between the two split ends of the law system. That is, Judges and Lawyers habitually appear not to appreciate the particular burdens of their differing roles. Lawyers face tremendous pressures from clients and from the organizational and financial realities of conducting a busy law practice. Judges, on the other hand, have to deal daily with different cases, problems and personalities under the attentive scrutiny of the Bar and public. Then, what can we do to perk up the relationships between the Bench and Bar?

We need to have more contact with one another outside the Courtroom sitting. This contact will accentuate our common bonds and amplify our genuine regard for one other. In these type of casual sittings, we all can throw out our professional titles and plainly enjoy each other's company. Other comfortable social events can accomplish the same result in ways that a formal Bench-Bar dinner cannot. Judges and Lawyers can increase their combined participation in Bar and community projects. They can work together teaching secondary, and college students about the import of the rule of law in our society. They can address social groups and women folk in the rural and semi urban areas to promote legal literacy. Both the Bench and Bar can benefit from participating in mentoring efforts for newer Lawyers. One by one, these personal relationships that are established will adjoin to the collective strength of our professions. In these and other ways, we need to promote and protect the unique character of the work that defines us as a 'profession', rather than as a mere 'occupation'. In doing so, we will not only enjoy ourselves but will contribute a conceited legacy for further generation. To me, the glorious mores of the Bar and Bench are objects of worship and the binding bonds between them are inseparable.

I am leaving the office of Judge; but not the legal stream. I have an enthrallment to the legal profession. I have quite a few projects in my mind. I will capture your involvement. Let all of us share our experience and design tools to the next generation to meet the ever-growing demands from society, to the profession.

I am thankful to President, and Executive Body of the Bar Association for giving this warm farewell. A special mention is need to the entire body of Advocates for their active presence. I am taking leave from you, carrying a lot of recollections from the glorious past I spent amidst you for all these years in this magnificent building.

I conclude quoting *Henry Austin Dobson* from his 'The Paradox of Time'-

Time goes, you say ? Ah no! Alas, time stays, we go.

A CRITICAL APPRAISAL OF BIO-TECH PATENTS AND INTELLECTUAL PROPERTY RIGHTS

By

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Introduction :

The subject of bio-technology patents acquires great significance around the globe, because of the procedure in patenting the products or services that are invented becomes very difficult. The rules and regulations in patenting their products are also differ from

one country to another. Intellectual property law has grown tremendously in the present decade. Its utility has been recognized not only in the economically developed countries, but also in the developing countries like India. With the rapid growth of industrialization and intellectual trade, it has become indispensable for the protection of public interest at large. In this paper, an attempt is made to analyze briefly the evolution of bio-tech patents into India and the interpretation made by the Judiciary in patenting the bio-tech patents. It also studies about the legal framework of bio-tech patents in India.

Intellectual Property Rights emerged as a pivotal field of law due to the rapid changes in the world scenario and the identification of the necessity of honouring champions of creative and innovative ideas. The intellectual property vests in the valuable production of human mind, labour, skill and efforts. It relates to the capacity of a man to produce a new thing and present that thing so before the public to use. The owner or producer has a right to such property which is produced by him by his own intellect. The man with his superior intellect, has dominated overall living and non-living things on the earth. In all fields of human activity including politics, administration, economy, culture, medicine, commerce, agriculture, industry *etc.*, the man with his superior intellect is calling the shots and is bringing glory to himself and also to his nation. The grant of patent is a recognition and also a reward to the human mind or human intellect and the basic rationale of the patent system is to provide an incentive for the creation of new technology. The patent system is also serves to stimulate invention and innovation, thus restrengthen the technological base of a country and paves way for rapid industrialization, improvement of the economic conditions of the people and raising the quality of life[1].

1. Dr. *Ravi K. Chaubey*, "Intellectual Property Rights under the TRIPS Agreement – Curse or Boon for India in the era of globalization, Indian Bar Review, Vol-XXXI (3&4) 2004, July-Dec., 2004.

It is well settled principle of law that no one can gain benefit of a thing which has been produced by the labour, skill and efforts of others. Therefore, everyone has an inherited right to protect his/her intellectual property. In case of infringement of such intellectual property, law provide certain remedies to the owner of the intellectual property. Intellectual property law is now an integral part of economic life all over the world, which protects use of ideas and information that are of commercial value. Almost all the countries of the world have framed the Statutes for safeguard of the intellectual property[2].

In this knowledge driven generation, where intellectual property rights have contributed its chunk for litigations to continue, it is need of the hour to have a good understanding of the concept. Inventions, discoveries and technologies widen scientific horizons, which poses new challenges for the legal world. What is worth copying is *prima facie* worth protecting is the genesis of Intellectual Property Rights[3]. Despite its importance, there is a lot of controversy in between the inventions and discoveries that are to be patented around world.

Inventions v. Discoveries :

It is universal accepted law that patents are granted only to inventions and not to discoveries. In this context, it is obvious to know the distinctions between the inventions and discoveries, whether a product or service get patentable. Invention is something newly designed or created or the activity of designing or creating new things. It is an act or operation of finding our something new. It is the finding out, contriving; the creating of something which did not exist and

2. Dr. *Krishna Chandra Jena*, "Remedies for Infringement of Intellectual Property Rights", Indian Bar Review, Vol-XXVIII (2&3) 2001, Apr-Sep, 2001

3. *Paterson* J., in *University of London v. University of Tutorial Press Ltd.*, (1916) 2 Ch. 601

was not known before, and which can be made useful and advantageous in pursuance of business or can add to the enjoyment of mankind[4]. According to the amendment made in Section 2(j) of the Act by Patents (Amendment) Act, 2002, the term invention is a new process involving an inventive step capable of industrial application. The Delhi High Court[5] has held that the expression "invention" to mean any new and useful (i) art, process, method or manner of manufacture; (ii) machine, apparatus or other article; (iii) substance produced by manufacture, and includes any new and useful and improvement of any of them, and an alleged invention[6]. According to the Concise Oxford Dictionary, invention is a thing invented; contrivance especially one for which a patent is granted. Whereas the discoveries means find out or become aware of, whether by research or searching or by chance; or be the first to find or find out, which do not involve in any creation or designing of new things. It is to be noted that there is a controversy whether biotechnological inventions are mere discoveries. In the case of biotechnological inventions, majority of them appeared to be discoveries rather than inventions. Therefore, they are not eligible for patent protection.

Genesis of Biotechnology Patents:

Under intellectual property rights law, owners are granted certain exclusive rights to a variety of intangible assets such as musical, literary and artistic works; discoveries and inventions. Since 1970's, the development of technologies for patenting living matters have witnessed, which laid the foundation for the evolution of biotechnology patent law. Biotechnology involves the production of large number of products which are of both commercial and economic importance. Many inventions are responsible for the production of biotechnological products, which can be categorized into two main forms *i.e.* Products[7] and Processes[8]. Therefore, intellectual property rights have a significant role in biotechnology and biotechnology patents. There is a lot of difference between the patenting of other inventions and the biotechnology inventions, because the latter inventions most often relate to living materials. Therefore, patenting of biotechnology inventions involves great difficulty. Many a times, the process of patenting becomes a frustrating experience, patenting laws are very complex and vary among different countries. For example, a patent application rejected in one country, may be given patent in other country *i.e.* A genetic company was awarded patent for human tissue plusiminosa activator products (TPA) in United States of America, while it was first rejected in the United Kingdom, and later on, it was issued in the U.K. also after a long battle.

As far as evolution of biotech patents is concerned, Louis Pasteur was the first person to have been granted French patent in 1865 for yeast clones. In patenting the biotechnology products, biotechnology encompasses three generations[9]. Ever since 1980's, the Supreme Court of United States permitted in patenting the micro-organisms, the science of biotechnology has been drawing great deal of attention throughout the world. Prior to 1980's, these micro-organisms were considered to be the products

4. *P. Ramanath Aiyar*, The Law Lexicon (1997) p.982
5. *Ram Narain Kher v. Ambassador Industries, New Delhi and another*, AIR 1976 Del at P.87
6. Section 2(1)(j) of the Patents Act, 1970
7. Living entities like micro-organisms, animals and plants, plasmids, cell lines, organelles and naturally occurring products like alcohol and antibiotics.
8. Isolation, purification, cultivation, bio-conversion *etc.*
9. First generation (beer brewing and bread making), Second generation (micro-biological applications, tissue cultures, animal and plant breeding) and Third generation (recombinant of DNA, RNA, Genomes and genes)

of nature, and so not patentable. Because to get a patent for the product, it must satisfy three tier-test of patentability that is inventive step, novelty and industrial application. The products, which are available in nature do not satisfy the tests of invention and novelty, and therefore they are considered to be not patentable. However, post 1980, after the decision of the United States Supreme Court in the historical case of *Diamond v. Chakraborty*, there was a sudden change in the patentability of life forms.

The *Chakraborty case*[10], is still a leading case that divides many nations of world over the interpretation of "Novelty" in respect of the patents. In brief, the international test for the registration of patents is that of "Novelty or newness". However, the key lies in understanding what exactly is 'New'. The question came before the US Supreme Court was, whether a discovery of an article that existed in nature but was yet unknown to mankind, would constitute to be something new? The matter came up as Dr. *Chakraborty*, an Indian Scientist resident in the US and an employee of GE Inc. had developed a bacteria that could made crude oil soluble in water. This had great implications as it meant that whenever there was an oil spill in the ocean, the same could be prevented from causing harm or damage to the ecology of the ocean where the accident might have taken place. The bacteria was a living matter, developed from a natural source, and modified to perform a certain function. While adjudicating on the said matter, the US Supreme Court passed a judgment stating that patentability included '*anything under the sun*' that is made by man and live human-made micro-organism is patentable as it constitutes "manufacture" or "composition of matter" and so could be seen as "human-made inventions". Thus, Chief Justice *Burger* by a majority of 5:4 allowed the registration of patent and held that while laws of nature, physical phenomena and abstract ideas are not patentable. In this context, Dr. *Chakraborty's* claim was not to a hitherto unknown natural phenomenon but to a non-naturally occurring manufacture or composition of matter – a product of human ingenuity having a distinctive name, character use. The implications of this decision would mean that today if any person extracts the herbal ingredient from the tulsi plant, that may have any feature attributable to human ingenuity and seeks to patent the same, it may be permissible[11].

Legal framework for Biotech Patents:

Intellectual Property Law gives an umbrella protection to new inventors. Patent rights promote innovation, and expression of new ideas and inventions for the public benefit. Its rights gives incentives to inventors to express their ideas by giving them assurance that these ideas will be protected so that others will not be able to profit from them[12]. The fundamental principle of patent law is that a patent is granted only for an invention, which must be new and useful. That is to say, it must have novelty and utility. It is essential for the validity of a patent that it must be the inventor's own discovery as opposed to mere verification of what was already known before the date of the patent.

The rules and regulations governing biotechnology patents differ from country to country. Each country sets its own standards for granting biotech patents. In United States of America, to grant a patent to an invention, it must be new, non-obvious and useful. In Europe, the basic requirements are novelty, inventive step and industrial application. In Australia, a biological entity

10. 447 US 303 = 65 L Ed 2d 144

11. R.C. Lahoti Justice, "Role of Judiciary in Intellectual Property Rights Development and Adjudication", (1997) 6 SCC (J) at p.6

12. *Ahuja V.K.*, Law Relating to Intellectual Property Rights, 2007.

may be patentable if it has resulted in an artificial state of affairs, which does not occur in nature. In view of the tremendous progress in biotech industry and biotechnology, there emerged a strong demand in Europe for proper legal protection of biotechnological inventions as the existing patent system was found to be inadequate. As a result, the European Union adopted 'a directive'[13], on the legal protection of biotechnology inventions, which is a major breakthrough in the evolution of biotech patents, as it provides a comprehensive legal protection to the biotechnological inventions.

Indian Patent Act, 1970:

The Act does not mention anything about biotechnology inventions. Once the patents were granted in the United States of America and the European Union, the demand for adopting same approach gained momentum in India too. After the ratification of the TRIPS Agreement, patenting of inventions became mandatory. The agreement of Trade Related Aspects of Intellectual Property Rights intends to reduce trade distortions and impediments to international trade with a view to promote effective and adequate protection Intellectual Property Rights. It ensures that measures and procedures to enforce Intellectual Property Rights do not themselves become barriers to legitimate trade. The main object underlying the agreement on TRIPS is to provide worldwide protection to the Intellectual Property Rights on the basis of equality. India's stand on this issue of patenting of micro-organisms and life forms has become very by understanding that India is a signatory to the TRIPS Agreement. Section 3 of the said Act, has been amended in the light of Article 27(1) of the TRIPS Agreement. Section 3 of the Patent Act, 1970 provides for the patenting of micro-organisms to give effect to the TRIPS agreement obligation[14]. Section 3(j) of the Act says that plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals[15].

Limitations for Patentability :

The European Union Directive on the legal protection of biotechnological inventions specifies that certain biotechnological inventions are not patentable. According to the said Directive, the following are not patentable. They are Plant and Animal varieties, essentially biological processes for the production of plants or animals. Commercial exploitation of which would be contrary to public order or morality such as processes for cloning of human beings, processes for modifying the germ genetic identity of human being, uses of human embryos for industrial or commercial purposes, or processes for modifying the genetic identity of animals, which are likely to cause them suffering, without an substantial medical benefit to man or animal, and also animal resulting from such processes. Apart from the above, those biotech inventions which cause serious prejudice to human, animal or plant life, health or environment are not patentable. Discovery of any living thing or non-living substance occurring in nature is not patentable.

Conclusion :

In recent years, intellectual property rights has gained a lot of attention, yet as there are so many challenges facing around the globe, especially in the area of biotechnological inventions. Intellectual property is a term

13. Adopted in 1998, which states that inventions which are new, involve an inventive step and susceptible to industrial application shall be patentable whether they are resultant products or processes, and also declares any biological material produce or isolated from its natural environment by means of a technical process is patentable.

14. Prof. *K. Uma Devi*, "IPR and Biotech Patents", Legal Era, Vol.1. Issue IX, at p.45

15. Inserted by the Patents (Amendment) Act, 2002.

referring to a number of distinct types of legal monopolies over creating of the mind both artistic and commercial. Its importance in international trade relations has been well recognized by the global community with the inception of TRIPS Agreement. The academic, industrial and commercial importance of intellectual property is ever increasing with the revolutionary changes which TRIPS brought about.

PROSECUTION FOR PERJURY IN EXPERT TESTIMONY : A STUDY IN THE LIGHT OF PUNJAB TRACTORS LTD., CASE*

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1. Section 340 of the Criminal Procedure Code,[1] 1973 states as follows:

> (1) When, upon an application made to it in this behalf or otherwise any Court is of opinion that it is expedient in the interest of justice that an inquiry should be made into any offence referred to in clause (b) of sub-section (1) of Section 195, which appears to have been committed in or in relation to a proceeding in that Court or as the case may be, in respect of a document produced or given in evidence in a proceeding in that Court, such Court may, after such preliminary inquiry, if any, as it thinks necessary:-
>
> (a) Record a finding to that effect;
>
> (b) Make complaint thereof in writing;
>
> (c) Send it to a Magistrate of the first class having jurisdiction;
>
> (d) Take sufficient security for the appearance of the accused before such Magistrate, or if the alleged offence is non-bailable and the Court thinks it necessary so to do, send the accused in custody to such Magistrate; and
>
> (e) Bind over any person to appear and give evidence before such Magistrate.
>
> (2) The power conferred on a Court by sub-section (1) in respect of an offence may, in any case where that Court has neither made a complaint under sub-section (1) in respect of that offence nor rejected an application for the making of such complaint, be exercised by the Court to which such former Court is subordinate within the meaning of sub-section (4) of Section 195.
>
> (3) A complaint made under the section shall be signed:—
>
> (a) Where the Court making the complaint is a High Court, by such officer of the Court as the Court may appoint;
>
> (b) In any other case, by the presiding officer of the Court.
>
> (4) In this section, "Court" has the same meaning as in Section 195.

* *Punjab Tractors Ltd. v. International Tractors Ltd. and others*, (2009) 2 Copyright and Trade Marks Reporter Oct. 2009, P.315.

1. Criminal Procedure Code hereinafter referred to as Cr.PC throughout this study