

1.19 Teacher Tool Box- Prior Art

What is Prior Art?



Prior Art in Engineering is the gathering of information that is attainable by the public about any product that is on the market for consumer use. This includes any patents that are related to the product, any published articles about the design or any open demonstrations.

The main reason for exploring Prior Art in Engineering is to make sure that we do not violate patent law or existing products. However for our purposes, we are trying to determine if there are other products that are already on the market that will suit the needs of our stakeholders and evaluate these products.

Prior Art Searches- There are three basic types of prior art searches that are conducted by engineering firms to determine existing products and services which will be explored below.

1) **Novelty-** This type of search is conducted to determine if there is a patent on the product before an application for a patent is filed. This search includes basic information such as prototypes that have been developed along with scientific literature.

2) **Validity-** This type of search is implemented after a patent has been issued. This is a thorough search to be certain that no patent already exists on a product like the prototype that has been built. When a product is developed, it is essential that all parties, particularly those with financial stakes in the product, understand what potential need this product can fill within the community and its marketability.

3) **Clearance-** This type of search explores existing patents to determine if there are any patent infringement with a potential product or process. The clearance search might be limited to a specific country or a certain market.

Prior Art and Service-Learning- In EPICS we use Prior Art searches as a way to define the project with specifications and defend why this project would be helpful for the community. We want students to explore the market to determine if this project really does meet the needs of the stakeholder better than an already existing product. This causes the students to analyze products to determine the specifics of the already existing product that includes the cost, safety, ergonomic aspects, and the aesthetics of the product. They will then use this information to make further evaluations concerning the features of the product and why it does not meet the needs of the stakeholder. They will be able to better focus their attention on details that will make their project unique and feasible.

EPICS [®] /HIGH Prior Art								
Prior art is information that is disclosed to the public about a specific product. To be able to design a new product, you must understand the products that are already on the market and how your design will be different.								
Name			Class					
Name of Manufacturer	URL	Cost	Safety issues	Ergonomic Aspects	Aesthetics	Best Feature	Why this product will not meet the need of the stakeholder.	

Resources:

- Blenko, W.J. (1991) *Considering What constitutes Prior Art In the United States?* Retrieved from <http://tms.org/pubs/journals/JOM/matters/matters-9106.html>
- Engelfriet, A., (2006) *When is something prior art against a patent?* Retrieved from <http://www.iusmentis.com/patents/priorart/>