

**DOI:**

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**ABSTRACT**

The objective of this review is to highlight and explore the inter-relationship and the functioning of the intellectual property right in the pharmaceutical and biotechnology industry. The rising tide of patent applications can be witnessed globally in this industry as the need for such protection and licensing has become imperative so as to safeguard the rights of the inventor and also to encourage and promote new talents, inventions and innovations which can be a boon for the economy. The field of biotechnology is an upcoming science which is still at the initial stage of establishing a foundation but it promises a revolution in the fields of medicine, agriculture, pharmaceuticals and industrial sector amongst other sectors of the economy.

**KEYWORDS:** IPR ,Biotechnology.

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**INTRODUCTION**

The role of Intellectual Property Rights has become a key issue in agricultural and resource economics over the past three decades. The changes in biotechnology and intellectual property protection that have occurred since 1980 make private enterprise possible for the first time in many broad research areas in agriculture and the health sciences. Furthermore, universities, cooperatives and other public and non-profit institutions now have the option of licensing or selling research outputs in this area, rather than giving their results away for free. As the scope and power of IPRs in biotechnology has grown, their international reach has expanded. These developments raise many fascinating and important issues: optimal patent design and licensing; the implications of IPRs under cumulative innovation, typical of agriculture and biotechnology; the effects of the TRIPS agreement on developing countries; the effects of IPRs on monopolization of key sectors; and the optimal way to ensure that the poor of the world have access to pharmaceutical products including AIDS drugs. Berkeley is the acknowledged world leader in academic IPR expertise, and relevant graduate courses in the department are complemented by others in economics, business and law.

Patent protection is the corner stone of a healthy and dynamic research environment of any country .Product patents protects the newly developed product from exploitation, without the permission of patent holder whereas process patent protects the method of production. Patent protection provides incentives and encouragement to the inventor or the company which is involved in R&D to develop new innovation.

Since Research and development in Biotechnology requires a lot of innovation and huge amount of investment, granting Intellectual Property rights is an effective tool to protect the Biotechnological inventions. There are certain accepted guidelines for the management of IPR and many options exists regarding the utility of Intellectual Property Rights in the area of Biotechnology.

Patent and design Act.1911 provided product Patent for all the inventions, including foreign inventions for a period of 16 yrs from the date of application. The Independent Government in 1947 emphasized rapid industrialization, yet it did not discouraged the foreign companies from competing in India (1). In 1962 it was observed that the drug price was highest in India in the world. At this time the government took a major step to make Pharma Industry self reliant

with the establishment of two giant public sector enterprises, Hindustan Antibiotics Ltd in 1954 & Indian Drugs & Pharmaceutical.

Patent Enquiry Committee (1948-50) and Ayyangar Committee (1957-59) was established to provide suggestions on the types of patent system that India should implement. The patent Act of 1970 which came into effect in 1972 was finally enacted on the recommendation of these committees.

Mankind has used forms of biotechnology since the dawn of civilization. However, it has been the recent development of new biological techniques (e.g., recombinant DNA, cell fusion, and monoclonal antibody technology) which has raised fundamental social and moral questions and created problems in intellectual property rights.

Intellectual property protection for biotechnology is currently in a state of flux. Whilst it used to be the case that living organisms were largely excluded from protection, attitudes are now changing and increasingly biotechnology is receiving some form of protection. These changes have largely taken place in the USA and other industrialized countries, but as other countries wish to compete in the new biotechnological markets, they are likely to change their national laws in order to protect and encourage investment in biotechnology.

One very significant treaty was signed in respect to microorganism depositon ,BUDAPEST teaty- Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure, or Budapest Treaty, is an international treaty signed in Budapest, Hungary, on April 28, 1977. It entered into force on August 9, 1980, and was later amended on September 26, 1980. The treaty is administered by the World Intellectual Property Organization (WIPO). The Budapest Treaty ensures that an applicant, i.e. a person who applies for a patent, needs not to deposit the biological material in all countries where he/she wants to obtain a patent. The applicant needs only to deposit the biological material at one recognised institution, and this deposit will be recognised in all countries party to the Budapest Treaty.

The deposits are made at an International Depository Authority (IDA) in accordance with the rules of the Treaty on or before the filing date of the complete patent application. Article 7 of the Budapest treaty outlines the requirements for a facility to become an International Depository Authority. As of March 1, 2008, there were 37 IDAs in approximately 20 countries worldwide. Most of the research orient towards the impact impact of TRIPS on biotech , pharmaceutical industry and agriculture. However, little research that has been conducted has the impact of TRIP will be restricted to an elimination of production of patented products. It will not have a deleterious or a positive impact on their levels of inventive acitivity. Even more importantly,TRIP's is not likely to create any incentive to increase technology knowledge or create innovations other than that provided by the national system of innovation. TRIP's is not going to have a significant impact on Biotech in India or on the other preoccupations of Indian firms to put their re engineered products on the market only when they get off patent(3).

Keeping biotechnology 'secret' can also be a valuable form of protection. National treatment of trade secrets is diverse, and all attempts to harmonize trade secret laws in Europe, for example, have failed. Most jurisdictions do provide some form of protection against those who steal or use others' trade secrets unfairly. However, the problem with this form of protection is that the secret generally becomes public once the biotechnology is used commercially and thus the protection is lost.

Despite of all situation a streamlined and efficient patent protection, in addition to the industry's maturing relationship with capital markets are the hallmarks of global leadership in biotechnology. In contrast, most developing countries do not have strong IPR regimes and suffer negative effects of "brain drain". The reason being, lack of effective copyright laws, which force scientists and technicians to immigrate to countries, where their research is protected from unfair exploitation by competitors.

## LITERATURE CITED

- [1] WIPO web site, Summary of Budapest Treaty on International Recognition of the Deposite of Microorganisms for the purpose of Patent Procedure(1977), retrived on October 21,2008.