

**AN OVERVIEW OF THE LEGAL, ECONOMIC AND
TECHNOLOGICAL ASPECTS OF INTELLECTUAL
PROPERTY IN ZAMBIA AND THEIR COMPLIANCE
WITH INTERNATIONAL STANDARDS**

**A DIRECTED RESEARCH SUBMITTED TO THE SCHOOL OF
LAW OF THE UNIVERSITY OF ZAMBIA IN PARTIAL
FULFILMENT OF THE AWARD OF THE DEGREE OF
BACHELOR OF LAWS (LL.B).**

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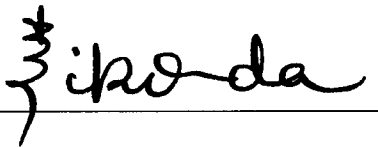
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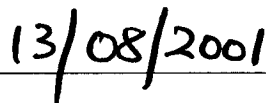
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PREFACE

In view of the obvious importance of intellectual property in every aspect of our personal and social lives, interested laymen and students who have sensed that something exciting is going on here would like to have a simple introduction - a guide to orient them in the exploration of this important area. This is what this study seeks to achieve.

At the attainment of independence on 24th October 1964, Zambia had one of the strongest economy in the region. But due to both internal and external factors, she is one of the poorest countries in the world today. In its quest to improve its economy, she has embarked on various economic policies dictated by the Western World such as structural adjustment program, privatisation and regional integration through free trade areas. These have not yielded the desired results of development.

It is therefore submitted that perhaps the answer to improved social, cultural, technological and economic welfare of the nation lies in one of the most over looked areas of human endeavour intellectual property. The most valuable natural resource of any given nation is it's human resource which invariably is the source of intellectual property.

The maximization of the exploitation of intellectual property would provide answers and solutions to the unique problems experienced by third world nations such as Zambia. This calls for adequate legal protection of the resultant intellectual property rights to ensure a constant source of solutions. Lack of a comprehensive mechanism of protection has resulted in the diminished exploitation of this branch of law. Adequate protection of

intellectual property provides a conducive atmosphere to attract the much needed foreign investment and foster economic development.

Intellectual property is one of the most fundamental pillars to technological development through the patent system. The patent system encourages local investment and domestic technology to acquire an economic face. This is only attainable were there is a firm and comprehensive legal framework.

Though intellectual activity can be traced to the first man created, the concept of intellectual property law is a relatively new branch of law in the developing countries and it has not received the attention it deserves. This is largely due to the misconception that it is not viable for the improvement of the nation. This may be attributed to either ignorance of its importance or lack of understanding of its scope and use.

The above factors put together necessitate an evaluation and analysis of Zambia's intellectual property laws and their significance to the economic and technological aspects especially in light of the minimal results yielded through other economic policies on by the government.

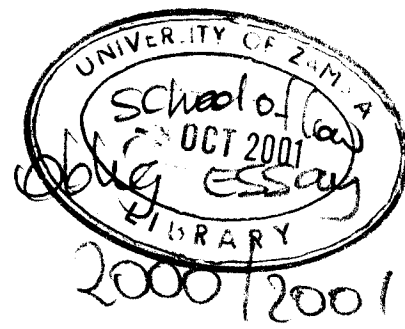


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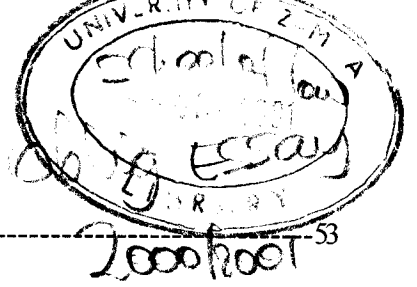
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The acknowledgement would be incomplete without making a special mention of my family. To my parents thanks for giving me the freedom to choose what I wanted to do. You are my source of inspiration and I love you so much. My brothers Kelvin, Geoffrey, Dickson and Anthony and one and only sister Aggie you mean a lot to me. Thanks for your encouragement.

Uncle Michael, you are more than an Uncle you are my best friend and thanks for everything I have learned from you. You are simply the best.

My journey through campus was long such that friends are many and enemies are few. Therefore, to all my friends and relatives I have forgotten to mention, I say thanks a lot and forgive my over sight.

I extend my tremendous gratitude to Mrs. Tonga for having the patience to type my work and working odd hours to complete on time. This work is a result of your diligence and effort.

Last but most importantly, I thank God for all he has done for me. With God nothing is impossible.

CHAPTER ONE

INTRODUCTION

“The state of a man’s mind is as much as a Fact as the State of his digestion.¹ The mind being the seat of a man’s conscience, It harbours innovative ideas which in certain circumstances are peculiar and may be attributed to the individual so exercising his mind. The expression of such ideas should thus be regarded as belong to such individual like any other form of property. But owing to the fact that this form of property is a product of an individuals intellect activity it is classified as intellectual property. In its literal sense intellectual property is about the product of the mind. According to Merville;

“This form of property concerns newly created things which necessarily are unique. However, far from being against the public interest, the creation of these new and useful or artistic things or of new processes is of the essence of life itself, which constantly renews itself in nature, producing in a way, new forms of life which represent an advance on what has been in the past.”²

It therefore follows that (if) necessity is the mother of intellectual property, (then idleness is often the father)

Intellectual property according to Phillips and Firth has two descriptions, the colloquial and legal description. The colloquial description is that it simply comprises all those

¹ EDINGTON V. FITZMAURICE (1885) 29 Ch. D. 459 at P483

² Merville L.W., Forms and Agreements on Intellectual property and International licensing, 3rd Edition, Sweet and Maxwell, London, 1979 P5

things, which emanate from the exercise of the human brain such as ideas, inventions, poems, designs and microcomputers. The legal description focuses upon the rights which are enjoyed in the produce of the mind, rather than upon that produce itself.³ The most plausible description of the subject of intellectual property is that it is the least tangible of all forms of property. Referring to it Merville points out that it is diffuse and indefinite in scope and speculative in value.

However, this property gives rise to legal rights in rem, that is, rights which are sustainable against an indefinite class of persons. Most forms of intellectual property are classified as choses-in-action. According to Channell J. in Torkington V. Magee⁴ Choses in action describes all personal rights which can only be enforced by action and not taking physical possession. But a different view is expressed by Merville who provides that the appropriate classification is that they are choses-in quasi- possession. The reason is that they are quasi-possession because the right is incorporeal and they are rights in possession because the holder of the right may create sub-rights out of them in favour of others by a grant under his hand.

Intellectual property relates to human activity precipitated by individual skill and labour either expressed for its own sake or upon some material, either in an art ^{form} or a functional thing such as a newly invented mechanical device. It denotes the legal rights which emanates from the intellectual activity in the industrial, scientific, literary and

³ Jeremy Phillips and Allison Firth, Introduction To Intellectual Property Law, 3rd Edition, Butterworths, London, 1995. P3

⁴ (1902) 2KB 427

artistic fields. According to the World Intellectual Property Convention of 1968 Article 2 (viii) the subjected matter of intellectual property is defined as the rights relating to:

- ◆ Literacy, artistic and Scientific works
- ◆ Performances of performing artists, phonograms and broadcast;
- ◆ Inventions in all human endeavours;
- ◆ Scientific discoveries
- ◆ Industrial designs
- ◆ Trade marks, service marks and commercial names and designations
- ◆ Protection against unfair competition;

And all other rights resulting from intellectual activity in the industrial, scientific, literary and artistic fields.

On the basis of the foregoing, intellectual property is traditionally divided into two branches, that is, industrial property on the one hand and on the other hand there is copyright and its neighbouring rights. The first two categories mentioned above belong to the latter while inventions, industrial designs and trade marks, service marks, commercial names and designation belong to the former. Also included in industrial property is protection against unfair competition because repression of unfair competition is included among the areas of the protection of industrial property.⁵

⁵ Article 1 (2) Of The Paris convention.

Copyright is the simplest form of intellectual property since it arises automatically as a right vested in an author of an original work immediately it is created. Copyright covers cultural artefacts from the areas of education, entertainment and the arts. It is generally accepted that copyright is not a monopoly but merely a right to prevent others from copying. A detailed and comprehensive analysis of copyright & neighbouring rights is the subject of discussion in the next chapter.

In the area of industrial property, inventions are protected by patent laws. Inventions have been defined as “new solutions to technical problems where as industrial designs are aesthetic creations determining the appearance of industrial products.”⁶ Owing to the fact that inventions usually contain an inventive idea, the protection that is sought is for the inventive concept. This must be clearly defined to show exactly what it is that is protected.

Applying the same principle, the creative idea underlying the creation of a business of a good repute, known by a particular name or mark must be protected. This is also the realm of intellectual property in that it too needs protection by means of Trade mark or service mark laws.

As stated in the WIPO Convention, also included in the arena of intellectual property is scientific discoveries. These have been defined in Article 1 (I)(i) of the Geneva Treaty On The International Recording of Scientific Discoveries (1978) as “the recognition of

⁶ INTELLECTUAL PROPERTY READING MATERIAL 2ND Edn. WIPO Publication, Geneva, 2000. P4.

Phenomena, properties or laws of the material universe not hitherto recognized and capable of verification.”

It is apparent from the foregoing that intellectual property is an encompassing field and affects all aspects of human endeavour. Thus, if properly nurtured it can play a fundamental role in the development and economic process of a nation. The most plausible exposition of its significance is that; “Intellectual property law play a vital part in the physical well being of the individual and in the commercial vitality of the economy”.⁷ Of essence in the appreciation of intellectual property is the understanding that proprietors of these rights derive no financial benefit from it except by using it commercially.

LEGAL ASPECT OF IP

The Intellectual property system seeks to protect and reward innovative and creative activity. The basic mechanism for achieving this is the creation of intellectual property rights (IPR) which confer temporary monopoly rights on the creator work. The term monopoly in intellectual property must be distinguished from the trade monopolies. The distinction between the two is eloquently stated by Merville as follows;

“We need to speak of creative monopolies, which apply to new creations, and mortmain monopolies which arise from the acquisition of all or the major part of sources of supply of a product or service, and which by stifling competition, hold the public to ransom.

Creative monopolies are narrow in application and must compete with existing articles or services to which they claim to be an improvement. They encourage competition by showing how a product or a service may be better produced or carried out either at less cost or having some other advantage”⁸

The underlying factor for the temporary monopoly right is that a person should owe the fruits of his labour. As a consequence men sought the protection of the law for their intellectual fruits. It is in this regard that this study will incorporate the legal aspect of intellectual property. The legal aspect is what appropriately constitutes intellectual property Law and ensures protection of these rights so as to enhance economic, social cultural and technological development. Therefore, there is need for an effective system of protection of these rights and creation of a conducive environment through legislation if intellectual property is to flourish. The domestic legislation governing the different branches of intellectual property in Zambia are The Patents Act,⁹ The Trade Mark Act¹⁰, The Copyright and Performance Rights Act¹¹, Industrial Designs Act and the Competition and Fair Trading Act.¹² These statutes collectively form the foundation for the study of the legal aspect of intellectual property from a domestic perspective.

According to a WIPO Publication, a country has laws to protect intellectual property for two main reasons. Firstly, to give statutory expression to the moral and economic rights of creators in their creations and such rights of the public in access to those creations, and

⁷ Phillips & Allison Firth, O.P ~Cit, P.7.

⁸ Melville, OP CIT

⁹ CAP 400 OF THE LAWS OF ZAMBIA

¹⁰ CAP 401 OF THE LAWS OF ZAMBIA

¹¹ CAP 406 OF THE LAWS OF ZAMBIA

secondly to promote, as a deliberate act of government policy, creativity and the dissemination and application of its results to encourage fair trading which would contribute to economic and social development.¹³

The preceding paragraphs have brought to the fore the notion that the marked tendency under modern conditions is to reach answers about the proper scope of protection of intellectual property by political decision expressed primary in legislation. Though intended to protect intellectual property rights, the law further serves the public interest by imposing restrictions to prevent abuse of the right conferred.

THE TECHNOLOGICAL ASPECT OF INTELLECTUAL PROPERTY (INTERSECTION BTN IP & TECHNOLOGY)

Intellectual property has as one of its constituent component intellectual activities in the industrial and scientific field, which invariably relate to technology. Referring to technology, Steven Langdon said, in it's broadest sense it may be considered to be specialised knowledge related to production."¹⁴ It may take the form of technical skill, machinery, equipment and inventions. Technology is an abstract concept embracing both the tools and machines used by a society and the relationship between them implied by their use. Machines and tools are objects selected or fabricated by man as a means of changing the state of his material environment.¹⁵

¹² CAP 417 OF THE LAWS OF ZAMBIA

¹³ WIPO Publication, OP Cit, P3

¹⁴ Langdon, S. Technology Transfer by MNC's in Africa, Effects on the Economy: Africa Development, Vol 11 No. 2 April –June 1977. P64

¹⁵ David Dickson, Alternative Technology and Politics, 1974, P. 17

In Galbraiths' view, technology is "the systematic applications of scientific or other organised knowledge to practical tasks."¹⁶

Technology, therefore, represents something unique, new and useful whose creation is of essence to life itself. Hence, it is inseparable from intellectual property in that it is always the product of man's intellectual activity precipitated by necessity. Necessity being the mother of (invention) it has paved way for the technological revolution, which is characterized by a production of improved tools, exploitation of electronic and advanced Chemistry. All this technology is a fruitful product of intellectual property and it plays a vital role in the vitality of the economy. Its importance is that;

"Technological progress is a necessary condition for economic development because it enables a more productive use of the factors of production".¹⁷

Recognizing the importance technology plays in the development of any nations economy, it is submitted that:

"the developing nations are exhibiting a desire to build their economy, and, instead of purchasing products, they are demanding the technology to enable them to manufacture their own products. Thus, has grown the concept or technique of technology transfer."¹⁸

¹⁶ J.K. Galbraith, *The New Industrial State*, Harnish Hamilton, London 1968. P.12

¹⁷ Lall, S. The patent system and Transfer of Technology to less Developed Countries, *Journal of World trade*, Vol.10, No. 1 Jan – Feb – Feb 1976 P.2

¹⁸ Melville, *Op Cit* P7

In relation to technology transfer it has been argued that generally technologies are seen to be transferable in space and time, and failure to successfully transfer and adopt a new technology is generally blamed upon the unwillingness of the recipients to change their ways in the face of progress. This unwillingness is based on cultural barriers to the spread of any new technology.¹⁹

But a picture, which is more reflective of the truth, is that technological transfer is more desirable and lucrative only where there is a strong regime of intellectual property laws. This is evident by the reluctance by developed nations to invest and develop technology in countries with a weak or non-existent intellectual property law regime.

The impact of technology on the different branches of intellectual property can be described as ambivalent in that new technologies, though a product of intellectual activity have imposed very considerable strains on the traditional conceptions of intellectual property itself. Accordingly, Webster and Parker advance a compelling argument that

“the effect of new technology on the intellectual property system is that it will continue to pose serious problems for the traditional categories of intellectual property long in the future. Although particular areas may well settle down and become easier to handle as they mature, it seems probable that many future technologies will sit uneasily in the intellectual property system”²⁰

¹⁹ Ben Turk (Ed), Development in Zambia, Zed Books Ltd, London 1979, P88

It is apparent from the foregoing that technology being a product of intellectual activity it may nonetheless wear down current notion of intellectual property beyond levels of resuscitation. It is in this regard that the technological aspect of intellectual property will be accorded the most dignified of attention.

THE GENERAL ECONOMIC ASPECT OF INTELLECTUAL PROPERTY

There is a correlation between the technological and economic development of any nation. The proceeding paragraphs have sown the seed of a fertile discussion that the acquirer of intellectual property rights can derive no financial benefit except by exploiting it commercially. The commercial vitality of intellectual property is the foundation for a discussion of its economic aspect. The economic aspect is two-fold; Firstly, it relates to the economic interest of the creator in his creations and secondly, to the wider application of intellectual property to contribute to the economic and social development of the nation as a whole.

The economic rationale for intellectual property from an individualistic view is that if these rights are not protected, the levels of innovation in society would reduce below that deemed socially optional. Whatever form of innovation, it requires up front costs. Therefore, in order to recover this initial expenditure, the price for the innovation must exceed the level of marginal cost. In order to achieve this, some degree of monopoly must be conferred on the creator of that innovation. This monopoly is achieved through intellectual property rights. Without such provision, the consequence is that “imitation

²⁰ Andrew Webster and Kathryn Parker (Ed), Innovation and The Intellectual Property System, Kluwer Law International Ltd, London, 1996, P6.

and copying might compete away and monopoly profits and innovators would fail to recoup initial costs, and future innovative activity would be discouraged.”²¹ In this regard, intellectual property laws plays a significant role in the well being of the individual creator.

In relation to the second aspect, the transfer of foreign technology and stimulation of domestic technology is essential for the improvement of the nations' economy and bridging the gap between the developed and developing world. According to Mark Leese;

“there is a broad consensus, albeit not without dissenting voices that the protection of intellectual property serves to stimulate the economy.”²²

Margaret Llewelyn referring to intellectual property said it has long been accepted as necessary to a thriving economy and its importance within the market place has grown accordingly.²³ An economy that is able to create its own intellectual property must be able to export it. Thus, it is imperative for the economic well being of any country to guard against a massive outflow of funds by providing a commercial environment in which the creation of intellectual property (IP) is rewarded. This has been perhaps the most important function of intellectual property law.²⁴

An effective system can therefore be used as a vehicle for importing and exporting technology which in turn stimulates economic development. This is essential for the

²¹ Ibid P 48

²² Ibid P 171

²³ Ibid P 193

growth of a nation participation in both the economic and industrial world order. In light of the aforesaid, it is imperative that the economic aspect of intellectual property has also been accorded the most dignified of attention in this study.

INTERNATIONAL CHARACTER OF INTELLECTUAL PROPERTY

The concept of intellectual creativity transcends all geographical barriers in that it is peculiarly international in nature. No civilized society can exist in which there is no intellectual creativity either in the form of solutions to technical problems or merely an expression of the ideas as an index for information on the cultural, social, political or economic activities of that particular society. As typified by Melville, its subject matter is abstract in nature with universal application. This universality has precipitated a need for the harmonization of the rules governing intellectual property. This presupposes a 'body of international rules which set the standards to be complied with by the international community. The justification for the above proposition is that;

“The harmonization of research, production and trading relations across all industrial sectors has meant that the protection of intellectual property within and between states has required a parallel global focus.”²⁵

Owing to the universality of intellectual property, there has also arisen the need to seek its protection across borders since its infringement knows no boundaries. It should however be noted that some types of intellectual property are protected only territorially e.g. patents.

²⁴Jeremy and Phillips, Op Cit P8

²⁵ Webster and Parker, Op Cit, P3

A consequence of globalization of intellectual property is that the proprietor of intellectual property rights (IPR's) can seek the indulgence of protection of the right either through national, regional or indeed international fora. This prompted nations to secure IPR's through the harmonization initiatives made first by the World Intellectual Property Organisation (WIPO) and then the General Agreement On Tariffs and Trade (GATT).

The resultant International Conventions set the minimum standards to be complied with by member states which are party to the convention. These include, but not limited to the following, the Paris Convention for the Protection of industrial property (herein referred to as Paris convention), the Berne Convention for the protection of literary and Artistic Works (the Berne convention), the WIPO copyright Treaty, Patent Cooperation Treaty, the Madrid Agreement concerning the International Registration, the Trademark Law Treaty, the WIPO Performance Phonograms Treaty, the International convention for the protection of performers, producers of phonograms and Broadcasting Organisations (the Rome convention), and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS).

Zambia forms part of the global village and as such, there is need to harmonise its intellectual property laws in order to comply with international standards as provided in those treaties to which it is a party and become a member state to those treaties it has not

signed and ratified. It is through such efforts that Zambia can fully participate in the global intellectual property regime.

CONCLUSION

At the expense of sacrificing expediency for clarity it is contended that the correlation between the laws, technology and the development of the economy in a country like Zambia cannot be exaggerated. And if at all there is one medium in which these three fields of human endeavour can interact and bring to bear the desired fruits of development, it is in the arena of intellectual property. As provided by Reynold;

Development is a multi-dimensional process and it does not only entail closing the gap of economic growth but also calls for a sustained commitment to uplifting the general social, cultural and political standards of a people”²⁶

And this can only be achieved by the involvement of people themselves who in essence are the raw materials for intellectual property.

²⁶ L.G. Reynold, 'Is Development Economics a Subject; Cited by W. Markhan and G.F. Papanek (Ed), Industrial Organisation and Economic Development, Houghton Mifflin Co. New York, 1970 PP. 321 - 322

CHAPTER TWO

SCOPE AND AIMS OF COPYRIGHT

As a branch of intellectual property, copyright seeks protection of a wide variety of subject matter of intellectual creativity. The bastion of this protection was aptly stated by Peterson J. in University of London Press V. University Tutorial Press Ltd¹ when he said;

“...there remains the rough practical test that what is worth copying is prima facie worth protecting”

Thus, the *raison d'être* of Copyright Law is to prevent others from taking unfair advantage of a person's creative efforts. Copyright confers protection by way of exclusive rights in respect of two kinds of activity;

- i. In the making of and dealing with physical copies of the protected work, and;
- ii. The giving or making of public performances, broadcast and cable transmission of work²

It has been argued by Graig Joyce, et al, that copyright establishes the conditions for the existence of a market, in information and it performs the allocational function of helping to determine who gets what where information resources are concerned.³

RATIONALE OF COPYRIGHT PROTECTION

Utilitarian Conception

¹ (1916) 2Ch. D. 601 at 610

² Peter Stone, Copyright Law in the U.K. and the European Community, The Athlone Press, London, 1990, P2.

³ Graig Joyce, et al, Copyright Law, 4th Edn, Mathew Bender and Co. Inc., New York, 1998, P.52.

The Utilitarian conception of copyright was eluded to in Twentieth Century Music Corp. V. Aiken⁴ per Justice Stewart that:

“The immediate effect of our copyright law is to secure a fair return for an authors creative labour. But the Ultimate aim is, by this incentive, to stimulate artistic creativity for the public good.”

To buttress the above proposition, Justice O’Connor in Harper and Row Publishers Inc. V. Nation Enterprises⁵ put the matter as follows:

“By establishing a marketable right to the use of one expression, copyright supplies the economic incentive to create and disseminate ideas.”

The Utilitarian conception is founded on an economic rationale in that it is important to have legal protection as an incentive if intellectual products are to be brought to the market. Faced with possible competition from pirated copies, the copyright owners may capitalize on his ‘lead time’ in penetrating the market to derive a sufficient profit for the their initial investment. But this may not always be guaranteed, thus the need for a grant of a limited monopoly right to the copyright owners. The exercise of this monopoly is prescribed by the law to avoid abuses such as manipulating the supply of the product in the market to create artificial shortage resulting in a less than optimal dissemination of information to the public. It is therefore submitted that;

“Copyright law should represent an economic trade-off between encouraging the optimal creation and distribution of work of authorship

⁴ 422. U.S. 151, 156 (1975)

⁵ 471, U.S. 539, 558 (1985)

through monopoly incentives, and providing for their optimal use through limiting doctrines.”⁶

LOCKEAN CONCEPTION OR COPYRIGHT

The protagonist of this conception of copyright is John Locke an English Philosopher of the eighteenth century. The theory is premised on the natural law justification for recognising property rights in works of authorship. This is rooted in the firm belief which remains unshaken over time that;

“the rights of authors to reap the fruits of their creations, obtain for their contribution to society, and to protect the integrity of their creations as extensions of their personalities”⁷

Translated in simple terms, this means proprietors of work should have the right to control its use and must be compensated or rewarded commensurate with the value of their contribution to society. The guidelines on how much control the author enjoys is delimited by copyright laws So that the interest of the proprietor and that of the general public are balanced.

RHETORIC MISAPPROPRIATION THEORY

According to this conception of copyright, intellect products must be protected for the reason that;

⁶ Graig Joyce, *op cit*, P 55.

⁷ *Ibid*.

“The very fact that someone has cared enough to appropriate the product of another mind must indicate that those products were worth something, and therefore deserving legal protection.”⁸

This theory is called the Rhetoric of misappropriation. With the foregoing proposition in mind, one cannot resist but embrace the need for copyright laws to ensure protection of intellectual products.

RHETORIC OF PUBLIC DOMAIN

The premise upon which this theory is founded is that;

“the existence of a robust, constantly enriched public domain of material not subject to copyright is a good in its own right, which our laws should promote at the same time as they provide incentives and reward creativity”⁹

By encouraging creativity, copyright ensures that at the end of the period of protection that work invariably falls into the public domain and becomes common property thereby benefiting society as a whole.

NEW ECONOMIC THEORY

A theory which is yet to come to full realization in most societies is the neo-economic theory which provides that “copyright is not so much a system of incentive to production

⁸ Ibid, P 58

⁹ Ibid P 59

and distribution of new works, but also a mechanism for market facilitation, for moving existing creative works to their highest socially valued use by enabling copyright owners to realise the full profit potential for their works in the market.¹⁰ Though not fully realised, the principles of this theory are inadvertently applied in modern societies and justify the existence of a regime of copyright laws.

SOCIAL DIALOGUE AND DEMOCRATIC DISCOURSE THEORY

This is one of the recently developed theories for the justification of copyright which has emerged with the advent of digital technology information. Accordingly, the copyright system is figured as a mechanism for promoting certain core values of civil society-such as openness, freedom, and diversity of expression – which are relatively new focuses of attention in the domain of intellectual property.¹¹

The proponents of this theory believe that copyright exists to some extent to promote the collective life of society and that mere reliance on an unregulated market in commodified expression will not necessarily further this end.

An elaborate and relatively comprehensive discussion of the rationale or justification of copyright in the preceding paragraphs has been necessitated by the need for a firm foundation upon which legal, technological and economic aspects of copyright will be analysed. The general consideration elucidated to above will assist in fitting the Zambian copyright regime in context and proper perspective.

¹⁰ Netahel, D.E., Copyright and Democratic Society, 106 Yale Law Journal, 283, (1996) pp. 308 - 9

¹¹ Graig Joyce et al, op cit, P 60

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Netahel, D.E., Copyright and Democratic Society, 106 Yale Law Journal, 283, (1996) pp. 308 - 9
Graig Joyce et al, op cit, P 60

CHARACTERISTICS OF COPYRIGHT LAW

There is a broad classification of the various types of copyright work. Copyright laws protect original works of authorship in literary, dramatic, musical and artistic works. In University of London Press V. University Tutorial Press (already cited) Peterson J. said for a work to be original, it must not be copied from another work, that is, it should originate from the author. This was further endorsed in Ladbroke (football) Ltd V. William Hill (Football) Ltd¹² by Lord Pearson that originality requires only that the work should not be copied but should originate from the author. Other works need not be original and these include film, sound recordings, broadcast, cable programmes, compilations and typographical arrangements. These can be described as derivative works.

Copyright is the simplest form of intellectual property in that it arises automatically as a right vested in the author of an original work immediately it is created whether published or not.¹³ There is no need for an official grant or registration and the work so created belongs to the author, or his employer or successor in title.

It is widely accepted that copyright does not confer a full monopoly on the proprietor but merely a right to prevent others from copying. But Melville argues that;

“Whilst this is true in theory, it presupposes that two artists might write the same novel, each work being insufficiently unlike the other to be

¹² (1964) I.W.R. 273; (1964) I All. E.R. 465. HL.

¹³ L.W. Melville, *Forms and Agreements on Intellectual property and International Licensing*, 3rd Edn, Sweet and Maxwell Ltd, London, 1979, P1

distinguishable. Since this is unlikely, we may regard copyright as a monopoly in practice.”¹⁴

Owing to the limited monopoly conferred by copyrights, authors enjoy a longer term of protection compared to that conferred by patents.¹⁵

Ownership of copyright is alienable in that it can be assigned, it may pass under a will or intestacy, or operation of Law or licensed to another person by the owner.

The rights enjoyed under copyright are economic rights and moral rights. The moral rights are independent of the economic rights.

For an act to amount to infringement the defendants article or performance must be actually copied directly from the plaintiffs work without authorization.¹⁶

They are however certain permitted acts, that is, acts which can be done in relation to a work protected by copyright without the permission of the owner which do not amount to infringement.

It must at all times be borne in mind that copyright does not protect ideas but protect only the expression of an idea in some material form;

¹⁴ Ibid.

¹⁵ The discussion of patents is the subject matter of the next chapter

THE LEGAL ASPECT OF COPYRIGHT

The marked tendency in modern societies is to reach answers about the proper scope of intellectual property by political decisions expressed primarily in legislation. Therefore, the majority, if not all-intellectual property rights (IPR) have a statutory basis and copyright is no exception.

The Copyright and Performance Rights Act (hereafter referred to as the Act)¹⁷ is the legislative source of copyright in Zambia. It's preamble provides that it is an Act to provide for copyright in literary, musical and artistic works, computer programs, audio- visual works, sound recording, broadcasts and cable programs; to provide for rights in performances and matters incidental to and connected to the foregoing.

SUBJECT MATTER OF PROTECTION

For a work to be protected, it must belong to subject to which copyright applies. This includes every production in the literary, scientific and artistic domain whatever the mode or form of expression.¹⁸ The Act provides that copyright is a form of property in the product of creativity and provides categories of work in which copyright subsists.¹⁹

These are;

- i. Original works in Literary, musical, artistic and computer programs domain,
- ii. Compilations,
- iii. Audiovisual works;
- iv. Sound recordings;

¹⁶ Peter Stone, Op Cit, P2.

¹⁷ CAP 406 OF THE 1995 EDITION OF THE LAWS OF ZAMBIA

¹⁸ Article 2 (1) of Berne Convention.

- v. Broadcasts
- vi. Cable programs
- vii. Typographical arrangements of published editions of literary works.

It should however be noted that copyright will not subsist in a Bill introduced in parliament or in an Act of Parliament.

Furthermore, for copyright to subsist in original Literary, musical or artistic works and computer programs, It must be recorded in writing or in some other form.

The other subject of copyright protection is right in performances, that is, performances right and recording right.²⁰

SUBSISTANTIVE PROVISIONS

It should be noted from the out that a detailed elucidation of the substantive provisions of the Act is beyond the scope of this work. This being the case, emphasis will nonetheless be placed on the salient provisions of the Act, which Act is divided into six parts in the following order. The first part is the preliminary sections containing the short title, interpretation, works of unknown authorship and joint authors. It also provides for publication and a work is published when copies of the work are made available to the

¹⁹ S.7 and 8 respectively of the Act.

²⁰ Ibid, S.45.

public whether for gain or not.²¹ It should however be noted that the Act does not bind the Republic

THE NATURE OF COPYRIGHT

The second part of the Act provides for the nature of copyright and its duration of protection. According to the Act, copyright is classified as a form of property right in the products of creativity²². The categories of work in which copyright may subsist is provided in section eight and these have been discussed above under, subject-matter of protection.

BASIS OF PROTECTION

Other than falling within the above stated categories, work will not be protected in Zambia if qualifying conditions as provided in section nine (9) are not satisfied. The said section provides that for copyright to subsist in categories contained under subject matter of protection, save for broadcast and cable programs, the work should be made or first published in Zambia or a convention country.²³ In relation to broadcast and cable programs, the work should be first transmitted from a place in Zambia or a convention country.

²¹ Ibid S. 4

²² Ibid S. 7

²³ A convention country is defined in section 2 of the Act as member of the union established by the Berne Convention.

AUTHORSHIP AND OWNERSHIP

Authorship and ownership under copyright are two distinct concepts. It is generally accepted that ownership flows from authorship with the author normally being the first owner of the work. This is reflected under that Act which provides that;

“...the author of a work shall be the first owner of the copyright in the work”²⁴

But if a work is made in the course of employment or the commission of another person, then the employer or such other person shall be the first owner.²⁵ The Berne convention expressly states that the beneficiaries of protection of literary and artistic works (as defined therein) shall be the author and his successor in title.²⁶

Like any other form of property, copyright is transferable by assignment, testamentary disposition or by operation of law as provided in section 11 of the Act, which must be in writing and signed by the assignor. A license may also be given in relation to work to third parties.

DURATION OF COPYRIGHT

The duration of copyright protection differs according to the type of work in question.²⁷ Literary, musical, artistic works and compilation last for life of author plus fifty-year. Audiovisual works, sound recordings, and computer programs expire fifty years after it

²⁴ Op Cit, S 10

²⁵ Ibid S. 10 (3)

²⁶ Article 2 (6)

²⁷ The duration of copyright is provided under the Act from section 12 to 16

was either made or first published. Broadcast and cable programs copyright last for fifty years after it was first transmitted. Typographical arrangements last for twenty five years from the year in which it was first published.

INFRINGEMENT OF COPYRIGHT

Infringement of copyright is defined in terms of acts controlled by copyrights. Acts controlled by the copyright owner reflect the exclusive rights that are conferred on him by the Act.

- The Act explicitly provides that;

“Copyright in a work is infringed by a person who, without the consent of the owner of the copyright, does, or authorises another person to do, a controlled act in relation to the work”²⁸

The controlled acts in relation to work include the following:²⁹

- the publication;
- the reproduction;
- the broadcasting or inclusion in a cable program service;
- the communication to the public by any means;
- the importation into Zambia of copies; and
- the adaptation;
- of a work protected by copyright.

²⁸ Ibid S. 18

²⁹ Ibid S. 17

Further acts of infringement in relation to a work are possessing in the course of business, selling or letting for hire, offer or expose for sale, distributing or exhibiting in public articles which are infringing copies.³⁰ Any person making or trading in articles for making infringing copies or transmission for the purpose of making infringing copies without the consent of the owner is deemed to infringe copyright.

The Zambian courts had occasions to determine the issue of infringement in the case of Performing Rights Society V. Hickey³¹ where the defendants played copyrighted musical records to the public without the consent of the plaintiff who owned the copyright. It was held that under section 13 of the copyright Act (Now section 17), copyright is infringed if a controlled act is done without the authority of the copyright proprietor.

PERMITTED ACTS

It has been argued by Yong-Chan Kim that the copyright concept is vulnerable to various social claims due to contradictions in the purpose of copyright laws.³² This results from the fact that copyright laws is supposed to protect and promote two mutually conflicting rights, that is, creators rights and users rights. The former is achieved through provisions of controlled acts (i.e. infringement acts) and the latter it is through permitted acts. The Act provides for actions which do not constitute infringement. These relate, but are not limited to the following.³³

³⁰ Ibid S. 18

³¹ (1979) ZRL 66

³² Young-chan kim (1977), copyright and internet, social claims and government intervention, <http://www.msu.edu/user/kimyong2/copy.htm>.

- fair dealing for private study or research for personal purposes not for profit;
- fair dealing for criticism or review provided there is sufficient acknowledgement:
- fair dealing for reporting current events
- reproduction of judicial proceedings;
- reading or recitation in public of a reasonable extract with acknowledgement;
- reproduction for judicial purposes.

Acts which conflict with normal commercial exploitation of a work or unreasonably prejudices the legitimate commercial interests of the owner of the copyright will not be treated as fair dealing. Further more, no infringement occurs in relation to a work if the author is unknown or if it is reasonably assumed that copyright has expired.

MORAL RIGHTS

Moral rights are conferred on the proprietor for the protection of his personality and the integrity of his work. They are provided under section 24 of the Act and these are right to be identified as the author or director of the works, which is also referred to as paternity right, and the right to object to any distortion, mutilation, or other modification or derogatory in relation to the work that would be prejudicial to the authors honour or reputation.

ENFORCEMENT OF COPYRIGHT

The conferring of rights on copyright owners would be meaningless if it lacks an enforcement mechanism. It is in this regard that part III of the Act contains provisions

³³ S. 21 of the Act.

which give strength to the right conferred on proprietors of copyright. These provisions compel compliance to copyright by empowering the copyright owner to institute proceedings against infringement in the High court. The relief available include damages, injunctions, account of profits or relief otherwise available in respect of other property right.³⁴ Other provisions aimed at consolidating the position of copyright owners are the right to delivery of infringing copies to the owner and restriction on importation of infringing copies.³⁵

The Act creates offences for anyone to make, sell, let for hire, offer for sale, possess, distribute, exhibit in public or import any infringing copy or to possess articles used in making infringing copies unless he acted in good faith and didn't believe copyright would be infringed.³⁶

If the proprietor suspects that they are infringing copies in any house or premises, they may give such information to a magistrate who may issue a warrant by virtue of which any police officer above the rank of inspector (named therein) may enter such premises, search and seize any such article. In exercising such power, he is authorised if necessary to use and detain every person found on the premises.³⁷

³⁴ Section 25 of the Act

³⁵ Ibid S. 26 and 27

³⁶ Ibid.S. 28

³⁷ Ibid S. 33 and 34 respectively

REGISTER OF COPYRIGHT

The Act provides for the appointment of a Registrar of Copyright in section fifty four who is empowered to keep a register of copyright in works other than broadcasts or cable programmes. However, this provision is of little significance to the discussion at hand by virtue of subsection four of section thirty nine which provides that the existence and enforceability of a copyright shall be independent of whether or not it is registered.

RIGHTS IN PERFORMANCES

It has been observed earlier that the *raison d'etre* of copyright is to prevent others from taking unfair advantage of a persons creative effort by conferring exclusive rights, inter alia, in giving or making of public performances, broadcast and cable transmission of works.

The Act confers performers right and recording rights on a performer to exploit a qualifying performance by means of recording, broadcast or inclusion in a cable program service of the performance.³⁸ These rights are recognised as a property right although it is only assignable or transferable on death by testamentary disposition or by operation of law.

Infringement of performers rights occurs where a person makes, broadcasts, shows or plays in public the whole or any substantial part of a performance without the consent of the performer. Furthermore, any person who imports, sells or lets for hire, offers or

³⁸ Ibid S. 45

exposes for sale or hires, or distributes a recording of a qualifying performance, infringes the performer's right.

In relation to rights in performances the Act also provides for action for infringement, offences and acts which do not constitute infringement *mutatis mutandis* those discussed above.

THE TECHNOLOGICAL ASPECT OF COPYRIGHT

The essence of copyright is to prevent others from taking unfair advantage of a person's creative efforts. It basically aims at strengthening protection of qualifying works in light of the rapid changes in the dissemination and reproduction of protected works. These changes are a product of technological advances in information distribution to which the laws must adapt. Emanating from the foregoing is the notion which aptly demonstrates the correlation between the law and technology in the realm of copyright which provides that;

“the law of copyright is a form of legal adaptation, a response to new technologies in the reproduction and distribution of human expression- or more precisely, to the social, cultural and economic trends unleashed by these technologies.”³⁹

The importance of technology as a tool of production of copyright subject matter cannot be under scored. This is evident in the modern equipment for producing a work, for instance, the transition from the era of typewriters to computers and printers has greatly

enhanced the quality and quantity of works in the arena of copyright. However, it is the advance in copying, reproduction and dissemination technology that is of concern to copyright owners since it has improved the position of users of such material. It is nonetheless argued that new technology may bring the private gain and public benefit values into conflict. But according to Bush;

“this does not necessarily portend the sacrifice of one value for the sake of the others; but accommodating these values in the computer era may require a revamping of the present law of copyright and a large dose of administrative genius”⁴⁰

Owing to the fact that society is always in a state of flux, there are changes in society through technology which have prompted people to question whether the law should confer property rights in certain products of the mind. They are new copying technologies in the media of photography, motion pictures and sound recording. The discussion will now proceed to consider the new copying technologies.

Photocopying (Reprographic revolution)

As a response to the advance in technology, there has emerged a copying machine which according to Bush is threatening the economic interest of copyright holders. This machine is the photocopier- a device which allows individuals to make single copies of

printed work economically.⁴¹ In illustrating the impact of the photocopier, Bush argues that before the development of photocopying, users found it easier to buy the desired printed work than to make a machine copy of it. The reprographic revolution is characterised by this ability to produce single copies economically.

The consequence of this development in Literary works is that the publisher who usually own the copyright will have lost a sale because of this new technology. With the occurrence of such events the conflict between private gain and public benefit is clear in that publishers and authors have been hardest hit by the burgeoning phenomenon of machine reproduction.

The publishing industry is prone to making loses since subscribers tend to photocopy articles of interest than buying from the publishers. At the dawn of the photocopying era Gerald Sophar, executive Director of the Committee to investigate copyright problems in the U.S.A. found that industrial library copying was the only real economic threat to copyright owners then.⁴² But then, new technologies emerged that further strained copyright protection.

Facsimile Transmission (long Distance Machine)

In the area of machine copying there is another technological development that threatens copyright owners. This technological development is the facsimile transmission which is “an outgrowth of the new found ability to transform images from a printed page into

⁴¹ Ibid

⁴² According to an Interview with him by Stewart Mills in Washington D.C. September 1, 1967

electronic signals. Such signals may be transmitted over telephone lines from one location and create a copy at a receiver at another location”⁴³

Microfilm and Microfiche

As a result of technological advancement, microfilm and microfiche have emerged as new copying technology, which pose a threat to the copyright owners. As a form of a copying technology “a microfilm is a reduced size of photographic reproduction’. The Collins New English Dictionary defines it as a standard film used in the micro-copying of books, documents etc. Microfiche is also a photographic copy but of a drastically reduced size compared to microfilm. Both of these media are tremendous space savers.⁴⁴

Computers and Copyright

Computers are important consumers of copyrighted materials. The efficiency of the computer has been effectively harnessed for the use of printed texts such as copyright books. It should however be pointed out that unlike the other technologies which are restricted to only literary or printed works, computers extend their long arms to encroach musical works, artistic works, computer programs, compilations, audiovisual works, sound recording, broadcasts, cable programs and typographical arrangements. Copyrighted sources may also be used in developing program instructions for research.

⁴³ Bush, Op Cit, P68

⁴⁴ Ibid P 69

Digitization Technology and copyright

Sailing on the tide of change, coupled with the need for conformity in technological advances, most societies have evolved from an industrial to an information and service based society. It has been argued that this era is marked by rapid technological change in which our ability to produce and receive information grows exponentially.⁴⁵ This is especially so with the use of digital information technology in general and digital networks in particular. The world is now closely linked by digital networks which defy physical distance to carry texts, images and sound with startling ease and rapidity. This is the greatest source of worry for copyright owners.

Little doubt can be cast on the proposition that there is an emerging problem, which by now has caught momentum for the laws of copyright in information storage and retrieval by computer of material protected by copyright. The problems for copyright conceptions, as we know it has arisen with the development of a sophisticated computerized information storage and retrieval system in the name of the Internet. The Internet has revolutionarised information dissemination throughout the world.

DIGITIZATION AND THE REVOLUTION IN INFORMATION PROCESSING

Computer Programs

The development in information technology in the form of digitization of information, that is, its description by means of string of binary code was ushered in by the invention and popularization of digital computers.⁴⁶ One consequence of digitization was the

⁴⁵ Graig Joyce, et al, Op Cit, P1

⁴⁶ Ibid P.45

introduction of an entirely new category of information products – computer programs – into market place.

Digital Network

The significance of digital network is that “more and more devices are linked by wired and wireless connections to form small and large networks over which digitized information (which more often than not is protected under the copyright) can be exchanged without any need for the transfer of a physical object.⁴⁷ Collectively these linked networks form what is called the internet which has become the principal medium for the commercial and non commercial exchange of information world wide.

Effects of Digitization on copyright⁴⁸

The technology of digitization has produced a tide of economic and cultural trends which challenge many of copyrights most fundamental conceptions.

- i. Ease of replication:- Works in digital forms threatens the copyright owner in that the same technology one needs to use the digital work is the (same) technology that can be used to make multiple copies of the work, and more frighteningly, can be used to produce perfect copies.
- ii. Ease of transmission and multiple use: copyright owners are concerned with controlling pirate copies but digital information technology enables a single pirate

⁴⁷ Ibid P.46

⁴⁸ Samuelson, P. Digital media and the changing face of intellectual property law, 16 Rutgers computer and Technology, Law Journal 323, 1990, cited by Graig Joyce in footnote 80 on P 47

copy to be loaded into a computer hooked up to a network of computer systems each of whom can have ready and virtually simultaneous use of the same copy.

- iii. Plasticity of digital Media: The copyrighted work can easily be modified through technology to misrepresent what the author meant.

- iv. Equivalent of Works in Digital form: once in digital form, works protected by copyright are less differentiated by type and more equivalent to one another because they are in the same medium.

- v. Compactness of Works in Digital Forms: By comparison to books and other traditional media, works in digital media do not take up much space. The compactness of digital data allows new assemblages of material that in a print world would be unthinkable.

- vi. New Search and Link Capacities: Digital information technology enables part of the a digital text to be linked to other parts of related but separate entries or texts and displayed on the screen on the click of a button.

The above effects of digitization exemplify the fact that it provides the means to communicate copyright materials in new and unprecedented ways free from historic constraints of time and space. These revolutionary copying techniques will continue to increase the ability to make inexpensive single copies, an ability which undermines the

economic structure which has until recently served to make legal protection against copy-making effective.⁴⁹

COPYRIGHT OWNERS PERSPECTIVE OF THE INTERNET

The ease with which digital information technology produces a work and distributes it prompts one to ask how copyright owners view its development. A more optimistic view taken by copyright owners is that;

“they have identified the internet as a potential future source of vast profits; a distribution medium with the potential of delivery content of all kinds, on demand, to consumers without the high overhead associated with conventional distribution system.”⁵⁰

Though attractive at first glance, the Internet has a negative side in the eyes of some pessimistic copyright owners who provide the antithesis to the above opinion in that;

“they perceive the internet as a present danger to their valuable assets. Their aim, then is to make the network environment safe for digital commerce in information and entertainment products”.⁵¹

A solution to this present danger can be found through technological safeguards which create barriers to infringement. But, this solution is only limited to the act of copying, the real issue for copyright lies in legal protection which invariably translates into the legal framework. Copyright laws may be adapted in digital technology to conform to the

⁴⁹ bush, Op Cit P.71

⁵⁰ Graig Joyce, Op Cit. P48

⁵¹ Ibid

traditional copyright doctrines so as to assure the maintenance in the new environment in the balance of proprietary and user interests.

CONTENTIOUS ISSUES OF COPYRIGHT IN INTERNET

Several fundamental concepts of the current copyright have appeared as controversial since the internet was introduced.

Authorship and Property

Under copyright the ideas themselves are not property unless they are fixed in certain forms, but if they are created as part of the process of human communication without a fixed form, they are not protected by any copyright law.⁵² Furthermore, the capacities of the internet to intertextualize and compile information from multiple sources into new product also turns authorship and property into controversial concepts.⁵³

Principles of Balance

One of the fundamental issues about the copyright law is how to define principle of balance between authorship and readership in the digital era.⁵⁴

Transmission

There has been a debate on whether a digital transmission is a distribution of a copy to the public, such that mere browsing can be interpreted as an infringement. But copyright

⁵² Young – Chan kim, copyright and Internet, www.msu.edu/user/kimyong2/copy.htm

⁵³ Norderhaug, T. and Oberding J. (1995) Designing a Web of Intellectual Property. Computer Networks and ISDN system, 27 (6), pp 1037 – 46.

⁵⁴ Yong – Chan, Op Cit

users argue that it is not appropriate to regard every transmission as regulated by copyright since it defeats the value of public benefit of copyright.⁵⁵

Fair Use

The only mechanism to protect copyright users right has been provisions on fair use. However, considering the introduction of internet, some are arguing that cases of fair use should be expanded since in the electronic environment hyperlinking and inlining are possible. But program providers maintain that fair use becomes meaningless in the internet and should be minimized or eliminated to protect copyright in the digital environment where it is very easy and fast to copy any materials.⁵⁶

Policing; Service Providers Liability

One of the copyright issues in the internet raised by the copyright holders, is the liability of the internet Providers for copyright infringement by their users.⁵⁷ The contention is that, the content owners are looking for a certain level of responsibility and participation from access providers to police copyright violation.⁵⁸ However, the Internet Access Providers argue that the content providers want service providers handcuffed to unrealistic policing efforts, while realistically concerned about protection of their works.⁵⁹

⁵⁵ Ibid

⁵⁶ Ibid

⁵⁷ Samuelson, P. (1996) the copyright Grab. <http://www.hetwired.com/wired/white paper. html>

⁵⁸ Greenberg, m.(1996) catching The internet copycats <http://politics now.com/views/netwatch/archive 1996/062696.htm>

⁵⁹ Voorhees m. (1996) will the white paper Die? <http://infor law aler.com/stories/050396a.html>

There have been raised some concern about whether the current legal system and the political structure have the capacity to deal with problems the Internet has brought about. There is little consensus about whether the current legal system can be applied to the Internet or whether totally new regulation systems based on different assumptions and philosophy than what we have held for the traditional media have to be invented for the new media

OBSERVATION

There is a relationship between technological stimulus and its legal response. It is often said that developments in new information technology demand or require modification in intellectual property doctrines. Such developments alter economic cultural and social relationships to create the conditions for change in copyright law. More often than not, copyright has adopted itself to new technology circumstance in information distribution.

According to Lyman, before print culture began, there was no such concept as copyright, indicating that copyright was a product of print technology.⁶⁰ Copyright initially a rather belated response to the printing press, had then to assess the performance of plays and music, photography, sound recording, broadcasting and now the extraordinary prospects of digital recording and transmission.⁶¹ It is not the initial technology but rather the technology of imitation which stimulates the strongest demands for Intellectual Property Right Protection. This technology enables others to copy or imitate copyrighted works

⁶⁰ Lyman, P. (1995) copyright and fair use in the Digital age Educom Review.<http://edcom.edu/educom.review>. review.95/Jan.Feb/Lyman

⁶¹ Cornish, Op Cit, P 32 - 33

quickly, efficiently and cheaply thereby making the case for intellectual protection hard to resist.⁶²

POLICIES TO CONSIDER IN FORMULATING SOLUTIONS

Under copyright law, there is tension between the public interest in dissemination and the private interest in compensation.

Public Interest in Dissemination

The rationale behind this view is justified on the ground that prospects of payment to authors or publishers encourages the production and dissemination of works which benefit society.⁶³

Private Interest in Compensation

The underlying factor is that a man ought to be paid for the fruits of his labour. This economic reward will encourage men to produce more, thus promoting the public interest in increasing the flow of ideas into the intellectual market place.⁶⁴

The case for copyright rest not upon proven need of the system but rather rests upon uncertainty as to what would happen if protection is removed. Thus, one is compelled to adopt the view of Shakespeare who concluded that:

⁶² Ibid

⁶³ bush Op Cit. P77

⁶⁴ Ibid P79

“the World without copyright is nonetheless an undiscovered country which puzzles the will and makes us rather bear those ills we have than fly to others that we know not of.”⁶⁵

THE ECONOMIC ASPECTS OF COPYRIGHT

The basic arguments for protection of copyright are twofold. Firstly they are founded on the authors moral rights to reap the fruit of his labour and control what he has created. secondly the economic inducement to publication that copyright provides.⁶⁶ Copyright serves a wide range of industries ranging from the production of books, it has moved out into modern media of instructions and entertainment-through stage performance to recording and broadcasting; and into the field of computer programs.⁶⁷ According to Cornish;

“Copyright may provide the legal foundation upon which monopoly profits can be generated, provided always that the market contains sufficient demand for the product.”⁶⁸

He further provides that the first purpose of the protection is to allow recoument for the initiative of creating the material and the investment risked in producing and marketing it.

AUTHORS AND PUBLISHERS

Without copyright protection book production would be seriously injured. The authors and publishers considerable investment into bringing a work on to the market is protected

⁶⁵ William Shakespeare, Hamlet, Act III, Scene 1, Lines 79 – 82 (various 13th Edition, 1905)

⁶⁶ Steven Breyer, the Uneasy Case for copyright: A study of copyright in Books, Photocopies and computer programmes. Harward Law Review, Vol.84 No. 2 December 1970, P.285

⁶⁷ Cornish, Op Cit, P367

⁶⁸ Ibid

and achieved through copyright. Without it a publisher would compete in the production and sale of a book with an infringer who may copy and sell the book at a lower cost such that the publisher fails to recoup his initial investment. It is thus submitted that the fear of such a result in a world without copyright would, it is claimed, discourage publishers from publishing and authors from writing.⁶⁹ The initial publisher must sell a lot more copies than the infringer before he begins to make profits. This would seriously threaten book publishers and authors revenues.

ECONOMIC PROBLEMS OF DIGITIZATION

Copyright owners envision a substantial reduction in the number of purchases for their work when computerized information systems are developed.⁷⁰

It has been argued that input of data should impose liability because input to a single system may be the only sale the copyright owner makes. By users login into a network with a copy of a copyrighted work, the several potential buyers are eliminated or reduced. Infringement must be at the point of input if done without the authorization of the copyright owner. This would save the author the impossible task of detecting output for which he has not been paid. It is therefore, submitted that;

“uncovering production without any knowledge of where the work has been input is much more difficult than discovery of unlicensed input”⁷¹

⁶⁹ Steven Breyer, Op. Cit P294

⁷⁰ Bush, Op cit, P125

⁷¹ Bush, Op Cit, P125

However, it has been argued that imposing liability for all input diminishes or abolishes the fair use doctrines. The argument is that “if fair use is strictly defined in economic sense-as a use which will not prejudice the sale of the original work, then the area of fair use in computer use is probably more constricted than most computer people realise.”⁷² But the bottom line should be that input should be infringement unless the copyright holders permission is obtained.⁷³

There should be a systematic procedure for obtaining licenses and making payments for computer use of copyright works. The problems of distributing payments once collected under a single organ such as a Collecting Society is overcome in that they are obliged to offer blanket licenses for use of material in their repertoire and in some cases to make distribution of revenue to their members on the basis of sampling or other averaging techniques.⁷⁴

There is another type of collective scheme in which various commercial groups in copyright industries create associations to watch over their mutual interests. Musicians and artists have been subjected to harsh, oppressive and fraudulent contracts. In order to safe-guard their economic interest they can form associations to negotiate with entrepreneurial association for collective guarantees of minimum terms in contracts to publish or use their works and legislative reforms.⁷⁵

⁷² Ibid P134

⁷³ Ibid P135

⁷⁴ Cornish, Op Cit, P370

⁷⁵ Ibid P 371

By conferring a right to prevent others from exploiting the copyrighted work without the owners authorization it enhances his economic position. This is reflected in the acts controlled by copyright under the Act.

Furthermore, the enforcement provision under the Act also operate to safeguard the economic interest of the copyright owner.

The importance of copyright in the economy of a nation is well reflected in a study conducted in the United States of America in 1998 which revealed that between 1987 and 1996 the core copyright industries grew significantly faster than the rest of the U.S. economy and created new jobs faster than the economy as a whole. In 1996, the U.S. core copyright industries achieved foreign sales and export of \$60.18 billion, surpassing all other sectors, including agriculture, chemicals and automobiles.⁷⁶ with such statistics, it can not be in doubt that copyright if properly nurtured does not only enhance the economic position of the author but that of a nation as a whole. This can be achieved through revenue raised through taxes on copyright product by the fiscal authorities.

However, as the copyright owners achieve such success, they are becoming increasingly vulnerable to piracy and inadequate protection of their rights in the world economy.⁷⁷ It is in this regard that international efforts have been made to protect copyright.

⁷⁶ Siwek and Mosteller (Economist incorporated), Copyright Industries in the U.S. Economy: 1998 Report Prepared for the international Intellectual Property Alliance.

INTERNATIONAL COMPLIANCE OF ZAMBIAN COPYRIGHT LAW.

Copyright laws have no extraterritorial effect. They differ from country to country and digital technology has made the model of national treatment problematic. Recognizing this problem Kraig Hill suggested that;

“what we need is some kind of unifying principle or rationale that would allow us to harmonize the various national standard.”⁷⁸

This has been attempted through Agreements signed at international levels. This was done through WIPO at first and then World Trade Organisation under The TRIPS Agreement. International standards are defined in terms of provisions of these treaties or conventions. In considering the compliance of the Zambian legislation to international standards, attention will only be drawn to those provision which are not reflected in relation to the treaty under discussion.

The Berne Convention

Zambia is party to the Berne Convention. Though in conformity with most of it provision, the copyright Act does not provide for Droit de suite, that is the right to an interest in resales provided in Article 14 ter of the Convention. This requires members to adopt or adapt a right for visual artist to share in the proceeds from successive commercial sales of their original works.

⁷⁷ Graig Joyce, Op Cit, P 14

Trips Agreement

Performers under TRIPS have an exclusive right covering fixation, reproduction, wireless broadcasting and public communication of actual performances which is distinct from recordings of them.⁷⁹ The Act does not provide for the right of fixation for authors unfixed performances.

TRIP Agreement confers a Rental right in respect of computer programs and cinematographic works on authors to authorize or prohibit the commercial rental to the public of originals or copies of their copyrighted works.⁸⁰ There is no express provision on the rental right under the Act.

THE WIPO COPYRIGHT TREATY (WCT)

In response to the digitization era on an International level two Agreement were reached under the auspices of WIPO. The WIPO Copyright Treaty (WCT) and WIPO Performance and Phonograms Treaty (WPPT).

The WCT

The treaty deals with on-line digital services chiefly by requiring, for works within the convention, a right of communication to the public by wireless means, which include the making available to the public of their works from a place and at a time individually chosen by them.⁸¹ The Act does not provide that communication to the public could take

⁷⁸ Krig M. Hill, et al, Globalization of Intellectual Property in the 21st Century, CASRIP High Technology Protection Summit, University of Washington, July 25, 1998

⁷⁹ Article 14 (1), (5) of TRIPS Agreement

⁸⁰ Article 11 of TRIPS

⁸¹ Article 8 of WCT

place in this piecemeal fashion. This is especially so in relation to literary, artistic and musical works.

Secondly, states have to provide protection against anti-spoiler devices. This pertains to any circumvention which would allow the side stepping of technical barriers to copying, when they are placed either in hard copy materials or in digital sites in order to restrict access copying which is not authorised or permitted by law.⁸²

The WCT provides for obligations concerning Rights Management Information.⁸³ This requires that interference with rights management information, that is electronic, identification of author, owner, terms and conditions of use should itself be a form of secondary infringement. Such provision is important in the digital era but the Zambian Act has no provision to this effect.

The WPPT

This treaty is primarily concerned with rights of performance and sound recording producers. It provides for a reproduction right, a distribution right, a rental right and the right to single equitable remuneration for broadcasting and communication to the public for both performers and phonogram producers.⁸⁴ The Zambian Act does not provide for a distribution and rental rights.

⁸² Ibid Art.11

⁸³ Ibid Att. 12

⁸⁴ Articles 7, 8, 9, 11, 12 and 13 of WPPT

Similarly, the WPPT has equivalent provisions to those of the WCT in relation to digitization by ensuring that communication to the public occurs upon offer of access and there must also be protection against anti-spoiler devices and of copyright management information. There are no similar provisions in relation to rights in performances under the Zambian Act.

Furthermore, the WPPT provides for moral rights of performers⁸⁵ whereas the Zambian copyright Act does not extend moral rights to performances.

As noted earlier, Zambia is part of the global village hence the need to harmonize its laws with international standards in order to fully participate in the global intellectual property regime. The significance of harmonization lies in the fact that, revenues from intangible information products represent an increasingly important dimension of a nation's participation in the economy.”

⁸⁵ Ibid Art.5.

CHAPTER 3

PATENTS

According to former American President Thomas Jefferson, he said;

“an inventor ought to be allowed a right to the benefit of his invention for some time. No body wishes more than I do that ingenuity should receive encouragement.”¹

It is indeed true for every nation that ingenuity should receive liberal encouragement for it to develop and this encouragement manifest itself in the form of a patent system. This is reflected in the words of another former U.S. president, Abraham Lincoln who said, the patent system added fuel of interest to the fire of genius. Each patent address the often difficult subject of technology. Accordingly Ojok – Bwangamoyi unhesitatingly stresses that;

“recognition of the value of information, Particularly functional technical knowledge and concerns over national technological competitiveness in the changing economic climate has fueled the revival of interest in patents. The patent system remains the laws primary response to technological change”²

Referring to the American patents system, Dwight Eisenhower exemplified that;

“Soundly based on the principle of protecting and rewarding inventors, this system has for years encouraged the imaginative to dream and to experiment. From such exploration on frontiers of knowledge has welled

¹ Thomas Jefferson in his capacity as secretary of state the administrator of the American patent system.

² John P.P Ojoko – Bwangamoyi, patents and Technology Transfer, L.L.M. Thesis, UNZA, 1976, P1.

a flood of innovations and discoveries which have created new industries and reactivated the old, adding greatly to the prosperity and well being of all.”³

It is not only in America where patent appreciation is recounted. The Japanese commissioner Mr. Korekiyo Takahashi (1854 – 1936), the founder of the Japanese patent system once said:

“we have looked about us to see what nations are the greatest so that we can be like them. We said, what is it that makes the United States such a great nation and we investigated and found it was patent and therefore we will also have patents.”⁴

The frequency of such notions provides a rich testimony for the desirability of an effective patent system. Indeed, such a comparative approach stimulates critical thinking about the array of possibilities and potential the Zambian patent system is endowed with. The patent system is based on two principles, namely, monopoly of technology and its disclosure.

In order to appreciate the patent system, it is imperative to go beyond conceptions that patent laws are merely a set of rules. They are an embodiment of the development will of a nation which has a humanistic focus, reflecting essential societal goals. From the

³ Robert Buckless, Ideas Inventions and Patents: How to Develop and Protect them. John Wiley and Sons. Inc. New York.

⁴ Terno Doi, The Intellectual Property Law of Japan, Sijtoff and Noordhoff International Publishers, Maryland U.S.A. P1.

foregoing, one is prompted to ask what then is this patent and how does it achieve all these characteristics attributed to it.

What is a Patent

There is a general misnomer on the concepts of ideas, inventions and patents. Ideas are not invention but merely a prelude to inventions. They are the tools of inventors. Patents are not inventions but are legal documents that describe and claim inventions.”⁵ Different scholars have defined patents in different ways.

According to Jeremy Phillips and Alison Firth, the word patent is synonymous with a monopoly right in an invention.⁶

A WIPO Publication defines a patent as “a document, granted, upon application, by a government office (or a regional office acting for several countries), which describes an invention and creates a legal situation in which the patented invention can normally only be exploited (i.e manufactured, used, sold or imported) with the authorization of the owner of the patent.”⁷

The patent and companies Registration office in its brochure entitled Basic facts About Patent defines a patent as a statutory authority conferring on the owner of an invention

⁵ Robert Buckles, Op. Cit, P.2.

⁶ Phillips J. and Firth A. Introduction to Intellectual Property Law, Butterworth, London, 1990.

⁷ Intellectual property reading Material (World Intellectual Property Organisation), Geneva, March 1998 P.

the right to work the invention in exclusion of others for a limited period which in Zambia is sixteen years.

However, the most authoritative definition is that contained in the Patent Act⁸ (hereinafter referred to as the Act) which defines a patent to mean letters patent for an invention granted for Zambia under section twenty five of the Act.⁹

As can be noted from the foregoing, patents are constantly conjoined to invention. It is therefore prudent to also define an invention. The WIPO publication defines an invention as a solution to a specific problem in the field of technology.¹⁰

The Act defines an invention to mean ‘any new useful art (whether producing a physical effect or not), a process, machine, manufacturer or composition of matter which is not obvious, or any new and useful improvement thereof which is not obvious capable of being used or applied in trade or industry and includes an alleged invention.’¹¹

Although it is merely persuasive, the American case of Hochkiss V. Greenwood¹² Laid down the principle that only invention were patentable, and that in order to constitute an invention, a new technology must transcend the everyday efforts of the skilled mechanic.

⁸ CAP 400 OF The Laws of Zambia (1995 Edition.).

⁹ Section 2 of the Act.

¹⁰ Intellectual Property Reading Material, Op. Cit P13

¹¹ Op Cit

THE LEGAL ASPECT OF PATENTS

As already observed, the law which regulates the Patent system is the patent Act. We will now consider the Salient provisions of the Act with emphasis on those relevant to the discussion contain herein. However a synopsis of the Act will be provided nonetheless, although a detailed discussion in beyond the scope of the study at hand.

OVERVIEW/SYNOPSIS OF THE ACT

The Act deals with the administration of the patent system which include establishment of a Patent office, appointment of officers, Seal and Register of patents.¹³ International provisions concerned with convention arrangements, that is, the union convention of Paris dated 20th March 1883, for the protection of industrial property and international applications, that is, ARIPO patents are also covered under the Act.¹⁴ The Act also provides for domestic application generally, the grant, effect and term of the patent, and special provisions relating to specifications, anticipation and rights in invention followed by infringement.¹⁵

Provision relating to assignments, corrections and rectification of the register and the functions of the Registrar in relation to certain evidence, documents and powers are also subject matter of the Act.¹⁶ The Act has provisions for patent agents, appeal, offences,

¹² U.S. Supreme Court 1851.52 U.S. (11 HOW) 248

¹³ Part II of the Act

¹⁴ Part III of the Act

¹⁵ Part IV, V, VI and VII respectively.

¹⁶ Parts VIII and IX

penalties and miscellaneous Sections.¹⁷ The last part of the Act deals with application and transitional provisions of the Act.

WHO CAN GET A PATENT

The patent Act under section eleven (11) provides for persons entitled to make applications for a patent and these are:

- a. A person claiming to be the inventor of the invention who owns the invention in Zambia
- b. Any one to whom rights under (a) have been assigned
- c. A person entitled to convention applications by virtue of:
 - i. residency or citizen of a Paris Convention state;
 - ii. ownership of a patent application filed for an invention in a first convention country within the last 12 months is entitled to file a convention application for grant of a patent in Zambia for the invention.
- d. The legal representative of any person who immediately before death or disability was entitled to make such application

The other category of person entitled to the grant of a patent is one who has applied through the African Regional Industrial Property Organisation (ARIPO). The act provides that;

“where a patent has been granted by ARIPO under section 3 (7) of the ARIPO Protocol and the Registrar has not objected, under section 3(6) of

¹⁷ Parts X, XI, XII and XIII.

the Protocol, the patent having effect in Zambia, the patent shall for all purposes be deemed to have been granted under this Act.”¹⁸

PROCEDURE FOR OBTAINING A PATENT.

The first procedure for obtaining a patent grant in Zambia is acquiring all the necessary documents for making an application and then ensuring that they are properly drawn up before taking them for filing at the patent office. Every application must be made in the prescribed form signed by the applicant or any person authorized to do so. The application is then lodged at the Patent Office in a prescribed manner.¹⁹

Every application for a patent is accompanied by either a complete specification or a provisional specification, but for a convention application it's only a complete specification.²⁰ The specification must indicate the subject to which the invention relates. A provisional Specification should fairly describe the invention whereas a complete specification should fully describe the invention and the manner in which it is to be performed and further disclose the best method of performing the invention. The specification must end with a claim defining the subject matter for which protection is claimed.²¹

The disclosure in the specification must be sufficient clear and complete for the invention to be evaluated and to be carried out by a person having ordinary skill in the art.²² The

¹⁸ S. 10A (2)

¹⁹ S. 12 (1)(a) and (b),

²⁰ S.13

²¹ Ibid, S.14

²² Intellectual Property Reading Material, Op. Cit, P.18

Claims are the basis of interpretation of patent protection and they are the ones which determine whether third persons action amount to infringement of the patent.

Once the application is filed, it is examined to ensure that it is properly documented. This examination is to both form and content and requires persons with high technical skills. The Act States that the Registrar examines the application to ascertain;

- Whether it complies with the requirements of the Act,
- In the case of a complete specification, whether the invention claimed is the same as that disclosed in the provisional specification or in an application lodged in the convention country.²³

The Registrar may refuse the application if it is frivolous or contrary to well established natural law, contrary to law, morality or it relates to substances capable of being used as food or medicine which is a mixture of known ingredients possessing only the aggregate of the known properties of the ingredients.²⁴

If the specification is not accepted within 30 months from the date of lodging the application then it will lapse but if accepted, the applicant must advertise its acceptance or else the application will lapse.²⁵ This renders the document open to the public for inspection.

The state or any person interested may oppose the grant of patent by giving written notice to the Registrar on specified grounds within three months from the date of

²³ S. 16 of the Act.

²⁴ *Ibid* S. 18

publication.²⁶ However, it is open to the applicant to contest the opposition. But if no opposition arises during this time, the applicant must file a further form requesting for a certificate of a grant of a patent called Letters Patent which is then sealed by the Registrar with the Seal of the Patent office.

EFFECT OF GRANT OF A PATENT

According to section twenty eight, the effect of a patent is to grant to the patentee, subject to the Act and conditions of the patent, full power, sole privilege and authority by himself, his agent and licensee during the term of the patent, to make, exercise and vend the invention within Zambia as he deems fit to have, and enjoy the whole profit and advantage accruing by reason of the invention during the term of the patent. This provision is the one that confers an exclusive right on the person to whom the patent is granted (the patentee).

The date of the patent is effective from the date of the application and its duration is sixteen (16) years from the date of lodging of the complete specification. The patent grant must be renewed annually (except for the first three years) for it to be legally valid.²⁷

Though granted for only 16 years they are instances in which this period may be extended and these are:

- if the patent has not derived adequate remuneration from the patent or

²⁵ Ibid S. 20 and 21

²⁶ Ibid S. 22

- by reason of hostilities between the Republic and any foreign state as a result of which the patentee has suffered loss or damage.²⁸

The period of extension allowed are a term not exceeding five years or in exceptional circumstances not exceeding ten years on the first ground and for a term not exceeding the period of hostilities in respect of the second ground.²⁹

COMPULSORY LICENSES

Patents being a form of intellectual property can be dealt with like any other type of property. Thus, a license may be given to a third party by the patentee. 'The licenses that are granted by the patentee are considered voluntary as opposed to compulsory or non voluntary licenses. The beneficiary of a voluntary license has the right to perform acts covered by the exclusive right under an authorization from the patentee. In contrast, "the beneficiary of a non- voluntary license has the right to perform acts covered by the exclusive right under an authorization given by a government authority against the will of the owner of the patent for invention."³⁰

Where it is found that the patent right are abused or insufficient used, any person interested and has been unable to obtain a license from the patentee on reasonable terms may, after three years from the date the patent was lodged apply to the Registrar in a prescribed form for a compulsory license on the ground that the reasonable requirement of the public have not been met. The patentee is given a chance to oppose the grant of

²⁷ Ibid S. 29

²⁸ Ibid S. 30(i)

²⁹ Ibid S. 30 (4)

³⁰ Intellectual Property Reading Material, Op Cit, P.31

the license and the Registrar then sends the relevant documents to the High Court, which may order the grant of the license on such terms as it may think expedient.³¹

Other instances where the High Court may order the grant of a non-voluntary license is to an applicant for inventions relating to food or medicine, or a process for producing such a substance or any invention capable of being used as or as a part of a surgical or curative device.³²

The Act further allows any government department or person authorized by the minister in writing, the use of patented invention for services of the state. Furthermore, they are special provisions in relation to state use of inventions for any purpose during a state of emergency.³³

A patent can be revoked only on any one of the specified ground on which it might have been opposed.³⁴

THE ECONOMIC ASPECT OF PATENTS.

The patent system has both individual and Public justifications. It is however, of crucial importance to note that the patent system does not protect each inventor who conceives an invention but rather the first to apply for a patent is given priority. Accordingly, 'today the debate over patent systems tends to concentrate upon their role as a public

³¹ S. 37 of the Act

³² Ibid S. 38

³³ Ibid S. 40 and 41

³⁴ For details of grounds on which it may be revoked see S.50 of the Act.

instrument of economic policy.³⁵ This view portends that ‘patents are intended to encourage the making of inventions and the subsequent innovative work that will put the invention to practical use, and they are expected to procure information about the invention for the rest of the industry and the public generally, which might otherwise be withheld, for a period that could be crucial.’³⁶

The economic rationale of patents rest on the proposition that knowledge is an economic commodity over which patent systems establish property rights. The frequency of such notions embodies the orthodox view that;

“the prospect of obtaining a patent monopoly provides an incentive to invest in research, to make new intentions and that the patent system promotes disclosure of new inventions and thereby enlarges the public store house of knowledge.”³⁷

Different theories have been advanced to explain the correlation between patents and the economics of the system. Focus will now be directed to the economic rationale so that it too receives the most dignified attention.

INCENTIVES TO INVENT THEORY

According to this view, without legal protection of patents, the quantity of innovation would be less than that deemed socially optimum. It is founded on the premises that ‘too few inventions will be made in the absence of patents protection because invention once

³⁵ Cornish, Op Cit, P 129.

³⁶ Ibid. PP 129 - 130

made are easily appropriated by competitors of the original inventor who have not shared in the cost of the invention.³⁷ As a consequence, the inventor does not enjoy the benefits that are deservedly his for the costs incurred by the initial investment and development expenditure. This is because the patentee, like other intellectual property right holders, can derive no financial benefit except by exploiting it commercially.

The bastion for the enjoyment of the benefits emanating from the grant of patent lies in the fact that with the assurance that his invention will be protected from competitors, the inventor is motivated to invent. In this case, an inventor does not run the risk of his invention being indiscriminately hijacked by competitors.

The most plausible exposition of this theory is that;

“Patents serve to bring the private benefit of invention in line with their social value by allowing inventors to use their monopoly position to extract a price that more closely approaches the value that users receive from inventions.”³⁹

In this regard, there is an equitable distribution of resources between society and the inventor.

³⁷ *Kewanee Oil Co. v. Bicron*, 416 U.S. 470, 480 – 81 (1974).

³⁸ Adelman, et al. *Patent Law*. P 34

³⁹ *Ibid.* P35

CRITICISMS OF THE THEORY

This theory has not gone unchallenged. It has been argued that once a monopoly in an invention is granted through a patent, it restricts their use thereby reducing the social benefits of patented inventions.

The question for determination according to Adelman (already cited) is whether it is necessary to endure the output-restricting effects of a patent monopoly in order to stimulate invention. This is especially in issue where alternative views for stimulating inventions at less social cost are available, such as where government or alternative systems award prizes and bonuses to inventors in lieu of a patent.

It has been argued that 'patent protection is not the magic formula to volume and nature of inventions, and the presence or absence of a patent law is not the principal determinant of a country's technological progress.'⁴⁰ It is contended that alternative methods of inducing inventions other than the patent system include 'instinct of contrivance or workmanship, reputation, the desire for fame and the sense of altruism as well as intellectual inquiry and curiosity which also lead to discoveries'⁴¹ In the same vein, Grundmann stated that, 'what is needed is a stress on technical and scientific training and not a law on the protection of invention.'⁴²

⁴⁰ Ojok-Bwangamoyi, Op, Cit P 38

⁴¹ Vaughan F.C. Economic of Our Patent System, New York, 1925, P 1 – 16.

⁴² Grundmann, H. The Economic Agreement for Patents and their Valicity for Developing Countries (1970), Indian Economic Journal, Vol. XVIII No. 2 P. 198.

Another opposing view to the incentive to invent theory of patent is that ‘inventions arise inevitably with or without government incentives when the state of basic knowledge and other social conditions become favourable.’⁴³ The contention is that patent protection is not an incentive to invent since according to this view, inventions are a product of necessity.

It has also been argued that competition between rivals in a market place in relation to technological progress may induce inventiveness without there being further incentives. It is provided that “if the problem of appropriability is ignored, firms in a competitive market will have greater incentive to invent than would a monopolist because the competitive firms incentive is equal to the full cost reduction on the competitive output, while the monopolist’s incentive is diminished by the set-off of pre-invention monopoly benefits”⁴⁴

A further objection to this theory is that patents may distort economic activity in ways that undermine efficiency, whereby, inventors may spend too much money trying to develop inventions quickly, when the same result could be achieved at less social cost through a less accelerated research effort.⁴⁵ This emanates from the principle that patents systems do not protect each inventor who conceives an invention but the first one to apply for a patent.

⁴³ Adelman, Op Cit, P 35 footnote no. 9

⁴⁴ Ibid, P 36 footnote 11

⁴⁵ Richard Posner, Economic Analysis of Law 54, Little Brown, 2nd Edn, 1977.

The last critique of the theory advanced focus on persons other than the patentee and contends that, ‘the existence of a patent may undermine the incentives of these other persons to make improvements in patented technologies’⁴⁶ where they are forced to waste time and effort finding duplicative solutions to technological problems in order to avoid infringement.

REBUTTAL TO THE CRITICISMS.

Finding duplicative solutions to technical problem in order to avoid infringement is not wasteful if it leads to the development of superior products or processes. This criticism does not hold in that, according to the case of Yarway Corp V. Control,⁴⁷ Inventing around patents requires further research and stimulates progress. The patent Act recognizes such improvements and provides for patents of addition. This happens where there is a patent for the main invention and:

“the applicant or patentee applies for a further patent in respect of any improvement in or modification of the main invention, the Registrar may if the applicant so requests, grant a patent for the improvement or modification as a patent of addition”⁴⁸

⁴⁶ Op Cit, p 36

⁴⁷ U.S. 775 F. 2d 268

⁴⁸ S. 31 (I) of the Act.

one is therefore compelled to contend, like Professor Clark, that a patent system is a stimulant of invention and development.⁴⁹ Furthermore, Khan argues in relation to invention as products of necessity that;

“it must especially be understood about the laws of inevitable inventions that it does not operate in the vacuo...we cannot reason that since inventions are inevitable we need no system for rewarding inventors. Any given invention may be regarded as inevitable only given a certain set of social conditions. Other things being equal when the state of the industrial arts is adequate and when the need is perceived by a number of people the required invention will be forth-coming. The patent system is one of those other things”⁵⁰

Patent systems, therefore, provide a frame work in which persons can exploit their inventions with a clear conscious that their findings will be protected. Without such a system, there would be no guarantee for protection of the intellectual property right even where the motive for invention and innovation advanced by Vaughan are present. Patents by securing protection against indiscriminate and unauthorized exploitation through a monopoly for a fixed period, for an invention, which more often than not involve up-front costs, act as one of the incentives to invent. Owing to ‘the increasingly systematic organisation of research and development, and the extensive process of education which precedes it, this makes it harder to maintain the view that inventions are

⁴⁹ Clark J.B, ‘Essentials of Economic theory, CH. XXI cited in Plant, A, “The Economic Theory Concerning Patents for Inventions, *Economica* New Series No. 1 (February 1934), P 39

⁵⁰ Khan Alfred, The Efficiency of the American Patent system. 1962, pp 42 – 43.

there to be discovered, and industries that have progressed will inevitably make them, and so artificial aids are unnecessary.⁵¹

The incentive to invent theory is focused on enhancing the economic position of the inventor. This conception of the role of patents is reflected in the monopoly effect of the grant of the patent under section 28 (4) of the Act which gives full powers, sole privilege and authority to the patentee to make, use, exercise and vend the invention in Zambia, so that he shall have and enjoy the whole **Profit** and advantage accruing by reason of the invention.

Furthermore, in safeguarding the economic interest of the patentee, the Act provides for extension of a patent if at the expiry of the patent the patentee has not derived adequate remuneration from the patent or that by reason of hostilities between the Republic or any commonwealth or foreign state he has suffered loss or damage, for instance, on account of lack of supplies or loss of markets as a result of such hostilities.⁵² These extensions based on economic grounds, go to show that patents are incentives to invent.

Under section 27 (6) it can further be deduced that patents are, inter alia, granted to encourage inventions.

⁵¹ Cornish, Op Cit, P 130.

⁵² S.30 of the Act.

INCENTIVES TO DISCLOSE THEORY

A patent gives the inventor an exclusive right to exploit his invention on condition that he discloses the invention immediately and fully to the public. The basic premises for this theory was typified in the case of Universal Oil prods. Co. V. Globe Oil and Ref. Co.⁵³ that, “in the absence of patent protection inventors would keep inventions secret in order to prevent competitors from exploiting them, thereby depriving the public of the benefit of new knowledge.

This tenet though sound, it has not gone unchallenged. The rationale for the challenge is that if long term secrecy is feasible, patent protection for a limited period might not be an attractive alternative.

Furthermore, Melman Seymour puts up a compelling argument that patent systems encourage secrecy and incomplete disclosure of technological information. He asserts that most applications are designed to disclose as little information as possible which is not enough to be useful to the public.⁵⁴ And emphasizing the point for third world countries, Sir Plant argues that personnel handicap coupled with the general experience that not much detail is normally disclosed in a patent puts least developed countries in double tragedy.⁵⁵

⁵³ 322. US. 471, 484 (1944)

⁵⁴ Seymour, Melman, The Impact of Patent system on Research, U.S. Senate Committee on the Judicial sub-committee on patents, trade marks and copyright. 85th congress, 2nd session study No. 11, P 34 – 35.

⁵⁵ Plant Arnold, Op Cit. P 44.

This is so because these countries are faced with low levels of technological analysis such that even where a patent specification has sufficient information, very few people can comprehend it due to its technical nature. Personnel at the patent office are not immune to this weakness as well. The dangers with inadequate disclosure and lack of the requisite skill, knowledge and facilities by personnel to check the scope of claims is that it extends the monopolistic control of the patentee to areas not anticipated by the granting authority. This was revealed in an interview with Wilbrod Mulenga, the Assistant Registrar at the Patent office conducted on 6th July 2001.

JUSTIFICATION OF THE THEORY

The positive effect of this theory is that patents facilitate disclosure by protecting rights in inventions whereby, these rights are not affected by the disclosure, that is, the patentee does not lose their exclusive right.

The purpose of disclosure is to inform the public of inventions or processes such that it warns researchers not to infringe the patentee's right or waste resources on an article which is already protected by patent. This is achieved through protection of patentee's rights which encourages full and immediate disclosure of knowledge which can be used directly (under a license) or as a foundation for further research (such as patents of addition).

The patent system in exchange for the disclosure, provides for special inducement for investment already discussed.

The legal justification of the disclose theory is embodied in the Act which provides that every application for a patent shall be accompanied by a provisional or complete specification which shall fairly or fully describe the invention respectively. The complete specification should also disclose the best method of performing the invention and the subject matter for which protection is sought in the claim.⁵⁶

INCENTIVE TO INNOVATE

The premise on which this theory rests is that a patent monopoly is necessary to induce firms to invest in innovations, that is , putting existing inventions to practical use.⁵⁷ This is where a firm undertakes to make further improvements on invention to suit consumer demands and needs. With the patent protections offering monopoly profits, the firm will be willing to undertake these further investments. This theory gives existing patents a continuous role in preserving the incentives of patent holders to invest in development during the term of the patent. The legal justification for this theory has already been discussed, that is patents of addition.

THE PROSPECT THEORY

The economic aspect of this theory is anchored on the belief that ‘the patent system promotes efficiency in the allocation of resources to the development of existing inventions by awarding exclusive publicly recorded ownership in new technological

⁵⁶ S. 13 and 14 of the Act

⁵⁷ Adelman, Op Cit, P 40.

prospects shortly after their discovery.⁵⁸ This efficiency is promoted through private property rights created by patents and by putting the patentee in a position to co-ordinate or control subsequent research and development efforts.

TECHNOLOGICAL ASPECT OF PATENT

Franklin D. Roosevelt, a former U.S. President once said, patents are the key to our technology and technology is the key to production. More than anything else, the patent law epitomizes a regime of technological evaluation in that it addresses the often difficult subject of technology. The focus of patent law is applied technology.

Technological advancement can take place either through technology transfer from abroad or local production. For the local technology to develop, it requires attention and encouragement. But until the desired level of development is attained, most developing countries must rely on technology transferred from abroad.

One of the fundamental elements in the sound management of a science and technology policy based, inter alia, on encouraging inventions and innovation is undoubtedly the patent system. Friedrich list in buttressing this argument said that;

“the granting of privileges offers a price to innovative minds and that the hope of obtaining the price arouses the mental power and gives them a direction towards industrial improvement. Capitalists are thus incited to

⁵⁸ Ibid 43

support the inventor by being assured of participation in the anticipated profits.”⁵⁹

Patents system promote industrial development through investment by encouraging inventors to invent and capitalists to invest. It further provides the framework for the classification, collection and dissemination of the richest store of technological information. This is in consonant with the objectives of intellectual property as laid down in the TRIPS Agreement which provides that;

“the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology; to the mutual advantage of procedures and users of technological knowledge and in the manner conducive to social and economic welfare, and to a balance of rights and obligation.”⁶⁰

TECHNOLOGY AND THE PATENT SYSTEM

One of the justifications of a patent system is that it encourages the transfer of technology and investment from the developed to the developing countries by providing the legal basis for such transfer. The term transfer of technology is defined as;

“the transfer of systematic knowledge for the manufacture of a product, for the application of a product, for the application of a process or for the

⁵⁹ List, F. *The National System of Political Economy*, New Impression, London, 1928, P. 246.

⁶⁰ Article 7 of TRIPS Agreement.

rendering of a service and does not extend to the transactions involving the mere sale or mere lease of goods”⁶¹

The agents that provide and control this transfer are Multi-National Co-oration (MNC's). The MNC's more often than not, own the patented and the unpatented technology and technical know-how.

The Role of MNC's in Technology Transfer.

MNC's have been defined in the following terms, “in the broadcast sense they cover all enterprises which control assets, factories, mines, sales offices and the like in two or more countries”⁶²

According to Turner, a MNC is a firm which has a number of directly controlled operations in different countries and which tend towards a global perspective.⁶³

The underlying factor of MNCs being the vehicle of technology transfer is that, they transfer their processing and assembly plants and technology into industries outside their homes. However, the goals of MNCs may either be in harmony or in conflict with the goals of the hosting nation. Both the MNC and the developing country need the patent system to archive their goals. The MNC aim to maximize its profit using the monopoly created by patent system where as the host nations aim is the quest for acquisition of advanced technology to enhance development. Osita referring to MNCs said;

⁶¹ Mwenda M.G. Patents and Industrial Development. A Case study of Zambia. (L.L.M. thesis) 19...P.78

⁶² Multinational Corporation in World Development, New York, U.N. Department of Economics and Social Affairs, U.N Publication No. E/73.11 1973, P.5

⁶³ Turner, L., Invisible Empires, Multinational Companies and the modern world. P2

“the truth is that they are more concerned with protecting their secret process and securing their monopoly portions above all else”⁶⁴

It has been argued that once a MNC acquires a patent, it may use it to prevent other companies from working identical products or processes in the country and if inadequately exploited, the country is prohibited by its own patent system from enjoying the benefit of that technology. Accordingly, Kenneth Kaoma Mwenda said;

“patent laws are the framework through which multinational corporations maintain their monopoly over technology.”⁶⁵

However, this may be remedied by invoking provisions on compulsory licensing or revocation of patents under the Act.

PATENTS AND INVESTMENT IN TECHNOLOGY TRANSFER IN ZAMBIA

A research conducted by Majorie Mwenda revealed that patents do not induce foreign investment in Zambia.⁶⁶ Despite this MNCS will insist on obtaining a patent to protect it's market in Zambia, thus, patents in Zambia are used as a protective measure rather than for developmental purposes thereby reflecting the conflict in aims between the MNC and the developing nation.

⁶⁴ Osita, E.C. Multinational Enterprises and local manpower in Tanzania (1977) JWTL Vol. 11 No 5 P461

⁶⁵ Kenneth Kaoma Mwenda, contemporary issues in Corporate Finance and Investment law, Penn Press Inc. Washington, 2000, P 41

⁶⁶ Mwenda M.G. Op.Cit.

The dilemma facing developing countries like Zambia is that ‘the patent system in a revised form could be a convenient vehicle for the transfer for technology but MNCs have modified the primary function of patent grant from a tool for encouraging incentive activity, to a device for maximizing profits’⁶⁷

The onus is therefore on the government and all stakeholders to reverse the trend so that the patent system serves its intended purposes. To achieve this end, there is need for ‘an adequate legal framework which permits an equitable balance to be struck between the MNC and the interest of the public.’⁶⁸

But that as it may, the position in Zambia in relation to technology transfer is that the investment Act 1991 and the succeeding investment Act 1993 do not contain provisions on the regulation of technology transfer to Zambia, as such, the patent system remains the sole mechanism that at least ensures protection of technology developed and imported in the nation

METHOD OF TECHNOLOGY TRANSFER

They are various ways through which technology can be transferred. These include the sale or assignment of a potential invention; the licensing contract in relation to a patented invention; the know-how contract; the sale and import of capital goods; franchising and distributorship of goods and services; consultancy arrangements the Turn-key project,

⁶⁷ Haar, PS. Revision of the Paris convention ; A Realignment for private and public interest in the international patent system P86

⁶⁸ WIPO, Licensing Guide for Developing countries Geneva, 1977, P18 and 22.

i.e., it involves the supply of the design of the industrial plant and technical information on its operation; and through a joint venture arrangement.

TECHNOLOGICAL PROBLEMS ON THE SCOPE OF PATENTS

Intellectual property rights are consistently destabilized by the technological advance and the patent system is no exception. Cornish provides that the emergence of each major technology produces adjustments in the patent system and is likely to stir up argument about underlying rationale and specific policy objectives. Patent law, evolving primarily around machines and chemical processes, has had to absorb the emergence of electrical engineering, computer construction, automatic energy, microbiological production and now biotechnology.⁶⁹

INTERFACE BETWEEN TECHNOLOGY AND ECONOMICS

At the expiration of the patent monopoly, the patent inures to the people to practice it without restriction and reap profits from its use. In this case, the patent is said to have fallen in the public domain. The ultimate goal of the patent system is to bring new designs and technologies into public domain through disclosure and it contributes to the stimulation of innovations and technological advancement in three ways:

- it's an incentive to inventive and innovative activity;
- the limited monopoly creates an environment which facilitates the efficient development and utilization of patented inventions;
- it provides a framework for the collection, classification and dissemination of the richest store of technological information.

The Correlation between technology and economic growth was aptly stated by Lomthuzi Jere that there is considerable evidence suggesting that technological change has been an extremely important source of economic growth over time and that levels of invention are responsive to economic stimuli.⁷⁰

This has been empirically verified by Robert Solow in a research that revealed that approximately 80 per cent of the growth in non-farm out put per worker in the United States between 1905 and 1949 was attributed to technological change rather than increased capital intensity.⁷¹

Similarly, Edward Demison further demonstrated that 36 per cent of the rise in out-put per worker between 1929 – 1957 in U.S.A was attributed to the advance of scientific and technological knowledge.⁷²

The studies by Demison and Solow (above) provide a convenient point of departure to contend that countries that do not have patent systems more often than not may be free riding a domestic or foreign invention stimulated by patent protection abroad. Thus, the need to develop an efficient domestic system.

⁶⁹ Cornish, Op Cit, PP 136 and P 32 respectively

⁷⁰ According to an interview with Lomthuzi Jere, the manager – policy Development, Coordination and promotion at the National Science and Technology council, 6th July 2001.

INTERNATIONAL STANDARDS

Calls for reform of Zambia's patent Laws have largely been motivated by the international global harmonization movement. The areas of focus will be the patent Act's compliance with the TRIPS Agreement. Due to limitation of space, only those provisions in the TRIPS Agreement that are not contained in the Zambian Act will be highlighted.

The first provision relates to patentable subject matter. Article 27 (3) (b) TRIPS provides that members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. Under the Act there is not provision for the protection of plant varieties. This is a short fall on the part of the Act.

The TRIPS Agreement provides, inter alia, that in relation to compulsory licenses, such use shall be non- exclusive.⁷³ But the Act provides that if in respect of an application (for compulsory licenses) the High court is satisfied that the invention is not being worked on a commercial scale within Zambia, it may, order the grant to the applicant an exclusive license. The order shall operate to divest the patentee of any right which he may have as patentee and to revoke all existing licenses unless otherwise provided in the

⁷¹ R.M. Solow, Technological change and the Aggrigate production function, 39 Rev. Eco. And Stat. 312, 320 (1957)

⁷² E.F. Denison, Accounting for U.S. Economic Growth, 1926 to 1969, 128 Bookings inst. 1974.

⁷³ Art. 31 (d)

order.⁷⁴ This provision is clearly at variance with the provision of TRIPS Agreement and therefore calls for need to amend it accordingly.

Though not compulsory, there is also a provision in relation to compulsory licenses that provides that any such use may be predominantly for the supply of the domestic market of the member authorizing such use.⁷⁵ This provision is not contained under the Zambian Act. Another provision lacking in the Act relates to duration of the compulsory licenses. There is no provision regulating the term of the license which makes it prone to abuse. Such provision is contained in Article 31 (g) of TRIPS Agreement which states that use under a compulsory license shall be liable to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur and Article 31 C which provide that the scope and duration of such use shall be limited to the purpose for which it was authorized.

The TRIPS Agreement goes further by providing conditions that must apply in relation to compulsory licenses where such use is authorized to permit the exploitation of a patent (the second patent) which can not be exploited without infringing another patent (the first patent).⁷⁶ This provision addresses the problem of dependent patents or patents of addition when it comes to compulsory license. This situation is not envisaged and provided for under the Act and therefore, there is need to incorporate it in our Act.

⁷⁴ Section 37 (8) and (11) respectively

⁷⁵ Art. 31 (F) of TRIPS

⁷⁶ Ibid Art 31 (1)

The TRIPS Agreement provides that the term of protection available for patents shall not end before the expiration of a period of twenty years counted from the filing date.⁷⁷ But the Zambian patent Act in Section 29 provides that the term of patent protection shall be 16 years which clearly is not in conformity with the provisions of TRIPS. Thus, there is need to amend the term of protection to 20 years or above.

In respect of proceedings of infringement of a patent for a process for obtaining a product under TRIPS the burden of proof is on the defendant to prove that the process to obtain an identical product is different from the patented process.⁷⁸ Member states should therefore provide that in the absence of proof to the contrary, identical products will be deemed to have been obtained by the patented process. Though recognized to some extent under the Act which provides that in an action for infringement of a patent in respect of an invention which relates to the protection of a new substance, any substance of the same chemical composition and constitution shall in the absence of proof to the contrary be deemed to have been produced by the patented process.⁷⁹ However, the scope of protection in this section should be extended to include all process patents and not restricted to those substances of the same chemical composition.

⁷⁷ Ibid Art. 33

⁷⁸ Ibid Art 34

⁷⁹ Section 53 (6) of the Patent Act

CHAPTER FOUR

The area of focus in this Chapter is intellectual property rights, which are concerned with means of promoting and selling goods and services. These methods are trade marks and Laws against unfair competition.¹

TRADE MARK

In order to understand what is meant by trademark, it is imperative to appreciate what trade is and what a mark is. Trade is the business of buying and selling goods; commerce; barter; occupation or vocation. A mark on the other hand is a visible sign, a peculiarity or a distinguishing feature. The Trade mark Act defines a mark as including a device, heading, label, ticket, name, signature, word, letter, numerical or any combination thereof.²

With the increase of trade there was need to distinguish the goods of different merchants and manufacturers from those of their competitors. Competing manufacturers and traders offer consumers a variety of goods in the same category. With a variety to choose from the consumer may easily be confused and must therefore be guided on the alternatives on the market in order for him to make a choice. This guidance comes in the form of naming, labelling or marking the goods. The means by which the goods are named, labelled or market is what can be understood as trademark. A trademark therefore assists consumers to identify particular products of a particular manufacture in a given industry.

¹ The respective Acts governing these branches of law are the Trademarks Act (Cap 401) and the competition and fair Trading Act Cap 417 of the Laws of Zambia and the merchandise marks Act Cap 405.

² Section 2 of Trade mark Act.

Example of trademarks are Sony, Philips, Christian Dior, Nike and Puma, to mention a few. The mark (✓) is a sign that the product is from Nike.

DEFINITION

The Trademark Act defines a trademark as;

“A mark used or proposed to be used in relation to goods for the purpose of indicating, or so as to indicating, or so as to indicate a connection in the course of trade between the goods and some person having the right either as proprietor or as registered user to use the mark, whether with or without any indication of the identity of that person.”³

In the case of Smith Kline and French Laboratories V. Sterling Winthrop Group Ltd.,⁴ a colouring system applied to pharmaceutical capsules was held to be a mark. Lord Diplock held that the colour combination served the business purposes of a trademark by indicating to buyers that the goods were made by SKF and not any other manufacturer.

A trademark relates only to tangible goods and not the other aspect of trade, i.e. services that do not produce goods such as transport, banking and insurance. Similarly, there is need to have marks used for identifying them and these are what are known as service marks. The Trademark Act does not provide for registration of service marks.

³ Ibid

⁴ (1975) 2 ALL. E.R. 578

They are also symbols capable of distinguishing the goods or services of members of the association which is the proprietor of the mark from those of other undertakings. These are called collective marks and are not registerable under the Trademark Act.

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Like collective marks, they are also certification marks used to indicate the affiliation of enterprises using the mark to signify standards met by their products. The Act provides that;

“A mark adapted in relation to any goods to distinguish in the course of trade goods certified by any person in respect of origin, material, mode of manufacture, quality accuracy or other characteristics from goods not so certified shall be registerable as a certification trade mark in part C of the register in respect of those goods in the name, as proprietor thereof, of that person”⁵

PROTECTION OF TRADE MARKS IN ZAMBIA

Under the Act, trade marks rights are protected under common law and by registration under the Act. Common Law rights are recognised by virtue of section seven (7) which provides that the tort of passing off goods of another person is actionable in Zambian courts of Law. Furthermore, section 12 prohibits a proprietor of a registered mark from

restraining the use by another person of a prior unregistered mark similar to the registered one in all important respects.⁶ The method that offers better means of protection and redress in case of infringement is registration of a mark under the Act even though the law does not compel one to register a mark.

REGISTRATION OF MARK

Types of trademarks that can be registered under the Act are ordinary trade marks, certification trade mark and defensive trade mark which are registered in the appropriate parts of the Act. A mark shall not be registered if it is deceptive or cause confusion, or immoral or contrary to the law or identical in all material respect to a mark already registered in the name of another person.⁷ A trade mark bearing certain words such as “patent, copyright or Red cross and those words wrongly implying a connection between the owner and the President or the government, or there coat of arms of Zambia and the flag, is not registerable under the Trade marks Act.⁸

One pre-requisite for registration is distinctiveness of the mark as provided in section 14 and 15 of the Act. This means the mark must be inherently adapted to distinguish its goods or it must be an invented word, that is, if its new and freshly coined.⁹

⁵ S. 42 Of Trade marks Act

⁶ According to a paper presented by Wilbrod Mulenga at the National Intellectual Property seminar held in Lusaka, June 27 – 29, 2001, on Registration of Intellectual Property Rights.

⁷ Section 16 and 17 of the Act respectively.

WHO MAY APPLY FOR REGISTRATION

The Act provides that any person claiming to be the proprietor of a trade mark used or proposed to be used by him who is desirous of registering it must apply in writing to the registrar in a prescribed manner for registration.¹⁰ Both natural and artificial persons under the law may apply.

PROCEDURE FOR REGISTRATION

The application after filing is received at the Patent Office and stamped with a filing date. It is then examined to determine suitability for acceptance and if accepted, it must be advertised in accordance with section 23. The essence of advertising is to enable any person to oppose the application within two months from advertising and the applicant must also respond within two months. A hearing will subsequently be held by the Registrar whose decision is subject to an appeal to the High Court.

When an application is accepted the Registrar shall register the trademark and issue the applicant a certificate of registration sealed with the seal of the Patent Office.¹¹

EFFECT OF REGISTRATION

The effect of registration of a trade mark is that it gives its proprietor 'the exclusive right to use the trade mark in relation to those goods.'¹²

⁸ Ibid Regulations 15 and 16 of the Act.

⁹ Wilbrod Mulenga, *Op Cit*

¹⁰ Section 22 of the Trade mark Act.

¹¹ Ibid, S. 24 (1) and (2)

INFRINGEMENT

The exclusive right of a trade mark proprietor is deemed to be infringed by any person who not being the proprietor or a registered user thereof using by way of the permitted use, uses a mark identical with it or so nearly resembling it as to be likely to deceive or cause confusion in the course of trade in relation to any goods in respect of which it is registered.¹³

DURATION AND RENEWAL

Once registered, the trade mark is valid for a period of seven years but subject to renewal from time to time.¹⁴ The trademark is renewed for a period of fourteen (14) years from the date it expires.

A registered trade mark may be struck off the Register on application by any person aggrieved to the High Court on the ground that the applicant had no bona fide intention to use it and that there has in fact been no bona fide use in relation to those goods or that a continuous period of five years or longer elapsed during which there was no bona fide use.¹⁵

The Act creates offences for certain acts such as where a person deliberately makes or submits a false statements or representation with a purpose of deceiving the Registrar or any officer of the Trademark office as regards the execution of the provisions of the Act,

¹² Ibid S. 9(I)

¹³ Ibid.

¹⁴ Ibid S.25

¹⁵ Ibid S. 31

or where a person deliberately gives false evidence on oath before the Registrar concerning any subject matter.¹⁶

THE ECONOMIC ASPECT OF TRADE MARKS

Trade marks by their nature are economically oriented in that they aim to safeguard the economic or commercial interest of the enterprise which conceived it. The economic aspect rests on the notion that marks indicate source, develop and bear there owners goodwill and they offer a Unique name of the product offered by the marks owner. Therefore, once established on the market, trade marks represent an extremely valuable assets to the owner. Accordingly, an interview with Mr. Wilbrod Mulenga revealed that the trademarks have a value which can be expressed in monetary terms and he gave an example of a report by UNCTAD of 1979 which estimated the value of the trade mark Coca-cola to be 3.4 billion U.S. dollars.¹⁷

With the liberalised economy adopted in Zambia, the significance of trade mark laws is that it prevents third persons from ridding on the economic goodwill created by a trade mark. This is reflected in the case of Lever Brothers V. Trade Kings¹⁸ involving Geisha and Gezza bathing soaps, both being registered trade marks with Geisha belonging to the plaintiff and Gezza belonging to the defendants. The plaintiff brought an action on the ground that the defendants product infringed their trade mark in that it would deceive and confuse consumers owing to the similarity in their pronunciation and floral markings and colour on their packaging. Basing it's decision on section 16 and 17 of the Act which

¹⁶ Ibid S. 70 and . 71 respectively.

¹⁷ Interview on 06 June 2001

prohibit the registration of marks that are likely to deceive, confuse, or mistake consumer as to the source of the goods, the court held that Gezza because of the floral labelling on its package which was very similar to that of Geisha was likely to confuse consumers and therefore could not be used. This decision clearly illustrates the economic aspect of trade marks which is reflected in their purpose as outlined by Pro. Cornish.¹⁹ These functions are:

- Origin function; they are indicators of the trade source of the goods or services;
- Quality or guarantee function: marks symbolise qualities associated to the goods and guarantee that they measure up to expectation;
- Investment or advertising function; marks are cyphers around which investment in the promotion of a product is built and that investment is a value which deserves protection.

Trade marks, it is submitted, play an important role in the economic welfare of its proprietor and the nation in that the demand for its protection has swelled immensely with the development of modern advertising and large scale retailing.²⁰

TECHNOLOGY AND TRADE MARKS

The correlation between trademarks and technology may seem far fetched. However, modern advertising is mainly carried on with the aid of modern technology such as advertising through the Internet. This is a positive impact of technology on trade marks.

¹⁸ (1998) ZLR

¹⁹ Cornish, Op Cit, P612

However, it has also been argued that “the general protection against unfair imitation of marks is a product of the commercial revolution that followed factory production.”²¹ Technology advancement has given rise to organised crimes as evidenced in the discovery of illegal manufacturer of intercem products (i.e. registered trade mark) in Mandevu, one of Lusaka’s townships.²² Furthermore, use of technology in the form of machines is evident in the manufacturer of counter feit products bearing a well know mark which are sold at the town centre, some shops in town and the city market.²³

COMPLIANCE OF DOMESTIC LEGISLATION TO INTERNATIONAL STANDARDS

The main international treaties in relation to trade marks to which Zambia is a party are Paris Convention and the TRIPS Agreement. However, the Paris Convention provides that the filing and registration of trademarks shall be determined in each country of the union by its domestic legislation.²⁴ This as it may be, they are other provisions which must nonetheless be incorporated in our domestic legislation.

The Paris Convention provides for protection of service marks in Article 6 sexies. The TRIPS Agreement adopts a broad definition of marks in that it requires trade mark registration to extend to marks for services.²⁵ The Zambian Act does not provide for registration of service marks and thus falls short on these international requirements.

²⁰ Ibid. P 599

²¹ Ibid

²² Times of Zambia, November 2000

²³ Findings of my research around the markets and shops from 24 – 30 March 2001 to determine the originality of goods sold.

²⁴ Article 6 (i) of Paris convention

²⁵ Article 15(4) of the TRIPS Agreement

Article 6 bis of the Paris convention provides for protection of well-known marks as being already the mark of a person entitled to the benefits of the convention.

Therefore the competent authority may refuse or cancel the registration and prohibit the use of a well known mark of a person entitled to the benefit of the convention even if it is not registered in its jurisdiction. The *Zambian Act* does not provide for protection of well known marks.

The TRIPS Agreement extends the Paris convention provision on the protection of well know marks to service marks and to cases of dilution by use for different foods and services where that use is damaging.²⁶ Similarly, the *Zambian Act* lacks provisions for the protection of well known marks in relation to service marks.

Another provision that is not contained in the *Zambian Act* but IS provided for under the Paris Convention relates to protection of collective marks belonging to associations.²⁷ This is another short coming of the *Zambian Act*.

ACTS OF UNFAIR COMPETITION

The repression of unfair competition is recognised among the objects of industrial property protection under the Paris Convention.²⁸ Protection against unfair competition is based not on an application to the industrial property office which confers an exclusive right but on the consideration that acts contrary to the honest business practice are to be

²⁶ Ibid, Art. 16

²⁷ Art. 7 bis of Paris convention.

prohibited.²⁹ Though different from the other intellectual property rights, protection against unfair competition effectively supplements the protection of Industrial property rights such as patents and trade marks.

In Zambia acts of unfair competition are regulated by the competition and Fair Trading Act.³⁰ Its preamble provides that it is an Act:

“to encourage competition in the economy by prohibiting anti-competitive trade practices; to regulate monopolies and concentration of economic power; to protect consumer welfare; to strengthen the efficiency of production and distribution of goods and services, to service the best possible conditions for the freedom of trade; to expand the base of entrepreneurship and matters incidental to the foregoing”.

Under the Act, anti – competitive trade practices are enumerated in section 7 which provides that any category of agreements, decision and concerted practices which have as their object the prevention, restriction or distortion of competition to an appreciable extent in Zambia or in any substantial part of it are declared anti-competitive trade practices and are hereby prohibited. These acts include discriminatory pricing and discrimination, predatory behavior towards competition and imposing restriction on the form or qualities of goods to be supplied.

²⁸ Art. 1(2)

²⁹ Intellectual Property Reading material, Op Cit, P125.

³⁰ CAP 417 of the Laws of Zambia 1995 Edition.

Under section 12, the Act provides for Unfair trading by prohibiting a person to do any act in relation to goods with the aim of bringing about a price increase, include liability for defective goods, make false representation in relation to goods that is likely to mislead the public in relation to goods or services or supply any products which is likely to cause injury to health or physical harm to consumers.

The Act further provides for anti-competitive trade practice by associations and establishes the Zambia competition commission whose function is to control, monitor and prohibit acts or behavior likely to adversely affect competition and fair trading in Zambia.³¹

ECONOMIC ASPECT

The economic aspect of acts of unfair competition is reflected in section 7(2) of the competition and fair trading Act which provides that enterprises shall refrain from the acts prohibited by this section (already referred to) if, through abuse or acquisition of a dominant position of market power, they, limit access to markets or otherwise unduly restrain competition, or have, or are likely to have adverse effect on trade or the economy in general.

Further more, the Act provides the criteria for controlling monopolies and concentrations of economic power whereby the commission is empowered to keep the structure of production of goods and services in Zambia under review to determine where

³¹ Section 10, 4 and 6 of the Act respectively.

concentration of economic power exists whose detrimental impact on the economy outweigh the efficiency advantage.³²

These provisions clearly illustrate the importance of intellectual property in the form of repression of unfair competition in the economic well being of individual enterprises and the nation as a whole.

INTERNATIONAL STANDARDS

Protection against unfair competition is recognised in the Paris convention under Article 10 bis which provides that, the countries of the union are bound to assure effective protection against unfair competition and that any act contrary to honest practices in industrial or commercial matters constitute an act of unfair competition. It further prohibits the following acts:

- i. All acts that create confusion with the establishments, the goods, or activities of a competitor;
- ii. False allegations to discredit the establishment, goods or activities of competitors;
- iii. Indications or allegations liable to mislead the public in relation to the goods,

Protection against unfair competition under the TRIPS Agreement is recognised under Art 39 (i).

From the foregoing, it is apparent that the Zambian Laws are in compliance with these international provisions.

³² Ibid S.11

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

It has been argued that successful problem solving requires finding the right solution to the right problem. We fail more often because we solve the wrong problem than because we get the wrong solution to the right problem.¹ Intellectual property is a branch of law which protects some of the finer manifestations of human achievements. The main characteristic of intellectual property law is that it defines conduct which may not be pursued in relation to products of the mind expressed and manifested in some material form without the consent of the right owner. This form of protection applies to ideas and information which are of commercial value.

Therefore, by way of conclusion, this chapter will capture the main arguments for the various branches of intellectual property discussed in the preceding chapters and offer recommendations on the short falls of our intellectual property laws in relation to international standards.

The importance of copyright is described in the preface to the guide to the Berne convention as follows:

“Copyright, for its part, constitutes an essential element in the development process. Experience has shown that the enrichment of national cultural

heritage depends directly on the level of protection afforded to literary and artistic work. The higher the level, the greater the encouragement for authors to create; the greater the number of a country's intellectual creations, the higher it is renowned; the greater the number of productions in literature and the arts, the more numerous their auxiliaries in the book, record and entertainment industries, and indeed, in the final analysis, encouragement of intellectual creation is one of the basic pre-requisites of all social, economic and cultural development".

The above notion of copyright was echoed by Martin Nkhoma, the Chairman of the Zambia Association of Musicians, when he said, once a musician is empowered economically through the protection of his work under copyright, the nation as a whole will benefit through the arm of taxation. He further said copyright helps to preserve the cultural heritage and identity of a nation.² Therefore, the development of a sound copyright base in Zambia is not only of importance but, it is of fundamental importance. A local Musician St. Michael was optimistic that Zambian artists can earn a living from their music but added that it is only attainable if the organizations managing artists are serious.³

The patent law is directed towards the pursuit of technical knowledge which is a fundamental aspect of the modern world. Patent law is important because technology is important. The United Nations Secretary for Economic and Social Affairs, Mr. Ph de Seyness declared at the

¹ . Russell L. Ackoff, *Redesigning the Future: A system approach to social problems* (1974)

² . Interview with Martin Nkhoma conducted on 06.07.01 at the Zambia Association of Musicians Offices

³ . Interview with St. Michael (Musician), a video Editor and band leader at Muvi Studio, 06.07.01

opening of the New Delhi Conference of the United Nations Conference on Trade and development (UNCTAD) in 1968 that;

“The patent system can be of great benefit in the industrialization of the Least Developed Countries provided that they are able to protect themselves against the abuse often inherent in the monopoly position created by the patent. Many countries simply do not have the know how or personnel to examine applications with this criteria in view. Consequently many patents are issued without justification and impose unfair restrictions on imports and production.”⁴

The significance of a patent system in the industrialization process of any nation can not be ignored. According to a United Nations Committee for Industrial Development, Industrialization is a process of economic development in which a growing part of the national resources is mobilized to develop a technically up to date, diversified domestic economic structure capable of assuring a high rate of growth for the economy as a whole and of achieving economic and social progress.

There is growing integration of the global society such that the role of trade marks and acts of unfair competition are increasingly becoming important factors in the economic welfare of many countries. It is thus contended that;

⁴ . Anderfelt, L.F. International Patent Legislation, The Hague, Martinus Nijhoff. 1971, P194.

“As goods and services move more freely and quickly throughout an increasingly integrated global economy, producers and distributors need to be assured that the creative or innovative element of these goods and service, and elements that give these goods and services their unique character and thus, their competitive advantage, are protected against misappropriate.”⁵

Attractive as it may be, the notion that intellectual property plays a significant role in the development of a nation is meaningless if the rights it seeks to protect cannot be enforced. Accordingly, it is provided that there is no point in establishing a detailed and comprehensive system of granting and disseminating information concerning them, if it is not possible for the right owner to enforce their rights effectively in a world where expanding technologies have facilitated infringement of protected right to a hitherto unprecedented extent.⁶

RECOMMENDATION

It is apparent from the foregoing that for an intellectual property system to be effective, it must be underpinned by a strong enforcement mechanism. It is further provided that no intellectual property system, however well its basic laws are drafted and however efficiently they are implemented, can make an effective contribution to economic and technological development unless the system is known to, and used by, those for whose benefit it was established. The first recommendation is that the intellectual property system in Zambia should be well publicized if it is to achieve the desired fruits.

⁵ Frederick Abbot, Thomas Cottier and Francis Gurry, *The International Intellectual Property System: Commentary and Materials* part 1. Kluwer Law International, Netherlands, 1999, P.2

The study has also brought to the fore some short falls of the domestic legislation in relation to international standards which need to be amended to be in compliance with these standards.

In the area of copyright, it is recommended that the copyright Act be amended to provide for the right to an interest in resale (droit de suite) contained in the Berne convention.. The Act should also be amended to provide for the following:

- The right of fixation for author unfixed performances
- To provide for rental right a contained in the TRIPS Agreement,
- The right of communication to the public should be broadened to include on-line digital service as contained in the WIPO Copyright Treaty and the WIPO performance and phonograms Treaty,
- Protection against anti-spoiler devices,
- Obligations concerning Right management information;
- Extension of moral right to performers.

The recommendations in relation to patents are the following. The patent Act should provide for:

- Protection of plant varieties as patentable subject matter
- Compulsory licenses should be non-exclusive as provided under the TRIP Agreement
- The use of an invention under a compulsory license must be for the supply of the domestic market.

⁶ Intellectual property Reading material, WIPO (1998) p. 199

- Provisions in relation to dependent patent in the case of compulsory licenses
- The term of protection should be extended from 16 years to 20 years
- The burden of proof in proceedings of infringement for process patents should fall on the defendant to prove that the process to obtain an identical product is different from the patented process.

It is recommended that the *Zambian Trade marks Act* be amended to cure the short comings.

It should be amended to provide for:

- The protection and registration of service marks
- The protection of well – known marks
- The extension of protection of well known marks to service marks
- Protection of collective marks belonging to association

CONCLUSION

The inscription at the Headquarters of WIPO in the WIPO Hall states that human genius is the source of all works of art and invention. These works are the guarantee of a life worthy of men. It is the duty of the state to ensure diligence and the protection of the arts and invention. Inventiveness and creativity are features which have favored the differentiation of mankind in the course of evolution from all other living species. As such, it is only through the creativity of men that real development can come about. Such creativity cuts across sectoral lines in human endeavor.

It is in this regard that the discussion has drawn an analysis from a number of perspectives – legal, economic and technology – reflecting the emergence of an interdisciplinary approach to intellectual property. The significance of such an approach is that it provides an explanation of the new dynamics of innovation so that economic, and technological development can be achieved.

Recognizing the potential of intellectual property in the development process, we therefore, must act upon the first signals of success to seek protection for the ultimate end in sight. Intellectual property has emerged as an amalgam of differing passion and there is, more than ever before a general acceptance that the wheels of development are oiled by intellectual property. Zambia should therefore not be left out. Finance Minister Katele Kalumba in his budget address (2001) said this hour is at the threshold to prosperity, away from economic malaise and decadence. We can not flirt with ideologies of failure. We know the aroma of success. Let us play to win and reject mediocrity. Zambians are capable of success and they have not suffered in vain.

The intellectual property system has added fuel of interest to the fire of genius..

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