CONTENTS
(Nominal)

Chapter – I  Introduction 1-13
Chapter – II  Origin and growth of Patents 14-92
Chapter – III  Patentability 93-150
(General understanding of patent protection by a comparative study among USA, EU (UK) and India)
Chapter – IV  Nuances of patent protection with modern technologies : Biotechnology 151-210
Chapter – V  Conclusion and suggestions 211-225

Appendices

Bibliography
CONTENTS

(Detailed)

Chapter

1. INTRODUCTION

1.1 General Introduction
1.2 Significance of the problem
1.3 Objective of the study
1.4 Scope of the study
1.5 Limitation of the study
1.6 Hypotheses
1.7 Methodology adopted
1.8 Review of literature
1.9 Scheme of the study

2. ORIGIN AND GROWTH OF PATENTS

2.1 Introduction of Intellectual Property Rights
2.2 Historical background and world wide reasons for the development of patent system
   2.2.1 Awards and Wages
2.2.2 Privileges and Monopolies
2.2.3 Modern Individual Property Rights
2.3 Development of Patent law in different countries
   2.3.1 Europe-Republic of Venice
2.3.2 Germany
2.3.3 France and Netherlands
2.3.4 Switzerland
2.3.5 United Kingdom
   a. Statute of Monopolies
   b. Legislative developments
   c. Patent prosecution
   f. Later Developments
2.3.6 USA
2.3.6.1 Judicial activism
2.3.6.2 Patent Laws after 1952

2.3.7 India
2.3.7.1 Dr. Bakshi Tekchand Committee
2.3.7.2 Justice Rajagopal Ayyangar Committee
2.3.7.3 Basic Principles underlying the Indian Patent Act, 1970
   a. Invention must be new and useful
   b. Invention not patentable
   c. Consideration for grant
   d. Commercial working of inventions
   e. Abuse of patent monopoly
   f. Avoidance of restrictive conditions
2.3.7.4 TRIPs and India
   c. Patent Amendment Act, 2005

2.4 Efforts to make a uniform level of international standard of protection
2.4.1 Paris Convention
2.4.2 European Patent Convention
2.4.3 Regional Patent
2.4.4 Patent Co-operation Treaty
2.4.5 Other Regional Patent Organizations
2.4.6 TRIPs regime
   2.4.6.1 Provisions relating specifically to patents
   2.4.6.2 Provisions on Enforcement of IP Rights
   2.4.6.3 Deadlines for implementation
   2.4.6.4 TRIPs Implementation – Changes to Patent laws
2.4.7 Status in Individual Countries
2.4.8 Grant and Enforcement of Patents
2.4.9 Compulsory Licensing
2.4.10 International Organizations efforts
2.4.11 The patent law Treaty (PLT)
2.4.12 The substantive patent Law Treaty

3 PATENTABILITY
(General understanding of patent protection by a comparative study among USA, EU [UK] and India)

3.1 Introduction
3.2 National Patent systems
3.3 USA
  3.3.1 Patentable inventions
  3.3.2 Patent - monopoly
  3.3.3 Novelty
  3.3.4 Nonobviousness
    3.3.4.1 Inventions – Ideas
    3.3.4.2 Nonobviousness with novelty and utility
    3.3.4.3 Microbiological inventions
  3.3.5 Utility
  3.3.6 Utility and operability
  3.3.7 Utility of chemical compounds and process
  3.3.8 Utility of biotechnological inventions
3.4 Europe
  3.4.1 European Patent Convention
  3.4.2 Novelty
  3.4.3 Inventive Step
  3.4.4 Industrial Application
  3.4.5 Specific exceptions
3.5 India
  3.5.1 Novelty
  3.5.2 Inventive step
  3.5.3 Industrial Application
4. NUANCES OF PATENT PROTECTION WITH MODERN TECHNOLOGIES: BIOTECHNOLOGY

4.1. Introduction
4.2. Definition of Technology
4.3. Technology and Society
4.4. Modern technologies
   4.4.1. Nanotechnology
   4.4.2. Information technology
   4.4.3. Biotechnology
4.5. Biotechnological inventions
4.6. Development of Biotechnology
4.7. Biotechnology in Science
4.8. Field Biotechnology
   4.8.1. Commercial Biotechnology
   4.8.2. Structure of Biotechnology Industry
   4.8.3. Commercial Biotechnology in USA
   4.8.4. Commercial Biotechnology in Europe
4.9. Biotechnology and Patents
   4.9.1. Biotechnology Patenting in USA
       4.9.1.1. Vitamin technologies case
       4.9.1.2. Bergy case
       4.9.1.3. Chakraburty case
       4.9.1.4. Exparte Hibbered case
       4.9.1.5. Oncomouse case
       4.9.1.6. Pioneer Hi-bred International Inc., case
       4.9.1.7. Bayh-Dole Act
       4.9.1.8. Amgen Inc., case
       4.9.1.9. Biotechnology legislative development
       4.9.1.10. USPTO Biotechnology Guidelines, 2001
4.9.2. Europe

4.9.2.1 Relaxin case
4.9.2.2 Plant Genetic Systems case
4.9.2.3 Transgenic plant case
4.9.2.4 Oncomouse case
4.9.2.5 Biotechnology Patenting Directive
4.9.2.6 Modified animal case

4.9.3 India

4.9.3.1 Essentials of patent in biotechnological inventions
4.9.3.2 Novelty
4.9.3.3 Inventive Step
4.9.3.4 Utility

5. Findings & Suggestions