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Letter to the Editor

Can microbes be patented?

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ABSTRACT

Native microorganisms in their original form cannot be patented. However, microbes like yeasts, bacteria, protozoa, unicellular algae, fungi, actinomycetes and viruses can be patented if they have been genetically modified. The process and the product obtained can also be patented.

1. Introduction

This is a very interesting question posed by many people around the world. The answer is that the native microorganisms in their original form cannot be patented. However, microbes like yeasts, bacteria, protozoa, unicellular algae, fungi, actinomycetes and viruses can be patented if they have been genetically modified. A provision exists for the deposit of newly discovered Genus or Species of microorganisms as Type Strains in a Culture Collection. The Culture Collections/International Depositary Authority (IDA) also hold cultures in their Patent Depositary whose processes or product patents are under the patent procedure. It is important to remember that modified organisms are intellectual property and can therefore, be patented.

It is interesting to note that before 1980 microbiological processes were patentable. Microbes being tiny living animal cules were considered as products of nature and thus, were not patentable. The first classical patent was granted to Louis Pasteur in 1873 for a process of fermenting beer that was of superior quality and was made in higher amount by the exogenous addition of yeast. Dr. A.M. Chakrabarty's won the famous Diamond-Chakrabarty case in the US Supreme Court in 1980 to patent his modified "Oil eating bugs" and since then many patents on genetically modified microorganisms have immerged.

In India Biodiversity research gets the Prime Minister Dr. Manmohan Singh's push and he announced that Rs. 250 crores ($50 million) would be earmarked for this important activity. This huge support came while he was inaugurating an UN Conference on Biodiversity in Hyderabad, India. Thus, there is a changing trend in the research on the microbial world around the globe and many more new ways to use the power of the single celled microbial cells will come up in different fields like medicine, drugs, high value compounds production and in removal of toxic pollutants from the environment. In India we have an IDA in IMTECH, Chandigarh and good progress is made in the conservation of microbial diversity.

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