

7-Step U.S. Patent Search Strategy (continued):

4. Read the Classification Definitions to verify the scope of the sub-classes and note "see-also" references.
5. Search the *Issued Patents* and the *Published Applications* databases by "Current US Classification" and access full-text patents and published applications.
6. Review the claims, specifications and drawings of documents retrieved for relevancy.
7. Check all references and note the "U.S. Cl." and "Field of Search" areas for additional classes/sub-classes to search.

(52) U.S. Cl. 301/5.1; 301/5.1; 301/108.4; 280/165
(58) Field of Search 301/5.1, 37.101, 301/37.25, 37.28, 37.102, 37.371, 108.1, 108.4; 280/163, 164.1, 165

(56) References Cited

U.S. PATENT DOCUMENTS

1,149,338	A	*	8/1915	Butcher	280/165
2,218,060	A	*	10/1940	Watson	280/165
3,288,488	A	*	11/1966	Shinn	280/165
3,734,534	A	*	5/1973	Brooks et al.	280/163

For a more complete explanation of the U.S. Patent Search Strategy, see the complete guide:

<http://guides.lib.umich.edu/content.php?pid=35640>

Getting More Information & Assistance

For more information on patent research, visit our website:

<http://www.lib.umich.edu/aael/>

For additional assistance, please contact your subject specialist:

AOSS, Electrical Engineering and Computer Science



Sara Samuel
734-615-8638
henrysm@umich.edu



Chemical, Materials Science, Biomedical, Naval Engineering and Center for Entrepreneurship

Leena Lalwani
734-936-2332
llalwani@umich.edu

Aerospace, Civil and Environmental Industrial, Mechanical, and Nuclear Engineering



Paul Grochowski
734-647-5738
grocho@umich.edu

For additional assistance in non-engineering disciplines, please contact your subject specialist:

<http://www.lib.umich.edu/collections/specialists.html>

A Quick Guide to Patent Research at the Art, Architecture & Engineering Library

<http://www.lib.umich.edu/aael/>

Reference Desk: 734-647-5735
E-Mail: aael.ref@umich.edu



University of Michigan
North Campus – Duderstadt Center
2281 Bonisteel Boulevard
Ann Arbor, Michigan 48109-2094

Things to know before getting started with a patent search:

- Patent searching is complex and time consuming. Plan on spending a few hours learning the search process and additional hours searching and evaluating results.
- You will need to document your search. Keep careful records of what databases you search, what terms and classification numbers you search in the databases, and document numbers of the patent and application documents that you retrieve and examine.
- Tools for searching that are available at the Art, Architecture & Engineering Library (AAEL) include the PUBWest database. AAEL also keeps a collection of patent related books, shelved in the reference area on the 2nd floor of the Duderstadt Center.
- AAEL Reference librarians can show you how to use patent resources, but we cannot do the search for you. There are no exceptions. We are happy to help people get started, but for legal reasons, patent searches must be done by the people who will use the results. We have plenty of expertise in using the databases. We even know a bit about the law. But none of us are trained intellectual

property lawyers, so none of us can give legal advice--which is what doing such a search for somebody is.

- Keyword searching alone is never enough. A comprehensive patent search requires that you search by classification and sub-classification numbers.
- A search for patentability involves looking at all prior art. In addition to searching patent literature, you will need to search relevant journal literature in the field of your invention. Your subject specialist (listed on back) can help you determine which databases to search.
- You can do much of your work from anywhere that you have internet access. The United States Patent & Trademark Office (USPTO) makes databases and manuals available online at:

<http://www.uspto.gov/>

For a 36-minute tutorial on the patent search process, see the USPTO website:

<http://www.uspto.gov/web/offices/ac/ido/ptdl/CBT/>

7-Step U.S. Patent Search Strategy:

1. Brainstorm keywords related to the purpose, use, and composition of your invention. Think both broadly and narrowly.
2. Look up the words in the *Index to the U.S. Patent Classification*
<http://www.uspto.gov/web/patents/classification/uspindex/indexoutspc.htm> to find potential classes and sub-classes.

Land Vehicle See Specific Types	280
Air bags	280 / 728.1+
Seat belts	280 / 801.1+
Spare tire compartment	296 / 37.2
Stub axles	280 / 124.125+
Tires and wheels resilient	152
Toilets	4 / 458+
Vertically adjustable wheels	280 / 43+
Wheel substitutes	305
Wheels and axles	301

3. Verify the relevancy of the classes/sub-classes by using the Classification Schedule in the *Manual of Classification*
<http://www.uspto.gov/web/patents/classification/>.

Class 301 LAND VEHICLES: WHEELS AND AXLES	
<small>Click here for a printable version of this file</small>	
1	COMBINED WHEEL AND AXLE MODIFICATION
2	• Cushion lateral thrust
2.5	• With pedal crank
5.1	WHEEL
5.21	• Balancing device
5.22	• Self-operating
5.23	• With peripheral roller
5.24	• Having housing for tire inflation means
5.301	• Skate wheel
5.7	• With antifriction bearing
5.302	• Traction increasing
5.303	• Shape