



## Patenting Lives Life Patents: Culture and Development

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### Book Review

The book is about the life patents based on the concepts of Patenting. In the introductory part “Patent Publics, Patent Cultures” by Johanna Gibson, the cultures of patent laws, life patents, patenting lives, patent public and the structure of patenting lives are considered. Distinction between copyright and patent has been described related to creativity of cultural goods and technical skills of utilitarian economic goods respectively. Here emphasis has been made on ‘Patenting Lives Project’. This project involved interdisciplinary expert group which met in 2005, who made it diverse and divisible in the public context. The aim of the Patenting Lives Project and of this collection is to try and facilitate public responses to life patents and understanding the relationship between public perceptions, the creation of the market, and environmental questions. Agreement on Trade Related Aspects of Intellectual Property mandates that patent protection must be extended to all fields of technology (Article 27.1) including biotechnology. Regarding biotechnology inventions should be based on gene sequences or whole organisms- the so called ‘life patents’. Structure of this book comprises of five parts which are: Context by Tony Howard, Human Rights and Ethical Frameworks by Kathryn Garforth, Medicine and Public Health by Luigi Palombi, Traditional Knowledge and Biotechnology by Chika B. Onwuekwe and Daniel Robinson, and Agriculture by Diwakar Poudel and Fred Hakon Johnsen.

In first part, “Context” in chapter 1, “The Legal Framework Surrounding Patents for Living Materials” by ‘Tony Howard’ writes about the intellectual property rights considered as industrial property, patents and patent laws. The IP rights awarded to individuals or organizations over creative works like, inventions, literary and artistic works, symbols, names, images and designs, give the creator or inventor the right to prevent others from making unauthorized use of their property for a limited period. The author enlightens the context of Europe, where the European Patent Convention along with TRIPS Agreement and Patent Law Treaty, which entered into force on 13<sup>th</sup> December 2007, set patent laws. Article 3(1) of Directive states that, inventions that are new, novel and applicable to industrial use are patentable and Article 4(1) and (2) states that animal and plant varieties should not be patented. The industrial application must be specific, substantial and credible (UK Intellectual Property Office). WIPO and UNESCO applied the model to protect the traditional knowledge; concept of farmers’ right was introduced by Food and Agricultural Organization in 1989.

In part second, “Human Rights and Ethical Frameworks” in chapter 2, “Life as Chemistry or Biology? An Ethic of Patents on Genetically Modified Organisms” by Kathryn Garforth, conceptualize triptych (ethics, biotechnology and patent law) mostly related to the Genetically Modified Organisms (GMO). The core interest of the ethical panel was about the debate related to materialist and vitalist

understanding of life. For clarification of life concept the author had described the DNA (deoxyribonucleic acid), and relation of chemistry and biology. Vitalism and materialism suggest a series of antonyms like autonomy and control, uniqueness and fungibility, and sanctity and violability. For patenting life, Canadian and American patent law comes forward that set some requirements in order to obtain a patent. In 1980, the US Supreme Court ruled that living organisms are patentable as long as they fit within the definition of invention in the patent legislation. US Supreme Court made decision that ‘anything made under sun is by man’ is patentable. The terms ‘manufacture’ and composition of matter’ in the definition of invention, were expanded to ‘higher life forms’ namely plants and animals. There was debate on giving patent between Harvard College and Pioneer Hi –Bred v. Canada. In 2002, the Supreme Court of Canada denied the patentability of higher life forms in its decision in Harvard.

In chapter 3, “The Right to Development, African Countries and the Patenting of Living Organisms: A Human Rights Dilemma” by Adejoke Oyewunmi had made curiosity about the discrimination for the developing countries with reference to the Africa continent. The developed North has much expenditure on research and development; hence it has become dominated in the IP rights in the international context. Organizations like UDHR (Universal Declaration of Human Rights), ICESCR (International Covenant on Economics, Social and Cultural Rights) and ACHPR (African Charter on Human and Peoples Rights) have lighted on the human rights also between private and public values, and it is stated that everyone has the right to freely participate in the cultural life of the community. Africa among developing countries faces problems like unemployment, hunger, diseases; efforts were made by African Union, Organization of African Unity (OAU) for such above challenges. Regarding life patents, two patents systems in Africa were, African Industrial Property Organizations (ARIPO) and African Intellectual Property Organizations (OAPI) which were regional under which patenting life forms have excluded from the scope of protection.

In chapter 4, “The Genetic Sequence Right: A Sui Generis Alternative to the Patenting of Biological Materials” by Luigi Palombi explains about the complexity of patenting life forms and their related substituents like genes, proteins etc. here the author had given the concept of infringement which means a trespass in patent law. Two patent claims are described with reference to patenting life which is: The Absolute Genetic Patent Claim and The conditional genetic patent claim which gives ownership to the product (gene) isolated from its natural environment (e.g. hepatitis C virus gene) and if it is directed to the isolated genetic sequence as a component in a process or method (erythropoietin). This chapter provides the creation of genetic sequences right as a sui generis system of intellectual property.

Chapter 5, “Forfeited Consent: Body Parts in Eminent Domain” by Angela A. Stanton, provides the clarification of the ownership on the

body parts in human context. The author had cited the example of Moore, whose blood was used for research purposes without his consent by his physician David W. Golde. Moore filed a case against Golde about the conversion but later on court has made decision that body parts removed, lacks the ownership of that person on them.

In Part 4, "Traditional Knowledge" chapter 6, 'Beyond Protection: Promoting Traditional Knowledge Systems in Thailand' focus has been made on the conservation of the traditional knowledge in context of Thailand. The Convention of Biological Diversity (CBD), regarding the protection, promotion had made working groups. The author has listed some common threats to the traditional knowledge like: tourism, government policies, land shortages, land rights, poverty, and loss of biodiversity. In case of patent laws Thailand has opted to exclude naturally existing micro-organisms and their components, animals and plants and their extracts from patentability.

The chapter 7, "Plant Genetic Resources and the Associated Traditional Knowledge: Does the Distinction between Higher and Lower Life Forms Matter?" by Chika B. Onwuekwe, describes about the patent laws difference between higher and lower life forms. The two cases of Harvard onco-mouse and Monsanto Canada v. Schmeiser were taken which were held by the Supreme Court of Canada which were analyzed whether to be patentable or not. Traditional knowledge on the uses of the PGR (Plant Genetic Resources) is not a public good. The intention of CBD and FAO International Treaty on Plant Genetic Resources for Food and Agriculture on PGR status and associated TK will strengthen the nation.

The part 5; 'Agriculture' consist of chapter 8, "Analysis of Farmers' Willingness to Pay for Agro biodiversity Conservation in Nepal" by Diwakar Poudel and Fred H. Johnsen addresses the conservation pattern of agro biodiversity in Nepal and the willingness of farmers to pay for their benefits regarding genetic resources and their conservation. The CBD, emphasis the need for conservation, which can be in situ, ex situ or community gene bank. For measuring the WTP, economists define two methods which are Travel Cost Method (TCM) and Contingent Valuation Method (CVM), with the result that WTP for important crop genetic resources was higher than the less important ones with the example of rice landraces.

In the final chapter 9, "Is More Less? An evolutionary Economics Critique of the Economics of Plant Breeds' Rights by Dwijen Rangnekar, he says about the plant breeders' rights which have excluded from the traditional patent law rules. The protection of Plant breeders' rights has achieved socio-economic assent and a sui generis multilateral treaty for the protection of new varieties.

In the concluding remarks, about the book is all about the debates regarding life and its constituents whether patent laws are moral for it or not, without arising the ethical issues. The mostly organizations regarding the formulation and implementation of such life patent laws are mostly European, which has a profound effect on the developing countries. In the book, the bio-dynamics of natural laws for the eco-green life patents and regulations are not presented.