

UNIVERSITI TEKNOLOGI MARA

**THE PATENTABILITY OF GENES
AND GENE RELATED INVENTIONS
AND ITS EFFECTS ON THE
ADVANCEMENT OF MEDICAL
RESEARCH IN MALAYSIA**

FARIZAH MOHAMED ISA

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is a result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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Name of Student : Farizah Bt Mohamed Isa
Student I.D. No. : 2011276554
Programme : Doctor of Philosophy – LW991
Faculty : Law
Thesis Title : The Patentability of Genes and Gene Related Inventions and Its Effects on the Advancement of Medical Research in Malaysia

Signature of Student : 
Date : December 2020

ABSTRACT

The evolution of modern biotechnology in recent years, have made this industry a lucrative venture. Patents play a huge role in ensuring that the returns of investment for companies and investors are guaranteed. The issue of patenting of biotechnological inventions, particularly naturally occurring biological materials such as living organisms, particularly genetic sequences has spawned a number of endless debates and litigation across the globe. These conflicts have left legislators baffled as they struggle to strike a right balance between protecting public interests and private rights. Adversaries to patents of such nature argue that gene sequences are product of nature, not human inventions and as such their discoveries do not entitle anyone to the exclusive rights conferred by patents. Opponents of DNA patenting also contend that allowing such patents, does more public harm than good as it hinders medical breakthroughs which could save lives. They claim that instead of promoting innovations, it stifles scientific research and hurts patient care due to the exorbitant costs associated with using patented data. However, promoters of gene patents object the notion that gene sequences are mere discoveries. They assert that substantial time and efforts are expended in isolating and studying a particular gene sequence, to find its use and chemical make-up for the benefit of mankind, and such noble efforts merit reward and recognition in the form of patent rights. The Malaysian Patents Act 1983 as it stands now, does not provide clear guidance on the patenting of biotechnological inventions per se. Although there are some exclusions on the matter, the current position in Malaysia with regard to inventions in the field of biotechnology is still vague. This research explores the pertinent issues regarding gene patents and endeavours to suggest changes to the Patents Act 1983 in order to strike a balance between the progress of medical science and the protection of investments and scientific efforts for the Malaysian researchers and industries in particular, and mankind in general.

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TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
LIST OF FIGURES	xi
LIST OF CASES	xii
LIST OF ABBREVIATIONS	xvi
CHAPTER ONE: A STUDY ON THE PATENTABILITY OF GENE AND GENE RELATED INVENTIONS AND ITS EFFECTS ON THE ADVANCEMENT OF MEDICAL RESEARCH IN MALAYSIA	
1.1 Introduction	1
1.2 Background of Research	2
1.3 The Malaysian Biotechnology Policy	3
1.3.1 The Malaysian Biotechnology Industry	5
1.4 The Malay Human Genome Project: Malaysia	6
1.5 The Rise of Gene Patents	8
1.6 Definition of Genes and Gene Related Inventions	10
1.7 The Issues Relating to Gene Related Inventions	11
1.8 The Malaysian Aspect	12
1.9 Research Questions	13
1.10 Research Objectives	14
1.11 Scope of the Study	14
1.12 Significance of the Study	15
1.13 Research Methodology	15
1.14 Limitation of the Study	16
1.15 Conclusion	16