

PATENT PROTECTION FOR MICRO- ORGANISM

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Origin of the Term Patent:

The term "Patent" has its origin in the term "Letters Patent" to expression "Letters Patent" meant open letters as distinguished from closed letters.

Object of Patent Law:

The patent law recognizes to exclusive rights of a patentee to gain commercial advantage out of his invention. This is to encourage to inventors to invest their creative faculties, knowing that this inventions would be protected by law and accordingly no one else would be able to copy their inventions for certain period during which to respective inventor would have exclusive rights.

The patent (Amendment) Act 2002 substituted the provisions and defines patent under section 2(m) as "Patent" means a patent granted under this Act. The patent rules 2003 provides for the Application for patents.

Patent Protection for Micro-Organism:

The sciences of molecular biology, genetics, biophysics, cell biology and immunology have for the last few years made starting advancement and opened up vast possibility for the development of new and novel technologies. Living entities which include micro-organisms, plants and animals cells in culture and genetically designed plants and animals are used as living entities as materials and being all organic and inorganic substances used in such technology research activities. Living entities

consists of substances like animals and plant cell lines, enzymes, micro-organisms, viruses and genetic elements such as DNA, RNA, etc.

The Supreme Court of the United States granted a patent to an engineered living organism in 1980. That was invention of Scientist Dr. Ananda Chakraborty, which was found to meet the requirements of patent, i.e. utility, novelty and non-obviousness. That invention consisted of genetically engineered bacterium which was capable of degrading oil spills. The new organism invented by Dr. Chakraborty did not exist in nature earlier. Application of Dr. Chakraborty who was a microbiologist at that time working for General electric contained eighteen claims which can be categorized as below:

The grant of patent for engineered micro-organism meant grant of product status to that micro-organism, which revolutionized the field of biological research.

DNA techniques by Dr. Stanley Gohen and Dr. Herbert Boyer received a patent in 1980 which claimed protection for the method and composition for replication of exogenous genes in micro organisms. This patent was granted by U.S.A. Patent Office even when the non-obviousness as one of the important pre-requisites of the invention was questionable in other countries. This patent has however, become model for several other patent application field in field in different countries. The methods and procedures described in this patent application being mostly the procedures routinely used in present day molecular biology research, even though the US Patent Office granted this patent, the grant of patent, for similar applications in other countries has been facing problems.

Scientific aspects of such invention and their legal drafting of application play crucial roles in structuring of a patent application in such cases. Definition of the micro-organism is made in terms of what new technology will produce and in what manner it will perform. The claims made in a patent application and claims made for filling infringement proceedings when the patent is in force would succeed when functionary description is developed in appropriate manner keeping the

scientific aspects and legal drafting of invention. It is extremely important that the country's scientists are educated in patent procedures and they are encouraged to develop necessary skills and expertise in relation to invention and such products.

Indian has to join the international Patent Organization and employ its patent, like to include provisions for grant of patents for technologies which employ living entities.

Now that India has become member of the Paris Convention, it could become member of Budapest Treaty on the International Recognition of the Deposit of Micro-organisms for the purposes of Patent Procedure. Budapest Treaty has been in existence since 1980.

India is now joining this Treaty. Instruments of ratification or accession to this Treaty have to be deposited with the Director General of WIPO. (WIPO) World Intellectual Property Organization which is the organ of the UNO established to promote respects for and protection of use cooperation among States; to ensure administrative founded on a separate multilateral treaty administered by WIPO and each dealing with legal or administrative or both aspects of intellectual property protection. WIPO in fact is one of the developed specialized agencies of the United Nations system of organization.

In order to eliminate the need to deposit such micro-organisms in order to eliminate the need to deposit such micro-organism in each county, in which protection is sought, the Budapest Treaty provides that the deposit of the micro-organism with any "International Depository Authority" suffice for the purpose of patent procedure before the National Patent Office of all the contracting States and before any regional Patent Office (if such regional office declares that it recognizes the effects of the Treaty). The European Patent Office (EPO) has made such declaration.

What the Treaty calls "International Depository Treaty" is a scientific institution typically with "with culture collection" which was capable of creating micro-organism. Such an institution

acquires the status of “International Depository Authority” through the processing by the contracting states in the territory of which it is located on assurance to the Director General of WIPO to the effect that the state institution complies and will continue to comply certain requirements of the Treaty”. The deposit of micro-organism under the procedure provided for in the Treaty is primarily advantageous to the Depository if its application for patent in contracting State filed, it will save money and increase his security. It will save money because instead of depositing the micro-organism in each and every contracting State, in which he files the patent application referring to that micro-organism, he will have to deposit it only once, with one Depository Authority with the consequence that anyone of the contracting States in which he seeks protection, he will receive the fees and cost with such deposit would otherwise entail. The Treaty increases the security of the depository because it would be uniform system of deposit, recognize and furnishing of samples of micro-organism.

The patents are granted to promote the progress of industry by way of “Industrial application” the criterion of “technical character” is employed involving physical and chemical means which are practicable at the time of such development. “Technical character” is the central criterion for distinguishing patentable inventions from non-patentable ones.

The meaning of “technical character” includes the processes of germination utilizing bacteria/ micro-organism for the production of industrial products like alcohol, antibiotics, etc. The character of the “technical character” has itself undergone serious change in the field of technology as it is not only items of inanimate nature and their utilization and control by techniques of physics and chemistry.

Case Law on Paten:

ABI KSGALWAL V. EDGAR HADDLEY CO.PVT.LTD., 1984 PTC

There was opposition to registration of patent for an invention relating to ‘an improved electrical switch’ on the grounds of unfair description, prior publication, prior public knowledge. The patent office held that keeping in view the facts that the invention has not been properly described and will not function in the way claimed by the applicants, the opponents succeed even when they failed to establish the ‘prior publication as well as prior public knowledge’ and accordingly the application for the grant of patent was refused.

ZURO ENGINEERS V. MINISTRY OF COMMERCE AND INDUSTRIES, (2003) 26 PTC 199 (DEL)

The respondents required the petitioner to pay the fee for renewal of patent in the category of individuals, which was applicable to legal entities other than individuals either alone or jointly. The respondents took the view that since the name of the patentee is Zuko Engineers, the fee has to be paid for legal entity other than individual. The court held that the stand is erroneous in as much as the name of a concern cannot be determined or decisive of whether the concern is a proprietorship and is owned by individual or is partnership firm.

Reference

1. Patents act 1970.
2. Patent (Amendment) Act 2002
3. Patent Rule, 2003
4. The Protection of Patent Varieties and farmers’ Rights Act, 2001.