# **Academic Research and Intellectual Property**

Neeraj Parnami and Dr. T.K Bandyopadhyay

Rajiv Gandhi School Of Intellectual Property Law, Indian Institute of Technology-

Kharagpur, Kharagpur 721302

# **Abstract**

This paper makes an analysis for scientific society or community to evaluate their research work into Intellectual Property. After making an IP analysis through various sources or databases available, researchers can understand the worth of their time, money and efforts w.r.t. research work in the industry as well as in academic institution.

**Keywords**: Academic Research; Intellectual Property; IP awareness.

## **Article Outline**

- 1. Introduction
- 2. Intellectual Property and Research
- 3. Research and Search
- 4. Research and its value
- 5. Academic Research Vs Industry Research
- 6. General Discussion
- 7. Conclusion

References

## 1. Introduction:

Scientific knowledge is becoming increasingly important for innovation and technology development. In today's knowledge based society value of non-tangible asset like intellectual property (IP) is immense. It becomes extremely important for individual and researcher to protect their intellectual property in the best possible way. But scientific society or community developed IP notions quite different from industrial technology

community. They move based on first to publish principle rather first to file or invent. Scientist publish their research and cite somebody else research. Researcher gets reorganization based on citation. So naturally question arises that how the notions of IP can be changed to a researcher i.e how the researcher will able to understand the value of its research? The purpose of this paper is to present is how to notion of IP can be build up to academic researcher.

## 2. Intellectual Property and Research:

There is a non-trivial "knowledge gap" about IP among significant section of researcher, which causes the arisen of some questions like.

- (i) How the notions of IP do arises in a child brain? Example: If the child builds a sandcastle on the beach with the specific design, does it object in some way to other children initiating that design? Does he hide his creation from other children? If yes. Does he know about creation of IP?
- (ii) How the notions about IP do arises in individuals and collectiveness?
- (iii) How the notions of IP do arise to a researcher?

To get that answer it is required to search and analysis his / her research work.

To keep aware of the research out put as potential IP, researcher need following;

- (i) IP awareness
- (ii) Economic value of the research out-put or economic value of IP
- (iii) Legal aspect of IP as it is reported that Inventor should be aware of patent office guidelines and court decisions if they are to seek useful intellectual property as a basis for technology transfer to industry
- (iv) Industrial potential of the research accompanied by knowledge of tangible product or service will produce in return.

# 3. Research and Search:

The research out put may be a Patent, Industrial Design, Utility model, Copyright, trade secret or know how. In order to understand the research out put as a Patent, it is

required to conduct "Prior art search and analysis". The prior art search may be based on available patent and non-patent literature. The "prior art" (i.e., the body of knowledge existing prior to the invention) helps determine whether or not the invention is "new" and "non-obvious." Thus, it is important to know and understand the prior art so that one can make distinctions between the prior art (what is already known) and the invention (what is new). It will help him to get Patent and avoid infringement.

The basic search can be done by following steps,

- (i) Accessing available data bases.
- (ii) Performing Search based on key word, classification.
- (iii) Brainstorming key words related to purpose, use, process and composition of the invention.
- (iv) Classify the invention based on key word and search based on Patent classification otherwise search based on keyword (s).
- (v) Skimming first page of Patent specification majority of record of search may be eliminated.
- (vi) Reading and Re-reading the specification relevant to the invention.

Patent search can also be done based on (a) Name of inventor, (b) Name of applicant/assignee, (c) field of invention.

#### 4. Research and its value:

To understand the commercial potential of the invention it is required to pass of patent analysis. Patent analysis and mapping will give the researcher following information;

- (i) Technology trend,
- (ii) Technology mapping,
- (iii) Economic use of it.

Patents are defensive rights and consequently it is usually appropriate to apply for patent protection in other territories – this is primarily a commercial decision based upon the market potential for any given technology. Patent search and mapping give the researcher insight regarding where and when to file Patent application.

#### 5. Academic Research Vs Industrial Research:

Research in industry and academia has different time horizon as academic people think about its contribution to science and industry people think about business. But presently increasing entrepreneurial activity within academia has raised concerns that the number of publications added to the scientific commons might be reduced or that academic research would be directed exclusively towards the application oriented business need of industry. If the academic research is directed to application oriented business need of industry then researcher will understand the value/asset generation from his research and the research will be business oriented.

## 6. General Discussion:

In present scenario researcher needs to know about (i) Generating an IP, and (ii) Valuation of IP.

- (i) Generating an IP: Research focused should be based on potentiality of IP. The criteria of recognizing IP are,
  - 1 Identify IP as separate, stand alone asset,
  - 2 Sell or transfer IP
  - 3 Protect IP
  - 4 Recognize IP as enduring in nature
- (ii) Valuation of IP: Valuation of IP is needed as research will be focused on business and researcher will be benefited by:
  - (i) Determining a better idea of the overall value of your business
  - (ii) Provide a tool to manage your asset

Hence researcher will be able to understand the potentiality of its research as IP if the research is application oriented to industry and understand the value of its research.

During the last few decades, the characteristics of patentees have also changed. Public patent holders like universities and research centers play an increasing important role. For example, a law change in Germany allowed universities to create their own patent and licensing department to earn money to further research. As per Boyh Dole Act US

universities retain ownership of IP of the research funded by Federal Govt.

# 7. Conclusion:

The notion of IP can be built up to academic researcher by awaking him regarding intellectual property, its nature and its need of protection. Also it is required to impart knowledge regarding economic value of their research for him and society.

#### **References:**

- [1] Einar Rasmussen, Qystein Meen, Magnus Gulbraden, "Technovation" (2006) 518-533.
- [2] Over Granstrand, "The Economic of Intellectual Property, pp. 18
- [3] Lee Moerman and Sandra van der Laan, "Journal of Intellectual property Right, vol11, pp. 243-248
- [4] Martin A. Bader, "Intellectual Property Management in R & D collaboration, pp. 11.