



# AN EFFECTIVE PRIOR ART SEARCH AND ITS USES

## INTRODUCTION:

A patent is an exclusive right or monopolistic right, granted to an inventor for a term of 20 years for an invention that is new or novel, inventive or non-obvious and has industrial application. Therefore, before filing for patent or investing heavily in research, patentability of an invention should be determined i.e. novelty and non-obviousness of an invention in view of the prior art. The present article provides an understanding on what are the relevant prior art to determine novelty of an invention.



## WHAT IS PRIOR ART?

Prior art is any evidence that an invention is already known. Prior Art includes any public document, for example published patents, technical publications such as journal articles, conference papers, newspaper articles, websites, available products, marketing information, traditional knowledge (oral or written) and the like. Any evidence that the invention in some format has been described or made something that contains a use of technology that is very similar to the invention can be termed as prior art.

The most important point to be noted is that any information available about invention in question should be from a date before the filing date of the patent for the invention. Any document dated after the filing date is not considered as prior art.

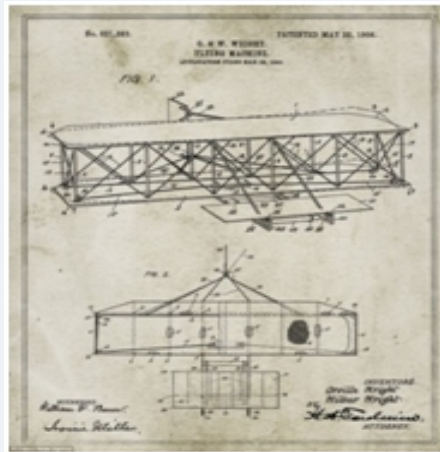
Another important point is that any evidence presented as prior art should describe the invention in question in such a manner that a person with average skills in the art is able to perform the invention as described. For eg. a mythological/fictional story describing a device which can help humans to fly cannot be considered as prior art. A valid document would be a technical description of an airplane or like device.

### NOT PRIOR ART



Ravana's Pushpaka Vimana

### PRIOR ART



The ingenious structure of the Wright brothers' flying machine

#### What can be Prior Art ?

1. Publications
2. Products
3. Non-disclosure agreements
4. Oral disclosures

## PUBLICATIONS

The publication can be made in any form and in any language. The language, number of copies, audience, and geographic location are irrelevant. The only determining factor is whether such document was available to the public before the priority date or the date of first filing.

Any publication, in any form or medium, in principle qualifies as prior art includes patents and scientific publications, textbooks, newspapers, lectures, demonstrations and exhibitions and any other disclosure.

## PRODUCTS

Any product that utilizes any feature of the invention that is applied in a patent application, then the product becomes a prior art for the invention. It is very difficult to prove whether a product entails feature(s) in the existing product, hence, reverse engineering techniques are used. Further, to prove the date of use evidences such as purchase orders, or customer receipts, may be furnished. Such evidences are more impacting as they also indicate that the product was not just made for personal use or research purposes where the public did not have any access.

## **NON-DISCLOSURE AGREEMENTS**

There are times when inventors disclose their ideas to potential investor(s) for commercialising or establishing proof of concept, before filing a provisional specification. Such disclosure(s) can destroy the novelty of an invention; therefore such disclosures should be made in confidence with an appropriate non disclosure agreement (NDA). The inventor should make sure that he explicitly mentions that his disclosure is confidential.

## **ORAL DISCLOSURES**

Oral disclosures, are also considered as prior art, which includes lectures or non-confidential discussions between inventor and third party. The problem with oral disclosures is usually to prove what was exactly disclosed and when was it disclosed. Therefore, transcripts and recordings could be maintained.

## **WHAT DOESN'T COUNT AS PRIOR ART**

### **PUBLICATIONS THAT LACK ENABLEMENT OR SUFFICIENCY**

The disclosure in an assertedly anticipating reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient, if it cannot be produced without undue experimentation and one of ordinary skill in the art must be able to make or synthesize it. Therefore, a comic book or a movie disclosing Ant Man suit or Iron Man suit is not an enabling prior art.

### **ABANDONMENT BEFORE PUBLICATION**

Normally, a patent is published within 18 months of filing. If under any circumstances, mostly due to abandonment of a patent application, the application is not published then such applications remain as secret prior art, as they never form the part of the public domain. The abandonment leading to secret prior art is subject to the jurisdictional restrictions of time, hence in some jurisdiction mere withdrawal in 15 months is adequate or in some before 4 weeks. In some jurisdictions non-publication of applications can be requested such as in USA, until grant.

### **TRADE SECRETS**

An invention that is not protected by disclosing, instead is kept secret is known as the trade secret. The main ingredient of the secret prior art is that it is not disclosed to any one and hence is new or novel. As trade secrets are confidential by nature, they cannot be used as evidence of prior art.

### **CONFIDENTIAL DISCLOSURES**

If an inventor discloses an invention under confidentiality, after executing a non-disclosure agreement (NDA) such disclosures are not considered as the prior art

## WHAT IS PRIOR ART SEARCH?

Prior art search is an essential step to ensure that an invention is new and has not been reported or known to the public in any form.

An inventor may wish to perform a thorough prior art search before or during the development of his/her idea. A thorough prior art search ensures that amount of time and money being invested in development of the idea is fruitful. However, an absence of prior art at the time of the search may not be a permanent absence. One should update prior art searches periodically during the development of the idea. No prior art search, not even an official Patent Office examination, is regarded in law as conclusive proof of novelty. Hence, prior art search helps an inventor to understand the extent of development already reported falling under the field of the idea.

## HOW TO PERFORM A PRIOR ART SEARCH?

The constituents of an invention/idea can be searched using several ways. A general search using search engines provides basic information available about the invention in the most recent times. However, a detailed search would require a thorough product search and patent search.

The most important part of conducting a prior art search is identifying the keys words defining the invention. These critical key words helps in narrowing down the search.

### Product Search

In a product search, one tries to find if a similar product or a product tackling the similar problem is already existing in the market. Obsolete technologies are a part of prior art, hence a thorough search is required.

Products in development but not yet in market may also fall under prior art if any information is displayed by respective inventor online or offline. Hence, having a detailed knowledge in the field of invention is necessary.

### Patent Search

This is thorough search of patent documents in the field of invention/idea. This heavily relies on the key words that are deduced from the description of the invention and hence, several combination of words needs to be used for searching.

Patent searching involves two skills:

1. Finding every patent document that is relevant to the invention; and
2. Interpreting the significance of the patent search findings.

### Competing art Search

One of the important aspects of prior art search is to look for **competing art**. Basically, **competing art** are ideas that are not substantially alike but **perform the same job**. It is important to study competing art as a patent is nothing but solution to a problem. Therefore, one problem may have more than one solution. Hence, by doing such studies advantages are highlighted and strength of the alternative solutions is measured.

## WHEN TO PERFORM A PRIOR ART SEARCH?

A prior art search may be conducted at various time points depending on the criteria for the search such as:

- Before carrying out R&D of interested idea;
- Before filing of a patent application;
- During examination of patent application; and
- Before product launch.

## HOW IS PRIOR ART SEARCH USEFUL?

As explained earlier, a thorough prior art search enables an inventor to decide whether his/her invention has already known to the world or it is novel.

Another important aspect of prior art, is to have a better understanding of where a specific technology fits within a domain, which is useful when drafting a patent application.

## LEGAL ASPECT OF PRIOR ART SEARCH?

Indian Patent Act 1970, defines Novelty under Section 2(1)(j) an invention is considered as new if it is not anticipated by prior publication, prior use or prior public knowledge. An invention is new (novel) if it has not been disclosed in the prior art, where the prior art means everything that has been published, presented or otherwise disclosed to the public before the date of filing of complete specification.

### ***Section 2. Definitions and interpretation***

*(1) "new invention" means any invention or technology which has not been anticipated by publication in any document or used in the country or elsewhere in the world before the date of filing of patent application with complete specification, i.e., the subject matter has not fallen in public domain or that it does not form part of the state of the art;*

General Principle: An invention is considered new (novel) if it has not been anticipated by publication in any document anywhere in the world or used in the country or prior claimed in an application for patent in India or form part of the knowledge, oral or otherwise, available within any local or indigenous community in India or elsewhere before the date of filing of patent application or date of priority, that is, the subject matter has not fallen in the public domain or that it does not form part of the state of the art.

### ***Section 13. Search for anticipation by previous publication and by prior claim.-***

*(1) The examiner to whom an application for a patent is referred under section 12 shall make investigation for the purpose of ascertaining whether the invention so far as claimed in any claim of the complete specification –*

*(2) is claimed in any claim of any other complete specification published on or after the date of filing of the applicant's complete specification, being a specification filed in pursuance of an application for a patent made in India and dated before or claiming the priority date earlier than that date.*

- Indian Patent Act 1970,
- Anticipation by previous publication (Sec. 29)
- Anticipation by previous communication to the government (Sec. 30)
- Anticipation by public display (Sec. 31)
- Anticipation by public working (Sec. 32)
- Anticipation by use and publication after provisional specification (Sec. 33)

## **USPTO**

**35 USC 102(a)** applies only to the work of others, NOT the applicant's own

An invention is not patentable if public knowledge or use, and pertains only to activities occurring in the United States.

- Known by others, used by others, described in a publication written by others, or patented in the U.S. before the application was filed; or
- Described by others in a publication written by others or patented in a printed publication in a foreign country before the application was filed.

### **35 U.S.C. 102(a)(1) and (2)**

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in -

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a); or

(f) he did not himself invent the subject matter sought to be patented, or

(g) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or

(h) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.