At the official website of the United States Patent and Trademark Office, [http://www.uspto.gov/index.jsp](http://www.uspto.gov/index.jsp), patents issued from 1790 through 1975 are searchable only by patent number, issue date, and current US classifications. The USPTO’s text-searchable patent database begins with patents granted from 1976 to present.

**Searching by Patent Classification**

(Pre-1976 patents can only be searched by patent number and/or classification. No full-text searching is available.)

In general, you can search by patent classification with a five-step approach:

1. Think of keywords describing the purpose, use, and composition of an invention.

2. Search the **Index to the U.S. Patent Classification**. (Choose “Index in HTML” which supports linking to the next step in the search process.) With its alphabetical list of subject headings, the Index will allow one to use common terms to find potential classes and subclasses that relate to an invention. See **Bicycle seats: 297/195.1+** (class 297 and subclass 195.1+). A “+” sign following a subclass indicates that additional subclasses under 195.1 may be relevant.

3. Click the blue 297 hyperlink to turn to the next step in the classification search process—examining the **Classification Schedule** in the **Manual of Classification**. The Classification Schedule displays the hierarchical structure of the many classes and subclasses which comprise the U.S. Patent Classification System. Verify that the classes and subclasses identified through the Index to the U.S. Patent Classification are actually relevant and further refine your search.

Examine subclass **195.1**, “STRADDLE SEAT (E.G., SADDLE TYPE, ETC.),” referenced in the Index to the U.S. Patent Classification. Because subclass **195.1** was
followed by a “+” sign, also browse the subclasses indented below. **Subclass 195.13**
“Detachable seat” looks like a good one to search.

Click the blue **195.13** hyperlink to move to the Classification Definitions. Use the Classification Definitions if you have trouble deciding between classes or subclasses. These definitions provide detailed information about the kind of subject matter found in each class and subclass. They also point out distinctions between classes and subclasses and refer you to related ones.

4. Compile a list of all patents issued and patent applications classified under a pertinent class and subclass:

   A. By clicking the red icon to the left of the subclass number in the Manual of Classification for patents issued; and by clicking the blue icon to the left of the icon for pending patent applications.

   or

   B. By performing either a Quick Search (only a two-term search) or an Advanced Search in the Issued Patents database; and either a Quick Search or an Advanced Search in the Patent Applications database by class and subclass number.

   Phrase your query as class/subclass (for example, 301/58). Some subclasses can contain decimal and alpha modifiers (for example, 427/2.31 or 427/3A).

   Quick Search—type your two-term query into the search box and choose the Current US Classification field for each term.

   Advanced Search—type your query in the search box as ccl/class/subclass, (for example, ccl/297/195.13)

   Clicking the icon produces many results (69 when searched on March 19, 2013). Several look relevant.

```
38  5,669,660  Inflatable motorcycle seat
39  5,653,500  Bicycle seat assembly
40  5,622,374  Child carrier for a bicycle
41  5,588,701  Device for mounting baby chair to bicycle
42  5,553,915  Attachable passenger seat for two-wheeled vehicle
42  5,523,587  Seat carrier installable on a bicycle
```
Clicking the icon produces more results (11 when searched on March 19, 2013).

<table>
<thead>
<tr>
<th>PUB. APP. NO.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>20120242120</td>
<td>ATV HAVING ARRANGEMENT FOR A PASSENGER</td>
</tr>
<tr>
<td>20120212013</td>
<td>ATV HAVING ARRANGEMENT FOR A PASSENGER</td>
</tr>
<tr>
<td>20120007395</td>
<td>Auxiliary Bicycle Seat</td>
</tr>
<tr>
<td>20110198898</td>
<td>MOTORCYCLE SEAT DEVICE</td>
</tr>
<tr>
<td>20090195038</td>
<td>ATV having arrangement for a passenger</td>
</tr>
</tbody>
</table>

5. Examine Pat. No. 5,622,374 “Child carrier for a bicycle” for example. Note the other classes and subclasses under which the invention was categorized, i.e., class 224/subclasses 415,416,418. Also examine the “References Cited” to see what patents the inventor relied upon. By examining those patents you may find even more classification numbers, i.e., 297/250.1; 224/415; 224/422; and 297/243 for further searching.

Searching by Keyword

1. Patents issued from 1976 to present are full-text searchable by keywords. Think of keywords that describe the use, purpose, and composition of an invention. Type them into the Quick Search or Advanced Search query box.

2. Review the patents retrieved and be mindful of other potential search terms.

Useful Keyword Field Searches

With both the Quick Search and Advanced Search options, you can limit a keyword search to specific fields. Useful fields include patent number, inventor name, assignee name, description/specifications, and claims.

Patent Number

Click Patent Number Search in the Issued Patents database.

Type your patent number in the USPTO Patent Full-text and Image Database query box.

Inventor Name & Assignee Name

Quick Search – to search for an inventor or assignee named John Smith, enter Smith-John in the Term 1 query box and select the Inventor Name or Assignee Name field.
Advanced Search – enter “IN/Smith-John” (for inventor) or “AS/Smith-John” (for assignee) in the query box. If you are unsure of the exact name, you can truncate: Smith-$ or Smith-John$ or Smith-J$.

**Description/Specification** – This field contains the patent description, including a brief summary and background of the invention, the detailed description, and a brief description of the drawing, if applicable. For Quick Search, type your terms in the query boxes and select the Description/Specification field. For Advanced Search, enter SPEC/bicycle and “child and seat”) in the query box.

**Claim(s)** – This field contains the text of the patent claims. Claims point out and distinctly claim the subject matter which the applicant regards as the invention and define the scope of the patent protection. For Quick Search, type your terms in the query boxes and select the Claim(s) field. For Advanced Search, enter ACLM/(bicycle and “child and seat”) in the query box.

**LEXISNEXIS ACADEMIC**

**LexisNexis Academic** is a campus-wide database available through Hesburgh Library. It provides access to a wide range of news, business, legal, and reference information. Patent information is available under the **U.S. Legal** heading. LexisNexis Academic covers patents from 1790 to present. Those prior to 1971 appear in a semi-full-text format with only certain parts of the record searchable. Patents from 1971 present are available in full-text and fully searchable.

**Using a Keyword Search to Search by Patent Classification**

Neither the *Index to the U.S. Patent Classification* nor the *Manual of Classification* is available on LexisNexis Academic to determine the pertinent class and subclass for a patent classification search. To find relevant classifications, develop a keyword search from words that describe the purpose, use, and composition of an invention. Use the keyword search to retrieve patents on point and thereby glean useful classes and subclasses.

The keyword search “bicycle and child seat” in the Patent Title field retrieved 17 patents, many of them relevant. Browsing the text of those patents confirms that 297/195.13 is a relevant class/subclass, and you see other classes/subclasses worth searching as well.

Once a useful class and subclass have been found, you can do an advanced search (see Edit in Advanced Search) to find more patents. Combine a Natural Language search with the claims field, i.e., CLAIMS(297#195.13) to retrieve other inventions listed under the same class/subclass.

**Useful Keyword Field Searches**

Searches by patent number, assignee, or inventor name are easy to do because specific search boxes are available for each type of search.