Module 6: Standards & patents

Welcome to Research Skills for Engineering Students module 6, standards and patents. In this section, you’ll learn what standards and patents are, why they’re important, and some of the best ways to locate them.

Standards

Engineers will often need to locate standards in the course of their work.

Standards are published specifications, criteria, and guidelines for the performance or composition of a product or process. Standards often supplement the design process by guiding the engineer, saving significant design time. They increase quality, reliability, and interoperability.

Standards are created by a variety of organizations and may be voluntary or legally mandated.

Some examples of standards include:
- the British Columbia Building Code, which sets out technical provisions for the design and construction of new buildings, as well as the alteration, change of use, and demolition of existing buildings
- Canadian Standards Association (CSA) Standards
- ASTM Standards
- safety standards and testing methods

Standards are updated frequently to keep pace with changing technologies. Usually, you want to ensure you’re looking at the latest version of a standard. But older, superseded versions of a standard may be useful in many cases, especially when evaluating a product or process created when the old standard was in place.

For more information, see Codes & Standards from the CSA Group.

Patents

A patent is an exclusive right granted to an inventor to prevent others from making, using, selling or importing an invention, for a limited amount of time. Rights granted by a patent office are specific to a geographical area.

The invention can be a product (a towel), a composition (a chemical substance used in fabrics for a towel), an apparatus (a machine for making towels), a process (a method of making towels), or an improvement of any of these.

Most patent offices provide access to patent documents via freely available databases. Patents contain descriptive and useful technical information (including drawings or diagrams) that may not be found elsewhere. They also cite references that can serve as additional sources of information. Patents assist in both design and academic research.

There are a number of ways to locate patents and their related documents:
- The easiest way to locate a patent is with its application, publication, or patent number
  - Sometimes, patent numbers can be found on products, packaging, or within documentation
- You can search by inventor or company
  - But company names can change, and patents can be assigned to divisions or subsidiaries
  - Patents can also be licensed to other companies
  - You may need to search many different former and current company names to locate all related patents
Most patented products are known by a brand name or trademark. However, patent applications are generally filed before the name of the product is determined. A patent could be used in multiple products with different names. The patent document’s title could have little or no relation to the product’s name.

For more information about patents, check out this Patents and Design guide from Queen’s University Library.

**Finding standards & patents**
The UBC Library provides research guides to help you in locating relevant standards and patents. Research guides were introduced in module 5, part 4.

You can find the Standards Research Guide or Patents Research Guide by either browsing in Engineering & Applied Science, or searching for “Standards” or “Patents.”

If you need help in searching or accessing standards or patents, ask a librarian!

That concludes module 6, standards and patents. But after you find the information, how do you properly give credit in your report? In the next module, you’ll learn the process of proper citation and reference.