

Internet Patent Searching

An introductory guide to searching collections of patent specifications on the Internet

Introduction

Planning future research or investigating the patentability of a new development requires effective searching of the scientific and technical literature. In order for an invention to be patentable it must be novel, i.e. not previously described or used. The patent literature should be included as part of the scientific and technical literature.

The patent literature is a valuable and increasingly accessible resource for researchers and managers alike. The patent literature comprises published patent specifications. As the volume, currency and accessibility of this resource increases, so too does the need for more powerful and sophisticated searching techniques.

The purpose of this guide is to serve as an introduction to some of the web sites that provide free access to searchable collections of patent specifications. The sites have basic search functionality.

Searching the patent literature effectively is a sophisticated task. It requires experience and expertise. However, it is hoped that this guide will enable users to perform some useful initial searching so that they may better assess their search needs.

Purpose of Searching

As well as searching to establish if an invention is novel, searching the patent literature can be used to:

- Identify patents that may be infringed;
- Monitor developments in a field of technology;
- Identify technologies that may be adopted;
- Monitor competitors; and/or
- Identify possible collaborators/strategic alliances.

In all these cases it may be necessary to seek the advice of a patent attorney to determine the significance of the patent specifications identified. In particular the interpretation of claims can be a difficult task, even for the experienced.

In addition to patent rights, other intellectual property rights may need to be considered. These include plant variety rights, design registrations, trademarks and copyright.

Access to the Patent Literature

The following patent offices provide access via their web sites to searchable collections of patent specifications:

[Australian Patent Office \(IP Australia\)](#)
[European Patent Office \(EPO\)](#)
[New Zealand Patent Office \(IPONZ\)](#)
[World Intellectual Property Organisation \(WIPO\)](#)
[United States Patent Office \(USPTO\)](#)

The collections of IP Australia, IPONZ and USPTO are patent specifications for applications and granted patents filed in these countries only. The WIPO database provides access to copies of international [Patent Co-operation Treaty \(PCT\) applications](#).

The following websites also offer access to patent collections:

[Google Patent Search](#)
[Esp@cenet](#)
[FreePatentsOnline](#)

Google has a complete collection of US patents and published applications, and using OCR allows searching of all text.

The Esp@cenet web site hosted by the EPO provides access to collections of patent specifications held at patent offices throughout the world. An introduction to searching the Esp@cenet website is provided below.

The FreePatentsOnline website provides access to US patents and published applications, European patents, Japanese abstracts and published PCT application. FreePatentsOnline allows searching of all text. An introduction to searching FreePatentsOnline is provided below.

Coverage

One should always consider the geographical and historical coverage of the patent collection searched when evaluating the value of a search result. The possibility exists that relevant patent specifications are not included in the collection searched.

Performing a Search

A search of the patent literature can conveniently be divided into two steps:

1. The first step is to identify relevant patent specifications from the vast array of patent applications and granted patents published throughout the world. The search result is a list of patent specifications. Each specification is identified by a publication number, title and/or abstract.
2. The second step is to obtain copies of the relevant specifications so that they may be reviewed. Obtaining a full copy of a patent specification usually requires a fee to be paid. Patent specifications can be downloaded for free at the [Esp@cenet](#) site.

Most people reading this guide will be familiar with keyword (search term) searching of the scientific and technical literature. Understanding of the use of Boolean operators (search operators) such as AND, OR, NOT, etc., and wildcards is assumed. The help pages of the Esp@cenet web site provide more detail concerning the form and syntax of keyword based searches.

A useful aid when searching the patent literature is the use of classification codes. The use of classification codes is discussed below.

Publication Numbers

The filing of a patent application for the same invention in more than one country leads to the generation of a "family" of "equivalent" patent applications. Associated with each of these applications will be the publication of a specification.

Published specifications are identified by a publication number. A specification may be published for a patent application and then published again (with amendments, if any) when the patent is granted. The two published specifications may or may not have the same publication number.

Classification Codes

Patent applications are assigned classification codes relating to the field of technology concerned. Searching by classification codes is often a more effective way of searching the patent literature than the use of keywords alone.

[International Patent classification \(IPC\) codes](#) are a system of classifying the technical subject matter of patent specifications.

In order to identify relevant IPC codes, one may either work through the IPC hierarchy or use the catchword index to identify IPC codes of relevance. If one has identified a relevant patent specification, the subject matter of which has been assigned one or more IPC codes by an examining office, then these IPC codes can be used to search for other relevant documents. The IPC code is usually provided on the front page of the published document.

The assignment of IPC codes is not always consistent between examining offices. For this reason it is best to avoid searching using IPC codes at the group or subgroup level. Relevant patent specifications may have been assigned to a different, albeit related, IPC code.

The USPTO and European Patent Office also have systems for classifying the technical subject matter of patent specifications. The [US classification codes](#) and [EC classification codes](#) are both searchable by keyword.

Searching the Esp@cenet site

The homepage of the [Esp@cenet](#) website provides access to a number of collections of patent specifications. The "Worldwide collection" includes patent specifications from the collections of the patent offices of France, Germany, Japan, United Kingdom and United States, as well as WIPO (PCT applications).

Keywords are entered in the relevant search fields (or input boxes). The Boolean operators

AND, OR and NOT may be used to combine search terms.

Parentheses may also be used in conjunction with the Boolean operators to provide nested search terms that will be searched first. If one wishes to search for a particular phrase then this should be surrounded by double quotes. Search terms may be entered into more than one search field and will be combined by the AND operator.

[IPC codes](#) should be entered as a continuous string without blanks. The IPC code may be entered for the section, class, sub-class, group or sub-group level. The string will take the form CnnCnn/nn for sub-group classification code, or may be truncated to CnnC for sub-class classification code searches.

Searching the FreePatentsOnline site

[FreePatentsOnline](#) provides access to US patents and published applications, European patents, Japanese abstracts and published PCT application. Unlike Esp@cenet, FreePatentsOnline allows searching of full text.

Under the "Quick Search" tab, keywords are entered in the relevant search fields. The Boolean operators AND, OR and NOT may be used to combine search terms.

Parentheses may also be used in conjunction with the Boolean operators to provide nested search terms that will be searched first. If one wishes to search for a particular phrase then this should be surrounded by double quotes. Search terms may be entered into more than one search field and will be combined by the AND operator.

[IPC codes](#) should be entered as a continuous string without blanks. The IPC code may be entered for the section, class, sub-class, group or sub-group level. The string will take the form CnnCnn/nn for sub-group classification code, or may be truncated to CnnC for sub-class classification code searches.

Search Documentation

For a search to have any value to another it must be well documented. This requires the search strategy (combinations of keywords, class, owner, inventor etc. were searched) and the search coverage (types of documents and periods searched). This allows others to assess the comprehensiveness of the search and to verify or extend the search if required.

Viewing a Patent Specification

The best sites for viewing patent specifications are [Esp@cenet](#) or [FreePatentsOnline](#).

Searching Service

Comprehensive searching of the patent literature is a skilled activity and requires access to databases and the use of search strategies not available via the sites discussed in this guide. We recommend that you do not base important decisions on searches unless conducted by a professional searcher.

In legal matters, no publication can take the place of professional advice. Although every effort has been made to ensure the accuracy of the information in this publication, it should not be treated as a basis for formulating business decisions without further professional advice.