



How to Run a Search String

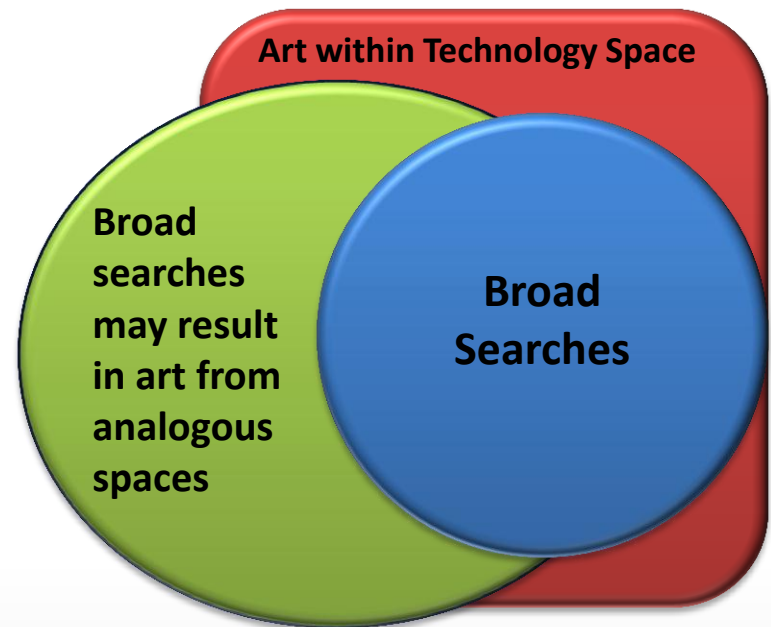
Search Strings Are the Starting Point for any Prior Art Search

Types of Search Strings

The Best Search Strings combine Broad and Narrow Searches

Broad Searches

- Result in a wide array of documents
- Goal of catching as many pieces of prior art as possible
- Most Helpful When:
 - You are not familiar with the subtleties and nuances of a patent
 - You need to understand the broader themes, keywords, and ideas for the patent study

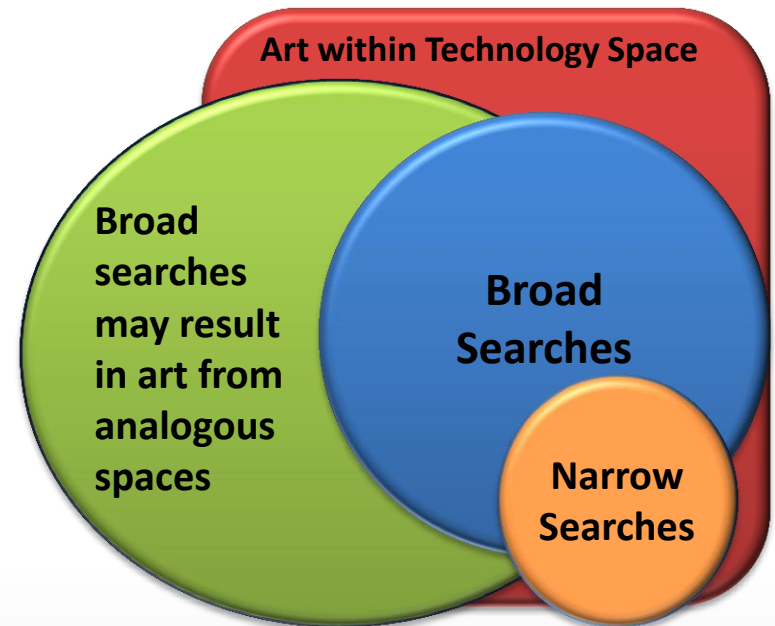


Types of Search Strings

The Best Search Strings combine Broad and Narrow Searches

Narrow Searches

- Provide very focused research results
- Goal of expanding on specific areas
- Most Helpful When:
 - You already know the relevant keywords, themes, and ideas
 - You know specific areas where more detail is needed
- **Combining these methods helps you to find the most relevant Prior Art.**



SEARCH STRINGS: Example

Case:

- Filed on January 28, 2011
- Affinity Labs sued Volkswagen for infringement
- [Affinity's patent: US 7,324,833](#)

Broad Search:

- Patent 7,324,833 contains broad themes, including:
 - “portable electronic device”
 - “automobile”
- These words come from the patent claims

Google scholar Advanced Scholar Search [Advanced Search Tips](#) | [About Google Scholar](#)

Find articles with **all of the words**
with the **exact phrase**
with **at least one** of the words
without the words
where my words occur

Author Return articles written by
e.g., "PJ Hayes" or McCarthy

Publication Return articles published in
e.g., J Biol Chem or Nature

Date Return articles published between —
e.g., 1996

Collections **Articles and patents**

Search articles in all subject areas (include patents).

Search only articles in the following subject areas:

<input type="checkbox"/> Biology, Life Sciences, and Environmental Science	<input type="checkbox"/> Medicine, Pharmacology, and Veterinary Science
<input type="checkbox"/> Business, Administration, Finance, and Economics	<input type="checkbox"/> Physics, Astronomy, and Planetary Science
<input type="checkbox"/> Chemistry and Materials Science	<input type="checkbox"/> Social Sciences, Arts, and Humanities
<input type="checkbox"/> Engineering, Computer Science, and Mathematics	

Results per page: 10

SEARCH STRINGS: Example

Narrow Search:

- Narrow themes help keep the search focused
- These include:
 - “graphical interface”
 - “portable electronic” (without the word “device”)
 - “audio file”
 - “touch screen”

The screenshot shows the Google Scholar Advanced Search interface. The search criteria are as follows:

Field	Criteria
Find articles	with all of the words
	with the exact phrase
	with at least one of the words
	without the words
	where my words occur
Author	Return articles written by
Publication	Return articles published in
Date	Return articles published between

Search String: graphical interface portable electronic audio file communicatively coupled

Excluded word: device

Location: anywhere in the article

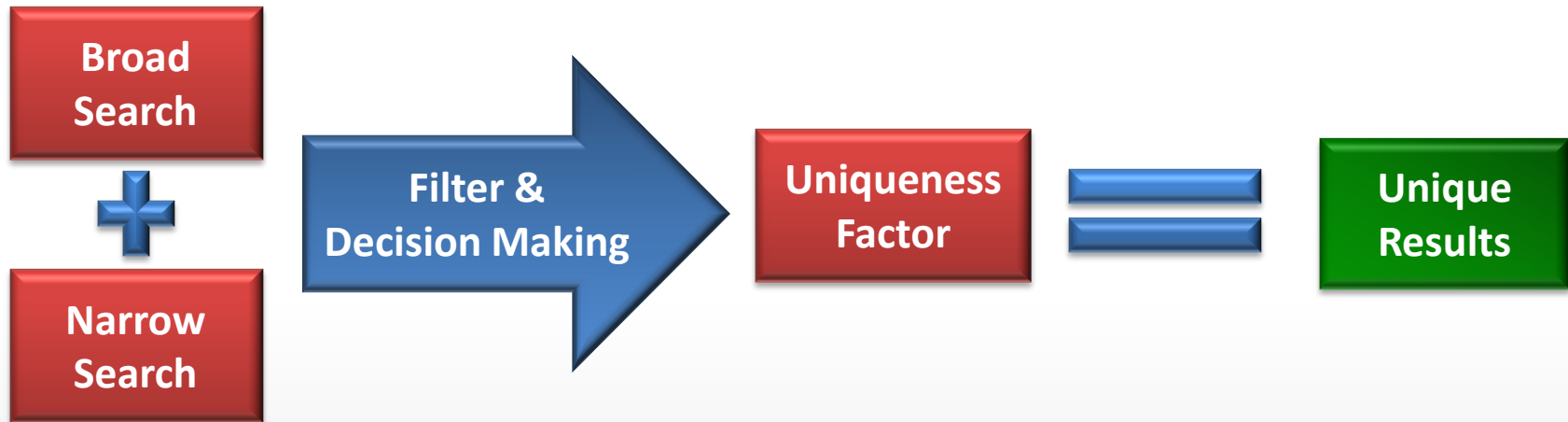
Results per page: 10

Search Scholar

SEARCH STRINGS: Example

Combining Search Strings:

- Create combinations of Broad Terms and Narrow Terms
 - Automobile + Touch Screen
 - Portable Audio Device + Graphical Interface
- **Key:** Determine what combinations make the patent **unique**
- Find these unique factors in the claims and abstract



SEARCH TIPS:

- **LDPA:** Always be thinking about the Last Date of Prior Art. Prior Art must be from before the LDPA, which is defined in each patent Study.
- **Working Inside your Comfort Zone:** Start with tools and databases that you understand, and where you have past experience and success
- **Working Outside your Comfort Zone:** Test and learn about research databases you have never used before. These provide access to new and exciting information.
- **Reverse Directions:** Sometimes it is beneficial to go forward in time first, rather than backwards. Read literature about technology or products that resulted from a patent, then go back in time to compare.

FINAL SEARCH STRING PROCESS

