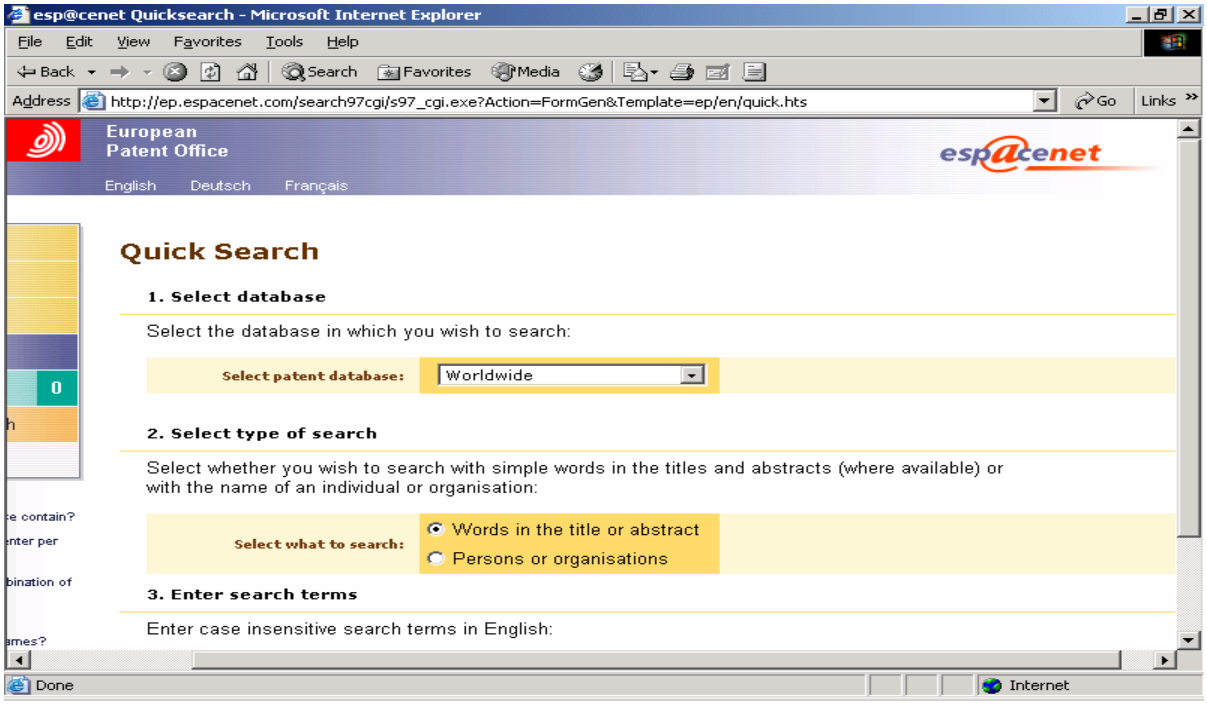

Figure 1 esp@cenet homepage at http://ep.espacenet.com

The Search Basics

The worldwide esp@cenet database allows for searching by title, title and abstract, applicant name, inventor name, publication date, European Classification (EC), and International Patent Classification (IPC). These search methods are rather straightforward, but searching by publication number, application number, and priority number will need a little more explanation. The publication number is the number given when the document is published. The publication number starts with the two-letter country code and is followed by ten or less numbers. The resulting number is of the CCnnnnnnnnn. The application number is established when the application is filed. It also starts with a two-letter country code and is followed by the four-digit year and eight or less numbers, resulting in a number of the form CCYYYYnnnnnnnn. The priority number is the number for which priority rights are claimed and generally is taken from the first published document. It starts with a two-letter country code and is followed by the four-digit year and seven or less numbers, following the format, CCYYYYnnnnnnn. For a full list of country codes see Country Names and Two Letter Codes listed in the section for "Helpful Websites" at the end of this paper.

The publication and application number searches default to an "OR"search, while searching in all the other fields default to an "AND" logic. All search terms should be entered in lower case letters. To search for an exact phrase use "double quotations." The user may truncate, but only in the title, title and abstract, inventor name, and applicant name field. Even then the user may only truncate at the end of a word, never in the

middle or beginning. The "*" symbol takes the place of unlimited characters. The "#" sign takes the place of only one character. The "?" mark takes the place of zero or one character. The esp@cenet worldwide database is accessible at (http://ep.espacenet.com/).

Sample Searching and Results

A search for publication number US6004596 yields one result entitled "Sealed Crustless Sandwich." The top of the box shows the user what they searched and below is a display of how many hits were returned. Checking the box next to the patent title will place the document in the "shopping basket" called "my patents list" for later viewing. Clicking on the title opens a new window with the bibliographic data for the patent. This data includes the patent number, publication date, inventor name, applicant name, IPC, EC, priority number (this is important for the next example search), and abstract. To see a PDF facsimile of the patent simply click on "original document." (see Figure 2)

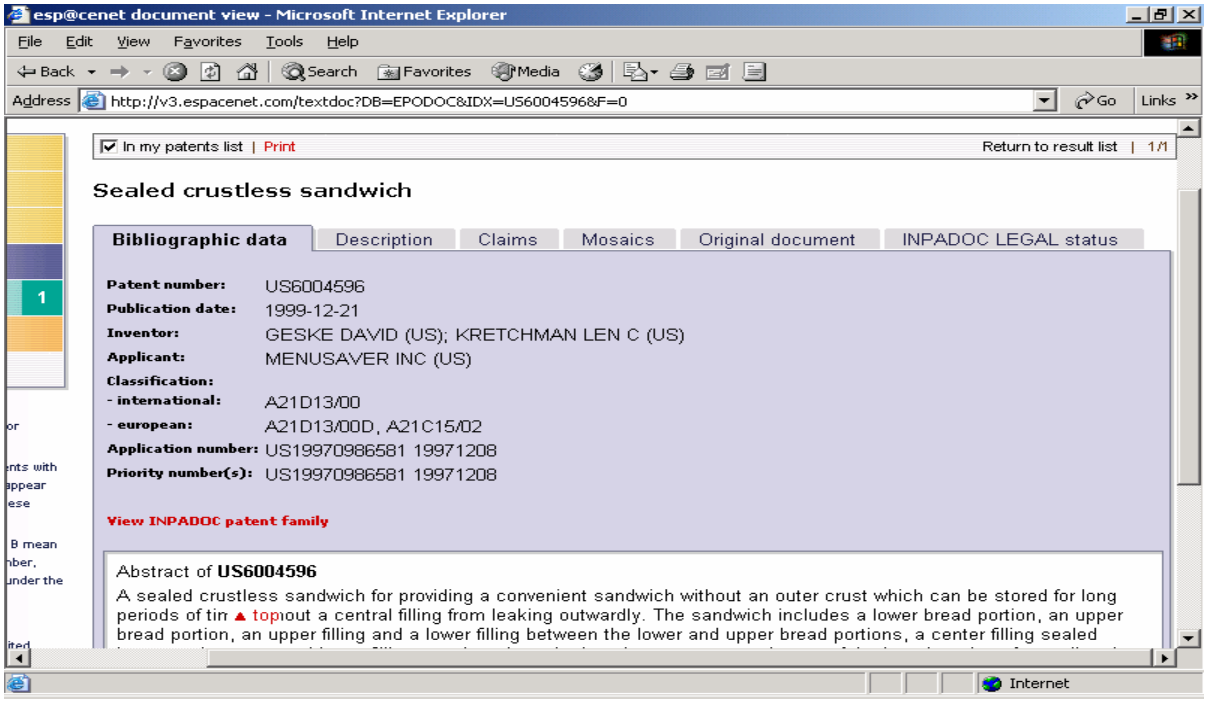

Figure 2. Typical Patent Record on Esp@cenet

A search for the priority number from the "Sealed Crustless Sandwich," US19970986581, gives three results. The bottom result is the patent from the first search. The other two documents are "related" to this original patent. They are addendums and improvements upon the first patent. These three patents make a patent family. Because patent protection is national in scope, an inventor or company that wishes to protect an invention in more then one country must apply for patent protection in each of the

designated countries. Applications may be submitted directly to the Intellectual Property Office of the selected country, or through one of the multinational application authorities such as the European Patent Office (EPO), or the World Intellectual Property Office (WIPO). Applications for the same invention in different countries are considered a patent family. The patent family often share the same priority number and other priority data. Patent families can be a difficult concept to grasp for many patent searchers. If one is new to patents what is really important is that one knows how to retrieve a patent family using a priority number search in the esp@cenet worldwide database.

The user may also search esp@cenet by combining several terms. Entering a keyword in title and abstract search box will yield all the patents that have that word in its title or abstract, provided the title and abstract are in English. The user may also limit the search to a specific country by entering just the country code in the publication number, application number, or priority number search fields. No limit exists on how many country codes may be searched at one time. A search for "Electronic Musical Instrument" in the title and JP (the country code for Japan) in the application or priority number yields thousands of hits. Most of the documents will contain a PDF version of the patent that the user will quickly realize is written in Japanese. If the user is able to read Japanese no problem exists. For users who do not understand the Japanese language, they will have difficulty deciphering the patent. WIPO has devised a plan that will help any user find their way around the patent. Each part of a patent document is labeled with a field name. For example, every patent title issued from any of the existing Intellectual Patent Offices is labeled with the same field number code, called INID codes. Therefore one can find the inventor name, patent title, and a host of other parts without having to know the language. A full explanation of INID codes exists on the WIPO website in a document titled *Standard St.9 Layout of Bibliographic Data Components.* (see the section on "Helpful Websites" at the end of this paper).

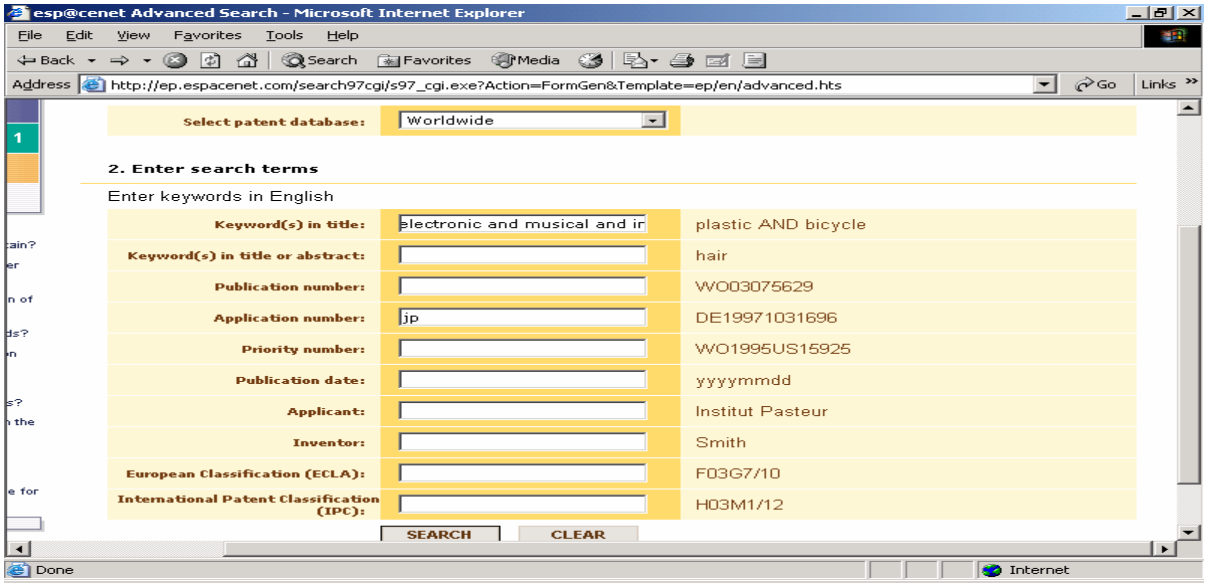

Figure 3 Sample search in 'Advanced Search' screen at http://ep.espacenet.com

United States Patents to 1920

In addition to the convenience of searching patents worldwide with one interface, the esp@cenet worldwide database has an added advantage for anyone who needs to find a pre-1976 US patent. The USPTO's patent database on the Internet only allows full-text searching of inventor and titles back to 1976. If a user needs a patent issued before 1976, the patent can only be searched for by patent number or a classification search on www.uspto.gov. On esp@cenet, on the other hand, one may search US patents by inventor name and title back to 1920. (see Figure 4) An inventor search for Walt Disney yields four patents, the oldest of which was published in 1933. This is a wonderful feature that makes long perusals of old paper patent indexes to find a patent number no longer necessary. If the patent was issued after 1920 then the inventor's name will suffice.

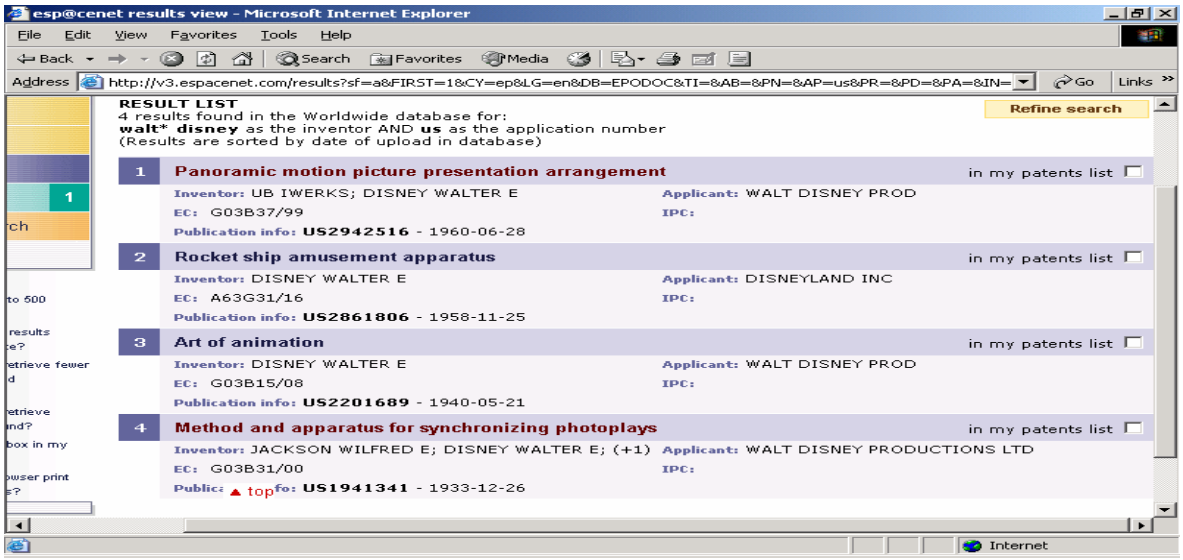

Figure 4 The results list for a sample inventor search on Walt Disney.

[Type, Walt* Disney in inventor field, and US in Application or Priority Number field]

Conclusion

The esp@cenet worldwide database makes finding international patents much easier. It provides centralized searching with a host of search methods as well as English-language titles and abstracts for most of the patents in the database. It also allows one to find patent families with a priority number search. As an added advantage the user may search US patents by inventor name and title as far back as 1920. This paper has illustrated selected sample searches of interest to librarians, inventors, and other researchers who are not regular users of international patents.

Helpful Websites

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