

**INTELLECTUAL PROPERTY RIGHTS IN EAST AFRICA
HARMONIZATION OF PATENT LAWS AND POLICIES FOR
THE EAST AFRICAN COMMUNITY**

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DECLARATION

I solemnly declare that this is my original work both in style and substance and the same to the best of my knowledge has not been presented to any academic institution.

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DEDICATION

This research is dedicated to our last born daughter, Keziah Wendo Manzi

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To God be the glory.

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Kenyan Constitution and statutes

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Competition Act No. 12 of 2011 (2011)

Industrial Property Act, 2001 (2001)

Science and Technology Act, Cap 250

Seeds and Plant Varieties Act (1991) Cap 326

Seeds and Plant Varieties (Plant Breeder's Rights), Regulations, 1994 (2002)

Ugandan Constitution and statutes

Constitution of the Republic of Uganda (as last amended in 2005) (2005)

Trade Secrets Protection Act, 2009 (2009)

Patents (Amendment) Act, 2002 (2002)

Patents Act (1993)

United Kingdom Designs (Protection) Act (1937)

Uganda Registration Services Bureau Act (2004)

National Environment Act (1995)

Tanzanian Constitution and statutes

Constitution of the United Republic of Tanzania of 1977 (as last amended by Act No. 1 of 2005) (2005)

Constitution of Zanzibar

Union of Tanganyika and Zanzibar Act, 1964 (1964)

Patents (Registration) Act (1995)

Protection of New Plant Varieties (Plant Breeders' Rights) Act, 2002 (2002)

Traditional and Alternative Medicine Act No. 23 of 2002 (2002)

Universities Act, 2005 (2005)

Zanzibar Industrial Property Act No. 4 of 2008 (2008)

Rwandese Constitution and statutes

Law No. 31/2009 on the Protection of Intellectual Property (2009)

Law No. 19/2010 of 9/6/2010 on the Organization of the Craft Sector (2010)

Law No. 21/2006 of April 28, 2006 Establishing the Customs System (2006)

Law No. 12/99 of June 12, 1999 relating to the Pharmaceutical Art (1999)

Burundian Constitution and statutes

Law No. 1/10 of April 3, 2013, on the Reform of the Criminal Procedure Code (Criminal Procedure Code) (2013)

Commercial Code (Law No. 1/07 of April 26, 2010) (2010)

Law No. 1/24 of September 10, 2008, establishing the Investment Code of Burundi (Investment Code) (2008)

Law No. 1/02 of January 11, 2007, establishing the Customs Code (2007)

LIST OF PATENT RELATED TREATIES, CONVENTIONS/ DECLARATIONS & INTERNATIONAL AGREEMENTS

Patent Law Treaty

Patent Cooperation Treaty (June 8, 1994)

Convention Establishing the World Intellectual Property Organization (October 5, 1971)

Paris Convention for the Protection of Industrial Property (June 14, 1965)

International Convention for the Protection of New Varieties of Plants (UPOV) (May 13, 1999)

Agreement establishing the World Trade Organization (WTO) (January 1, 1995)

World Trade Organization (WTO)- Agreement on Trade-Related Aspects of Intellectual Property

Rights (TRIPS Agreement) (1994) (January 1, 1995)

Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore within the Framework of the African Regional Intellectual Property Organization (ARIPO)

Harare Protocol on Patents and Industrial Designs Within the Framework of the African Regional

Industrial Property Organization (ARIPO) (October 24, 1984)

Lusaka Agreement on the Creation of the African Regional Intellectual Property Organization (ARIPO) (February 15, 1978)

Treaty for the Establishment of the East African Community (July 1, 2000)

ACRONYMS AND ABBREVIATIONS

ACTA	Anti-Counterfeiting Trade Agreement
ARIPO	African Regional Intellectual Property Organization
ASEAN	Association Of Southeast Asian Nations
ASERECA	Association For Strengthening Agricultural Research In Eastern And Central Africa.
BIRPI	United International Bureaus For The Protection Of International Property
Berne convention	Berne Convention For The Protection Of Literary And Artistic Works.
CARICOM	Caribbean Community
COMESA	Common Market For Eastern And Southern Africa
CSM	EPO Case Management System
EA	East Africa
EAAPP	East Africa Agricultural Productivity Program.
EAC	East African Community
EAC treaty	The Treaty Establishing The East Africa Community 1999
EACCM	East Africa Community Common Market
EACSO	East African Common Services Organization
EAHC	East Africa High Commission
EC	European Commission
EU	European Union
EALA	East Africa Legislative Assembly
EPO	European Patent Office
EPC	European Patent Convention
GATT	General Agreement On Trade And Tariffs
Hague agreement.	Hague Agreement Concerning The Deposit Of Industrial Designs.
IP	Intellectual Property
IPR	Intellectual Property Rights
KARI	Kenya Agricultural Research Institute
KECOBO	Kenya Copyright Board
KEPHIS	Kenya Plant Health Inspectorate Service
KIPI	Kenya Industrial Property Institute
LDCs	Less Developed Countries
Madrid agreement	Madrid Agreement Concerning The International Registration Of Trademark.
NAFTA	North American Free Trade Agreement
NEPAD	New Partnership For Africa Development
NGO	Non-Governmental Organization
Nice Agreement	Nice Agreement For International Classification Of Goods And Services For The Purposes Of Registration Of Marks
OAPI	African Intellectual Property Organization
OPEC	Organization Of Petroleum Exporting Countries
Paris Convention	Paris Convention For The Protection Of Industrial Property.
PhRMA	Pharmaceutical And Research And Manufacturing Association
PCT	Patent Cooperation Treaty

R & D	Research And Development
SADAC	Southern African Development Community
STAK	The Seed Trade Association Of Kenya
SME	Small And Micro Enterprises
PTAs	Preferential Trade Agreements
TK	Traditional Knowledge
TM	Traditional Medicine
TRIPS	Trade Related Aspects Of Intellectual Property Rights
UNCTAD	United Nations Conference On Trade And Development
UPOV	International Convention For The Protection Of New Varieties Of Plants
USA	United States Of America
UNESCO	United Nations Educational, Scientific And Cultural Organization
WIPO	World Intellectual Property Organization
WTO	World Trade Organization
4G-LTE	Fourth Generation Long Term Evolution

ABSTRACT

While acknowledging that the foundational conventions on intellectual property rights of the 18th century brought the world together towards uniformity under the doctrine of territoriality, the world did not settle there for long. The conventions, treaties and protocols negotiated and signed thereafter are reflections of the dynamism of the evolution of the IP regime. Under the WTO negotiated TRIPS, Provisions for basic minimum conditions by each member state were concluded and acceded to. Yet, soon thereafter different regional IP blocs emerged and the USA led the pack in the signing of bilateral trade agreements with her trade partners. Her intention was to supplement if not to circumvent the provisions of the TRIPS with the ultimate goal of benefitting her IP oriented multilateral industries. EU also put in place laws and policies to come up with a harmonized patent regime administered at EPO. The EU example has become a success story worth emulating. East Africa should not be left behind clinging to the Paris, Berne Conventions and TRIPS blindly. It is argued in this research that time has come for the East Africa Community member states to harmonize her patent policy and laws. Along this is the role of the internet in driving IP administration and exploitation. To effectively compete with the rest of the world the proposed harmonized patent regime should be administered through a central electronic registry at Arusha.

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CHAPTER 1

METHODOLOGY ON HARMONIZATION OF PATENT LAWS AND POLICIES FOR THE EAST AFRICA COMMUNITY

1.1 Introduction to Methodology on Harmonization of Patent Laws and Policies for the East Africa Community

Intellectual Property Rights (IPRs) have attracted several definitions over time. Generally, they are defined as the attaching or ownership of rights to the creations of the mind. They include ‘inventions, literary and artistic works, names, symbols, images and others, which creations are used for commercial purposes’.¹ Also, IPRs have been defined as those ‘rights attaching to individuals and are intangible or informational, and are not susceptible to possession or delineation.’²

Intellectual property law on the other hand ‘regulates the creation, use, and exploitation of mental or creative labour. It also creates rights in a wide and diverse range of things from novels, computer programs, paintings, films, television broadcasts, performances, dress designs, pharmaceuticals, genetically modified animals and plants’.³

Patents have been defined to comprise of inventions that are new, non-obvious and industrially applicable.⁴ It is required that the invention sought to be protected be not previously known or described; that it constitute a step forward in technology using the standard of the person having ordinary skill in the art (PHOSITA)⁵ an objective and universal standard; and that it has practical

* See Ben Sihanya (2007) *Sihanya Mentoring PhD and LLM Thesis Guidelines and Sihanya Mentoring PhD and LLM Thesis Guidelines on Citation, Punctuation, Form(ating), Corrections, Submissions, and Marking Schemes*, Sihanya Mentoring and Innovative Lawyering, Nairobi & Siaya.

¹ WIPO (2004) “Intellectual Property Definitions,” at <http://www.wipo.int/about-ip/en/> (accessed 30/1/2014).

² J Mugabe.(2001),‘Traditional Knowledge, Genetic Resources and Intellectual Property Protection: Towards A New International Regime’ ielrc working paper 2001-5 <<http://www.ielrc.org/content/w105.pdf>>accessed on 30.1.2014

³ Lionel Bentley & Brad Sherman (2014) *Intellectual Property Law*, Oxford University Press (3rd Ed) at p.1.

⁴ Moni Wekesa (2009) *Traditional Knowledge- The need for Sui generis System of Intellectual Property Rights Protection* in Moni Wekesa and Ben Sihanya (eds) *Intellectual Property Rights in Kenya*, Konrad Adenauer Stiftung p. 274 at www.kas.de/wf/doc/kas_18323-1522-2-30.pdf?110214131726 (accessed 15/10/2015).

⁵ See Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, Sihanya Mentoring & Innovative Lawyering, Nairobi & Siaya, at p.93

utility in industry. They are exclusive monopoly rights preventing others from making, using, selling, offering for sale patented product or product made using patented process.

The scope of IPR law has been expanded by the introduction of a more dynamic jurisprudential question by Professor Ben Sihanya.⁶ In his book, *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, Sihanya Mentoring & Innovative Lawyering, Nairobi & Siaya at page 2, Sihanya while agreeing with the definitions given to intellectual property, he points out what he terms as ‘the more dynamic jurisprudential question’.

His argument is that where else many scholars while getting it right in focusing on the creative aspect of IPR and which is innovation in the first sense, they often ignore innovation in the second sense. He then goes to explain that “First, intellectual property addresses the product or process developed by an innovator. Second, IP means an interest or juridical relationship protected by law, and how that interest is transferred or transacted. This is the more dynamic jurisprudential question.”⁷ For purposes of this thesis, the focus is on patents.⁸

Article 103(1) (I) of the Treaty Establishing the East Africa Community (The EAC Treaty) provides a key framework to harmonize policies. This framework covers policies on commercialisation of technologies as well as promotion and protection of intellectual property rights. However, the EAC Treaty does not disclose the methodology for this harmonization. In fact, harmonization is classified as one of the many avenues through which the member states are to use to enhance the development of science and technology within the EAC.

⁶ Prof Ben Sihanya JSD, JSM (Stanford), LLM (Warwick), LLB (Nairobi), PG Dip Law (KSL) Scholar, Mentor & Public Interest Advocate Constitutional Democracy, ©, TM, IP and Innovation Law, ICT Law and Education Law, Parklands Law Campus, Room B3 (254-20) 3741769 (O); +4343259 (H); 0722897825: sihanya@uonbi.ac.ke

⁷ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, Sihanya Mentoring & Innovative Lawyering, Nairobi & Siaya, at page 2.

⁸ Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights In Kenya,” in Moni Wekesa and Ben Sihanya (eds) *Intellectual Property Rights in Kenya*, Konrad Adenauer Stiftung at www.kas.de/wf/doc/kas_18323-1522-2-30.pdf?110214131726 (accessed 15/10/2015).

For a community which has been in existence since 1999 there is need to question how and in which ways some of the provisions of the EAC Treaty can be exploited. To identify the methodology could be the much-needed catalyst for realization of the economic potential of harmonized patent policies and laws for the East Africa Community.

In the East Africa Community, the member states have their specific municipal patent laws. Yet, there is marked increase in cross border trade accompanied by movement of goods and labour. Just as the issue of harmonization of patents in the international arena is important, so it is regionally within the EAC. This then calls for the need to question whether the patent laws in the EAC can be harmonized and the methodology to achieve that target. This research focuses on harmonization of patents in the East Africa Community within the existing EAC Treaty framework.

In the East Africa Community (EAC), besides the municipal legislations of the member states, patents are governed by several international instruments to which the specific state is a signatory. Within Africa, we have African Regional Intellectual Property Organization (ARIPO) and Organization Africaine de la Propriete (in French and African intellectual Property Organization in English (OAPI). Both ARIPO and OAPI provide avenues for the protection and enforcement of IPRs but within the confines of TRIPS.⁹ Some scholars have argued that there is a very strong link between Intellectual Property Rights, trade, competition, industrial growth and economic development.¹⁰

TRIPs sets the minimum standards that all member states must comply with. In their work, Sikoyo, Nyukuri and Wakhungu,¹¹ have observed that there exists scanty literature relating to the status of IPR policy and laws in Africa. These authors further argue that there is minimal

⁹ See Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, Sihanya Mentoring & Innovative Lawyering, Nairobi & Siaya, at p.85

¹⁰ George Sikoyo, Elvin Nyukuri and Judi Wakhungu (2006) "Intellectual Property Protection in Africa: Status of Laws, Research and Policy Analysis In Ghana, Kenya, Nigeria, South Africa and Uganda," African Centre for Technology Studies (ACTS) Ecopolicy Series No. 16 at <<http://www.acts-net.org/images/Pubs/Monographs/ecopolicy16.pdf>>. (accessed on 31/01/2014).

¹¹ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development (IPILKA)*, *op. cit.*

literature that acts as a bridge to connect IPR and other development aspects. These other aspects of development include industrial growth and economic development. The acquisition and enhancement of technological capability, trade and competition are also in that category.¹²

Patents are territorial in nature.¹³ Ulrich Huber identified three precepts of modern territoriality doctrine as;

‘(1) a state’s laws have force within the state’s boundaries; (2) anyone found within the state’s boundaries is subject to the state’s authority; (3) comity will discipline one sovereign’s exercise of authority to respect the territorial competence of other sovereigns’.¹⁴

Patents are protected only within and in accordance with the legal rules of the jurisdiction where they have been granted.

There are also economic considerations when dealing with Patents. States will adopt such laws as may suite their economic interests. Where there exists for example, a stable set of preferences within each jurisdiction, it is generally agreed that the diverse laws are tailored to favour each jurisdiction and accommodate in a better way those individual preferences than a uniform set of laws imposed across all jurisdictions.¹⁵

¹² George M. Sikoyo (2006) “Intellectual Property Protection in Africa: Status of Laws, Research and Policy Analysis In Ghana, Kenya, Nigeria, South Africa and Uganda,” (African Centre for Technology Studies (ACTS) Ecopolicy Series No. 16 at <<http://www.acts-net.org/images/Pubs/Monographs/ecopolicy16.pdf>.(accessed on 31/01/2014). Cf. Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights in Kenya,” in Moni Wekesa and Ben Sihanya (eds) *op. cit.*

¹³ Paul Goldstein (2008) *International Intellectual Property Law: Cases and Materials*, Fountain Press, New York (2nded).

¹⁴ Alexander von Mühlendahl and Dieter Stauder (2009) “Territorial Intellectual Property Rights in a Global Economy – Transit and Other ‘Free Zones,” 6 MPI Studies on Intellectual Property: Competition and Tax Law. https://link.springer.com/chapter/10.1007/978-3-540-88743-0_46 (accessed 15/11/2017). Also See also Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development, op. cit.* at 83 -104.

¹⁵ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development, ibid*, at p.183.

The third consideration is the cultural implication of Patents. Luigi, Paola, and Luigi, argue that culture impacts directly on both expectations and preferences. The impact of this can be felt in the effects it has on the economic outcome.¹⁶

At the international level, as the world became more and more globalized, there was a corresponding increase in the movement of economic resources beyond one's national border. The world began to experience enhanced international trade. There was also increased movement of both capital and labor in a more liberal way.¹⁷ There was need to harmonize patent laws to reduce conflict among other reasons.

Harmonization of patents is not a new phenomenon. With the principle of territoriality as the cornerstone on the same set of facts, successive litigations can trigger different applications of domestic and international patent norms. This can lead to conflicting judgments and outcomes with different implications.¹⁸

It has been argued that as early as the 19th Century, the 1883 Paris Convention was a product of attempts to answer the concerns of the day caused by absence of harmonized patent laws.¹⁹ Patents are an important economic vehicle by many countries. The existence of fragmented patent laws has kept the international community busy trying to strike a deal on the question of harmonization of patents.

¹⁶ Luigi Guiso, Paola Sapienza, and Luigi Zingales (2006) "Does Culture Affect Economic Outcomes?" 20 Journal Of Economic Perspectives. According to Luigi, Paola, and Luigi, in the context of identifying casual link between culture and economy, culture can be defined as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation.) at http://www.kellogg.northwestern.edu/faculty/sapienza/htm/guiso_sapienza_zingales_jep.pdf.(accessed on 6/4/2016)

¹⁷ World Trade Organization (WTO) (2008) "International Trade Statistics," at http://www.wto.org/english/res_e/statis_e/its2008_e/its08_charts_e.htm.(accessed on 5/3/2015).

¹⁸ See World Intellectual Property Organization (WIPO) (2003) "The Impact of The International Patent System on Developing Countries," available at http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=17556. (accessed on 15/10/2014).

¹⁹ Jerome H. Reichman and Rochelle Cooper Dreyfuss (2007) "Harmonization Without Consensus: Critical Reflections On Drafting A Substantive Patent Law Treaty," 57 DUKE L.J. 85, 87; Also See generally WIPO (2016) "Open Forum on the Draft Substantive Patent Law Treaty (SPLT)," Geneva, Switz., Mar. 1–3, 2006 [hereinafter WIPO Open Forum], available at http://www.wipo.int/meetings/en/2006/scp_of_ge_06/scp_of_ge_06_inf1.html (hosting the presentation of papers, lectures, and speeches on the international harmonization of patent law).(accessed on 16/7/2015).

1.2 Background to the problem on Harmonization of Patent Laws and Policies for the East Africa Community

The background to this study is captured best by Quentin Skinner in his work, *Liberty Before Liberalism*²⁰ where he observed as follows;

“The history of philosophy, and perhaps especially of moral, social and political philosophy, is there to prevent us from becoming too readily bewitched. The intellectual historian can help us to appreciate how far the values embodied in our present way of life, and our present ways of thinking about those values, reflect a series of choices made at different times between different possible worlds. This awareness can help to liberate us from the grip of any one hegemonic account of those values and how they should be interpreted and understood. Equipped with a broader sense of possibility, we can stand back from the intellectual commitments we have inherited and ask ourselves in a new spirit of enquiry what we should think of them.”

In the Preamble to the EAC Treaty, the members of the EAC Treaty agreed to strengthen their economic, social, cultural, political, technological and other ties. The objective was to achieve sustainable development.

There are already indications of compelling needs for the East Africa Community to pool together their resources in the area of patents and particularly in the pharmaceutical sector. A good illustration can be seen in the flagship plan-EAC Regional Pharmaceutical Manufacturing Plan of Action; 2012-2016.²¹ In the plan, the strategic objectives are;

‘Promotion of competitive and efficient pharmaceutical production regionally, Facilitation of increased investment in pharmaceutical production regionally, Strengthening of pharmaceutical regulatory capacity in the region, Development of appropriate skills and knowledge on pharmaceutical production in the region, Utilization of TRIPS flexibilities towards improved local production of pharmaceuticals and

²⁰ Quentin Skinner (1998) “Liberty Before Liberalism,” Cambridge University Press, Cambridge, at <https://www.goodreads.com/work/quotes/36620-liberty-before-liberalism> (Accessed on 24/11/2015).

²¹ East Africa Community “Regional Pharmaceutical Manufacturing Plan of Action; 2012-2016,” at https://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business_investment_and_technology_services/CUP/Pharma/Literature/EAC_Regional_Pharmaceutical_Manufacturing_Plan_of_Action.pdf. (accessed on 15/11/2017).

mainstreaming innovation, research and development within regional pharmaceutical industry'.²²

We have pointed out earlier in this chapter that East Africa Member states have their different municipal laws and policies. Implementing the EAC Regional Pharmaceutical Manufacturing Plan of Action; 2012-2016 would naturally face legal challenges if implemented without addressing the question of the diversity of the legal regime. To overcome that challenge, the implementing committee identified the need to address the policy, legal and regulatory framework affecting the East Africa Community pharmaceutical sector development. Had the policy and patent laws been harmonized, such a challenge would not have been an issue.

There was a history created when in 1878, the western world agreed to export their laws governing intellectual property rights to their colonies. Through this process, patent laws found their way into EAC.

The TRIPS Agreement which has been regarded as the global convergence of IPR laws sets certain minimum protection to be met by each member states within their respective domestic legislations. However, member states are free to develop their own IPR law as long as it meets the minimum standards provided under TRIPS. This window can be exploited by EAC members to correct certain glaring historical hardships created by earlier treaties and protocols on patents by developing a harmonized policy and laws in the field of patents.

The key observation of this research is that most of the foundational conventions and treaties regulating patent laws and policies at the international stage were formulated before EAC came into existence as an economic bloc. Other patent related instruments were formulated within the first decades of independence of EAC member states. During that period, it is indeed questionable whether there were enlightened participations, contributions and input by the EAC. To develop their patent domestic legislations and policies, EAC member states had to stand on a foundation they did not participate in laying. This argument can be explained better by Table 1 below;

²² ibid

Table 1

Item	Treaty/Agreement	When passed	Effective date
1.	Paris Convention	20/03/1883	07/07/1884
2.	Berne Convention	09/09/1886	05/12/1887
3.	Hague Agreement	06/11/1925	01/06/1928
4.	UPOV	02/12/1961	24/04/1998
5.	Madrid Agreement	14/04/1891	1892
6.	PCT	19/06/1970	24/01/1978
7.	T L T	27/10/1994	01/08/1996
8.	UCC	06/09/1952	
9.	TRIPS	15/04/1994	01/01/1996
10.	WIPO	14/07/1967	26/04/1970
11.	WTO	15/04/1994	01/01/1995
12.	UNESCO	16/11/1945	04/11/1946
13.	UNCTAD	16/11/1964	1964
14.	ITU	17/05/1865	17/05/1865
15.	ARIPO	09/12/1976	15/02/1978
16.	OAPI	1977	1977

A harmonized patent law environment can provide a vehicle through which trade, information and technology transfer can become competitive. Accordingly, there is provision for the desired incentives to invest in R&D. It is also expected that such a legal regime may have the potential to empower administrative and judicial organs to enforce patents. Other benefits associated with this include preservation of traditional knowledge, promotion and guaranteeing of foreign direct investments as well as other intangible assets. It should also induce local capacities in manufacturing services and research.²³In this work a case is made that there are useful economic benefits associated with harmonized patents with the potential of benefiting the people of the EAC.

²³ Peter. K. Yu (2006) "Intellectual Property And Innovation Wealth. Issues and Practices n The Digital Age," Vol. 4 quoted in David Vivas Eugui and Jonathan Von Braun *Beyond FTA Negotiations; Implementing The New Generation Of Intellectual Property Obligations*, p. 115-116, atwww.idrc.ca/EN/Resources/Publications/openebooks/397-3/index.html. (accessed on 20/3/2014).

With the crucial role played by the information technology across the globe, EAC should not lag behind. This work proposes to examine the viability of establishing a single harmonized patent law regime for EAC propelled by a central electronic registry. The study will borrow heavily from the recorded data and the experiences of the European Union where a model of harmonized patent laws has been successfully implemented.²⁴

The process of the implementation of the Treaty is underway.²⁵ From the onset, the EAC Treaty envisaged a multi-gradual process of integration. This includes the establishment of the Customs Union, The Common Market, a Monetary Union and finally a Political Federation.²⁶ To realize the full benefits of integration, there is need to have a harmonized patent regime. Currently the EAC region is experiencing a near free movement of goods as well as services.

This is a great stride towards the realization of a crucial goal within the EAC Treaty. Movement of goods and services are components of the emerging market. As people move freely together with their goods and services within EAC, challenges on the administration and exploitation of patents may become imminent. The study seeks to show further that through harmonized patent policies and laws these challenges can be surmounted to a great extent

This research shall further consider the existing patent policies and patent laws within the EAC. Additionally, the research shall attempt to consider the efforts done by the Member states to harmonize their patent laws and policies.

²⁴ Stephen Agaba “Regional Harmonization Of Commercial Laws: Opportunities And Implementation Challenges,” <www.eac.int>(accessed on 15/11/2013). At page 6 of his article he identifies six bills on:

- (a) Intellectual Property Law
- (b) Contract Law
- (c) Public Private Partnership Law (PPP)
- (d) The Law of The Recognition of Instruments
- (e) Business Registration Law
- (f) Enforcement Measures and Procedures For Debt Recovery.

²⁵ Nigel Simonds (2002) *Central Issues In Jurisprudence: Justice Law And Rights*, Sweet and Maxwell, London (2nd ed). Cf. Diodorus Buberwa (2006) “The Achievements and Challenges of the New East African Community Co-operation,” Research Memorandum at <<http://www2.hull.ac.uk/hubs/pdf/memorandum58.pdf>> (accessed on 15/11/2013). The author traces the development of the implementation of the Treaty.

²⁶ See preamble to the EAC Treaty at http://eaci.org/?page_id=33.(accessed 10/12/2016)

The harmonization of patents can either be procedural or substantive. A good example on each of these two categories of harmonization are; the Paris Convention, the PCT and TRIPS. PCT is seen more as a procedural harmonized patent law.²⁷ On the other hand both the Paris Convention and TRIPS are a substantive patent harmonization documents. In this research the focus will be on both types of harmonization.

The institutions dealing with the administration of patents within the EAC have certain limitations. This makes it tedious and time consuming to register a patent or even conduct a search for data. The research will show that an electronic registry on patents for EAC would be welcome to address some of these challenges. If the proposals in the project are adopted and applied, it is expected that the time taken to do a search for data and register documents will be drastically reduced. It will also enhance the efficacy of the process of the administration of patents.

1.3 Statement of the Problem on Harmonization of Patent Laws and Policies for the East Africa Community

It is accepted in this research that the EAC Member States have made considerable efforts to reform their municipal patent laws to align them with the requirements of TRIPS. However, the origins of these patent laws came with certain historical challenges. Each member state has her own independent patent laws yet under the EAC Treaty, the Member States are called upon to harmonize their laws.

The problem under investigation is to examine whether time has come for the harmonization of patent laws and policy for EAC. This study will also examine how such a harmonized patent laws and policies can be centrally administered by way of an electronic registry to be located at Arusha.

²⁷ WIPO (2010) “Patent Cooperation Treaty (PCT) Working Group: The Need for Improving the Functioning of the PCT System,” Study prepared by the International Bureau, Geneva, at p. 19 http://www.wipo.int/edocs/mdocs/pct/en/pct_wg_3/pct_wg_3_2.pdf (accessed on 16/5/2015).

1.4 The Research Objectives of the Study on Harmonization of Patent Laws and Policies for the East Africa Community

Before embarking on this study, it is important to formulate a broad and specific planning. This involves coming up with a development framework setting out guidelines and standards for more comprehensive plan for the study.

The study has two categories of objectives; the specific objectives and the general objectives. The general objectives shall deal with the broad picture of the study while the narrow considerations of the study will fall under the specific objectives.

1.4.1 Specific Objectives

This research study focused on three (3) main specific objectives. These three were;

- (a) To consider the history and origin of the existing policies and laws on patents within the East Africa Community.
- (b) To consider whether time has come for the policies and patents of the EAC member States to be harmonized and the methodology for achieving that goal within the framework the EAC Treaty.
- (c) To make broad but key recommendations on the steps to be taken by the EAC Member States to attain full harmonization of the patent policies and laws for the EAC.

1.4.2 General Objectives

This research study focused on the following four (4) general objectives;

- (a) To identify the economic benefits of harmonization of patents in the EAC.
- (b) To examine the role of ICT in easing administration of patents.
- (c) To evaluate the possibility of setting up a centralized electronic patent registry at Arusha.
- (d) To make general recommendations to enable the EAC to achieve full harmonization of patent policies and laws.

1.5 Research Questions on Harmonization of Patent Laws and Policies for the East Africa Community

In this study there are areas of concern which have created interest for the study to be carried. To provide proposals on how conditions of the subject under discussion can be resolved, it is important to design the research question. It is also expected that there will be difficulties to be experienced in the course of this study. The research question will guide all stages of inquiry, analysis and reporting.

The study shall attempt to answer the following eight (8) questions:

- i) What is the origin of the current patent laws for the EAC Member States?
- ii) What are the existing patent laws and policies for EAC member States?
- iii) What has the European Union done to come up with harmonized patent policies and laws?
- iv) Are there efforts being done by the EAC to harmonize her Member States' patent policies and laws?
- v) Can the policies and laws governing the administration and exploitation of patents within EAC be harmonized?
- vi) What are the economic benefits of harmonized patent policies and laws for the EAC?
- vii) Should the setting up of an electronic registry like that of EPO at Arusha be the methodology to administer the harmonized patents in EAC?
- viii) What are the key recommendations?

1.6 Hypotheses on Harmonization of Patent Laws and Policies for the East Africa Community

The research shall focus on three (3) key hypotheses.

- (a) The integration process of the EAC Treaty would be incomplete without harmonized patent policies and laws.
- (b) Harmonized patent laws for the EAC may lead to many economic benefits
- (c) An electronic patents registry at Arusha may bring additional benefits to the EAC.

1.7 Conceptual and Theoretical Framework on Harmonization of Patent Laws and Policies for the East Africa Community

This part has been divided into two sections; conceptual framework of patents and theoretical framework of harmonization of patents.

1.7.1 Conceptual framework on Patents

Patents, like the rest of IPRs are tools of economic advancement that should contribute to the enrichment of the society;

‘through (a) the widest possible availability of new and useful goods and services and technical information that derive from innovative activity and (b) The highest possible level of economic activity based on the production, circulation and further development of such goods, services and information’.²⁸

This statement summarizes broadly the major tenets of IPR. There are the private interests of the inventor which have to be protected by the state. On the other part, there are the bigger interests of the society which are to be guarded by the state.

In territories where there is not sufficient innovative capacity, patents can impede development and hurt the wider societal interests. The problem with patent system stems from the provisions engraved in the Paris Convention which consists of a series of international agreements regulating the granting, protection and use of patents.²⁹ Most developing nations joined the Paris Convention long after its rules had been set. TRIPS did not make matters easier for developing countries given that developed nations are pushing for more stringent protection of IPR and the inclusion of such protection in their trade with developing countries.

Professor Patricia Kameri-Mbote argues that developing nations view the patent system as one of the international policy instruments adversely affecting their development prospects because of the large number of foreign patents³⁰. This makes it necessary to have various policy options to

²⁸ See Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights In Kenya,” in Chapter 5 of Moni Wekesa and Ben Sihanya (eds) *op.cit.* Cf Linda Makutsa Opati “Intellectual Property Rights in Health-Impact on access to drugs,” quoting ICTSD-UNCTAD-at p.30-31.

²⁹ Patricia Kameri-Mbote (1994) “Patents in development,” in Yash Vyas et al. eds. *Law and Development in Third World*, University of Nairobi, Faculty of Law at p. 412-435.

³⁰ *ibid.*

ensure the working of patents within the developing countries to the benefit of their inventors and the society at large.

A good example can be given of Kenya. At independence, Kenya inherited patent laws brought by the British. This was applied through the Kenya Patent Registration Ordinance, 1933. Kenya did not as such have her independent patent system. The circumstances leading to the repeal of the Kenya Patent Registration Ordinance, 1933 are fully covered in chapter 2 of this work. The bottom line was that the patent regime was found unsuitable for the promotion of local innovations and inventions and being retrogressive to Kenya's socio-economic needs.³¹

Territoriality is an important principle of patents and IPR generally. If a patentee desires protection in another state, he has to apply for patent rights in accordance with the laws of that other state.³² This has led to the evolution of fragmented patent laws world over.

To resolve challenges caused by fragmented patent laws, the international community has come up with several treaties-the Paris Convention for the Protection of Industrial Property (Paris Convention). The Patent Cooperation Treaty (PCT) and the Patent Law Treaty (PLT). We also have the Trade-Related Aspects of Intellectual Property Rights (TRIPS), and WIPO Treaties. Yet, this process has been noisy and costly.³³

1.7.2 Thematical formulae of Harmonization of Patents

There are four main theories which have been advanced in relation to IPR. These are the utilitarian theory, the labour theory, the personality theory and the social planning Theory.³⁴ These theories were advanced by such scholars as William Landes and Richard Posner

³¹ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *ibid*, at 90.

³² Patricia Kameri-Mbote (1994) "Patents in Development," *op. cit.*

³³ Takashi Kinoshita (2001) "Strategy for harmonization of the US patent system with the international norm 8," available at http://www.commercialdiplomacy.org/pdf/ma_projects/kinoshita_takashi.pdf. (accessed on 24/7/2014).

³⁴ William Fischer (2013) "Theories of Intellectual Property Rights," at <http://cyber.law.harvard.edu/people/ffisher/iptheory.pdf>.> (accessed on 27/7/2014). The history of these doctrines in the United States and possible reasons for their growing importance are considered in William Fisher, "Geistiges Eigentumeinausufernder Rechtsbereich: Die Geschichte des Ideenschutzes in den Vereinigten Staaten," in *Eigentum im internationalen Vergleich* (Göttingen: Vandenhoeck and Ruprecht, 1999) available in English at http://www.law.harvard.edu/Academic_Affairs/coursepages/ffisher/iphistory.html>.

(utilitarian theory),³⁵ John Locke (labour/or the deontological theory)³⁶ where he came up with Two Treatises of government,³⁷ and Kant, Hegel³⁸ and Justin Hughes³⁹ (personality theory). There is then the Social planning theory.⁴⁰ Some proponents of this theory suggest, in relation to copyrights, that it ‘would be advanced more effectively by a copyright regime trimmed along certain lines to allow what they call creative manipulation’.⁴¹

Those who make useful inventions should be rewarded accordingly. Equally, the law must be used to guarantee this reward to ensure that the inventors derive sufficient compensation ‘for their ingenuity’.⁴² By developing a system through which invention is rewarded, such will act as an incentive to make new inventions. It will also encourage inventors to invest their time and capital. The economic benefits expected from harmonized patent laws are enormous and this acts as the incentive for states to put their best foot forward at the negotiation table with other states.

According to Professor Ben Sihanya, these theories can be classified into two conceptual parameters namely, natural, human and moral rights theory and economic, utilitarian incentives

³⁵ William Landes and Richard Posner (1989) “An Economic Analysis of Copyright Law,” *Journal of Legal Studies*, at <http://cyber.law.harvard.edu/IPCoop/89land1.html>, (accessed on 27/7/2014). Landes and Posner argue that enjoyment of the IPR products by one person does not prevent enjoyment of them by other persons. Those characteristics in combination create a danger that the creators of such products will be unable to recoup their “costs of expression” (the time and effort devoted to writing or composing and the costs of negotiating with publishers or record companies), because they will be undercut by copyists who bear only the low “costs of production” (the costs of manufacturing and distributing books or CDs) and thus can offer consumers identical products at very low prices.

³⁶ Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights in Kenya,” *op. cit.*

³⁷ William Landes and Richard Posner (1989) “An Economic Analysis of Copyright Law,” *op. cit.*; In his *Two Treatises of Government* (1690) Locke says: ‘Whatsoever, then, he removes out of the state that nature has provided and left it in, he has mixed his labour with it, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state Nature placed it in, it has by this labour something annexed to it that excludes the common right of other men.’ DS Chisum et al (2004) (eds) *Principles of Patent Law: Cases and Materials*, Foundation Press, New York, at 39.

³⁸ Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights in Kenya,” *op. cit.* quoting Margaret Jane Radin in *Reinterpreting Property* (Chicago: University of Chicago Press, 1993); Jeremy Waldron (1988) *The Right to Private Property*, Oxford: Clarendon.

³⁹ *ibid.* Quoting Justin Hughes (1988) “Philosophy of Intellectual Property,” 77 *Geo. L.J.* 287 at <http://www.law.harvard.edu/faculty/tfisher/music/Hughes1988.html> (accessed 7/12/2017).

⁴¹ Neil Weinstock Netanel (1996) “*Copyright and a Democratic Civil Society*,” *Yale Law Journal*, Vol. 106, No. 2 pp. 283-387. <http://ecohist.history.ox.ac.uk/readings/ip/netanel.htm>. (accessed on 25/7/2014).

⁴² Juma Calistus and J.B. Ojwang (eds.) (1989) “Innovation and sovereignty; The patent debate in African development,” *op. cit.*

and rewards theory.⁴³ However he observes that the two theories are neither exhaustive nor mutually exclusive.

Sihanya demonstrates how the natural human and moral rights theory derives legitimacy from such instruments like the Universal Declaration of Human Rights of 1948⁴⁴ and how it has cascaded into municipal constitutions.

As for the economic, utilitarian incentives and rewards theory, Sihanya takes the approach that because developing IP requires investments in R&D, time, effort, skill and judgment there should be a reward to the innovators. Such rewards include longer periods of protection to give innovators time to recoup their expenses or even monetary rewards or certificates of achievements or recognition.

Sihanya states that a good example can be found in a Kenyan case *Kenya AIDS Society* (as plaintiff) v. *Arthur Obel* (defendant).⁴⁵ Here, an injunction application was disallowed by Justice Mbiti and the plaintiff appealed to the Court of Appeal in Civil Appeal Number 188 of 1997(1998) eKLR⁴⁶ where Gicheru, Omollo and Bosire JJAs upheld the decision of Justice Mbiti.

Briefly, the facts were that the Kenya AIDS Society wanted Arthur Obel restrained by way of temporary injunction from among other things;

“...manufacturing, distributing, offering for sale, selling, administering or in any other manner dealing with a substance known as Pearl Omega pending the hearing and determination of this suit.”

Arthur Obel was a trained doctor and a researcher. Justice Mbiti recognized the contributions of the doctor in research and risks he could have gone through to come up with Pearl Omega and declined to issue the injunction.

⁴³ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.*

⁴⁴ *ibid*

⁴⁵ *Kenya AIDS Society v. Arthur Obel* HCCC No 1079 of 1996.

⁴⁶ *Kenya AIDS Society Versus Arthur Obel* Court of Appeal Civil Appeal No. 188 of 1997 (1998) eKLR.

Within the EAC, Patents have been given a special position in the Treaty. The EAC Treaty is by every nature a political product. It however blends IPR with the political economy of the EAC Member States. Each Member State has her own patent laws. Yet the Treaty expects of the Member States to engage in a process to harmonize laws and policies.

Through the harmonization of patent laws as set out in the Treaty it is expected that huge economic benefits would be achieved for the EAC inventors and the society. The rich reserves of traditional knowledge, traditional medicine and folklore of the EAC may find elaborate statutory protection within a harmonized patent regime. This calls for policy change by utilizing the provisions of the Treaty to harmonize patent laws and policy.

The inventors have an IPR in their own ideas and this right should be protected so that it is not breached. At the same time care should be observed so that the society is not forgotten or exploited. To achieve this, there should be a policy change to make the patents beneficial to the EAC.

This research shall be founded majorly on the economic, utilitarian incentives and rewards theory but paying attention not to ignore the natural, human and moral rights theory.

1.8 Preliminary Literature Review on Harmonization of Patent Laws and Policies for the East Africa Community

Professor Ben Sihanya while writing the *prolegomenon* to his book *Trade Related IP and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*⁴⁷ lamented in the following manner;

“When I started teaching Intellectual Property (IP) and Consumer Protection Law at the University of Nairobi Law School at LLB in 1997 and LLM as well as MA in Mass Communication in 2004, I was shocked by and concerned at the dearth of intellectual property materials relevant to the Kenyan and African context.

⁴⁷ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.*

The best option then was to use the books by David I Bainbridge, William Cornish and Paul Goldstein and supplement them with the few statutory materials, limited cases and the scanty anecdotes from articles, chapters or newspaper clippings. Remarkably these books and materials provide the basic principles and rationale for appreciating the theoretical and practical issues in intellectual property.”⁴⁸

This was in January 2016, a time when this research was under review.

This preliminary literature review was written against a background of little literature from East Africa on the subject “harmonization of patents law and policy.” The subject has however been widely written on both in America and Europe.

The EAC consists of the countries of Kenya, Uganda, Tanzania, Rwanda and Burundi. The first three countries were the original members with Rwanda and lastly Burundi joining the EAC at later dates in that order. There was the first treaty signed in 1967 but collapsed by the year 1977.⁴⁹ Thereafter, the process for renegotiation for revival of the collapsed EAC continued and a Mediation Agreement to facilitate the division of assets and liabilities but with a clause for exploring areas of future co-operation.⁵⁰ On 30th November 1999, in Arusha, the East African heads of states signed the EAC Treaty. It then came into force on 7th July, 2000 when the three original partner states ratified the same.⁵¹ Thereafter the republics of Rwanda and Burundi were incorporated into the EAC.

EAC is an intergovernmental organization established under the EAC Treaty. It exists as a regional bloc which encourages the pooling together of member state resources and regional free trade. Besides the huge land mass, and the multi-cultural communities most of whom share common ancestry, language and culture, the region boasts of a solid market volume of more than

⁴⁸ *ibid.*

⁴⁹ Peter. K. Yu (2006) “Intellectual Property and Innovation Wealth. Issues And Practices In the Digital Age,” *op. cit* at page 109.

⁵⁰ Stephen Agaba (2004) “Regional Harmonization of Commercial Laws: Opportunities and Implementation Challenges,” *op. cit.*

⁵¹ Peter. K. Yu (2006) “Intellectual Property and Innovation Wealth: Issues And Practices In The Digital Age,” *op. cit* at page 111.

115 million people.⁵² The EAC Treaty captures broadly as well as specifically the vision, the mission and the objectives of the EAC.⁵³

The main objectives of the EAC Treaty are to strengthen regional co-operation, infrastructure and development. These are to be achieved through a full political, economic and cultural integration of the sister states. Some of the main co-operation areas include the enhancement, protection and enforcement of the IPR. Under the EAC Treaty the concept of free movement of goods and services is well captured.⁵⁴ It is noteworthy that the region is now experiencing an almost non-barrier free movement of goods, some services and their citizens.⁵⁵ This is the EAC.

The existence of the EAC is not an isolated phenomenon. The world is coming together to form regional trade blocs. The main objective of such a shift is to maximize on their resources and protect their markets. Cases in point are the European Union, the Asian Tigers the trans-Atlantic region, the North Americans and the Southern Americans. Coming closer home, we have such regional blocs at continental level which include SADAC, COMESA and OPEC.⁵⁶ Some of these economic regions have created systems, laws, rules and structures to achieve their economic goals while others are bound together through bilateral agreements.

To enhance the implementation of the Treaty the EAC established a Customs Union on 1st January 2010.⁵⁷ This was followed by the establishment of the East Africa Community Common Market (EACCM) which is charged with the responsibility of making the free movement of persons, capital, goods, services, rights of residence and establishment easy. There is also the East Africa Community Monetary Union which is charged with the responsibility of

⁵² Statistics Times (2016) “United Nations Department of Economic and Social Affairs,” at <http://statisticstimes.com/population/african-countries-by-population.php>. (accessed on 6/4/2016).

⁵³ Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights in Kenya,” *op. cit.*

⁵⁴ Patricia Kameri-Mbote (1994) “Patents in development,” in Yash Vyas et al.eds. *op. cit.*

⁵⁵ Patricia Kameri-Mbote (2009) “Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights in Kenya,” *op. cit.*

⁵⁶ Currently, the organization has twelve members, namely: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela. OPEC is not an African grown organization but it has several members drawn from the African continent.

⁵⁷ WIPO (2010) “Patent Cooperation Treaty (PCT) Working Group: The Need for Improving the Functioning of the PCT System,” *op. cit.*

coming up with a common currency. The final pillar is the East Africa Integration for the creation of political federation projected to be attained by 2015.⁵⁸ The last pillar may nevertheless be a real challenge for the region.

In the process of legal harmonization, the community has identified certain key legislations proposed to be enacted by the East Africa Legislative Assembly (EALA). These key legislations include those touching on IPR laws, ‘contract law, public-private partnership law, the law of the recognition of judgments, business registration law’.⁵⁹ This list is not exclusive. It is accepted that the full realization of the benefits conferred upon EAC by the EAC Treaty is not viable in an atmosphere of weak or non-existing legislations. This can be seen from the approach taken by the EAC secretariat to fast track key legislations to inform the process of full integration. The importance of such key legislations cannot be over emphasized.

IPR is a key pillar for economic development as set out in the EAC Treaty. The framers of the EAC Treaty were alive to the economic potential of IPR administration and exploitation. To achieve the full benefits of free movement of goods and services will remain an elusive phenomenon if other processes were to be initiated leaving behind appropriate laws to drive the businesses associated with IPR. While commenting on a recent decision of the EAC Court of Justice, Mei D. had this to say.⁶⁰

“Thus, European Community law constitutes an own autonomous legal order based on the pillars of direct effect and supremacy. While the East Africa Community court of justice in Anyang Nyong’o and others does not go as far as its European counterpart in Van Genden Loos and Costa, it certainly seems to be moving in a similar direction.... The driving force behind the European court’s reasoning concerned the conviction their successful market integration requires enforcement of rights conferred upon traders, companies and individuals. For which such enforcement to be effective, it cannot be left only to member

⁵⁸ *ibid.*

⁶⁰ Anne Pieter Van Der Mei (2009) “The East African Community; The Bumpy Road To Supranationalism; Some Reflections On The Judgment Of Court Of Justice Of The East Africa Community,” *East African Law Society*, Working Paper 2009-7, at <<http://www.law.unamaas.nl/maastrichtworkingpapers>> (accessed on 3/12/2013).

states or the European Commission who might be unwilling or incapable to ensure full compliance with community law in all cases.”

This reasoning by Mei seems to emphasize the role of various institutions in championing policy reform. Such policy cannot be reformed in the absence of review of existing legislations of member states.

In the nineteenth century it became necessary that national protection had the potential to restrict inventors' willingness to share their inventions in other countries for fear of appropriation. This led European countries to co-operate in the area of IP protection in more elaborate ways. The Paris Convention was the first attempt at “harmonization” of patent laws. It covered “industrial property” including patents and trademarks.⁶¹

One of the consequences was the signing of the Paris Convention was that its conceptual framework was incapable of rewarding other types of innovations. One field left out was innovations in the relating to traditional knowledge or any other body of knowledge which is deemed ‘hierarchically inferior to western science and technology’.⁶² Since the nineteenth century, remarkable efforts have been put in achieving global harmonization of IPR. Some good examples are laws relating to the protection of patents. In this field there is a remarkable revolution in both administration and exploitation of patents which is the focus of this research.⁶³

The evolution of patents can be traced to industrial revolution in the 19th Century. Before then protection of Patents was on the basis of reciprocity between the home country of the investor and the foreign country in which he sought protection. This led to the establishment of the first international patent regime, the Paris Convention in 1883. Prior to that, during the conference in 1878, it was agreed that member states would be ‘allowed to extend their patent laws and

⁶¹ George M. Sikoyo (2006) “Intellectual Property Protection in Africa: Status of Laws, Research and Policy Analysis In Ghana, Kenya, Nigeria, South Africa and Uganda,” *op. cit.*

⁶² Patricia Kameri-Mbote (1991) “Patents and Development,” IELRC website, at <http://www.ielrc.org/about_kameri-mbote.php>. (accessed on 19/07/14).

⁶³ There are reforms towards harmonization of other types of IP besides patents. Such reforms have been experienced on the side of copyrights and trademarks. The principle is the same, harmonization. The research takes patents as a good example given the well structured institutions operating in Europe such as the EPO. Where necessary comments will be made touching on other areas of IP.

systems to their colonies'.⁶⁴ This set in motion, in a way, efforts by nations to 'engage time and again to review the treaties culminating with TRIPS agreement'.⁶⁵

As a general rule a state was obliged to offer protection to nationals of other signatory states that were reciprocating. And this 'principle carried forward and consolidated in the TRIPS Agreement is a corollary to the principle of territoriality in a world of patent laws. Lines are drawn according to place and not citizenship'.⁶⁶

Professor Patricia Kameri-Mbote⁶⁷ argues that such a principle is 'not congrued with the interests of developing countries because most patents granted by these countries are foreign owned'. According to Mbote the principle ignores the 'need for protection of a relatively small number of national patent holders in developing countries leaving them open to competition from foreigners'. She concludes that this problem is aggravated by the fact that 'majority of patents owned by nationals in developing countries correspond to individual inventors while the foreign owned ones involve transnational corporations'.

In this chapter, we mentioned briefly the example of Kenya and some of the reasons there had to be reforms in the patent laws. Professor Ben Sihanya says

"A number of studies including Juma & Ojwang's *Innovation and Sovereignty* indicated that Kenya's development was largely dependent on agricultural and medical biotechnology as well as the small or medium enterprise (SME) or informal sector innovations. Significantly, the UK Act was restrictive on patenting lifeforms. It also neither appreciated nor provided for protection of the *Jua Kali* (informal Sector) technologies. What was patentable was determined not by Kenya but by the UK standards."⁶⁸

⁶⁴ Patricia Kameri-Mbote (1991) "Patents and development," *op .cit.*

⁶⁵ UK IP Office website, at <<http://www.ipo.gov.uk/types/copy/c-about/c-history/c-history-1988.htm>.> (accessed on 30/5/2014).

⁶⁶ Graeme B. Dinwoodie (2004) "Trademarks and Territory; Detaching Trade mark Law From The Nation-State," at <[www.http://papers.ssrn.com/sol3/papers.cfm?abstract_id=616661](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=616661).> (accessed on 19/07/14).

⁶⁷ Patricia Kameri-Mbote (1991) "Patents And Development," *op. cit.*

⁶⁸ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op . cit.* at page 89.

In 1980s, Kenya medical Research Institute (KEMRI) after extensive work came up with an anti-HIV/AIDS drug. Efforts to patent the drug did not bear positive results to the Kenyan Scientists. Thereafter, a committee formed by the National Council for Science and Technology's (NCTST'S) Committee on the Transfer of Technology, Legal Affairs and Patents were set up. The issue was to address the problem and provide a viable solution.⁶⁹ The report from these committees together with other factors led to the repeal of the Patent Registration Act as well as the United Kingdom Industrial Design Act Cap 510 and replaced with the Industrial Property Act of 1989 and which came into force in 1990.

According to Sihanya, the Committee had four reasons to the effect that the then patent system provided insufficient patent information. Secondly, for Kenya to continue relying on the UK patent law did not enhance acquisition and transfer of appropriate technology to Kenya. The third argument was that there was the danger of allowing the grant of patents in Kenya without examination as to substance making hard to identify which patent was useful to Kenya. The fourth reason was that government was being denied revenue in the process and a source of development money which went to another country.

For more than a decade the EU has been harmonizing member states patent legislations. The main aim in this is to initiate necessary legislations for a well, functioning internal market. The reason behind this increasing harmonization process is to make patents mutually recognized and effective given that IPRs generally are part of trained policies and political agreements.⁷⁰ Part of this European approach has given into effect a unitary patent registration and enforcement system leading to a conclusion of a forty-year effort to replace what existed. Prior to this what was in place was only but a patchwork of national patent laws which gave rights to a single patent right commonly enforceable across the EU member states.

Whereas international patent agreements emanated from the Paris Convention, the current European patent system is legally grounded in the European Patent Convention of 1973 put in

⁶⁹ *ibid* at page 90.

⁷⁰ Vile Oksanen and Mikko Valimäki (2004) "Some economic aspects of the European harmonization of Intellectual Property Rights in software and its impact to Eastern EU," at <http://www.researchgate.net/publication/4820168>.(accessed on 16/7/2014).

place to establish the European Patent Office (EPO).⁷¹ EPO acts as a receiving office for the members states and provide for a common examination procedure based on a single body of substantive patent law.⁷²

The efficacy of an IP protection system ‘is determined by its ability to adapt to the needs of the knowledge based economy and which must be equally accessible and provide legal certainty’.⁷³ Besides establishing a centralized patent granting process, EU patent system was initiated by the EC ‘to also foster the long-term goal of creating a unified IP protection regime as a part of a move towards an undifferentiated, one-size-fits-all IP protection regime throughout the EU’.⁷⁴

It is thought that a key component in industrial growth that would stimulate both growth and innovation is necessary. It would at the same time bring together experts from different areas to clarify the work of the IP protection through natural harmonization and convergence.

So far, the EU patent system has managed to ensure an effective patent regime as well as an inclusive innovation environment at the European level. There are however challenges on regulation.⁷⁵

Evisa Kica and Nico Groemedijk⁷⁶ argue for a model that combines framework differentiated directives with the activities of epistemic patent communities. Such a law, they argue is to provide a flexible solution that will have the character of the European Law and will accommodate the existing diversity in innovation while coordinating the interactions of various stakeholders within the field. They in addition argue that such a model would encourage the

⁷¹ Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications And Strategies For The US Businesses,” at <http://www.dorsey.com/files/upload/hattenbach_longley_nov13_fal.pdf>. (accessed 16/7/2014).

⁷² WIPO (2010) “Patent Cooperation Treaty (PCT) Working Group: The Need for Improving the Functioning of the PCT System,” *op. cit.* quoting Articles 52 to 57 of EPC.

⁷³ Evisa Kica and Nico Groemedijk (2009) “The Governance of European Intellectual Property Rights: Toward a Differentiated Community Approach,” at <<http://doc.utwente.nl/71951/1/Kica09governance.pdf>>. (accessed on 16/7/2014).

⁷⁴ *ibid.*

⁷⁵ *ibid.*

⁷⁶ *ibid.*

integration minded industries and countries to move forward and advance certain developments in innovation among other benefits.

Patent law for example has been widely used by governments as a policy tool for economic growth. This then means that in making such ‘laws every country decides for itself what IP assets to protect within its borders and adopt the policies in connection with the preferences of its society’.⁷⁷

Dongwook Chun⁷⁸ argues that whereas international patent law harmonization has been an issue in progress since the Paris Convention, it is now facing ‘new challenges in a knowledge based economy’. He further claims that such globalization has intensified the problem of ‘fragmented patent laws’ and as a consequence the drive for ‘harmonization of patent laws has obtained dominant support in international communities’.

He takes the view that TRIPS Agreement which laid down substantive principles that apply to all members of the WTO was the dramatic turning point in recent phases of development concerning international patents. To him, TRIPS has had ‘substantial international impact because it signaled the inevitability of a more harmonized and stronger global patent system’.⁷⁹ Chun concludes his argument by observing that it is a ‘widely accepted fundamental assumption that harmonization is a necessary and an urgent matter’.

This is however at the global arena, but lessons can be learnt for purposes of creating such harmony within economic regions as it is with the EU. Indeed, it is Chun’s argument that countries which share a language tend to share common ‘cultural backgrounds and legal heritage which may make it easy to find a common denominator’.⁸⁰

⁷⁷ Dongwook Chun (2011) “Patent Law Harmonization In The Age Of Globalization; The Necessity And The Strategy For a Pragmatic Outcome,” at

http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1074&context=lps_clacp. (accessed 16/7/2014).

⁷⁸ Dongwook Chun is a scholar at Cornell Law School, BSE from Seoul National University.

⁷⁹ Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications and Strategies For The US Businesses,” Cf. Jerome H. Reichman and Rochelle Cooper Dreyfuss (2007) “Harmonization without Consensus; Critical Reflections On Drafting a Substantive Patent Law Treaty,” at <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1330&context=dl>. (accessed 16/7/2014).

⁸⁰ Chun derives his observation after considering such groupings like English groups (the USA, England, Canada and Australia, (Spanish groups (For example, Spain, Mexico, Argentina and Chile (French groups (France, Canada

Dongwook Chun's conviction is that 'a regional economic integration is a practical reaction to the wave of globalization' and that a 'regional patent system is the pragmatic solution to the problems in the age of globalization'. This is because theoretically such a system brings on board a new patent which can be recognized in its member states. To him the best example is those of the EU and the ASEAN which are products of 'a fundamental motivation and agreement to construct a common market, free trade with the full protection and enforcement of IPRs'.

He also notes that fundamentally the international community should co-operate towards achieving deep harmonization-substantive and legal harmonization. However, he points out that when 'trading countries' patent laws are substantially different and there are serious discrepancies in work, speed and culture, mere search sharing' could 'be more viable and practically beneficial'.

In addressing the approach to national legislations, the EAC Countries have come up with a policy statement on the amendments to be affected to their respective national legislation to take advantage of the transitional period provided under the TRIPS.⁸¹

This policy errands a great milestone in the field of patents. Towards this end, the EAC member states have come up with a seven-point policy statement recommending crucial amendments of the national legislations of the member states' patent Laws.⁸²

While writing the forward to the seven-policy document Ambassador Dr. Richard S.⁸³ observed that the implementation of the policy among the EAC partner states is expected to among other things 'optimize the populations' access to health products and medical devices, broaden the

Switzerland and Belgium, Chinese groups (China, Taiwan and Singapore). He further identifies the product of common language with such organization as POAI and ARIPO. Based on their recognition of common backgrounds for corporations among them similar sized developed countries, similar legal heritage, long standing relationship, they announced to enhance efficiency of the IP System and productivity of offices- in the interest of their customers and community.

⁸¹ EAC (2013) "The Regional Intellectual Property Policy on Utilization of Public Health Related WTO –TRIPS Flexibilities and the Approximation of National Intellectual Property Legislation," at www.cehurd.org/wpcontent/plugins/download.../download.php?id=45(accessed on 2/8/2014).

⁸² *ibid.*

⁸³ *ibid.*

public domain to ensure that IP embedded products and services concerning health are available and accessible at an affordable cost to the whole EAC partner states population’.

It was further noted from that speech that other expectations included; to promote pharmaceutical manufacturing and innovation industries, to improve corporation amongst themselves in the regional market particularly with regard to pharmaceutical for the mutual benefits and to contribute to the overall achievements of the regional public health objectives.

Commenting on this policy, Hilary Muheebwa⁸⁴ observes that a bloc market covering five countries whose estimated population of was 145 million people has emerged. He identifies as a key challenge, the need to align the existing different national laws and policies on patents protection to cater for a new regional framework. Indeed, according to Hilary, this policy by the EAC is a pointer to the common interest of the partner states to consolidate all gains from the WTO-TRIPS window for purposes of benefiting their membership uniformly.

The above approach of harmonizing the national patent legislation is a clear indicator to the emerging need for the region to consider having a harmonized patent laws and policy. This policy, if fully implemented will see many common grounds being broken in the national patent laws for the EAC member states. Yet, there is no documentation available to indicate that such laws will be centrally administered. This concern informs part of the foundation of this research.

Joseph Stiglitz⁸⁵ argues that ninety per cent of all patents are granted to developed nations. He also underscored the need for a cost benefit analysis on TRIPS in such areas like, welfare related aspects of IPRs for less developed countries and other net importers of protected knowledge.

What seems to be emerging from some of the scholars sympathetic with the developing countries is that TRIPS was a product of a strong and coordinated political lobby by the USA and the EU

⁸⁴ Intellectual Property Watch website, at <https://www.ip-watch.org/author/hillary-muheebwa/> (accessed on 21/7/2014).

⁸⁵ Alan Korn (2007) “Issues Facing Legal Practitioners in Measuring Substantiality of Contemporary Musical Expression,”⁶ J Marshall Rev of Intel Prop L 489<<https://www.amherst.edu/media/view/310453/original/Korn%2B%2BIssues%2BFacing%2BLegal%2BPractitioners%2Bin%2BMeasuring%2BSubstantiality%2Bof%2BContemporary%2BMusical%2BExpression.pdf>.(accessed on 17/7/2014).

industry and which lacked necessary legitimacy. In that regard, they suggest vividly the need for a moratorium on IPR to evaluate their realm of interests as a result of the new knowledge gained or to ‘impede a possible cessation of WIPO activities in TRIPS Plus standards or finally to call the entire concept of the system into question’.⁸⁶

Such criticism has been so severe that Joseph Stiglitz⁸⁷ in his comment observed that the structure of IPRs has become so extreme that it is harmful to the society and especially harmful to developing countries and recommends for establishment of institutional mechanism to go back and recognize the needs for the developing countries.

While addressing the aspect of institutional capacity of IPR institutions in the developing countries, the Commission on IPR set up by the EC observed that, in practice, there are three main options open for regional/international co-operation.⁸⁸ The first option is for those nations to become members of the PCT and Madrid system which allows national patent offices to minimize search, examination and publication tasks.

The second one is that of contracting out patent administration to another national or international patent office or a private organization, the way EPO offers a service for search and examination for patents to some countries in Eastern Europe. Finally, the third option is that of membership of a regional IPR organization such as ARIPO and OAPI.

However, it is not easy to attain substantive and legal harmonization. This process is expensive and will necessarily result in high monetary expenses. Other social costs include the need to modify municipal legal systems and change patent law’s established and widely accepted

⁸⁶*ibid*, at page 1; quoting the works of Maskus and Reichmann (2004) “The Globalization of Private Knowledge Goods and the privatization of Global Public Goods,” 7J INTL ECON. L. 279(2004), Musungu and Dutfield: Multilateral Agreements And TRIPS-PLUS World: The World Intellectual Property Organization(WIPO) [http://www.geneva.guno.info/pdf/WIPO\(A4\)final0304.pdf](http://www.geneva.guno.info/pdf/WIPO(A4)final0304.pdf), and that of James Boyle: A manifest on WIPO and the Future Of Intellectual Property,2004 DUKE L & TECH REV.0009(2004). <http://www.law.duke.edu/journals/dltr/articles/PDF/2004DLTR0009.PDF>.

⁸⁷Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications and Strategies for The US Businesses,” *op. cit*.

⁸⁸ Commission on Intellectual Property Rights, London (2002) “Integrating Intellectual Property Rights and Development Policy,” <http://www.iprcommission.org/papers/pdfs/final_report/Ch7final.pdf. (accessed on 23/7/2014).

working methods. Further patent law harmonization has political implications resulting in heated debates and conflicting interests among various lobbying groups.⁸⁹

In the EAC, patents are administered at three levels; nationally, regionally and internationally within the continent. Nationally, there are national offices for each state. Regionally, we have two main organizations ARIPO and OAPI. ARIPO draws its membership from the English-speaking countries while OAPI has its membership from the French speaking African countries. ARIPO was established through the Lusaka Agreement which was adopted in Lusaka, Zambia on 9th December 1976 and came into force on 15th February 1978.⁹⁰ Internationally, we have registrations through WIPO.

ARIPO implements two protocols on IPR on behalf of the respective member states. The first is the Harare Protocol⁹¹ which has membership to all member states of the Lusaka Agreement. The second protocol is the Banjul Protocol on Trade Marks.⁹² The Banjul Protocol provides for a centralized trade mark registration procedure and applications. Under it, applicants can claim priority in accordance with Article 4 of the Paris Convention⁹³ within six months from the date of their earliest application in another member of the Paris Convention.

OAPI on the other hand was established through the Bangui Agreement which was adopted in 1977.⁹⁴ The main objective of establishing OAPI was to introduce a uniform law on IPR and create a common IPR office at Younde, Cameroon.

While ARIPO system co-exists with the national laws and offices of the respective member states, OAPI serves as the national office of all member states. In this regard, for purposes of protection of IPR, all OAPI member countries are considered as one territory. Once an

⁸⁹ Chun Dongwook (2011) "Patent Law Harmonization in the Age of Globalization: The Necessity and Strategy for a Pragmatic Outcome," Cornell Law School Inter-University Graduate Student Conference Papers. Paper 45.

⁹⁰ ARIPO *Agreement on the creation of ARIPO* (Lusaka Zambia) <<http://www.aripo.org>> (accessed on 2/7/2014).

⁹¹ Chun Dongwook (2011) "Patent Law Harmonization In The Age Of Globalization: The Necessity And Strategy For A Pragmatic Outcome," *op. cit.* ARIPO (1982) *Harare Protocol on Patents and Industrial Designs* (1982 Harare, Zimbabwe) at https://www.jpo.go.jp/shiryousonota.../aripo.../e_harare_gitei.pdf. (accessed on 12/7/2014).

⁹² Banjul Protocol on Marks, 1993.

⁹³ Paris Convention For The Protection Of Industrial Property, 1883.

⁹⁴ Bangui Agreement, 1977.

application is received and approved by OAPI, the respective right is automatically protected in all the seventeen-member states.

Although both ARIPO and OAPI were created to pool resources together and promote IPR in the continent among their member states, their success is yet to be widely felt. Only 35 members of African Union are members of either ARIPO or OAPI. Further the African economic giants like South Africa, Egypt and Nigeria are not members of either.

As at the time of this research, Kenya, Uganda, Tanzania and Rwanda were members of ARIPO while the Republic of Burundi had been assigned the observer status.⁹⁵

International policy on IP rarely considers the needs of developing countries. As a consequence, Anna Meijknecht feels that the formulation of IP policy at national level in most African countries is driven by interests and mandates of major external actors such as WTO, WIPO and TRIPS to name but a few⁹⁶. The product of such a process is a policy which wholly or partially avoids development needs of these African countries making it impossible for them to strike a balance between the rights of inventors in the developed world and the needs of developing countries.

It would however appear that while making efforts to comply with the minimum thresholds set by TRIPS, the EAC member states have developed a patent regime which can be a basis for substantive harmonization. The actual contents of these patent laws are beyond the scope of this

⁹⁵ Member States Botswana, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Sierra Leone, Liberia, Rwanda, São Tomé and Príncipe, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. (Total: 19 Member States). Article VI of the Lusaka Agreement mandates the Organization to cooperate with non-member States. In line with this provision, ARIPO has cooperated with the following potential member States which have observer status in the meetings of its main organs: Angola, Algeria, Burundi, Egypt, Eritrea, Ethiopia, Libya, Mauritius, Nigeria, Seychelles, South Africa and Tunisia. (Total: 12 potential member States.) at <<http://www.aripo.org/index.php/about-aripo/membership-member-state>. (accessed on 1/8/2014).

⁹⁶ Anna Meijknecht (2010) "Harnessing Intellectual Property Rights for Development Objectives, the Double Role of IPRs in the Context of Facilitating MDGs Nos. 1 and 6," commenting on a document titled "Harnessing Intellectual Property Rights for Development Objectives, the Double Role of IPRs in the Context of Facilitating MDGs Nos. 1 and 6," at <https://aighd.org/media/medialibrary/2013/11/Harnessing_Book_lighter_version.pdf. (accessed on 23/7/2014).

research and may call for further study elsewhere. Additionally, efforts are being made by certain organs within EAC to harmonize patent laws.

Free movement of goods and services without protection can be costly on the holders of patents from either country of the member state. To advocate for harmonization of patent laws within EAC pre-supposes the existence of such patent laws at the municipal level as shown above. It is a reform of what is existing.

In regard to the management of a regional patent office, a good example is EPO, a product of the EPC which came into force in 1973. The EPO was set up on 7th October, 1977. EPC has two bodies namely the EPO and the Administrative Council. EPO is an intergovernmental organization while the Administrative Council of EPO acts as the supervisory body and consists of representatives of the EPO member states.⁹⁷

From the data available at the EPO website, EPO has come up with an online filing software to handle applications, submissions filed in opposition to appeals, limitations and revocation proceedings before EPO. The software also accommodates filed comments for all EP proceedings. In its 2004 Annual Report, EPO observes that for the first time since it was formed in 1977, “all its patent examiners are grouped in a single directorate–general, and all its strategically important support departments, technical services and quality control are gathered together in another”.⁹⁸

In the 2013, the President of EPO singled out as EPO’s priority, the facilitation and access to the European Patent System by simplifying and harmonizing the regime. The engine to this is the information technology which has been adopted by the European patent companies.⁹⁹

Professor Ben Sihanya has identified several national intellectual property policies in existence. First, he defines a national IP policy to mean ‘a system or document aimed at harmonizing the conflicting interests of all stakeholders in the generation, protection, promotion, and

⁹⁷ EPO website at <<http://www.epo.org/about-us/annual-reports-statistics>.(accessed on 2/8/2014).

⁹⁸ *ibid.*

⁹⁹ I248 U.S. 90 (1918) at <<https://supreme.justia.com/cases/federal/us/248/90/case.html>. (Accessed on 10/10/2014).

commercialization Of intellectual property rights.¹⁰⁰ Second he sets out clearly what such policy should strive to achieve, “A national IP policy seeks to create an environment that encourages and expedites the dissemination of IP creations for the greatest public benefit.”

Finally, Sihanya identifies the plan of such an IP policy to be the provision of a comprehensive and integrated plan over time. In the plan, all national stakeholders work together to create own and exploit research results, innovations, new technologies and works of creativity. In chapter 2, the national intellectual property policies are discussed in detail.

In this study, it is expected to be recommended that a model for EAC along the structures of EPO could be ideal for the proposed regional patent registry. How to implement such a policy would call for further research which is beyond the scope of this work.

Mbote underscores the magnitude of what is yet to be exploited in Kenya on the field of patents to include;¹⁰¹ ‘(a) the patenting of living things and materials found in nature as opposed to man-made product and processes,(b) the modification of protection regimes to accommodate new technologies particularly biotechnology and ICTs, (c) extension of protection to nascent areas such as software and business methods,(d) the focus on the relationship between IP protection and TK, folklore and genetic resources,(e) the geographical extension of minimum standards for IP protection through TRIPS agreement and of higher standard through bilateral and regional trade and investment agreements (f) the widening of exclusive rights, extension of duration of protection and strengthening enforcement mechanisms’.

To address some of these concerns, EAC must consider taking a bold step of looking at the existing patent policies and laws within the region and see how they can be harmonized. As it has been shown above, each state has her own municipal legislations. To tap the potential created by the Treaty, it is justifiable to consider harmonization of these policies and laws.

¹⁰⁰ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.* at page 585

¹⁰¹ Patricia Kameri-Mbote (2005) “Research and Policy Analysis on Intellectual Property Rights in Kenya,” International Environmental Law Research Center, at <<http://www.ielrc.org/content/w0502.pdf>. (accessed on 26/6/2014).

1.9 Methodology on Harmonization of Patent Laws and Policies for the East Africa Community

The study will employ both quantitative and qualitative methods of research. This will take the forms of desk research as well as a field study on a small group of lawyers for indicative purposes only.

For desk research the study will rely on both primary and secondary data. As far as primary data is concerned the study shall be looking at the domestic laws of EAC member states which relate to patents. This also shall include books on the subject of patents. At the international level the study shall consider treaties, agreements and protocols available in the website of WIPO among other websites.

In relation to secondary data the study will review journals, scholarly articles in magazines and newspapers, reports appearing in reputable websites, working papers and news reports.

As to the field study, it is presumed for this research that IPR law is technical to most members of our population. Interviews will be administered to a select number of members of the Law Society of Kenya practicing law in either Nairobi or Mombasa. The study shall adopt a face to face interview with a structured questionnaire. The tool for conducting this interview will be this questionnaire. Given the small number of the interviewees, it is not expected to be a representative field study.

1.10 Limitations on Harmonization of Patent Laws and Policies for the East Africa Community

The research expects certain limitations. Both Rwanda and Burundi have their history in French Law and the French language. The two countries have made considerable progress in embracing the English law and language. This is work in progress.

Secondly, the infrastructure of information technology and the role of the internet in disseminating information is still yet to be fully actualized within the entire EAC region. Useful materials on patents may not be readily available for perusal from the Internet. This is in contrast

with the Western World where most of the written work including, books, legislation or editorials can in many instances accessed through the internet.

The third limitation is that of time and resources. It would have been ideal to conduct interviews within all the EAC member states to get a generalized input. This would require a lot of time and resources.

There are limitations caused by political considerations. As at the time of writing this proposal, the media is awash with news that Tanzania is being isolated by Kenya, Uganda and Rwanda from the activities of the EAC in relation to some major transport infrastructure. This may not be the position by the time the study is completed.

1.11 Justification of the Study on Harmonization of Patent Laws and Policies for the East Africa Community

With TRIPS having provided for the minimum thresholds for national laws to meet, countries have to be innovative enough to come up with customized patent laws which comply with the minimum thresholds of TRIPS while at the same time taking care of the peculiar needs of that state or region. The implementation of the Treaty is under way. In this Treaty, part of its main objectives is to come up with a common market and a harmonized legal regime.

A common market will require a working legal regime to help it thrive. One way of creating such a regime is to explore the possibility of coming up with a regional harmonized patent policy and laws. There is an additional objective of the EAC adopting the use of one currency and ultimately becoming a political federation. It can be positively said that the framers of the Treaty saw the potential inherent in the concept of harmonization of IPR laws.

This study will provide measurable information to enlighten and influence policy formulation at both domestic and regional level. It is expected that the study will discuss the huge benefits capable of realization by the citizens of the EAC by embracing harmonized patent laws. Along this the study will provide crucial information on what is in existence, the efforts being done and what remains to be done to achieve a harmonized patent regime.

An electronic registry has the potential of making it customer friendly to access data and register patents online. This can perhaps bring the cost of doing business down drastically by eliminating bureaucracy and shortening time needed to register a patent. The process can also lead to certainty in dealing with patents as all necessary data will be available to consumers online at a minimal cost. Such an atmosphere can encourage more and more people to invest in patents.

Other benefits associated with an electronic registry would include; online access to data on patents at the comfort of one's office, facilitate a shortened data access time where days or weeks could be shortened to minutes or hours.

An electronic registry may also provide access to an expanding number of web-based software and intellectual property management tools, provide a path for EAC to catch up with world developments about intellectual property data access, and data management, lead to new industries and technology segments such as, online intellectual property management tools, monitoring software, technology exchanges, and new patent classifications, increase technology transfer among other benefits. Information technology may also increase business for legal sector, and accelerated time to market for new products and technologies.¹⁰²

If parliaments of the member states as well as EALA are to discuss matters patents, the research will provide a useful resource to inform decision making. Such information can also be useful for policy formulation by the executives from the region. It is hoped that the research will be available to members of the EALA to inform their debates in the integration process. There will also be possible identification of new areas which may require further research.

At this moment, it is opportune to give a brief chapter outline of the project.

1.12 Chapter Outline

Chapter 1 deals with the question of methodology on harmonization of patent laws and policies for the East Africa Community. Focus on this chapter shall be specifically on the background to the problem, statement of the problem and research questions on the harmonization of the patent laws and policies for the East Africa Community. The chapter will also deal with research objectives, research questions, hypotheses, theoretical and conceptual framework of the subject.

¹⁰² Rodney D. Ryder (2002) *Intellectual Property and the Internet*, LexisNexis, Butterworths, UK.

Finally, time will also be spent dealing with the methodology, limitations, justification of the study, chapter outline and a brief conclusion.

Chapter 2 discusses in detail the existing patent laws and policies within the East Africa Community. The Chapter also looks at the patents and institutions within the EAC Treaty, challenges facing protection of patents within the EAC and the role of information technology. The Chapter ends with a conclusion on existing laws and policies for the EAC.

Chapter 3 deals with harmonization of patents in the EU. Here, the process of harmonization of patents will be considered briefly as well the efforts done to harmonize patents within the European Union. This chapter also deals with online administration and registration of patents at EPO. It is this chapter which lays down the foundation for discussing harmonization of patents within the EAC in the fourth chapter.

Chapter 4 focuses on politics of patents and trace the steps of harmonization in the EAC showing the efforts so far done and what is in progress. Here, the Treaty provisions dealing with harmonization, exploitation and administration of patents are considered. There are recorded attempts to come up with an aspect of harmonization as shown in the preliminary literature review. Such will be considered. The Chapter concludes with a consideration of the findings of a field study, the economic benefits of harmonized patents administered by way of an electronic registry to the EAC and a conclusion.

In Chapter 5 the research will conclude with a summary of findings, conclusions, and making broad and specific recommendations based on the findings of the study.

1.13 Conclusion to Methodology on Harmonization of Patent Laws and Policies for the East Africa Community

The EAC Treaty lays a good foundation for the creation of a large economic bloc. However, there are challenges to achieve some of the objectives of the Treaty. One of these challenges is the existence of different municipal policies and patent laws. The solution is to harmonize the policies and the patent laws. This chapter has laid down the foundation of the study. The chapter

has traced the origin of the current patent laws and laid the basis for carrying this research. Having policies and laws which are not harmonized, EAC may not reap the desired benefits of an economic bloc.

The region has a big market with a population of more than 150 million people. Even though the foundation of patents in EAC is colonial and reforms have been taking place albeit piecemeal to comply with international requirements, there is still room for the EAC to reconsider what laws and policies are in place and see how they can be harmonized. Such harmonization is perceived to have the potential of ushering in a regime with the potential of huge economic benefits.

The study shall advance this argument further by looking at what is indeed on the ground before considering harmonization. These are the existing laws, policies and institutions which form the subject of the next chapter

CHAPTER 2

EXISTING PATENT LAWS, POLICIES AND INSTITUTIONS WITHIN EAST AFRICA

2.1 Introduction to Existing Patent Laws, Policies and Institutions within East Africa

In Chapter 1, this study focused on the history of patents within East Africa Community generally. Chapter 1 also identified some of the relevant policies for the community in the pharmaceutical manufacturing sector to include; the EAC Treaty itself, the fourth EAC Development Strategy; 2012-2016, the EAC National Industrialization policies and strategic plans of EAC Partner States; Investment promotion policies of EAC Partner States; Health sector policies of EAC Partner States and National medicines policies and strategic plans of EAC Partner States.

At the same time attention was also drawn briefly to the development of the existing laws, policies and institutions dealing with patents within the East Africa Community and what some scholars have written about harmonization of patents. In this chapter, the focus is on what is presently available in terms of patent laws, patent policies and institutions charged with the administration of patents in the East Africa Community.

2.2 Patents and the Treaty establishing the East Africa Community

East Africa Community is a creature of the Treaty establishing the East Africa Community. In chapter 1, it was shown that the EAC Treaty was signed in 1999. Within the EAC Treaty, patents are not defined but article 126(2) (b) calls upon the member states to harmonize all their national laws appertaining to the East Africa Community. It is therefore necessary to see how patents are specifically factored within the EAC Treaty itself. There are also isolated instances where harmonization of patent laws and policies has been attempted. The process of harmonization should have its foundation within the EAC Treaty before attempting to harmonize the existing legislations and policies dealing with patents.

Patents, like all other IPRs are in every form private economic rights from the perspective of the owner. Those who invest time and resource need to have the assurance from the state that a

monopoly is given to exclusively exploit the product for certain duration to the total exclusion of all would be available to the investor.¹⁰³ The duration of monopoly given should be attractive enough to the owner to give him the strong incentive that within the time of the monopoly, he can recoup his investments.

The preamble to the EAC Treaty is a clear pointer to the fact that it's the main objectives are economic. The EAC Treaty provides a broad road map of the aspirations of the people of EAC. Indeed, the framers of the EAC Treaty were so emphatic on the need to form the EAC on a key pillar of commerce that within the preamble itself they revisited the economic events going as far back to 1897.¹⁰⁴ This historical reflection of the role of economics in the foundational stages of the establishment of an economic bloc is a clear realization that trade, and business are the magnets to draw the Member States together.

The key pillars of the Treaty are; the consolidation of the Customs Union, the setting up of the Common Market, the establishment of a Monetary Union and laying the foundations for the Political Federation as well as the promotion of solid and economic infrastructure (including energy) that would support and spur economic growth in the Partner States.¹⁰⁵

One of the organs of the EAC Treaty is the East Africa Legislative Assembly (EALA). EALA has over the years enacted several useful legislations making it one of the key institutions for the purposes of this research. These laws by EALA are the engine for the integration process. They include; East African Community Interpretation Act; East African Community Emblems Act; East African Legislative Assembly Powers and Privileges Act; Acts of the Community Act; East African Community Customs Management Act 2004; Four Appropriation Bills for the Financial Years 2002, 2003 and 2004 and 2005.

¹⁰³ William Fisher (2001) "Theories of Intellectual Property Rights," Cambridge University Press at <http://www.theoriesofintellectualproperty.htm>. (accessed on 16/10/2014).

¹⁰⁴ The second item of the preamble captures this history in recognition of the formal, economic and social integration in the EAC which commenced during the construction of Kenya-Uganda Railway between 1897 to 1901, the establishment of the Customs Collection Center in 1900, The East African Currency Board of 1905, The Postal Union of 1905, The Court of Appeal for Eastern Africa 1909, The Customs Union 1919, The East Africa Governors Conference 1926, The East African Income Tax Board 1940 and The Joint Economic Council 1940.

¹⁰⁵ The Treaty Establishing The East Africa Community.

As at the time of this research, EALA had drafted several bills and were before the assembly for debate. These Bills include; The East African Community Appropriation Bill, 2007; The East African Community (Supplementary Appropriation) Bill, 2007; The Lake Victoria Transport Bill, 2007; The East African Community Customs Management (Amendment) Bill, 2007; The Summit (Delegation of Powers and Functions) Bill, 2007; The East African Community Joint Trade Negotiations Bill, 2008; The East African Community Quality Assurance, Metrology and Testing Bill; The East African Community Standardization, Quality Assurance, Metrology and Testing Act, 2006; The East African Community Competition Act, 2006.¹⁰⁶ As can be seen from this list, only the last four can be said to have some association with patents.

Under Article 43 of the Treaty the Member States committed themselves to promote and protect creativity and innovation for economic, technological, social and cultural development. Within this article, Member States undertook to enhance the protection of IPR. Sub Article 43.2 thereof is more elaborate by setting out the specific areas of co-operation to include; Copyrights and Related Rights. patents, layout designs of internet circuits, industrial designs, new plant varieties, geographical indications, trade and service marks, trade secrets, utility models, traditional knowledge, genetic resources, traditional cultural expressions and folklore and any other areas that may be determined by the partner states.

Article 43 of the EAC Treaty introduces member states as key players in the promotion and administration of patents as well as other regimes of intellectual property rights. This process was to state with each member state's municipal interventions with guidelines being set in article 43(3) and 43(4) of the EAC Treaty. The member states are required to put in place measures to prevent infringement, misuse and abuse of intellectual property rights, co-operate in fighting piracy and counterfeit activities.

Other duties assigned to member states in this article include; exchange of information on matters relating to intellectual property rights, promote public awareness on intellectual property rights issues, enhance capacity in intellectual property, increase dissemination and use of patent documentation as a source of technological information, adopt common positions in regional and

¹⁰⁶ The Treaty Establishing The East Africa Community.

international norm setting in the field of intellectual property and put in place intellectual property policies that promote creativity, innovation and development of intellectual capital.

As will be shown later in this research, some of these treaty requirements are work in progress. EALA seems to have taken the first initiative in formulating the bills mentioned in an earlier paragraph in this work.

Besides giving the member states directions on what to do under article 43.3, the EAC Treaty goes further under Article 43.4, to require each partner state to establish mechanisms to ensure that certain things are accomplished.

A reading of the list under this article reveals certain aspects of intellectual property protection which were not adequately catered for under the conventional intellectual property regime. Such areas include protection of traditional cultural expressions, traditional knowledge, genetic resources, national heritage, promotion of cultural industries, use of protected works for the benefit of the communities. The article also introduces the issue of cooperation in public health, food security, research and technological development.

Finally, under Article 43.5 the EAC Treaty introduces another important player as an institution or organ. This is the EAC Council which under this article is mandated to issue certain directives. These directions are to ensure that there is co-operation in the administration, management and enforcement of intellectual property rights. Here, it is important to note that the EAC Treaty is about co-operation.

Secondly, there is the question of cross border trade and the expected breaches of law as goods and services move from one state to another. The other part of this article deals with, the elimination of discriminatory practices in the administration of intellectual property rights. This has something to do with how member states are treated in each country in intellectual property rights. Under Article 73 of the Treaty, there is a provision for the creation of a trade regime.

The creation of the common market is a key achievement after the conclusion of the negotiations, signing and ratification of the EAC Common Market Protocol. In this the strategic

thrust of the Common Market Protocol is that of enhancing and institutionalizing the guaranteed provisions in the protocol through harmonization of policies, legal and regulatory framework as well as establishment of supportive institutions to facilitate the private sector investments, efficient and effective service delivery together with wide stakeholder involvement.¹⁰⁷

One common thread which binds the people of EAC intrinsically is their culture. Professor Ben Sihanya¹⁰⁸ observes that culture is a broad concept and embraces such things like art, craft, drama, dress, education, literature, music, politics, religion and technology. His view is that cultural industries are closely associated with industrialization and strategies. There are similar practices of these within East Africa Community.

Over the last decade the education sector within the EAC has seen a huge leap. Unlike in the past the region has seen a huge increase in the institutions of higher learning. The product of these institutions is expected to be a widely enlightened population. Such a population can be useful for investment in intellectual property.¹⁰⁹ A WIPO study in 1996 surveyed 96 developing countries and found that in over two-thirds of the sample, administration of industrial property was performed by a department within a ministry of industry and trade, or a ministry of justice. In 10 countries, an independent government agency was responsible for administration of industrial property. This is illustrated by Table 2.¹¹⁰

¹⁰⁷ EAC “Development Strategy (2011/12- 2015/16),” at page 33 <http://www.eac.int/index.php?option=com_docman&task=cat_view&gid=155&itemid=163.(accessed on 11.10.2014).

¹⁰⁸ Ben Sihanya (2009) “Intellectual property and mentoring for innovation and industrialization in Kenya,” *Law Society of Kenya Journal*, at p. 40.

¹⁰⁹ *ibid.*

¹¹⁰ WIPO Institute for Economic Research (1996) “Study on the Financial and Other Implications of the Implementation of the TRIPS Agreement for Developing Countries,” WIPO, Geneva report chapter 7 Institutional capacity at http://www.iprcommission.org/papers/text/final_report/chapter7htmfinal.htm. (accessed 15/11/2017).

Table 2

Country	The Staffing of IP Offices
India	The Patent Office has a total staff of approximately 300 against an authorized complement of 530 (this includes 40 patent examiners out of an authorized total of 190 examiners). The Trade Marks Registry has a total of 259 staff against an authorized total of 282. And the Copyright Office has a total staff of 12, of which 9 are professional posts.
Jamaica	The recently established Intellectual Property Office, under the Ministry of Industry, Commerce and Technology, has a complement of 51 posts, of which only around half are currently filled.
Kenya	The Intellectual Property Institute has an establishment of 97 staff, 26 of which are professional posts and 71 are administrative.
St. Lucia	The Registry of Companies and Intellectual Property, under the Attorney General's Department, has a complement of 9 posts with one post currently vacant.
Trinidad and Tobago	The Intellectual Property Office has a complement of 23 staff at present, with 6 posts vacant. A revised organizational structure proposes increasing the staff complement to 54 posts to handle the present workload.
Tanzania	The Intellectual Property Division of the Business Registrations and Licensing Agency has 20 staff (11 professional and 9 administrative).
Vietnam	The National Office of Industrial Property has 136 staff in total (87 professionals and 49 support staff) and there are a further 22 staff in the Copyright Office

The EAC Treaty gives the foundation needed to discuss about harmonization of patents.

2.3 Existing patent laws and policies in East Africa Community

Like all other developing countries, EAC member states face challenges in developing a comprehensive and coordinated policy on patents. Generally, developing an IPR policy has been

said to be a relatively new area of public policy.¹¹¹ The impetus for policy changes in IP typically comes from international agreements to which the country is signatory, without necessarily having a coherent idea of how they can be implemented nationally.

Some scholars have argued that ideally, formulation of IP policy in a developing country should be based on a sound appreciation of how the IP system might be used to promote development objectives derived from an analysis of the country's industrial structure, modes of agricultural production, healthcare and educational needs.¹¹² The expertise and the evidence necessary to undertake that task is often in very short supply.

The reality in many developing countries is that institutional capacity is generally weak, and , lack of experienced and well-qualified officials. Many are the times when there is considerable dependence on technical assistance by developing countries in the form of drafting of laws, expert advice and commentary on new draft legislation. This kind of assistance is provided by WIPO and other bodies.¹¹³

Indeed, even where such a policy has been developed, critics have argued that it may not guarantee desired results. It is always seen as a controversial subject. Where else most instruments purport to protect the rights and interests of the IPR holder, recent development concerns have been towards judicious balancing of the rights of the creator to the wider community rights to access and enjoy the benefits of the IP.¹¹⁴

¹¹¹ Michel Petit, Cary Fowler, & Wanda Collins (eds) (2001) "Why Governments Can't Make Policy: The Case of Plant Genetic Resources in the International Arena," at <http://www.cipotato.org/market/whygov/FlyerGR1.pdf>. (accessed on 11/9/2014).

¹¹² Commission on Intellectual Property Rights, London (2002) "Integrating Intellectual Property Rights and Development Policy," Chapter 7 at <http://www.iprcommission.org/papers/pdfs/final_report/ciprfullfinal.pdf. (accessed on 26/6/2014).

¹¹³ Peter Drahos (2002) "Developing Countries and International Intellectual Property Standard-Setting," Commission on Intellectual Property Rights Background Paper 8, Commission on Intellectual Property Rights, London, p 21. "LDCs in particular do not have local experts to evaluate the suitability of model international laws to local economic, social and cultural conditions. LDCs often lack drafting expertise and are reliant upon outside legal drafters, who may be brought in from those western legal systems to which the LDC has historical links as consultants or on contract basis for a set period. The problem is especially acute in the case of IP since there are very few people who possess both the specialized technical skills of legislative drafting, as well as expertise in IP law." Source: <http://www.iprcommission.org>.(accessed on 11/9/2014).

¹¹⁴ Patricia Kameri-Mbote (2005) "Intellectual Property Protection in Africa: An assessment of the status of laws, research and policy analysis on intellectual property rights in Kenya," *op. cit.*

In Burundi prior to 2013, the patent laws included the Patent Law of August 20, 1964, the Law of Factory and the Law on Industrial Designs on August 20, 1964, Decree-Law No. 1/170 Of July 1, 1968 Amending the Patent Law of August 20, 1964, and Decree-Law No. 1 /171 On July 1, 1968 Amending the Law on Industrial Designs of August 20, 1964. These were replaced with Law No. 1/13 relating to industrial property.

The Law No. 1/13 is supposed to organize and protect industrial property by regulating the rights relating to patents, utility model certificates, industrial designs, and layout designs for integrated circuits, traditional knowledge, crafts objects and distinctive signs. It recognizes such international instruments like the Budapest Treaty on the International Recognition Of The Deposit Of Micro-Organisms, the WTO, TRIPS, International Classification Of Patents And Certificates as established by the Strasbourg Agreement concerning international patent classification of 24th March, 1971 as amended on September 28, 1971, the Locarno Agreement establishing an international classification for industrial designs of October 8, 1968, the Nice Agreement concerning the international classification of goods and services for the purposes of registration marks of June 15, 1957, the Paris Convention for the protection of industrial property of March 20, 1983, Patent Cooperation Treaty signed in Washington DC on 19th June, 1970 and as amended thereafter. Law No. 1/13 amended several earlier legislations and incorporated previous legislation into a single statute.¹¹⁵

Burundi is a member of several IPR related treaties which are administered by WIPO. It is noted that within TRIPS Rwanda and Burundi fall in the category of LDCs but both countries have adopted patent laws that largely reflect the flexibilities available to LDCs under the TRIPS agreement.¹¹⁶

¹¹⁵ WIPO website, at <www.wipo.int/wipolex/en/text.jsp?file_id=215633>. (accessed (15/11/2017) The legislations repealed by this law included;

- (a) the patent law of August 20, 1964
- (b) the law of factory and trademarks of August 20, 1964
- (c) the law on industrial designs on August 20, 1964
- (d) decree-law no. 1/169 of July 1, 1968 amending the law on factory and trademarks of August 20, 1964
- (e) decree-law no. 1/170 of July 1, 1968 amending the patent law of August 20, 1964
- (f) decree-law no. 1 /171 on July 1, 1968 amending the law on industrial designs of August 20, 1964.

¹¹⁶ Hillary Muheebwa (2016) "Intellectual Property Watch," at <http://www.ip-watch.org/author/hillary-muheebwa>. (Accessed on 21/7/2014).

The Republic of Rwanda has an elaborate intellectual property policy within the Ministry of Trade and Industry.¹¹⁷ Through this policy the country appreciates the effect of globalization and information technology in affecting development in technological development, product and services for both government and private sector. The policy covers such areas like copyright and related rights, trade marks including service marks, geographical indications including appellations of origin, industrial designs, patents as well as the protection of new varieties of plants, the layout designs of integrated circuits as well undisclosed information including trade secrets and test data.

The Rwandese policy recognizes such international IPR instruments including but not limited to WIPO, WTO, and TRIPS among others. The vision is fairly elaborate, but the key aspiration is to create ideas and innovations that are protected in a way that ensures a greater prosperity of the Rwandese while making optimal use of international technologies to promote growth and productivity.¹¹⁸

The Rwandese IP Policy is crafted to stimulate local investment and aimed at providing guidance and road map to ensure that the IP laws, practices and strategies in Rwanda support and facilitate the country's technological learning.¹¹⁹ According to Sihanya, the Rwandese IP Policy has six major objectives.

The first aim is to increase technological literacy and advanced scientific and technological skills. These skills are in turn increase the innovation capacity. The second aim is to promote innovation and creativity including minor and incremental innovations. The third one seeks to increase access to foreign and local technology by local firms and research institutions. Fourth seeks to improve access to IP based essential goods and services while the fifth aim is to facilitate investments in innovative and creative activities. The sixth aim is to enhance the protection of traditional knowledge and facilitate access to genetic resources and benefit sharing.

¹¹⁷ Republic of Rwanda (2009) "Rwanda Intellectual Property Policy," Ministry of Trade and Industry, Rwanda.

¹¹⁸ *ibid*, Clause 3.1.

¹¹⁹ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op.cit.* at p 585.

On administration of patents, the Rwandese IPR policy sets out elaborate mechanisms for receiving, examining and granting or refusing applications for IP protection. Along this the policy recognizes the importance of computerization of all documents and its operations as a key priority of the sector. To implement this policy there are recommendations to set out institutional developments and policy coordination as well as engagement in regional and international IP negotiations processes and organizations.

Across into the United Republic of Tanzania there are also crucial developments in the field of Patents. The laws governing administration and exploitation of patents in that country include the Patent Act Cap 217 RE 2002, the Transitional and Alternative Medicine Control Act No. 23 of 2002.¹²⁰

The key policy framework for protection of patents in Tanzania include a National Healthy Policy, Science Technology and Innovations Policy, Forest Policy, Agricultural Policy, Environmental Management Policy as well as Trade Policy.¹²¹

When we look at Uganda, the story is not different from that of her neighbors. David J Bakibinga¹²², after reviewing the different IPR Laws then in force in Uganda, recommended that the IPR regime in Uganda needed reform.

One key area identified by Bakinga was what he termed as the peculiar aspects of IPR in Uganda such as protection of folklore, traditional knowledge and methods of treatment which required protection. Such reforms, according to Bakinga should be done while taking into account the international treaties to which Uganda was a signatory. Samuel Wangwe. In his work¹²³ noted that at independence Uganda inherited the then existing British IP System, including the whole pieces of legislation.

¹²⁰ George S. Shemdoe and Loy Mhando (2012) “National Policies and Legal Frameworks Governing TK and effective IP Systems in Southern and Eastern Africa: The case of traditional healers in Tanzania,” at ><http://www.atpsnet.org/Files/rps17.pdf>.(accessed 21/7/2014).

¹²¹ *ibid.*

¹²² Bakibinga J David is a Professor of Commercial Law and Deputy Vice Chancellor Makerere University, Uganda.

¹²³ Samuel Wangwe “Institutional Capacity in IP policy, Administration and enforcement-the case for Uganda,” at <www.iprcommission.org/papers/word/.../sp9_Uganda_case_study.doc.(accessed on 1/8/2014).

This situation continued until the late 1980s and the early 1990s when changes began to occur. According to Samuel such changes included the signing of WTO by Uganda in 1994 and as a consequence had her commercial laws affected by TRIPS. This called for various amendments. In the year 2000, Uganda formed a taskforce to review and up-date the IPR laws to align with TRIPS requirements.

Samuel Wangwe argued that at the time of his work there was no specific or concrete IPR national policy in Uganda. He however agrees that the National Science and Technology policy has the task of formulating a policy on IPR. Samuel identifies patent laws in Uganda then to include the Uganda National Council for Science and Technology, The Patents Statute, The United Kingdom (protection) Act, the TRIPS Agreement, The Patents (Amendment) Bill 2000 and The Industrial Property Bill 2001.

Samuel identifies the office of the Registrar General and Uganda National Council for Science and Technology to be the main institutions dealing with the administrative work of IPR. Finally, he singled out the key challenges to include; inadequate manpower, financial constraints, lack of coordination between key IP partners, inadequate information, weak outmoded laws and slow implementation. He concludes by observing that what was on the ground then was not sufficient, but moves should be made to bring IP regime in Uganda at par internationally and acceptable standards in conformity with TRIPS.

Uganda has reviewed most of IPR laws including those dealing with patents. Presently, there are the Patents Act, Cap 216, the Patents (Amendment) Act, 2002, the Patent Regulations,¹²⁴ S1 216-1, the United Kingdom Designs (Protection) Act Cap 218 and the Trade Secrets Protection Act, 2009 and now the Industrial Property Act 2014.¹²⁵

The Patent system in Uganda is administered by the Uganda Registration Services Bureau (URSB), a Ministry of Justice and Constitutional Affairs institution. There is however a low

¹²⁴ The Patents Act, S.I No.216-1.

¹²⁵ Uganda Industrial Property Act 2014.

level of patent registration in Uganda associated with¹²⁶ Uganda experiences law patent registration which has been associated with entrenched Culture of secrecy, Low level of awareness, Limited access to Patent information, Application process long and costly, General uncertainty on benefits and Few success stories among other reasons.

According to Prof Sihanya:

“Kenya received its first patent laws from her colonial master, Britain. These statutes were applied together with the English common law by the reception clause under the East African-Order-in-Council 1897. The reception clause applied to Kenya the substance of the English Common Law, the Doctrines of Equity and Statutes of General Application in force in England as at that date, and was later re-enacted under the Kenya Judicature Act, 1967.”¹²⁷

The Patent Laws given to Kenya by Britain were British linked. Until 1989, The Patent Act Cap 508 provided merely for the registration of Patents granted by the British Patent Office. A good example is what happened between Kenya and an American Company. In the New York Times Magazine, the report was revealed in these words;

“The Kenya Medical Research Institute, which conducted the first tests of the drug in AIDS patients, argues that it made a patentable discovery. But that is disputed by the president of the Amarillo Cell Culture Company of Texas, Dr. Joseph Cummins, who originally developed oral alpha interferon, had it manufactured by Hayashibara Biochemical Laboratories of Okayama, Japan, and first supplied the drug to the Kenyans. ‘There is no Kenya invention involved in this technology.’ Dr. Cummins asserted in a letter to Dr. Koech. Angered that the institute had filed a patent application for the drug, Dr. Cummins told the institute he would take “appropriate legal action to defend my technology.”¹²⁸

To address the hardships posed by the application of Cap 508, a Commission known as the National Council for Science and Technology and the Legal Patents Committee was formed to chart the way forward. This led to the enactment of the Industrial Property Act Cap 509 in 1989.

¹²⁶ WIPO website, at Accessed on 17/11/2015).

¹²⁷ Ben Sihanya (2010) “Copyright Law in Kenya,” *International Review of Intellectual Property and Competition Law (IIC)*, Journal of the Max Planck Institute for Intellectual Property, Competition and Tax Law, Munich, Germany, Vol. 41 No. 8, pp. 926-947 (2010) edited by Prof William Cornish, Prof Paul Goldstein *et al.*

¹²⁸ New York Times website, at www.nytimes.com/.../in-kenya-a-new-aids-drug-gets-mired-in-politics-and-financial- (accessed 17/11/2017).

It came into force in 1990. Through Cap 508, a new legal framework was enacted which for the first time gave a comprehensive legal framework for the registration and protection of Patents.¹²⁹

The Industrial Property Act Cap 509 established the Kenya Industrial Property Office (KIPO) which was later renamed Kenya Industrial Property Institute (KIPI). The role of KIPI was to among other duties to handle examination of applications for and granting industrial rights, screening technology transfer agreements and licences. There other functions set out in Section 5 of the successor Act, the Industrial Property Act, 2001.

The Industrial Property Act Cap 509 was amended several times until it was replaced by The Industrial Act No 3 of 2001. The latter statute came into force on 3rd August 2001¹³⁰

Prior to this date, Kenya had no independent intellectual property protection regime. Registration of Patents was done by the Registrar General in the office of the Attorney General under Cap 508.¹³¹ Such an application had to be filed within three (3) years after grant by Patent Office, London.

It is timely to note that in the same year 2001, when the Industrial Property Act No 3 of 2001 was enacted, the Copyright Act, 2001 was also enacted. The latter Act came into force on 1st February 2003.

In relation to Plant Variety protection, Kenya has had Seeds and Plant Varieties Act since 1942 but which only became operation in 1990s after the establishment of Plant Breeders Registration Office

Kenya does not have a national IP policy besides the Draft National IP Policy and Strategy which is pending passage before Parliament.¹³²

¹²⁹ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.* at p 90.

¹³¹ Patricia Kameri-Mbote (2005) "Intellectual Property protection in Africa; An Assessment of the status of laws; Research and policy analysis on Intellectual property rights in Kenya," at <http://www.ielrc.org/africa/ipr.php> (accessed on 4/6/2014). See Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.*

¹³² Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op. cit.* at p 586.

In Kenya, Professor Patricia Kameri-Mbote and Moni Wekesa¹³³ analysed the existing IPR laws in Kenya. Key legislations in the administration and exploitation of patents include the Industrial Property Act Cap 509 of the laws of Kenya 2001, the Seeds and Plant Varieties Act Cap 326 of the laws of Kenya.

Besides these legislations there are several major institutional stakeholders dealing with the administration and exploitation of Patents. Both Mbote and Wekesa came up with a list consisting of; Kenya Industrial Property Office which later changed its name to KIPI, Kenya Plant Health Inspectorate Service (KEPHIS) the Attorney General's Chambers which hosts the office of the Registrar General dealing with law reform on IPR, the National Council for Science and Technology established under the Science and Technology Act Cap 250, Kenya Agricultural Research Institute (KARI), The Kenya Forestry Research Institute, the Kenya Medical Research Institute, Public Universities, Seed Companies, Flower Companies, The Seed Trade Association of Kenya (STAK), Collecting Societies, International institutions such as FAO, The African Center for Technology Studies (Acts) as well as several NGOs.

In Tanzania, patents have their origin to the colonial times and as early as 1922 through Chapter 217 of Patent.¹³⁴ In this WIPO site, it is shown that after independence, Tanzania made little changes to the laws relating to Patents. It is further shown that currently, patents are governed by Patents Act No.1 of 1987 as amended by Acts Nos 13 and 18 of 1991. Apart from this domestic legislation, Tanzania has ratified several international conventions and treaties dealing with patents. These include WIPO Convention of 1967, Patent Cooperation Treaty (PCT) of 1970, The Protocol on Marks within the framework of ARIPO, Paris Convention, TRIPs and others.

In pharmaceuticals, Sisule F Musungu has observed that , there are a number of laws and policies that are critical in facilitating the use of the TRIPS flexibilities for access to medicines and ensuring quality control as well as providing a legal regime for market surveillance and tackling fake and sub-standard medicines. Such laws and policies include those relating to IP, IP

¹³³ Lionel Bentley & Brad Sherman (2014) *Intellectual Property Law, op. cit.*

¹³⁴ WIPO "Intellectual Property Rights In Tanzania," at http://www.wipo.int/wipolex/en/text.jsp?file_id=216618(accessed (accessed on 13/11/2017).

enforcement, quality standards and market surveillance.¹³⁵ Musungu identifies such laws and policies for Kenya, Tanzania and Uganda to be the following;

Kenya

- a) Constitution of Kenya 2010.
- b) Children's Act of 2001.
- c) Penal Code, Chapter 63 Laws of Kenya.
- d) Dangerous Drugs Act, Chapter 245 Laws of Kenya.
- e) Food, Drugs and Chemical Substances Act, Chapter 254 Laws of Kenya.
- f) HIV and AIDS Prevention and Control Act No. 14 of 2006.
- g) Kenya National HIV/AIDS Strategic Plan.
- h) Kenya Vision 2030.
- i) National AIDS Control Policy of 2005.
- j) National Hospital Insurance Fund Act No. 9 of 1998.
- k) National Poverty Eradication Plan.
- l) Public Health Act, Chapter 242 Laws of Kenya.
- m) Pharmacy and Poisons Act, Chapter 244 Laws of Kenya.
- n) Standards Act, Chapter 496 Laws of Kenya.
- o) Restrictive Trade Practices, Monopolies and Price Control Act, Chapter 504A.

In addition to these laws, Kenya is also considering a Traditional Medicines Bill which, if enacted, would also be relevant to question of access to essential medicines.

Tanzania

- a) Constitution
- b) HIV and AIDS (Prevention and Control) Bill 2007.
- c) Infectious Diseases Act, Chapter 96 Laws of Tanzania.
- d) Food, Drugs and Cosmetics Act No. 1 of 2003.
- e) National Policy on HIV/AIDS.

¹³⁵Sisule F. Musungu (2010) "The Potential Impact of the Proposed East African Community (EAC) Anti-Counterfeiting Policy and Bill on Access to Essential Medicines," at http://www.iqsensato.org/?page_id=184. (accessed 15/10/2014). This paper was commissioned by the HIV/AIDS Practice, Bureau for Development Policy (BDP) at the United Nations Development Programme (UNDP). However, the views expressed in the paper are the author's own and do not necessarily represent the views of UNDP. The author is the President of IQsensato (www.iqsensato.org) and is a research and policy expert on intellectual property.

- f) National Health Policy.
- g) National Strategy for Growth and Reduction of Poverty 2005.
- h) Pharmaceutical and Poisons Act, Chapter 219
- i) Pharmacy Act No. 7 of 2002.
- j) Penal Code, Chapter 16.
- k) Tanzania Bureau of Standards Act, Act No. 3 of 1975.
- l) Tanzania Development Vision 2025.
- m) Traditional and Alternative Medicines Act No. 23 of 2002.

Uganda

- a) Constitution of Uganda
- b) Food and Drugs Act, Chapter 278 Laws of Uganda.
- c) Health Sector Strategic Plan.
- d) National Health Policy.
- e) National Drug Policy and Authority Act, Chapter 206
- f) Penal Code, Chapter 120 Laws of Uganda.
- g) Poverty Eradication Plan.
- h) Pharmacy and Drugs Act, Chapter 280 Laws of Uganda.
- i) Public Health Act, Chapter 281 Laws of Uganda.
- j) Uganda Bureau of Standards Act.
- k) Uganda Vision 2025¹³⁶

Finally, at continental level the EAC members except the Republic of Burundi which has been given an observer status are full members of ARIPO. Under ARIPO, patents are administered through the Harare or Madrid System.¹³⁷

At this point, it is appropriate to demonstrate the variances existing in the national IP legislations of the member states. This can be well captured graphically in table 3.

¹³⁶ Uganda Vision 2025 at https://openlibrary.org/books/OL145026M/Uganda_vision_2025. (accessed on 12/4/2014).

¹³⁷ ARIPO Magazine Vol. 4, No.2, April - June 201; www.aripo.org/news-events.../2_5fa2f479f8fd63ab6450fd2f232d1809. (accessed on 15/11/2015).

Table 3. *Analysis of National IP Legislation – Overview Transitional period*

Burundi	Kenya	Rwanda	Tanzania Mainland	Tanzania Zanzibar	Uganda
2016 Transition Period, Art. 17 and Art. 381 – data protection No mailbox rule	Cannot take advantage of transition period for LDCs	Exclusion of pharmaceutical products, for the purposes of international conventions to which Rwanda is party, Art. 18.1 No. 8 No mailbox rule Prior use, Art. 41.1 No. 3	Does not provide for 2016 Transition Period	2016 Transition Period, Sec. 3.1 (x) and Sec. 72.5 (h) – data protection Mailbox, Sec. 10.8 Prior use, Sec. 8	2016 Transition Period, Sec. 8.3 (f) Mailbox, Sec. 28.14 Prior use, Sec. 43.4

*Adapted from annex 2 page 29 with graphic adjustments*¹³⁸

A keen look at the existing patent legislations as set out in table 4 above show that patents laws in EAC partner states are mainly governed by each partner state legislation. The only convergence is where a party is applying the avenues available under ARIPO or under the PCT system.

¹³⁸ EAC TRIPs Policy (2013), at <<http://kelinkenya.org/wp-content/uploads/2010/10/EAC-TRIPS-Policy.pdf>>(accessed 14/10/2014).

2.4 Challenges Facing Protection and Exploitation of Patents in EAC

It was pointed out in Chapter 1 that the origin of patents law can be traced from the colonial times. This history has its own role in the current experiences in the administration and exploitation of patents in EA. It is necessary to say something about the foundation of patents internationally to bring certain challenges into perspective.

2.4.1 General challenges

The Paris Convention and Berne Convention ushered in the multilateral era of international cooperation in IP. These are the foundational treaties of IP. This was followed by other international instruments like the Madrid Agreement of 1891, Hague Agreement of 1925, The Rome Convention of 1961, The UPOV of 1961 and 1991, The PCT of 1970. Over this period both the Paris and Berne Conventions underwent several revisions at Brussels on December 14, 1900, at Washington on June 2, 1911 at The Hague on November 6, 1925, at London on June 2, 1934, at Lisbon on October 31, 1958, and at Stockholm on July 14, 1967, and as amended on September 28, 1979.

Apart from the creation of international instruments on patents the world also experienced a rise in international organizations as a byproduct of international instruments. For example, the Paris and Berne Conventions saw the creation of international bureaus which were later merged in 1893 to form BIRPI. BIRPI was superseded by a new organization known as WIPO established 1967 and later became a specialized agency of the United Nations in 1974.¹³⁹

The effect of these institutions was the creation of certain fundamental principles the most important of which being the principle of national treatment.¹⁴⁰ From this principle of national treatment, states retained enormous sovereign discretion over IP standard setting. However, Peter¹⁴¹ observes that developing countries did not recognize the patenting of chemical compounds. Standards of trade mark registration varied drastically, even between countries from

¹³⁹ Peter Drahos (1998) “The Universality of Intellectual Property Rights: Origins and Development,” at <www.wipo.int/edocs/mdocs/tk/en/wipo_unhchr_ip_pnl_98/wipo. (accessed (accessed on 15/10/2014).

¹⁴⁰ *ibid.*

¹⁴¹ *ibid.*

the same legal family. The product of all the above was to have the World Intellectual Property Organization administering an intellectual property world of enormous rules of diversity.

After the World War II, more and more developing countries joined the Paris Convention and Berne Convention. From then they exerted their presence and began to demand reforms at the international arena. This pressure culminated in the formulation of Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS) in 1994. The TRIPS Agreement was made binding on all members of World Trade Organization (WTO) and there was no way a state that wished to become or remain a member of WTO could side step the TRIPS agreement without the possibility of international consequences. This historical challenge is a problem which cuts across developing countries in their quest to administer and exploit patents.

In addressing the challenges facing development nations, WIPO is working hand in hand with its Member States to promote intellectual property as a strategic tool for economic growth and national development. This is also in line with implementing NEPAD's priorities and the 10-year Capacity Building Programme for the African Union.¹⁴² The expectations on this are that each African country will have in place a strong, inclusive and comprehensive national intellectual property system that will allow its citizens to successfully create, protect, promote, and commercialize its intellectual property assets.

From WIPO's support to NEPAD report for the period July 2007 to June 2008¹⁴³ it is shown that many countries in Africa have gradually adopted National Intellectual Property (NIP) Strategies and Intellectual Property Development Plans. A study of this report gives a picture of the challenges internationally recognized to be facing developing countries.

The strategies here are preceded by thorough assessments of a country's IP needs by means of a national audit exercise, which in specific regions has been carried out in cooperation with regional economic communities such as COMESA and the Central African Economic and

¹⁴² WIPO Support To NEPAD Report for The Period July 2007 To June 2008 http://www.un.org/africa/osaa/2008_un_system/WIPO.pdf. (accessed on 15/10/2014).

¹⁴³ *ibid.*

Monetary Community. For example, it is revealed in that report that IP strategies have been formulated in countries such as Ethiopia, Kenya, Mauritius, Mozambique, Rwanda and Uganda. Towards this end, the following activities on IP generally are captured in the report and which can be summarized as follows;

- a) *Human Resource*; The report shows that WIPO continues to contribute to human resources and IT equipment at both African regional IP institutions, the African Intellectual Property Organization (OAPI) and the African Regional Intellectual Property Organization (ARIPO).
- b) *Culture*; On the cultural aspects of IP, the report says that WIPO has fostered exchange of information among national stakeholders. In doing this, WIPO uses various avenues including within the framework of the IP strategies and plans, and by means of a peer review mechanism.
- c) *Efficiency*; In any institution worth the title, efficiency is crucial. It is for this reason the report discloses why WIPO has focused on improving efficiency through specific training in corporate governance. Other areas of intervention by WIPO is in streamlining of administrative procedures and business tools in industrial property and collective management organizations. Finally, there is also office automation through the use of AFRICOS software, for copyright collective management and IPAS software for industrial property administration.
- d) *Legislation*; In addressing the legislative needs of countries, due regard is given to the requirement to consider flexibilities and public interest considerations and ensure that the laws are in conformity with the TRIPS standards. In this context for example, WIPO has given legislative advice to Botswana, Djibouti, Ethiopia, Ghana, Malawi, Rwanda and Zanzibar. Workshops on TRIPS flexibilities.
- e) *Innovation and Creativity*; The report shows how this is being done through medal awards. Some of these awards include; the African Union Award, exhibitions, and copyright enforcement through anti-piracy programmes to create an environment

conducive to the development of the music industry. On the other hand, to support inventiveness and creativity focus has been on special programmes, e.g., women inventors, the use of distinctive signs and branding for promotion of trade in the domestic and export markets. The report shows how in 2008, activities proposed to take place were to include an International Symposium on Innovation and Valuation of Research Products. This was to be held in Dakar, Senegal.

- f) *Technical Assistance*; to Small and Medium-Sized Enterprises (SMEs) and Research and Development (R&D) Institutions. The report shows how WIPO has continued to integrate technical assistance needs of SMEs and R&D institutions. An example is given in the report in 2007 of an awareness raising meeting for Managers of SMEs organized in Harare, Zimbabwe. This meeting and future activities include a programme on the use of patent information and documentation and all the business-oriented IP management techniques and methods to increase the value of indigenous products created and owned by SMEs.

- g) *Traditional Knowledge*: The report documents how the OAPI and the ARIPO requested WIPO's assistance in drafting a harmonized regional instrument for developing a sui generis system for the protection of traditional knowledge and traditional cultural expressions. Chapter 2 of this research, Peter Drahos (2002) is quoted decrying the lack of local expertise to legislate on IP bills. To legislate on traditional knowledge, both OAPI and ARIPO had to resort for technical assistance from WIPO. The first draft of which was submitted to the ARIPO Administrative Council and Council of Ministers and to the OAPI Administrative Council.

Within the EAC a good example is Kenya and Rwanda where data was available online at the time of the research. Professor Patricia Kameri-Mbote¹⁴⁴ has looked at the subject and identified certain challenges facing the administration of IPR in Kenya. Professor Ben Sihanya¹⁴⁵ has

¹⁴⁴ Patricia Kameri-Mbote (2005) "Intellectual Property Rights in Africa: An Assessment of the Status of Laws, Research and Policy Analysis on Intellectual Property Rights in Kenya," IELRC Working Paper 2005-2 at <<http://www.ielrc.org/content/w0502.pdf>. (accessed on 15/10/2014).

¹⁴⁵ See Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, op. cit. at p 617-622.

equally contributed immensely on this topic. From their separate works, challenges which can be summarized as follows;

(a) Mbote talks of *National infrastructure*. This takes two forms, sufficient competent human resource and the physical facilities in terms of office space and machinery. WIPO has been assisting developing countries to develop their human resource base and in the provision of computers and software for IP management. At KECOBO there are no adequate infrastructure, human resource as well as finance. On his part Sihanya talks of administrative challenges to IP enforcement. He argues that institutions handle many IP related assignments with inadequate architecture or infrastructure, insufficient or untrained human resources as well as insufficient funding.

(b) *Human Resource Capacity*. Mbote sees this as a major challenge while Sihanya combines it with administrative challenges. To Mbote, this relates to challenges in the issue of attracting a multi-disciplinary staff in the institutions. One would require for example lawyers, doctors, police, inspectors, customs and revenue officers for effective implementation of the law.

(c) *Educational institutions Training*. According to Mbote, this may pose a big question especially where there are inadequate institutions which teach IP.

Sihanya calls this Ignorance and related issues in IP lawyering and enforcement. This is likely to occur where some creators, innovators, and inventors as well as legal practitioners have limited information about IP. For example, Sihanya argues that there may be situations where only routine procedures are known or where most players are not aware about new developments in IP.

(d) *The judiciary and judicial process*. In Kenya, the industrial property provides for the establishment of a Tribunal. There is however a sizeable litigation in Kenya in Trade marks. Mbote was of the view that the capacity of the judiciary to deal with IP was limited by lack of judicial officers well versed with IP issues.

(e) *International negotiating capacity*. Mbote views IPRs as cross-cutting issues and are discussed at different fora. Such fora include those in trade, national development planning, tax, environment, agriculture, human, animal and plant drugs as well as in policies on medicine.

(f) The last item identified by Mbote was that of *Research and development*. She was of the view that there seems to be little expenditure on R&D

(g) Technological developments and IP enforcement

Sihanya notes that this to be a challenge. Most processes in the institutions handling administration of patents are manual. This leads to waste of time. Secondly, lack of appropriate technology at border points makes it hard for custom officials to detect some infringements on IP rights.

(h) Inadequate Funding for IP lawyering and enforcement

This according to Sihanya constrains the efficacy of administrative and enforcement agencies. This makes it hard for them to implement most of their programs. Further, due to poor remuneration, the agencies cannot attract well trained and qualified personnel.

h) Discrimination in enforcement of IP rights.

This comes due to inadequate legal provisions where not all IP rights are covered for protection. Sihanya points out that not all IP rights are accorded equal protection as far as enforcement is concerned. On this Sihanya argues that such discrimination can only be cured through reforms. To him there is need to effect three sets of reforms. The first one has to deal with innovation and technology transfer, while constitutional, normative and judicial reforms are the second set of reforms.

The third reform proposed by Sihanya has to do with administration of IP rights. He then closes by recommending that for a more efficient coordination of institutions mandated to enforce IP rights at the national, regional, sub regional and transnational context such as the EAC, COMESA, SADC, Economic Community of central Africa States (UDEAC), ECOWAS, AU, OAPI, and ARIPO.

In Uganda, a study done by Samuel Wangwe¹⁴⁶ entitled Institutional and issues for Developing Administration and Enforcement, several issues were identified as challenges; Inadequate manpower, Financial constraints, Lack of co-ordination between key partners in IP administration and enforcement, Inadequate information (the law generally), Weak and out model laws, Slow implementation of IPR laws, Donor dependence of legal reform and Lack of specialized legal practitioners.

The above two examples are representative enough to demonstrate the challenges faced in the administration of patents and IP generally within EA. To move forward, the region requires a reconsideration of the existing policies and legislation. As will be seen later in chapter 3, information Technology is playing a key role in administration and exploitation of patents worldwide. This chapter would carry incomplete work if something about ICT were not dealt with albeit briefly.

2.4.2 Challenges associated with Information Technology

Information technology systems are now a critical requirement for efficient IP administration. They enable easy access to a wide range of information on IP policy subjects as well as on the on-line patent databases and libraries of organizations like WIPO and EPO among others. It is thus an important tool of enhancing institutional capacity.

Whilst the basic hardware requirements are fairly limited for small IP offices and the necessary software is readily available, the extent of automation and internet-connectivity is surprisingly low. Although some larger, higher income developing countries have fully automated systems for searching and application processing, a large number of countries still have manual, paper-based systems. This not only hinders efficient processing of applications but also greatly complicates collection of important statistical and management information.¹⁴⁷

¹⁴⁶ Samuel Wangwe (2004) “Institutional Capacity in IP policy, Administration and enforcement-the case for Uganda,” *op. cit.*

¹⁴⁷ According to WIPO, 154 IP offices around the world currently lack Internet connectivity, WIPO (2001b) “Revised Draft Program and Budget 2002-2003,” WIPO, Geneva at <http://www.wipo.org/eng/document/govbody/budget/2002_03/rev/pdf/introduction.pdf. (accessed on 11/9/2014 (accessed 11/9/2014).

2.5 Conclusion on Existing Patent Laws, Policies and Institutions within East Africa

In this chapter, a lot has been said about the existing patents laws in EAC. The EAC Treaty provides a clear provision for the promotion of patents by member states. Apart from patents, other types of IP are clearly captured leaving no room for doubt on what the framers of the EAC Treaty had in mind.

Flowing from the EAC Treaty, patents as a regime of the wider IPR has taken root in the EAC. Receiving the initial patent laws from the former colonial masters, the region has moved further to align her municipal legislations with the TRIPS, a very commendable step to a region with a very low levels of patent registrations.

Apart from the municipal laws, EAC has also taken steps to come up with harmonized policies on patents especially in pharmaceutical medicine. There is however more to be done.

As will be shown in the next chapter, EU has put in place elaborate laws in the management and exploitation of patents through harmonized patent laws. The EU market has a long history and is well advanced in comparison to the EAC market. There are good lessons the EAC can learn from the EU. In the chapter 3 the study will focus on the European Union and explore how harmonization of patents is being undertaken as well as the associated benefits. The chapter takes the form of a case study.

CHAPTER 3

HARMONIZATION OF PATENT LAWS AND POLICIES IN THE EUROPEAN UNION

3.1 Introduction to the Harmonization of Patent Laws and Policies in the European Union

The history of the intellectual property rights as earlier shown in chapter 1 finds its root in the north with great influences coming from the countries currently forming the European Union (EU). The EU is described in its homepage as ‘*a family of democratic European countries, committed to working together for peace and prosperity*’. Initially, EU was composed of only six countries. These are; Belgium, Germany, France, Italy, Luxembourg, and Netherlands. The number later increased.¹⁴⁸ Currently the EU is composed of 28 countries.¹⁴⁹ This is a region that boasts of a very solid economy which by the year 2014 had a GDP of euro 12,945,402 million.¹⁵⁰ In terms of population EU has approximately 7% of the world’s population.

The EU does not operate like a federal state nor is it a purely inter-governmental organization like the United Nations because the member countries do pull together some of the sovereignty and in the process, gain much greater collective strength and influence than they would have acting individually. For example, they share institutions such as the European Parliament which is elected by the EU citizens and the European Council which represents national governments. They also share issues by making decisions on the basis of proposals from the European Commission (EC) which represents the interest of the EU.

In terms of administration the EC is divided into departments known as directorates general. According to the available data within its website each directorate’s general covers a specific policy area or service such as trade or environment. Each of the directorates’ general are headed by a director general who reports to a commissioner. The EC is mainly based in Brussels and

¹⁴⁸ European Union website, at <<http://europa.eu/about-eu/facts-figures/economy/inf>.(Accessed 22.10.2014).

¹⁴⁹ *ibid*; Member states of the EU and year of entry Austria (1995), Belgium (1952), Bulgaria (2007), Croatia (2013), Cyprus (2004), Czech Republic (2004), Denmark (1973), Estonia (2004), Finland (1995), France (1952), Germany (1952), Greece (1981), Hungary (2004), Ireland (1973), Italy (1952), Latvia (2004), Lithuania (2004), Luxembourg (1952), Malta (2004), Netherlands (1952), Poland (2004), Portugal (1986) Romania (2007), Slovakia (2004), Slovenia (2004), Spain (1986), Sweden (1995), United Kingdom (1973).

¹⁵⁰ *ibid*.

Luxembourg but with offices throughout the EU. There is however a rider that it is not a state intended to replace existing states, but it is more than any other international organization.¹⁵¹

The EU has five institutions which run its operations. These are; European Parliament, Council of the European Union, European Commission, Court of Justice, and Court Auditors.¹⁵² Apart from these institutions, there are five bodies which play a crucial role in the EU. The first one is the European Economic and Social Committee which is in charge of expressing the opinions of organized civil society on economic and social issues.

The second body is the Committee of the regions which expresses the opinion of the regional and local authorities. The third body is the European Central Bank which is in charge of monetary policy and managing the Euro. The European Ombudsman is the fourth body which is in charge of receiving citizen's complaints about maladministration of any EU institution or body. The last one is the European Investment Bank which helps to achieve EU objectives by financing investment budget.

Jean-Luck Piotraut J. in his article *European National IP Laws under the EU Umbrella; From National to European Community IP Law*¹⁵³ observes rightly that IP has become a focal point of the modern global trading system. In this, he gives the example of the creation of the WTO through TRIPS. He further holds the view that in Europe the construction of an economic and political community did require the EC to address IP law as well. This then led to the evolution of the national laws into a partial EC law, the importance of which continues to grow daily.

One area of IP which has gone through notable harmonization within the EU is that of the administration of patents. In the EU patent protection is currently provided by two systems namely; The National Patent System and the European Patent System. The initial step in the harmonization of IP laws was in the form of signing and enforcement of the Strasbourg

¹⁵¹ European Union, website at <http://www.europeanunion.promotion.org.pl/index.htm>. (accessed on 17/10/2014).

¹⁵² *ibid.*

¹⁵³ WIPO (1963)“Convention on the Unification of Certain Points of Substantive Law on Patents for Invention,” Nov. 27, 1963, 1249 U.N.T.S. 369 [Strasbourg Convention] at <https://books.google.com/books?isbn=184593203X>. (accessed on 15/2/2015).

Convention¹⁵⁴ and the Munich Convention¹⁵⁵. Both constitute an important source of European patent law. Through this process it can be said that the national patent has undergone *defacto* harmonization.¹⁵⁶

3.2 European Patent Office (EPO)

Under the Munich Convention there is a single procedure laid down for the granting of European patents. This convention established the European Patent Office (EPO). The crucial contribution of the Munich Convention is that it sets up a centralized registration system in the EPO located in Munich, Germany. Whereas international patent agreements date back to at least the Paris Convention of 1883, the current European patent system is legally grounded in the European Patent Convention of 1973.¹⁵⁷ EPO acts as a receiving office for the member states and provides for a common examination procedure based on a single body of substantive patent law.¹⁵⁸

The patents from the EPO become national patents subject to national rules. The Munich Convention does not provide for the creation of a community patent which would belong to the community legal order. There are agreements that such a patent could help Europe transform research results and new technological and scientific know how into industrial and commercial success stories. An additional aim is also to help Europe to catch on United States and Japan in terms of private research and development investment.¹⁵⁹ It is argued in this article that what exists is a proposal for the creation of a community patent system.

The main features of the proposed community patent include the elements of a unitary and autonomous legal regime. This means that the proposed community patent will have equal effect throughout EU. Secondly such a patent may only be granted, transferred or declared invalid for

¹⁵⁴ EPO Website, Convention on the Grant of European Patents, Oct. 5, 1973, 1065 U.N.T.S. 199 [Munich Convention] at <https://treaties.un.org/doc/Publication/UNTS/Volume%201065/volume-1065-I-16208-English.pdf>. (accessed on 16/5/2015).

¹⁵⁵ European Union website, at <<http://europa.eu/about-eu/facts-figures/economy/inf>. (accessed 22/10/2014).

¹⁵⁶ EUR Lex website, at http://europa.eu/legislation_summaries/internal_market/single_market_for_goods/pharmaceutical_and_cosmetic_products_126056_en.html.(accessed on 25/10/2014).

¹⁵⁷ Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications and Strategies for the US Businesses,” at <http://www.dorsey.com/files/upload/hattenbach_longley_nov13_final.pdf.(accessed 30/4/2015).

¹⁵⁸ *ibid*; quoting Articles 52 to 57 of EPC.

¹⁵⁹ *ibid*.

the whole of the EU. The effect of a community patent would confer upon the proprietor, the right to prohibit, without his consent, the direct use of the invention making it, offering it, putting it on the market or importing it and the indirect use of the invention through supplying it to the market.¹⁶⁰

In cases of infringement it is proposed that the community intellectual property court will have exclusive jurisdiction to handle matters of the validity of the community patent and or the alleged infringement.

Evisa Kica and Nico Groenendijk argue that the European patent system established a centralized patent granting process while the Community patent system was initiated by the EC to foster the long-term goal of creating a unified IP protection regime as part of a move towards an undifferentiated, one-size-fits-all IP protection regime throughout the EU.¹⁶¹

The aim of creating a community patent was to give inventors the option of obtaining a single patent which is legally valid throughout the EU.¹⁶² Evisa Kica and Nico Groenendijk argue that the issue of registration and administration of patents was solved through the European Community Patent. The two however find the Community Patent as the most ambitious legislative project.

While Evisa Kica and Nico Groenendijk term the Community Patent as the most ambitious legislation, they however observe that it is not aimed at replacing EPO. The Community Patent is to create a new system, in which the patent applicant, through one application can get a patent applicable throughout the EU without multiple filings and language translations. It is thought that this may usher in a regime that would stimulate both growth and innovation. At the same time such a regime may at the same time bring together experts from various fields to clarify the mission of the IP protection through natural harmonization and convergence.

¹⁶⁰ *ibid.*

¹⁶¹ Evisa Kica & Nico Groenendijk (2011) "The European patent system: dealing with emerging technologies," at <http://www.tandfonline.com/doi/abs/10.1080/13511610.2011.571405#preview> (accessed 3.11.2014).

¹⁶² *ibid.*

In March 2014 the European Council reaffirmed the importance of intellectual property as a key driver for growth and innovation and highlighted the need to fight against counterfeiting to enhance the EU's industrial competitiveness globally.¹⁶³ In its communication the council underscored the economic importance following the results of a study which revealed that the IPR intensive sector accounted for around 39% of the EUGDP (worth approximately EUR 4.70 trillion annually).

To the EU Council the key to achieving such a performance was in having optimal and economically efficient IP infrastructure which spans the legal recognition, registration, utilization and balanced enforcement of all forms of IP rights.¹⁶⁴ Further this communication emphasized the need to ensure that EU's existing regime in terms of IP rules, including those on civil enforcement, are applied and promoted in an effective manner. To achieve this, guidance was to be obtained from EU's common objectives.

Articles 1-3 of the Constitutional Treaty, which covers the internal and external objectives of the Union, merges the provisions of the EU Treaty and those of the EC Treaty. These objectives must guide the Union in the defining and implementation of all its policies.¹⁶⁵ Currently, the main objectives of the Union are now to promote peace, the Union's values and the well-being of its peoples.

There are however general objectives that supplement these main objectives. These include; an area of freedom, security and justice without internal frontiers; an internal market where competition is free and undistorted.

There are also other objectives that aim to achieve; sustainable development based on balanced economic growth and price stability, a highly competitive social market economy, a full employment and social progress, and a high level of protection and improvement of the quality

¹⁶³ Communication from the commission to the European parliament, the council and the European economic and social committee <<http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20140015.do>. (accessed on 3.11.2014).

¹⁶⁴ Brad Hattenbach & Nathaniel Longley (2013) "The European Unitary Patent; Implications and Strategies for the US Businesses," *op. cit.*

¹⁶⁵ European Union website, at (accessed on 4/11/2014).

of the environment; the promotion of scientific and technological advance; the combating of social exclusion and discrimination.

The promotion of social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child; the promotion of economic, social and territorial cohesion, and solidarity among Member States are also objectives associated with EU.¹⁶⁶ Further, the EU respects cultural and linguistic diversity and ensures that Europe's cultural heritage is safeguarded and enhanced.

One of the proposed institutions by the EU council is the creation of a unified patent court for the EU. A committee has been set which has drawn a road map projecting to finish its assignment for the setting up of a unified patent court by the year 2015.¹⁶⁷ If this is to be established it will provide an avenue for the members of the EU to have common procedural rules and regulations to govern their dispute resolutions in relation to patents.

For more than a decade the EU has been harmonizing IPR legislation with the aim of initiating necessary legislation for a well, functioning internal market. The reason behind this increasing harmonization process is to make IPRs mutually recognized and effective given that IPRs are part of trade policies and political agreements.¹⁶⁸

It is thought by some scholars that regional legal barriers and uncertainty about regulation in general may increase transaction costs and cause market failures.¹⁶⁹ For example Ville and Mikko give three reasons for IPR harmonization; (a) IPRs have to be mutually recognized to be effective, (b) that IPRs are part of trade policies and political agreements and (c) the reason can

¹⁶⁶Brad Hattenbach & Nathaniel Longley (2013) "The European Unitary Patent; Implications and Strategies for the US Businesses,"

¹⁶⁷*ibid.*

¹⁶⁸*ibid.* Cf. Vile Oksanen and Mikko Valimäki (1999) "Some Economic Aspects of the European Harmonization of Intellectual Property Rights in Software and its Impact to Eastern EU," at <<http://www.researchgate.net/publication/4820168>< Some Economic Aspects of the European Harmonization of Intellectual Property Rights in Software and its Impact to Eastern EU?ev=prf cit. (accessed on 16.7.2014).

¹⁶⁹ *ibid.*

be traced to the growing economic and therefore political significance of IPRs during the last two decades.¹⁷⁰

Part of this European approach has given rise to a unitary patent registration and enforcement system. This has led to a culmination of a forty-year effort to replace an existing patchwork of national patent laws and giving rights to a single patent right commonly enforceable across the EU member states. So far, the EU patent system has managed to ensure an effective IP regime as well as an inclusive innovation environment at the European level.

There are however challenges on regulation.¹⁷¹ Evisa Kica and Nico Groenendijk¹⁷² argue that a model law that identify the needs of the patent communities and provide a flexible solution that will have the character of the European law and accommodate the existing diversity in innovation while coordinating the interactions of various stakeholders within the field is welcome. They argue that such a model would encourage the integration minded industries and countries to move forward and advance certain developments in innovation among other benefits.

Patent law has been widely used by governments as a policy tool for economic growth. This then means that in making such laws every country decides for itself what IP assets to protect within its borders and adopt the policies in connection with the preferences of its society.¹⁷³ Dongwook Chun¹⁷⁴ on the other hand argues that whereas international patent law harmonization has been an issue in progress since the Paris Convention it is now facing new challenges in a knowledge based economy.

¹⁷⁰ For more detailed discussion about the background, see May 2000 and Maskus (2000) at <http://www.cid.harvard.edu/cidtrade/issues/iprpaper.html>.(accessed on 11/7/2014).

¹⁷¹ Dongwook Chun (2011) “Patent Law Harmonization in the Age of Globalization; The Necessity and the Strategy for a Pragmatic Outcome,” *op. cit.*

¹⁷² Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications and Strategies for the US Businesses,” *op. cit.*

¹⁷³ Dongwook Chun (2011) “Patent Law Harmonization in the Age of Globalization; The Necessity and the Strategy for a Pragmatic Outcome,” *op. cit.*

¹⁷⁴ Chun is a scholar at Cornell Law School, BSE from Seoul National University.

To Chun, such globalization has intensified the problem of fragmented patent laws and as a consequence the drive for harmonization of patent laws has obtained dominant support in international communities. He observes that the dramatic turning point in recent phases of development concerning international patents was the TRIPS which laid down substantive principles that applied to all members of the WTO. Further he says that TRIPS has had substantial international impact because it signaled the inevitability of a more harmonized and stronger global patent system.¹⁷⁵

Chun concludes by observing that it is a widely accepted fundamental assumption that harmonization is a necessary and urgent matter. This is however at the global arena, but lessons can be learnt for purposes of creating such harmony within economic regions as it is with the EU. Indeed, it is his argument that countries with the same language tend to share common cultural backgrounds and legal heritage which may make it is easy to find a common denominator.¹⁷⁶ Chun's conviction is that a regional economic integration is a practical reaction to the wave of globalization.

3.2.1 Information technology

One of the key elements which have contributed to the success of the operations of EPO is the digital single market. This is an ambitious agenda by the EC aimed at creating the conditions for a vibrant digital economy and society by complementing the telecommunications regulatory environment, modernizing copyright rules, simplifying rules for consumers making online and digital purchases, enhancing cyber-security and mainstreaming digitalization.¹⁷⁷ The digital economy has been a major driver of growth of the market and is expected to grow faster in the

¹⁷⁵ Jerome H. Reichman and Rochelle Cooper Dreyfuss (2007) "Harmonization without consensus; critical reflections on drafting a substantive patent law treaty," *op. cit.*

¹⁷⁶ Chun derives his observation after considering such groupings like English groups (the USA, England, Canada and Australia), (Spanish groups (For example, Spain, Mexico, Argentina and Chile) (French groups (France, Canada Switzerland and Belgium), Chinese groups (China, Taiwan and Singapore). He further identifies the product of common language with such organization as POAI and ARIPO. Based on their recognition of common backgrounds for corporations among them similar sized developed countries, similar legal heritage, long standing relationship, they announced to enhance efficiency of the IP System and productivity of offices- in the interest of their customers and community.

¹⁷⁷ European Union, website at http://europa.eu/rapid/press-release_IP-14-2703_en.htm. (accessed on 30/3/2015).

coming years. Through the internet there are new ways of providing, creating and distributing content as well as new ways to generate value.¹⁷⁸

In a communication from the EU Commission on content in the digital single market,¹⁷⁹ it has revealed the elaborate effort by the EC to among other things open access to content as part of its strategy to achieve a vibrant digital single market for intellectual property rights among other things. This process was expected to cover such matters like; (I) cross border access and the portability of services.

This was expected to enable its members to benefit from new developments like cloud computing, cross border legal access to cloud stored content and services (ii) user generated content and the licensing for small scale users of protected material. This would foster transparency and ensure end users have greater clarity on legitimate and non-legitimate uses of protected material and easier access to legitimate solutions. (iii) Audio visual sector and cultural heritage institutions.

This would facilitate the deposit and online accessibility of films in the EU both for commercial purposes and non- commercial cultural and educational uses. (iv)Text and data mining. This would promote the efficient use of text and data mining (TDM) for scientific research purposes. (v) Review of the copyright framework. This would address matters on territoriality in the internal market, harmonization, limitations and exceptions to copyright in the digital age, fragmentation of the EU copyright market and how to improve the effectiveness and efficiency of enforcement while underpinning its legitimacy in the wider context of copyright reform.

3.2.2 Online administration and registration

The EPO website provides crucial information in relation to patent registration and administration within the EU. In this website one can gather most information relating to search

¹⁷⁸ European Union, Website at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52012DC0789>. (accessed on 24.10.2014).

¹⁷⁹ Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent; Implications and Strategies for the US Businesses,” *op.cit.*

application and payment for the registration of patents. It is a model which is constantly updated to meet the demands of the market.¹⁸⁰

3.2.2.1 Search

The EPO website provides three categories of search options. These are; smart search, quick search and advanced search. The EPO website constitutes of a free internet register which provides procedural legal status information. In each category of search there are six types of information available. The first is about the specific file tab. The second is the legal status tab. This is followed by the event history tab. There is also a citation tab. Another component is the patent family view tab while the last one is the all document tab.

3.2.2.2 Applying for a patent

The EPO website provides facilities for online filing of patent applications. To obtain the online filing package an applicant is required to complete the enrolment form and return the same to EPO. Once successful the applicant is issued with the online filing software, a smart card reader and a smart card with pin code. With this package the applicant may thereafter proceed and start using the online facility.

The smart card reader and the smart card with pin code is to assist the applicant to make payments online. This online application system is applicable whether it relates to the European patent, international patent or even a national patent. In short it is a one stop online shop.

The Role of internet in the administration and registration of IPR occupies a central position when one is considering the IPR economic blocks. The business community is concerned about time spent in searching for IPR data within the relevant registries. Lack of data is one of the factors which make regions unattractive for doing business. Where an inventor wishes to register an IP, it is always mandatory to conduct a search to establish whether such a right has been protected previously.

From the EU we take the example of patents and how they are registered and administered at EPO. EPO has established a one stop shop for applicants lodging documents at EPO. The

¹⁸⁰ European Patent Office Website, at <<http://www.epo.org/index.html>>. (accessed on 31.10.2014).

process is carried through an online filing system for patent applications.¹⁸¹ While launching this programme the EPO president Benoît Battistelli had this to say;

“The launch of the new online filing system version 1.8 today constitutes a further significant move on the way to modernizing the EPO's IT services as agreed with our member states..... Following on to the successful launch of the mailbox, the new system supports the overall strategy of the Office to equip the European patent system with the best possible IT environment to reduce administrative costs for applicants. It also helps to align the European and PCT procedures under the same tool.”

The key component in this system includes accessibility through a browser interface. Further, the new online filing system is web-based and does not require any installations or security updates by the user. This website responds directly to a long-standing request of patent applicants. It has been found to fully support patent applications filed both under the European Patent Convention and the Patent Cooperation Treaty. Other documents processed through this system include those subsequently filed documents for both procedures.¹⁸²

To keep the market informed of the processes and changes at EPO, there is a regular publication that informs European patent information users of new developments in the area. It covers legal status data, bibliographic data, raw data, tips on Espacenet,¹⁸³ other services, and much more.¹⁸⁴ Together with this regular publication, EPO provides helpline services which provide tailor-made advice on specific IP or IPR queries – customized, in a straight-forward manner, a comprehensible fashion and free of charge.¹⁸⁵ This is done through the European IPR Helpdesk.

This helpdesk is managed by the EC's Executive Agency for Small and Medium Sized Enterprises (EASME), with policy guidance provided by the EC's Enterprise and Industry

¹⁸¹ European Union IPR Website, at <<https://www.iprhelpdesk.eu/node/2722>>. (accessed on 29.10.2014).

¹⁸² Brad Hattenbach & Nathaniel Longley (2013) “The European Unitary Patent: Implications and Strategies for the US Businesses,” *op. cit.*

¹⁸³ Espacenet (formerly often written as esp@cenet) is a free online service for searching patents and patent applications. Espacenet was developed by the European Patent Office (EPO) together with the member states of the European Patent Organization at <https://www.google.com/?gws_rd=ssl#q=what+is+Espacenet%2C>. (accessed on 22/4/2015).

¹⁸⁴ European Union IPR Website, at <<https://www.iprhelpdesk.eu/node/2702>>. (accessed on 29/10/2014).

¹⁸⁵ European Union IPR website, at <<https://www.iprhelpdesk.eu/>>. (accessed on 29/10/2014).

Directorate General.¹⁸⁶ Through this process, a fact sheet has been developed with the financial support of the EU.¹⁸⁷ Further, the helpline offers open access to the market.¹⁸⁸

The helpline service is headed by a team of experienced lawyers who provide through phone or fax answers to inquiries within a duration of three working days. This team of lawyers also offers training services on different aspects of IP management.

The team runs regular publications such as an email newsletter and the bulletin which keeps the market updated with all the latest developments in the field of IP and IPR.¹⁸⁹

What emerges from this process seems to be a cost-effective process and time management which is attractive to the market.

In discussing the exploitation of IPR aspects of a research in development are central. Whereas IP has more areas beyond a patent, the patent registration and administration within EPO is a pointer at how the information technology can overcome geographical barriers reduce cost of doing business and provide data online at real time. For example, the new online filing method, known as Case Management System (CMS) is accessible from most browsers. It is web based and there is no software to be installed except for the smart card software that allows the applicant to log on into a secure environment once activated. Equally there is no requirement for software updates since EPO carries updates centrally. Other features of the CMS include; confidentiality where it ensures that only the intended party is able to read the information.

There is also a guaranteed authentication to ensure that the identity of the communicating party is captured.

¹⁸⁶ European Union IPR website, at http://www.iprhelpdesk.eu/sites/default/files/newsdocuments/Open_access_in_H2020.pdf. (accessed on 29.10.2014).

¹⁸⁷ European Union IPR website, at www.iprhelpdesk.eu. (accessed on 29.10.2014).

¹⁸⁸ *ibid*; Open access can be defined as the practice of providing on-line access to scientific information that is free of charge to the reader. In the context of R&D, open access typically focuses on access to 'scientific information', which refers to two categories; Peer reviewed scientific research articles (published in academic journals) and Scientific research data (data underlying publications and/or raw data).

¹⁸⁹ European Union IPR website, at <https://www.iprhelpdesk.eu/node/2702>. (accessed on 29.10.2014).

The third feature is that of data integrity wherein it ensures that the information provided has not been modified. Finally, there is the aspect of non-repudiation. Here the facility ensures that an applying party cannot deny involvement in a transaction.¹⁹⁰ Other features of EPO include its interactive segment in social media through Facebook,¹⁹¹ Twitter,¹⁹² LinkedIn¹⁹³ and You Tube.¹⁹⁴

Some five benefits of using the online system for the registration and administration of patents at EPO include;¹⁹⁵ First, it entails an expedited process. It is noted that the results for a search are instant depending of course on the speeds offered by ones Internet Provider Server. The second benefit is that the process is a fully documented one. This ensures the combination and retention of a complete transactional history.

A third benefit is that it provides a clear process which provides essential information at a glance. Fourth, a user-friendly process. It contains special folders with search and sort functions. Lastly, the fifth benefit is that, once the applicant mail box has been activated the applicant can benefit from immediate and direct access to a whole range of communications

From the above summary it will be noted that a lot of developments have taken place within the EU in the realm of patent exploitation. The elaborate details of how the patent registry operates should form the basis of another study to get the full details.

The region is an economic bloc in every sense. There are many lessons to learn considering that this is a block within the heart of the developed nations.

¹⁹⁰ European Patent Office Website, at <<http://www.epo.org/applying/online-services/security>. (accessed on 31/10/2014).

¹⁹¹ European Patent Office Facebook page, at <<https://www.facebook.com/europeanpatentoffice>. (accessed on 31/10/2014).

¹⁹² European Patent Office Twitter page, at <<https://twitter.com/EPOorg>. (accessed on 31/10/2014).

¹⁹³ European Patent Office Website, at <<http://www.linkedin.com/company/european-patent>. (accessed on 31.10.2014).

¹⁹⁴ European Patent Office website, at <<http://www.epo.org/index.html>. (accessed 31/10/2014).

¹⁹⁵ European Patent Office Website, at <<http://www.epo.org/applying/online-services/mailbox>. (accessed on 31/10/2014).

3.3 Conclusion to the Harmonization of Patent Laws and Policies in the European Union

This chapter has demonstrated the changes which are taking place in the EU in relation to the practice and administration of patents. Even where harmonization is taking place, countries have been keen not to breach their international obligations. The chapter has also demonstrated that the administration of patents is not static but an evolving process. The trend is to create a European IP legal regime. The drive by EU members is to empower their subjects economically. The focus is indeed to meet the market demands of the EU.

There is a huge historical link between the EAC members and those of the EU on IPR administration and exploitation. The structures set out in the EPO are pointers to a success story within EU. These developments are crucial indicators of the direction economic blocs within developing nations can take.

Finally, even though the EU started by pushing for harmonization of patent laws at the international arena, slowly, there seems to be great persuasion by the same countries to go regional. This is by creation of regional economic blocs like the EU as well as harmonizing their patent laws. The coming together of the small nations to create a stronger trading bloc is strength to the challenge then established markets and bring them to the negotiating table. From the issues raised in this chapter there are lessons EAC can learn from the EU example.

In the next chapter, the research will focus on the actual process of harmonization of patent laws and policy within the EAC. The chapter shall also make some observations on economic importance of harmonized patent laws and policy. This will be based on the lessons learnt from the EU experience. Finally, the challenges faced in administration and exploitation of patents in the EAC will be discussed.

CHAPTER 4

HARMONIZATION OF PATENTS IN THE EAST AFRICAN COMMUNITY

4.1 Introduction to Harmonization of Patents in the East African Community

In Chapter 3, this research has dealt a great length with the process of harmonization of patents in the EU. Each of the steps taken to legislate, draft, formulate or even propose a law or policy to harmonize the patent regime comes along with a challenge. Sometimes these challenges may be national, regional or even international. As countries try to sort out these challenges, politics set in. Alongside the challenges, there are also possibilities of huge economic benefits associated with the harmonized patents.

These economic benefits may be those conventionally associated with IPR generally while others are specifically associated with patents. In this chapter focus will be on the efforts to harmonize patents within EAC and the economic benefits associated with patents. There will also be discussions directed at those factors which pose possible hindrances to achieving harmonized patents. Of manifest importance are politics associated with IPR generally with those touching on patents taking the lion's share.

Chun sees a regional economic integration as a practical reaction to the wave of globalization, and a regional patent system as the pragmatic solution to the problems in the age of globalization. Theoretically, he sees a regional patent system as that which introduces a new patent which can be recognized in its member states.¹⁹⁶ EAC exists as a region within the provisions of the Treaty. The model of patent laws proposed in this research is that which would, if effected apply to the member states of EAC.

4.2 Brief overview of politics of patents

Like any other regime, patents have always been a subject of intense political interests. Such interests may be national, regional or even international depending on the subject matter at hand. Where else we may not have politics of patents being played like those of other conventional subjects such as the environment, football, or even female genital mutilation campaigns, yet one

¹⁹⁶ European Patent Office website, at <<http://www.epo.org/index.html>>. (accessed on 31.10.2014).

cannot deny that in the realm of patents, politics have a huge role to play. In this, those associated with patents are indeed intense.

James Boyle argues that in the politics of IPR we lack a conceptual map of issues, a rough working model of costs and benefits, and a functioning coalition of political groupings unified by common interests perceived in apparently diverse situations.¹⁹⁷ However, even in such circumstances, alliances have always been formed to push for certain sectarian interests aligned along the developed and the developing nations.

One way of understanding the politics of patents is to consider the shifting positions while addressing certain policy issues on the subject. Susan K. Sell in her article “Cat and Mouse: Forum-Shifting in the Battle Over Intellectual Property Enforcement,”¹⁹⁸ observes that nations have constantly shifted positions. This is usually for purposes of satisfying domestic politics. She argues that in the 1980s while dealing with the General Agreement on Trade and Tariffs (GATT) the US shifted first horizontally from WIPO in her quest for higher global IP standards.

At the end of her analysis, Sell argues that the idea was to leverage US large market to induce developing countries to adopt high standards of IP protection. By linking IP protection to market access the US found accommodation that it did not have in WIPO. This led to her adoption of the TRIPS Agreement in the WTO.

The Uruguay Round of negotiations came up with a new invention of the principle of single undertaking. This means that every WTO member must now accept all the WTO agreements including TRIPS as a single undertaking.¹⁹⁹ Anna L. in her work; *The Global Politics of Intellectual Property Rights and Pharmaceuticals Drug Policies in developing countries*, observes that one effect of the single undertaking is to entrench the traditional consensus in decision making but this has become complicated as a result of increased membership of WTO.

¹⁹⁷ James Boyle (1997) “Politics of Intellectual Property Rights: Environmentalism for the Net?” at www.scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1013&context... (accessed on 16/11/2014).

¹⁹⁸ Susan Sell (2009) “Cat and mouse: Forum shifting and the battle over intellectual property protection and enforcement,” at www.ipgovernance.eu/conferences/.../Sell_APSA2009. (accessed on 15/11/2014).

¹⁹⁹ European Union IPR website, at <https://www.iprhelppdesk.eu/node/2722>, (accessed on 29.10.2014).

Some of the active participants on the subject of politics of IPR include college students in the United States, farmers in the developing countries who have protested seed patents and the licensing practices of multinational seed companies. This was experienced in 1993 when more than five hundred thousand farmers in Bangalore, India demanded that their government rejects the TRIPS agreement and the exclusive rights in seed stocks for multinational firms.²⁰⁰ The major stake in all this had something to do with patents.

Amy Kapczynski writing on the same subject in her article; *The access to knowledge mobilization and the new politics of intellectual property*, takes the position that whether their object is generic drugs or a free genome, free software or free culture, a desperate collection of groups is the thematizing new conflicts between property in knowledge and human efforts, to create, develop, communicate, and share knowledge in our increasingly informational society.

She further argues that this campaign affected the prices of medicine globally and persuaded WHO to consider proposals for new international mechanisms to better align medical research and development with global health needs. Another example is where in 1995 the USA initiated a process to strengthen copyright law and to introduce *sui generis* protection for databases both in the USA, EU and Internationally through WIPO.²⁰¹ This initiative was met with strong opposition from scientific, and consumer rights circles. The effort of this opposition was rewarded by compelling the USA not to pursue any further the proposed protection.

As politics on patents range among the players, effects are felt in areas of human rights, economic development, access to medicines, access to knowledge or education, innovation, biological diversity, climate change, and technology transfer among others. Access-to-medicine campaigners are credited of having secured the first ever amendment to the WTO agreement, the TRIPS as well as in bringing down the prices of AIDS medicines in developing countries by more than 95%.²⁰²

²⁰⁰ Amy Kapczynski (2007) "The Access to Knowledge Mobilization and the New Politics of Intellectual Property," 117 Yale L. J. 804 (2008) [www.http://digitalcommons.law.yale.edu/fss_papers](http://digitalcommons.law.yale.edu/fss_papers). (accessed on 13/11/2014).

²⁰¹ *ibid*; Amy quoting Pamela Samuelson, the US Digital Agenda at WIPO, 37 VA.J.INT'L.L.367,372-73,418-19(1997).

²⁰² Stephen Hilgartner (2009) "IP and the politics of emerging technology; inventors, citizens and powers to shape the future," *op cit*.

TRIPS does not set forth a uniform law on IPR rather it stipulates a set of minimum standards that may be differently implemented in member countries while leaving many aspects to the discretion of national laws. As a consequence, in developing national IPR laws that promote a competitive environment for innovation and the diffusion of new products and technologies, member parties may choose different legal options.²⁰³ The jurisprudence behind this statement holds the key to developing nations who feel caged in by the developed states on IPR.

Most developed countries regard the standards for IP protection established by TRIPS as too weak and too easily circumvented. In this, they seek to harmonize IP protection at a higher level and thereby guarantee high returns for their own innovative firms that benefit from IPRs.²⁰⁴

Soon after the TRIPS Agreement had been signed the USA and her allies started a fresh campaign to defend their IP oriented multinationals. The USA secures heightened IP protection through bilateral and regional preferential trade agreements (PTAs) that offer market access above and beyond what is available in the WTO in exchange for IP practices that are above and beyond what is required under TRIPS.²⁰⁵

This drastically reduces space for manipulation unlike that left under TRIPS. This process has been ongoing with the objective of having all countries sign on to the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty (WPPT). The vehicle for this purpose is the proposed Anti-Counterfeiting Treaty (ACTA). Both the WPPT and the ACTA are what have come to be referred to as the “Internet Treaties.” A party which accedes to the internet treaties will have given the USA and her allies the benefits perceived to have been lost through the TRIPS.²⁰⁶

²⁰³ Robert Howse (2002) “Oxford Commentaries on the GATT/WTO Agreements; Trade Related Aspects of Intellectual Property Rights,” Oxford University Press, at <ukcatalogue.oup.com/category/academic/series/law/gattwto.do. (accessed on 10/11/2014).

²⁰⁴ *ibid.*

²⁰⁴ *ibid* at page 11.

²⁰⁵ Paul Kuruk (1999) “Protecting Folklore and Modern Intellectual Reviews: A Reappraisal of The Tension Between Individual and Communal Rights In Africa And The United States,” *op. cit.*

²⁰⁶ *ibid.*

Stephen Hilgartner is of the view that from time to time political aspects of decision making on IP related issues and on those related to the internet become visible to a large audience, a factor which generates cause for reforms that sometimes lead to significant institutional change.²⁰⁷

Hilgartner further notes that IP is today perceived as a domain where important societal decisions are routinely made. He further observes that decisions about intellectual property bear not only on the transitional issue of innovation policy but also on the question of how influence over the structure of emerging technological systems would be allocated.

Further, Hilgartner poses such questions like; how do patents alter the balance of power in processes that shape emerging technological systems? do patents sometime limit the ability of citizens to have a voice and exercise choice in these processes? what forms of democratic representation, participation, and citizenship does intellectual property policy tend to support?²⁰⁸

Finally, Stephen captures the central role played by technology in political conflict and social control. This role has become visible in the artifacts as earth shaking as the international ballistic missile. His view is that to answer these challenges politics come to play where governments are called upon to develop a variety of policy machinery and change institutions.

In Kenya, we have an issue which is emerging in the plant found in some parts of Baringo, Garissa and Hola locally known as Mathenge (*Prosopis Juliflora*). It is alleged that the tree was introduced in the area by a botanist known as Mathenge but later, it is alleged that livestock which consumed the tree were losing their teeth. However, in 2013, Professor Kareru of Jomo Kenyatta University of Agriculture and Technology alleged to have discovered some medicinal value of the plant²⁰⁹ It will be interesting to see how the issue of patenting the drug and sorting out the community interests will be handled.

²⁰⁷ Stephen Hilgartner (2009) "IP and the politics of emerging technology: inventors, citizens and powers to shape the future," at www.ssrn.com/abstract=1654445 (accessed on 13/11/2014).

²⁰⁸ *ibid*, page 206.

²⁰⁹ Daily Nation Newspaper, Kenya (accessed on 3/10/2013).

The development of IP legislation first at the national and then at international level has been subject to the continued mobilization of interest to establish and reinforce position of economic advantage. The effect of this is a situation of recurrent tension.²¹⁰ In the midst of all these politics a consensus has been reached by WTO members that countries cannot be challenged for actions in IP that do not violate TRIPS even if those actions hurt other parties.

Within the African continent there are recorded tensions between individuals and the communal rights on IPR. This conflict is often political. Folklore tends to entice on its diverse nature consisting of traditions, customs, tales, sayings or act forms preserved among a people.²¹¹ This falls within the public domain to which no individual is supposed to claim monopoly. However, associated with these forms of folklore are commercialization activities. In many cases where traditional art of knowledge is exploited, communities derive either no economic benefits or if they do gain something, such benefits often pale in comparison to the huge profits made by the exploiters.²¹²

Apart from the economic implications of IPR exploitation within the transitional set up, that exploitation also comes with harmful effects to the environment, cultural works and communal values among others. The effect of this has been to fuel the push for effective legal protection of folklore to give traditional communities and national governments greater control over folkloric works to enhance revenues.²¹³

The formation of OAPI in 1962 by a number of French speaking African States and ARIPO in 1976²¹⁴ by English speaking African countries have political implications. This is why not all AU

²¹⁰ Susan Sell (2004) "Intellectual Property and Public Policy in Historical Perspective: Contestation and Settlement," 38 Loy. L.A. L. Rev. 267 at <http://digitalcommons.lmu.edu/llr/vol38/iss1/6>. (accessed on 13/1/2014).

²¹¹ Paul Kuruk (1999) "Protecting Folklore and Modern Intellectual Reviews; A Reappraisal of The Tension Between Individual and Communal Rights in Africa and The United States," at http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi. (accessed on 7/11/2014).

²¹² *ibid*; Kuruk explains that after the discovery of the tumor fighting capabilities of Madagascar's periwinkle, the plant was patented and sold netting the company approximately \$100 million, 88% of which was profit to the company.

²¹³ Limitations on the use of the works of folklore to special occasions and rituals are not likely to be respected where such works are removed from their original culture.

²¹⁴ ARIPO's history can be traced to the early seventies when a Regional Seminar on patents and copyright for English - speaking African countries was held in Nairobi. From that seminar recommendations were floated that a regional industrial property organization be set up. In 1973 the United Nations Economic Commission for Africa

member states are either members to OAPI or ARIPO. Indeed, the membership into the two organizations is still very low.

In the preamble to the Treaty, the partner states recognize the ugly factors which led to the collapse of the first EAC in 1977 to include; lack of strong political will, lack of strong participation of the private sector and civil society in the co-operation activities, the continued disproportionate sharing of benefits of the Community among the Partner States due to their differences in their levels of development and lack of adequate policies to address this situation.

In the field of IP, there are factors which exist and if ignored can equally bring conflict within the EAC. For example, within the WTO TRIPS, Kenya is classified as a developed nation while the rest of the members are in the developing states league. This means that certain benefits which are associated with this classification will not be uniformly felt.

4.3 Efforts to harmonize Patents in East Africa Community

Harmonization of patents comes along with legislation. The process of harmonization of laws in the EAC is spearheaded by a Task Force on Approximation of Laws comprising representation from the Partner States' Law Reform Commissions, Offices of the First Parliamentary Counsel, coordinating ministries and line sectoral departments.²¹⁵ Article 103(1)(i) of the Treaty sets out a clear foundation for administration and exploitation of IPR in the following terms;

“Recognizing the fundamental importance of science and technology in economic development, the Partner States undertake to promote co-operation in the development of science and technology within the Community through..... the harmonization of policies on commercialization of technologies and promotion and protection of intellectual property rights

(UNECA) and the World Intellectual Property Organization (WIPO) responded to a request by these English-speaking countries for assistance in pooling their resources together in industrial property matters by establishing a regional organization. This was finally realized through Lusaka which was adopted by a Diplomatic Conference held in Lusaka, Zambia on December 9, 1976 at <<http://aripo.org/index.php/about-aripo>. (accessed on 20/11/2014).

²¹⁵ Maria Nassali (2008) “Reforming Justice in East Africa: A Comparative Review of Legal Sector Processes,” *Kituo ChaKatiba: Law and Justice Series 2* Fountain Publishers, Kampala, at p. 23. www.kituoachakatiba.org/sites/default/.../Reforming%20Justice_Final.pdf (accessed on 14/2/2016).

This article is the gateway for patent harmonization in EAC. The article goes further to identify the areas for harmonization include Trade, Industry and Investment (including investment codes and laws; customs procedures; patents, copyrights, trademarks and the whole area of intellectual property rights; standardization, quality assurance and metrology.²¹⁶ To perform the activities set out in this article requires a region with harmonized laws and policies to avoid conflict and friction. It is an express commitment by member states to promote co-operation in the development of science and technology.

Patents law is not a strange terminology within the Treaty. Member states are given the mandate to explore ways and means to achieve harmonization on ‘of policies on commercialization of technologies and promotion and protection of IPR’. The Treaty also expressly identifies patents as one component of IPR.

Peter Cane and Mark Tushnet²¹⁷ argue that according to most observers, developing nations need both access to technology, some ability to control and profit from their ecological as well as in cultural assets. In relation to the first issue, Peter and Mark take the position that the most prominent debate is on reasonably priced access to AIDs drugs while for the second issue much debate concerns issues of the legal technique; how a nation can exclude outsiders from its treasures of communally developed age-old medical and cultural information. This is particularly so given the individualistic bent and limited duration of western models of Patents.

EAC as an economic bloc has the potential to emerge as a strong market if only the right policies are put in place along the foundation of the Treaty. To harmonize presupposes the existence of what is targeted to be harmonized.

East Africa Legislative Assembly (EALA) is crucial in the implementation of the Treaty. EALA is in every aspect a political organ. This can be seen in its composition as outlined in Articles 48,

²¹⁶ *ibid.*

²¹⁷ Peter Cane & Mark Tushnet (2003) “The Oxford Handbook of Legal Studies,” Oxford University Press, Chapter 28, P. 627 <<http://www.bu.edu/law/faculty/papers>. (accessed on 30/8/2014).

49 and 50 of the Treaty.²¹⁸ The membership consists of twenty-seven elected members, and five ex-officio members consisting of the Minister responsible for regional cooperation from each Partner State as well as the Secretary General and the Counsel to the Community.

In its Development Plan 2013-2018 the assembly's major strategic issues include; EALA's administrative autonomy, capacity and efficiency, negotiations for the EAC pillars of integration, EALA's corporate image and institutional status, growth and development, capacity building in regional parliamentary practices, effective, sustainable and results-oriented communication and sensitization on EAC integration, robust and effective monitoring and evaluation.²¹⁹ These are broad and ambitious pillars in the life of EALA. Closer to patents EALA has drafted the Anti-Counterfeit Bill.²²⁰

Kenya, The United Republic of Tanzania, and Uganda follow a common law system, while Burundi and Rwanda both subscribe to a predominantly civil law system. This has led to somewhat divergent legislative practices and procedures between the groups of countries, and may have contributed to slowing down the process of harmonization efforts in the region.²²¹

Under Article 47 of the Treaty, the Partner States undertake to approximate their national laws and to harmonize their policies and systems, for purposes of implementing the Protocol. The Treaty is even more elaborate on harmonization under Article 26 where the following is provided;

“In order to promote the achievement of the objectives of the Community as set out in Article 5 of this Treaty, the Partner States shall take steps to harmonize their legal training and certification; and shall encourage the standardization of the judgements of

²¹⁸ The members of the assembly consist of 27 elected members and 5 ex-official members. Each member shall elect from among its members 9 members of the assembly to represent as much as it is feasible the various political parties represented in the National Assembly among other considerations.

²¹⁹ EALA Strategic Plan 2013-2018 at <http://www.eala.org/key-documents/strategic-plans/doc_details/428-eala-strategic-plan-2013-2018.h>.(accessed 3/3/2015).

²²⁰ The EAC draft Policy on Anti-Counterfeiting, Anti-Piracy and Other Intellectual Property Rights Violations states its objective as “To provide a Policy basis for a robust legal framework for the protection and enforcement of Intellectual Property Rights in the Region with specific focus on combating counterfeits and pirated products.” The draft East African Community Anti Counterfeit Bill, 2010 aims “to prohibit trade in counterfeit goods, to establish national anti-counterfeit boards and for connected purposes,” at <www.cehurd.org/.../Policy-Brief-on-Anti-Counterfeiting-Laws-in-ESA-C....>.(accessed on 27/2/2015).

²²¹ UNCTAD (2012) “Harmonizing Cyber laws and Regulations: The experience of the East African Community,” at <www.unctad.org/.../dtlst..>.(accessed on 18/2/2016).

courts within the Community. 2. For purposes of paragraph 1 of this Article, the Partner States shall through their appropriate national institutions take all necessary steps to: (a) establish a common syllabus for the training of lawyers and a common standard to be attained in examinations in order to qualify and to be licensed to practice as an advocate in their respective superior courts; (b) harmonize all their national laws appertaining to the Community; and (c) revive the publication of the East African Law Reports or publish similar law reports and such law journals as will promote the exchange of legal and judicial knowledge and enhance the approximation and harmonization of legal learning and the standardization of judgements of courts within the Community. 3. For purposes of paragraph 1 of this Article, the Partner States may take such other additional steps as the Council may determine.”

As part of the efforts to harmonize key legislations in EAC, the Anti-Counterfeiting, Anti-Piracy and other IPR violation bills were discussed in Arusha on 6th December 2010.²²² Two workshops were held in Kampala: a “Workshop on Cyber laws and e-Justice” (25–26 April 2006) and a “Workshop on Information Security” (27–28 April 2006) which identified priority laws that needed to be harmonized.

The harmonization of the proposed laws was calculated to address certain firstly the need for EAC to ensure necessary coordination intended to harmonize regional and national legal frameworks to create an enabling environment for the successful implementation of the e-Government and e-Commerce Programmes in the region. There was also the need to set up a task force constituted from amongst key players and stakeholders in the region to spearhead the implementation of a roadmap towards the creation of a harmonized legal framework for cyber laws in the EAC.²²³

Within the EAC there are other recorded efforts in developing a harmonized policy on patents. A good example is the Eastern Africa Agricultural Productivity Programme (EAAPP), a Project of Association for Strengthening Agricultural Research in Eastern and Central Africa (ASERECA). Both ASERECA and EAAPP have come up with a policy document which sets mechanisms for the management of IPR generated out of EAAPP research projects in Ethiopia, Kenya, Uganda and Tanzania.

²²² WIPO website, at www.wipo.int/wipolex/en/profile.jsp?code=UG (accessed on 17/7/2014).

²²³ The Patents Act, S.I No.216-1.at page 5.

A key component is that the leaders of these projects are aware that in this knowledge age, organizations, more so regional organizations ignore IP matrix at their own peril because information is not only a crucial production tool but also pertinent to restoring environmental sanctity advancement of science and technology, improvement of livelihoods. The individual, enterprise, institution, organization or nation that accumulates the best scientific, technological and other intellectual information is considered wealthier.²²⁴

In its policy EAAPP has provisions for establishment of IP management offices whose composition includes the board of management comprised of a representative from each government ministry of member state among other organs. There is also a Secretariat.

The key aims of EAAPP include and not limited to; contributing to increased agricultural productivity and growth in EAC, establishing sustainable IP management systems in EAAPP/ASERECA projects, to achieve full exploitation and reward from all EAAPP IPs for the stakeholders, foster working relationship of the four partner countries to undertake common regional activities by harmonizing plans, format for data collection, recording communication and maintenance of database as well as fostering of knowledge sharing and technology output.

From the above paragraph, it can be seen that Ethiopia, though not a member of EAC is grouped with Kenya, Uganda and Tanzania in EAAPP. These examples point to one glaring conclusion that a need exists for exploring the possibility of establishing harmonized patent laws within EAC.

One example of the efforts done by the EAC in developing a common policy in an IP related subject can be seen in the Proposed East African Community (EAC) Anti-Counterfeiting Policy and a Bill on Access to Essential Medicines. While discussing these proposed bills Musungu

²²⁴ EAAPP Intellectual Property Coordination Policy 2012
at<<http://www.asareca.org/PAAP/Policy%20Instruments/ASARECAEAAPP%20draft%20IP%20policy.pdf>.(access ed on 17/7/2014).

Sisule²²⁵ takes the view that there is no evidence that the policy in its current form would result in any of the expected economic, business or government revenue outcomes.

He argues that such an approach has the potential to negatively affect both regional and national efforts in EAC Partner States to protect the right to health and life. Other shortcomings of the approach include the possible failure to improve public health, regulatory standards, quality control or promote local production, industrial development and trade in generic medicines.

In addressing the approach to national legislations the EAC countries have come up with a policy statement on the amendments to be effected to their respective national legislation so as to take advantage of the transitional period provided under TRIPS.²²⁶ This is under the Regional Intellectual Property Policy on Utilization of Public Health Related WTO –TRIPS Flexibilities And The Approximation Of National Intellectual Property Legislation²²⁷ This policy has come up with seven policy statements and resolutions on the way forward;

Policy Statement 1; All EAC partner states that are LDCs are to take advantage of the 2016 transition period and provide in their national patent laws for an extension of this period as may be agreed upon by the council for the TRIPS. All EAC partner state are to abolish any “main box” provision in their existing on draft national patent laws.

Policy Statement 2; EAC partner states are to strictly define in the patent laws and/or patent examination guidelines the patentability criteria and apply them strictly in order to keep a broad public domain.

²²⁵ Musungu Sisule (2010) “The Potential Impact of the Proposed East African Community (EAC) Anti-Counterfeiting Policy and Bill on Access to Essential Medicines,” at www.cehurd.org/.../Policy-Brief-on-Anti-Counterfeiting-Laws-in-ESA-C...(accessed on 15/10/2013).

²²⁶ The Regional Intellectual Property Policy On Utilization Of Public Health Related WTO –TRIPS Flexibilities And The Approximation Of National Intellectual Property Legislation. <www.cehurd.org/wpcontent/plugins/download.../download.php?id=45. (accessed on 2/8/2014).

²²⁷ EAC (2013) “Regional Intellectual Property Policy on the utilization of public health- related WTO –TRIPS flexibilities and the approximation of national intellectual property legislation,” at www.eac.int.(accessed on 17/7/2014).

Policy Statement 3; EAC partner states are to exclude from patentability, i) Natural substances including micro-organisms ii) new medical uses of ‘non-substances including micro-organisms iii) derivatives of medical products that do not show significantly enhanced therapeutic efficacy /significant superior properties.

EAC partner states in order to protect small scale innovations, for example in the areas of transition medicine, or genetic resources shall reward such inventors with a right to compensation from third parties who use invention for follow-on or improvements.

Policy Statement 4; in order to increase legal certainty with regard to the scope of research exception EAC partner states shall amend their patent provisions on research exceptions as follows; First, explicitly authorized research for scientific non-commercial purposes. Second, provide a right to claim a non-exclusive licence for the use of patented research tools against payment of compensation.

Policy Statement 5; in order to allow early market entry for generic producers EAC partner states shall amend their national patent law provisions on marketing approval/ ‘bolar’ exception to i) authorize the use of patented substances by interested parties for marketing approvals by national and foreign medicines regulatory authorities ii) clarify the scope of the marketing approval/bolar exception to the effect that generic producers may use patented substances for ‘acts’ reasonably related to the development and submission of information required for marketing approvals.

Policy Statement 6; a) EAC partner states should adopt a system to protect test and other data against unfair commercial use and disclosure while leaving the local MRSs free to rely on results of original test data from domestic or foreign approval when accessing the safety and efficacy of generic competing products ii) none of the EAC partner states may establish a linkage between patent protection and marketing authorization which would prevent MRS from granting marketing approval for generic medicines before the lapse of respective patent.

Policy Statement 7; EAC patent states shall require patent applicants; i) to disclose all models and expressly indicate the best mode of carrying out an invention by experts skilled in the art who reside in the respective EAC partner state ii) to disclose the international non-proprietary name (inn) of a pharmaceutical substance or an active pharmaceutical ingredient as soon as it is available.²²⁸

The above resolutions on each policy statement were indeed brave strides towards achieving a common approach in the area of Utilization of Public Health Related WTO –TRIPS Flexibilities.

There are efforts by each member state to come up with policies in this area. The following Table 4 is a summary of the policies in each member state;

Table 4

Burundi	Kenya	Rwanda	Tanzania mainland	Tanzania Zanzibar	Uganda
Art. 4 Prior art: worldwide, disclosed to the public by any means Art. 6 refers to “a person skilled in the art” Art. 7: Industrial applicability	Sec. 23.2 Prior art: worldwide; written or oral disclosure, use, exhibition or other non-written means Sec. 24 refers to “a person skilled in the art” Sec. 25: Industrial	Art. 15 Prior art: worldwide; by publication in tangible form, by oral disclosure, by use or in any other way Art. 16 refers to “a person skilled in the art and	Sec. 9.2 Prior art: Everything made available to the public anywhere in the world by means of written disclosure (including drawings and other illustrations)	Sec. 4.2 (a) Prior art: worldwide; disclosure in tangible or oral form including patent applications; everything that can be derived from	Sec. 10.2 Prior art: worldwide; written or oral disclosure; use; exhibition or other non-written means Sec. 11 refers to “a person skilled in the art” Sec. 12: Industrial

²²⁸ EAC Regional Intellectual Property Policy on the utilization of public health- related WTO –TRIPS flexibilities and the approximation of national intellectual property legislation, February 2013 at > www.eac.int.(accessed on 17/7/2014).

	applicability	involved in that area” Art. 17: Industrial applicability	or by oral disclosure, use, exhibition or other non-written means Sec. 10 refers to “a person skilled in the art” Sec. 11: Industrial applicability	a combination of patents; use; information disclosed in any other way including material in any deposit institution Sec. 4.3 refers to “a person highly skilled in the art” Sec. 4.4: Industrial applicability	applicability
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Adapted from annex 2²²⁹

Even though the above policies and legislations are not harmonized, it is encouraging to note that the foundation is the desire to comply with the TRIPS and in the process, take advantage of the TRIPS Flexibilities. The EAC region has taken a common leap to comply with TRIPS by working on their respective national legislations and policies to provide that minimum threshold provided under TRIPS. This is a welcome step to an emerging IPR market.

Over time, EAC member states have come up with certain legislations to regulate the administration and exploitation of patents. All the member states legislated on patents before they had any policy on the subject. As explained earlier the reason is historical. A summary of these laws is well demonstrated in table 5.

²²⁹*ibid.*

Table 5

	Burundi	Kenya	Rwanda	Tanzania	Tanzania	Uganda
		The	Law on the	mainland	Zanzibar	
Patents	Intellectual Property Law No. 1/13 of 2009 (Loi No.1/13 du 28 Juillet 2009 Relative à La Propriété Industrielle au Burundi)	Industrial Property Act, 2001	Protection of Intellectual Property (2009)	Patents Act of 1987 (law is currently being amended)	Zanzibar Industrial Property Act No. 4 of 2008	The Industrial Property Bill No. 5 of 2009
Clinical test data protection	Intellectual Property Law No. 1/13 of 2009 (Loi No. 1/13 du 28 Juillet 2009 Relative à la Propriété Industrielle au Burundi)	Pharmacy and Poisons (Registration of Drugs) Rules	Presidential Order – Determining Modalities for Medicines Registration	The Tanzania Food, Drugs, and Cosmetics Act, 2003 and Regulations Guidelines on submission of documentation for registration of human medicinal products, 2008	Zanzibar Industrial Property Act No. 4 of 2008 And Zanzibar Food, Drugs and Cosmetic Act No. 2 of 2006	Trade Secret Protection Act, 2009; Guidelines on Registration of Pharmaceutical Drugs For Human Use in Uganda National Drug Policy and Authority Act 1993
Trade marks	Intellectual Property Law No. 1/13 of 2009 (Loi No. 1/13 du 28 Juillet 2009 Relative à	The Trade Marks Act, Chapter 506 (as last amended by the Trade Marks [Amendment]	Law on the Protection of Intellectual Property (2009)	Act on the Control of the Use of Marks and Trade Description, 1963; Merchandise Marks Act, 1963; Trade and	Zanzibar Industrial Property Act No. 4 of 2008 The Trade marks Bill, 2008;	The Trade marks Bill, 2008; The Trade marks Act, 2010

	la Propriété Industrielle au Burundi)	Act, 2002)		Services Marks Act, 1986		
Utility models	Intellectual Property Law No. 1/13 of 2009 (Loi No. 1/13 du 28 Juillet 2009 Relative à la Propriété Industrielle au Burundi)	The Industrial Property Act, 2001	Law on the Protection of Intellectual Property (2009)	Patents Act of 1987 (law is currently being amended)	Zanzibar Industrial Property Act No. 4 of 2008	The Industrial Property Bill No. 5 of 2009
Copyrights	Copyright Law No. 1/021 of 2005 (Loi No. 1/021 du 30 Décembre 2005 Portant Protection du Droit D'Auteur et des Droits Voisins au Burundi)	The Copyright Act, 2001	Law on the Protection of Intellectual Property (2009)	The Copyright and Neighbouring Rights Act, 1999	Zanzibar Copyright Act No. 14, 2003 and Regulations	Copyright and Neighbouring Rights Act, 2006
Anti-counterfeit		The Anti-Counterfeits Act, 2008				

*Adopted from EAC Regional Intellectual Property Policy on the Utilization of Public Health-Related WTO-TRIPS Flexibilities and the Approximation of National Intellectual Property Legislation February 2013*²³⁰

Even where such policy exists issues have been raised as to whether the policy is to benefit the citizens of the respective nation or the purposes of compliance with international instruments and the TRIPS. As at 2013 there were about 28 legislations on IPR. There were also five bills pending before parliaments of some of the member states.

The process of harmonization has been met with certain challenges. Kaahwa²³¹ identifies some of these pitfalls to include;

- (a) a conceptually-founded problem. Apart from ratification of the Treaty, Member States are obliged to ensure its domestication within their respective municipal laws, the timely implementation of its projections; and general adherence to its provisions.
- (b) State sovereignty and the fact that Zanzibar has a different municipal law system from that of mainland Tanzania. Then, a worse challenge on enforcement is the fact that EAC does not have a clear mandate to police enforcement of Council decisions by Partner States
- (c) Different stages of legal development among Member States
- (d) harmonization is to have full effect it should cover both hard law (based on existing national legislation) and soft law (such as that based on model laws, rules and legal guides). To date, the emphasis of harmonization has been only on hard law
- (e) the “approximation” paradigm so far used by the EAC remains open-ended. Besides the fact that implementation of relevant decisions on harmonization of any handled legislation remains the preserve of the Partner States, the process has not ascertained the best option

²³⁰ EAC (2013) “EAC Regional Intellectual Property Policy on the Utilization of Public Health-Related WTO-TRIPS Flexibilities and the Approximation of National Intellectual Property Legislation February 2013,” at www.cehurd.org/.../uploads/downloads/2013/05/EAC-TRIPS-Policy.pdf. (accessed on 14/10/2014).

²³¹ EAAPP Intellectual Property Coordination Policy 2012 at <http://www.asareca.org/PAAP/Policy%20Instruments/ASARECAEAAPP%20draft%20IP%20policy.pdf>. (accessed on 17/7/2014) at pages 36-4.

- (f) the normally wide scope and extraterritorial connotations which makes harmonization of laws an intractable exercise.
- (g) The cost of funding the implementation of the treaty.
- (h) Political will power by member states

These are general challenges facing harmonization of laws generally but are indeed relevant even when one was to consider them when dealing with harmonization of patents.

4.4 Economic benefits of harmonized patents

In considering the overall economic benefits, one has to appreciate the three players in the administration and exploitation of patents. These players are; the state (as the giver of the rights), the private inventor (as the maker of the rights) and the public (as the ultimate beneficiary of the rights after expiry of the term of protection).

There are certain benefits which can be discerned from the TRIPS. These include those which may lead to encourage and reward creative work, facilitate technological innovation, fair competition, consumer protection, transfer of technology, balance of rights and obligations.²³²

Opportunities for developing countries also exist to design legislation that is compatible with their own level of development and with their economic and technological policies.²³³ In this research, it has been shown how WIPO is making efforts to assist developing countries to review their IP laws.

A central 'political expediency' rationale of organizing science and technology at the macro level is that an IPR system also offers information and new trajectories structured changes in technological development and the technological capacities of firms, industries, sectors and nations.²³⁴

The information provided through the patent system allows governments to be more effectively advised on science and technology policy matters. Better insights into the positive benefits of

²³² Chapter 4 of TRIPS. https://www.wto.org/english/docs_e/legal_e/27-trips.pdf. (accessed on 17/5/2014).

²³³ Yahong Li (2002) "The Wolf Has Come: Are China's Intellectual Property Industries Prepared for the WTO?" 20 UCLA PAC. BASIN L.J. 77, 86. <https://escholarship.org/content/qt1rp2c97x/qt1rp2c97x.pdf>. (accessed on 15/11/2017).

²³⁴ Birgitte Andersen (2003) "The Rationales for Intellectual Property Rights; The Twenty First Century Controversies," at <[www.researchgate.net/profile/Birgitte_Andersen/publication/...](http://www.researchgate.net/profile/Birgitte_Andersen/publication/)> (accessed on 15/11/2014).

enhanced patents protection will allow national governments to plan economic policies more efficiently, as well as providing a counter to the voices, such as those heard in Seattle in 1999.²³⁵

From this Seattle meeting much of what emerged was a loud condemnation of the globalization taking place under the WTO process. William Lesser. takes the view that there is no clear presumption that stronger rights will always enhance welfare. He argues that too strong protection of IPR in countries with limited R&D capacity has adverse consequences. In this he asserts that protection which reduces local production of ‘Private’ products would lead to higher prices and job losses. This in effect reduces welfare.

Developing countries are deemed to be net importers of patents. Unlike the Paris and Berne Conventions that allowed considerable flexibility in the design of IPR regime, TRIPS impose common framework for IPR.

From these, two schools of thought have emerged. There are those who support the Paris and Berne Conventions position. This group argues that without global IPR, innovations would stop in certain industries.

The second group is that which is opposed to the global IPR regime. The proponents of this group argue that universal IPR do not stimulate research to benefit the poor because they are not able to afford the high-priced products. Their view is that it limits the possibilities of technological learning through imitation, which has been found a key factor of success of countries like Taiwan, Korea, China or India to develop a world capacity for many scientific and technological areas including space, nuclear energy, computing, biotechnology, pharmaceutical, software development and aviation.²³⁶

What is clear in all this is that these scholars take the view that strong protection of IPR and patents in developing countries with limited R&D may lead to increase in the cost of patented

²³⁵ William Lesser (2001) “The effects of TRIPS-Mandates Intellectual Property Rights on Economic Activities in Developing Countries,” at <www.wipo.int/.../ssa_lesser_trip. (accessed on 17/11/2014).

²³⁶ Emmanuel Auriol, Sara Biancini, and Rodrigo Paillacar (2015) “Intellectual property Rights Protection in Developing countries,” at <www.etsg.org/ETSG2012/Programme/Papers/396.pdf. (accessed on 17/11/2014).

commodities which reduces welfare. A full protection of IPR is not always conducive of a higher level of investment. It depends on the capacity of each country to do R&D.

Keith E. Maskus takes the view that patents can play a positive role in encouraging new business development, nationalization of inefficient industry and inducing technology acquisition and creation.²³⁷ To him the potential gains and losses depend on the competitive structure of markets and the efficiency of related business regulation, including aspects of competition policy and technology development policy.

To justify this, Maskus argues that there are other factors which affect growth. These are macroeconomic stability, market openness and policies for improving the economy's technological infrastructure as well as the acquisition of human capital among others.²³⁸ A classic example was experienced in Brazil where a policy to encourage copying of utility models helped domestic producers gain a significant share of the farm machinery market by encouraging adaptation of foreign technologies to local conditions.²³⁹

The furthest the EAC members have gone towards having a harmonized patent regime is in the formulation of the Anti-Counterfeiting Policy Bill on access to essential medicines. This draft legislation is based on the realization that counterfeiting and piracy have become a global epidemic leading to a significant drain on businesses and the global economy. Additionally, the effects of counterfeiting and piracy have jeopardized investments in creativity, innovation as well as undermined recognized brands and exposed consumer health and safety.²⁴⁰ In the absence of counterfeiting, patents may lead to investments in creativity, innovation and enhanced health care and safety.

Patent protection encourages innovation and the development of knowledge based industries, stimulates international trade and creates a favourable climate for foreign direct investment as

²³⁷ Keith E. Maskus (1999) "Intellectual Property Rights and Economic Development," at <www.colorado.edu/economics/.../cwrure. (accessed on 17/11/2014).

²³⁸ *ibid.*

²³⁹ *ibid.*

²³⁹ *ibid.*

²⁴⁰ International Chamber of Commerce website, at <www.iccwbo.org/bascap.(accessed on 26/11/2014).

well as facilitating technology transfer. In this, patents play a prominent role in strengthening national economies, driving innovation and technology, fostering new ideas and enhancing society and culture.²⁴¹

Other benefits associated with patents protection include; the Promotion of innovation, increment on funding for research and development, helping of small firms monetize their innovations, secure investments grow market value and develop new markets.

In terms of consumer benefits there is provision for innovative products and services in virtually every area of life. The idea here is to develop solutions to drive many of the society's most important units such as clean energy, reduced carbon emissions, health care and shielding consumers from inferior and dangerous counterfeits.²⁴²

Studies have shown that sectors that rely on patents protection are substantial contributors to the economy.²⁴³ Indeed within the East Africa Community, the importance of effective IPR protection laws in attracting Foreign Direct Investments have been recognized as the most valuable assets of majority modern businesses.²⁴⁴ The absence of such a patent protection inexorably drives away new investments from the East African region.

The East Africa Community has an economy which is majorly agriculture based. In this it has been noted that while IPR regime for agricultural inventions have been widely used in industrialized countries, most developing countries are in the early stages of implementation and or enforcement of IPRs related to crop varieties.²⁴⁵ Policies driving an agriculture based economy can only ignore patents to the disadvantage of the citizens.

Research has shown that applications of patents for plant breeding in developing countries raise a number of important issues including smallholder access to technology, the role of public

²⁴¹ International Chamber of Commerce website, at <www.iccwbo.org/.../kenya/value-of>. (accessed on 26/11/2014).

²⁴² *ibid.*

²⁴³ *ibid.*

²⁴⁴ EAC –GIZ programme (2014) “Support to Regional Integration,” Annual Report at <www.eacgermany.org/wp-content/uploads/2014/10/EAC-TRIPS-policy.pdf>. (accessed 27/2/2015).

²⁴⁵ <www.hiafrica.org/index.php?option=com_docman&task>. (accessed on 26/11/2014).

agricultural research, the growth of the domestic private seed sector, the status of farmer-developed varieties, the growing north-south technology divide that restricts access to plant germplasm and research tools.²⁴⁶

Towards this end many issues have been raised in relation to access to seed and new crop varieties for agricultural development and rural welfare. This has led to the drive to import the prevailing technologies on breeding of seeds and plant germplasm as well as research tools from developed countries. Conversely a weak IPR environment reduces investment in the computer software and pharmaceutical sectors while at the same time presenting a significant barrier to international technology licenses.²⁴⁷

4.4.1 Benefits Associated with an electronic registry

In this research, it is proposed that the harmonized patents should be administered at a joint electronic registry. It is germane to consider those benefits associated with such electronic registry in addition to the general economic benefits of patents so far discussed.

4.4.2 Affordable access to intellectual property resources, globally

Like in the case of EU this can be achieved by running a web based electronic registry. The web-based electronic registry is to be accessed from anywhere through an electronic gadget. Such a process would make it convenient and cheap to search data online and at an affordable cost. This eliminates the need to travel to Arusha to register a document or conduct a search.

4.4.2.1 Lead to increased business, political and societal awareness of the region

The web based registry enables the world outside the region to search for available data. As this process takes place, the rest of the world has a chance to interact with the EAC region. The result is an enlightened world in regard to opportunities of investments in patents within the region. That awareness is crucial for potential investors.

²⁴⁶ Keith E. Maskus (1999) "Intellectual Property Rights and Economic Development," *op. cit.*
²⁴⁶ *ibid.*

²⁴⁷ Keith E. Maskus (1999) "Intellectual Property Rights and Economic Development," *op. cit.*
²⁴⁷ *ibid.*

4.4.2.2 Facilitate a shortened data access time where days or weeks could be shortened to minutes or hours

With broadband transmissions time to search for data or for reservation of information would be shortened. This is crucial for any business environment as it gives investor confidence in the system.

4.4.2.3. A geometric increase in the amount of accessible data and collections relative to intellectual property

It is expected that once the electronic registry is fully operational all the relevant information relating to registration and administration of patents will be available online. This has the effect of opening up the regional patent data to all interested investors worldwide.

4.4.2.4. Provide access to an expanding number of web-based software and intellectual property management tools

Investment in web based software and IP management tools cannot thrive in jurisdictions without internet facilities. Each state is expected to invest in information technology and infrastructure to keep pace with the regional electronic registry. These institutions will invest in electronic software which come together with IP and IP management tools.

4.4.2.5 Reduce reliance on third-party data providers

Here the users of the web at Arusha will have a direct interaction with the registry. This bestows confidence on the investor. The information supply chain is shortened so that aspects of third party tampering are minimized if not wholly eliminated.

4.4.2.6 Provide a path for East African countries to catch up with world developments with regard to intellectual property data access, and data management

Development of an electronic registry will attract other world players like WIPO. WIPO has a programme of helping developing nations to initiate changes towards stronger protection of

patents. This interaction will lead to avenues of technology transfer through training of the EAC technical and administrative staff.

4.4.2.7 Increase the ability of the government agencies to deliver resources to a larger number of their citizens

Through a regular newsletter electronically circulated like that of EPO agencies dealing with the administration and enforcement of patents will reach the population at minimal costs and at the click of a mouse. The circulation can have a wide outreach in the region.

4.4.2.8 Lead to new industries and technology segments, such as, online intellectual property management tools, monitoring software, technology exchanges, and new patent classification

With areas of the EAC region being reachable through the internet there will be incentives for investors to invest in IT facilities in areas outside the main cities to tap the emerging market.

4.4.2.9 May also increase business for legal sector, and accelerated time to market for new products and technologies²⁴⁸

With the increase of IPR related businesses such other ancillary services will emerge. Some of these include the legal services as well as electronic and IT related outlets.²⁴⁹

²⁴⁸ Rodney D. Ryder, (2002) *Intellectual Property and the Internet*, *op. cit.* at p. 9-10.

²⁴⁹ Rodney gives a list as to the kind of website categories for IP information, web based tools and databases access may include the following; -

- (i) Patent databases (government and commercial);
- (ii) Trade marks (government and commercial);
- (iii) Non-patent art (government, educational and commercial research);
- (iv) Scientific/research;
- (v) Chemical;
- (vi) Technology/materials;
- (vii) Bio and life sciences;
- (viii) University thesis and research studies;
- (ix) Technology disclosure publications
- (x) Domain registries: TLDs/cc TLDS (240 cc TLDs, com, net, gov, edu, org);
- (xi) Information and directory resources, including IP development, law, protection, enforcement, commercialisation references, information, services and products;
- (xii) Patent resources;
- (xiii) Trademarks sites;
- (xiv) Copyright sites;
- (xv) Management tools;
- (xvi) Specialised search engines;
- (xvii) Patent and trade mark search tools;
- (xviii) Technology transfer (university, non-profit, exchange, auctions).

4.5 Benefits associated with technical assistance by WIPO

The presence of WIPO can be traced within EAC while considering the national interactions by member states with WIPO. One key organ on this is the African Group And Development Agenda. This group presented a joint proposal to WIPO as an attempt to address the question of the technical assistance by WIPO to this its members. The area of concern was broadly defined as WIPO technical assistance in the area of Cooperation for the Development. This was to be placed for liberation by the 9th Session of the Committee on Development and intellectual property. The groups came up with four proposals for consideration by WIPO.²⁵⁰

These proposals were as follow; the Secretariat was requested to make available information on the external consultant engaged to independently review the tools and methodologies used to inform IP strategies as well as the terms of reference of review; Once the review is completed the tools/ methodologies should be made publicly available for a reasonable period for comment.

The comments made on the tools/ methodologies shall also be publicly available; the Secretariat was to regularly update/ inform CDIP on various things such as the independent review of the tools/ methodologies, its efforts to improve its support to developing countries, the engagement of an expert review team, the WIPO framework for developing national IP strategies among others.

Another key role of the Secretariat was to make publicly available tools, methodologies and other relevant documentation used to inform the development of IP strategies.

Prior to completion, at the request of the member states, IP strategies policies and plans supported by WIPO were to be made publicly available for comments.

Finally, the two groups came up with four proposals for consideration by WIPO which touched on training and capacity building to usher in support systems, coordination and follow up,

²⁵⁰ WIPO (2007) “The 45 Adopted Recommendations under the WIPO Development Agenda,” [atwww.ipwatch.org/2014/11/13/wipos-assistance-2-developing-countries-taki](http://www.ipwatch.org/2014/11/13/wipos-assistance-2-developing-countries-taki). (accessed on 4/3/2015).

technical assistance data base, transparency and communication experts and consultants, Human Resources among others.²⁵¹

The Economic Development Bureau for Africa of the WIPO is working hand in hand with its member states to promote IP as a strategic tool for economic growth and national development.²⁵² The main focus of this bureau is to assist the member states in their effort to build national capacities in order to enable them to take full advantage of their IP systems. The expected results are to have each African country to have in place a strong, inclusive and comprehensive national IP system that will allow its citizens to successfully create, protect, and commercialize its IP assets.²⁵³

For example, the comments in this report on traditional knowledge was that Africa has untapped economic potential in the field of traditional knowledge as an IP asset. Along this line it was reported that both OAPI and ARIPO had requested for WIPO's assistance in drafting harmonized a regional instrument for protection of traditional knowledge and traditional cultural expressions.²⁵⁴

In a further report by WIPO²⁵⁵ it is shown the different areas of assistance given to African nations East Africa included. In this report it is reviewed that legislative advice had been given to Botswana, Djibouti, Ethiopia, Ghana, Malawi, Rwanda and Zanzibar. There were also reports that workshops on TRIPS flexibilities were organized for the member countries of the EAC. Further areas included the formulation of IP strategies, IP development plans, the transfer of technology, research and development for such countries like Ethiopia, Kenya, Rwanda and Uganda among others.

²⁵¹ *ibid.*

²⁵² WIPO carries out its technical assistance and capacity building programmes and activities for Africa at the request of member states. they are designed and implemented in close consultation and cooperation with countries, taking to account each ones specific needs, priorities, challenges and level of developments with due attention being heard to the status and requirements of LDCS. WIPO support to NEPAD, period of report; August 2005 to August 2006 at <www.wipo.int/.../wipo.../wipo_/_/...>(accessed on 4/3/2015).

²⁵³ Rodney D. Ryder, (2002) *Intellectual Property and the Internet*, *op. cit.*

²⁵⁴ *ibid.*

²⁵⁵ WIPO support to NEPAD: period of report: July 2007 to June 2008
<www.un.org/africa/osaa/2008_un_system/WIPO.pdf>. (accessed 4/3/2015).

There was a nation of such other areas in which the presence of WIPO was being felt such as the continued contribution to Human Resources and IT equipment to OAPI and ARIPO, imparting IP culture through exchange of information among national stakeholders, peer review mechanism Strengthening IP institutional capacity, streamlining of administrative procedures and business tools in industrial property and collective management organizations.

These benefits are numerous as shown above. This may be a pointer as to why politics of patents are so fierce to the extent that Nations have to fight hard to protect the interests of their nationals.

4.6 Field Study to Harmonization of Patents in the East Africa Community

A study was carried out in this research which targeted a group of 40 lawyers practicing law as advocates of the High Court of Kenya. This data is not representative enough to form the basis of reliable findings. The findings are for indicative purposes only.

It was assumed that most practicing advocates in Kenya are either conversant with the administration and exploitation of IPR or have an idea about it. The target group was drawn from those advocates practicing in either Nairobi or Mombasa. From Nairobi a sample of 20 advocates was chosen. A similar number was also chosen for lawyers practicing in Mombasa. The interviews were carried between 10th of February 2015 and 20th of March 2015.

Mombasa City is located on the eastern coast region of Kenya approximately 500 kilometers from Nairobi. It is the second largest city in Kenya and has the second largest number of practicing lawyers in Kenya. On the other hand, Nairobi is the Capital City of Kenya and has the largest number of practicing lawyers²⁵⁶ in East Africa.

From Mombasa, the group was picked at random and each was given a structured questionnaire to fill in the preferred answers and return. The respondents were required to answer several questions as to whether in his or her view;

²⁵⁶ The writer has served as a council member of the Law Society of Kenya and is conversant with the way lawyers are distributed in Kenya regionally.

- (a) It is feasible for the EAC region to develop and administer harmonized patent legal regime?
- (b) What the benefits of having a harmonized legal regime for EAC are?
- (c) Such a single harmonized legal regime can be centrally managed by way of an electronic register?
- (d) What the key recommendation are?

Most of the interviewees were met in their chambers and filled the questionnaires on the spot. A small number were left with the questionnaires to study them and return. Most of the questionnaires were returned.

The response from the target respondents in Mombasa was commendable returning a 60% response. In Nairobi, a similar method was employed where questionnaires were physically given to twenty interviewees. Unlike those in Mombasa, out of the 20 questionnaires distributed only 8 were returned representing a percentage of 40%. Majority of the questionnaires which were not returned were those where the interviewee requested to be left with the questionnaire overnight. Follow up became tricky even after several visits and telephone calls to the lawyer. After a while, the follow up was abandoned.

This data reflects a total number of those given the questionnaires to be 40 out of which 20 questionnaires were returned with responses. This reflects a 50% response. After collecting all the responses, the questionnaires were evaluated to identify the nature of the answers given and the trend, if any. The results have been summarized in table 6 below.

Table 6

<i>Those for a harmonized patent legal regime</i>	<i>Those against a patent legal regime</i>	<i>Whether a joint IP electronic registry at Arusha</i>	<i>Whether a joint IP electronic registry elsewhere and why</i>	<i>Those with recommendations</i>
65 % supported	30% were against and 5% not sure	85% were against Arusha as a location for the registry	85% proposed Nairobi as the ideal location 10% proposed Mombasa and 5% were not sure	85% had no further recommendation to make, 10% gave some recommendations 5% were not sure

From the above table, majority of the lawyers interviewed supported the idea for a harmonized patent regime and an electronic registry for East Africa centrally located somewhere. However, majority of those interviewed did not support Arusha as the ideal location. They preferred Nairobi. On this, there is need for a further research to be conducted in Uganda, Tanzania, Rwanda and Burundi to have a better view of the regional preference. Such a study should include more stakeholders and more numbers. Due to time and financial limitations, it was not possible to cover the regions outside Kenya.

4.7 Conclusion to Harmonization of Patents in the East Africa Community

Patents are territorial. The principle of territoriality underscores the importance states attach to patents. The idea is to protect deep rooted business interests of the citizens of each state. In this regard, the driving engines are majorly the economic interests of the inventors and the business community at large. When representatives of state parties meet in an international IP forum, the agenda is never devoid of politics. This is why IP and politics are in many instances intertwined.

Recognizing the pitfalls which they failed to overcome in 1977, EAC stipulates these challenges into the Treaty as a pointer in the future of what they ought to be aware of to avoid a similar

challenge. Aware of this the framers of the Treaty included in the contents of the Treaty what can keep the region together-economic interests. They were not shy to recognize and include science as a tool of economic advancement for the region.

Harmonization of patents at regional level was given its right place in the Treaty. As the world moved to harmonize patents at international level and EU took strides to come up with harmonized patent laws, EAC on her part has made positive efforts to harmonize patents. These efforts are a long way to catch up with EU but at least something is being done. More should be done in the interests of the citizens of the Member States.

A lesson can be drawn from the EU on harmonization of patents. Through EPO, it can be seen how technology can be used to make registration and administration of patents easier. This includes the many benefits associated with a web based technology. These are additional benefits on top of the conventional benefits associated with patents. It is these huge benefits which make nations to invest in R&D.

In chapter 5 the study will now consider the key recommendations. Having traced the history of patents in East Africa, the literature available on harmonization of patents, the existing laws and policy on patents, the efforts to harmonize patents within EAC as well as considering how EU is dealing with the concept of harmonized patent regime and the key economic benefits of patents, it is timely to consider the key recommendations.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS ON HARMONIZATION OF PATENT LAWS AND POLICIES FOR THE EAST AFRICA COMMUNITY

5.1 Introduction: Initial Claims, Overarching Arguments, Research Objectives, Questions and Hypotheses

In this research, the focus is on the creation of a harmonized patent regime for the EAC. Chapter 1 laid down the basis of the research by first identifying the sources and foundation of the patent laws in the EAC.

The different regimes of IP were introduced with patent law and policies being the centre of this research. While appreciating the common origin of the IP laws from their former colonial masters the chapter notes that reform in patents and IP generally has taken root in East Africa Community albeit at different levels from country to country. This reform has been informed by events happening globally and more importantly, the TRIPS agreement.

Taking advantage of the options given within TRIPS, each member state of the EAC has embraced some steps to align her municipal IP legislations with TRIPS.

The chapter further identified the research question, the hypothesis as well as the justification of the study. This was followed by a summary of what scholars have written as the justification for moving the discussion towards harmonization of patents at regional level. In the preliminary literature review, a foundation was laid for putting up a case for harmonization of patents and policies in EAC. The chapter captures the issues to be discussed in the rest of the chapters of this research.

Chapter 1 further gives the justification of the study. While recognizing the minimum thresholds a state is supposed to observe within its municipal IP laws, it was argued that each state has to be innovative enough to make her laws and policies responsive to her market. The clarion call in the chapter is for the EAC member states to harmonize their patent laws and policies to take advantage of the already existing huge market.

Finally, the chapter concluded by introducing the chapter breakdown for the whole research.

The second chapter focused on the existing patent laws and policies within EAC. What emerges from this second chapter is that each member state of the EAC has patent laws which have been reviewed or are in the process of being reviewed in compliance with TRIPS. This is a good foundation for any harmonization process given that TRIPS compliant laws exist in the EAC.

Besides the laws and policies which exist, the EAC Treaty has been fairly discussed with special focus on how patents are captured in the treaty. The concept of harmonization emanates from the EAC Treaty itself.

The process of integration of the EAC Treaty is underway. It has been argued in this chapter that full benefits are to be realized if the EAC member states harmonized their patent laws and policies.

Chapter 2 concludes by discussing the important role information technology can play in enhancing patent administration and exploitation. Together with this, the chapter discusses at length the challenges encountered in the exploitation of patents in EAC. Some of these challenges are associated with human resource, national infrastructure, educational institutions training, judiciary and judicial process, international negotiating capacity, and lastly research and development. That list is not exhaustive.

The third chapter is more of a case study on harmonization of patents and practices within the EU. Here it has been shown how the EC countries embarked on a long road of harmonization of patents. The journey took a while to reach the present position. There are still discussions going on to improve the systems more. The benefits being realized by EU members were disclosed.

A crucial component of these reforms is the role played by ICT. Using ICT in web based technology driven by high speed data, the duration of search has been shortened from days to minutes or even seconds at the click of a mouse.

The EU model through EPO is advocated as a good example member states of the EAC can apply with local modifications. At the centre of this argument is the need to harmonize the patent laws and policies for the EAC.

Chapter 4 on the other hand dealt with the efforts being employed towards the harmonization process of patents within the EAC. The chapter discusses briefly the politics of patents. These politics are shown to be intense as member states lobby for decisions favourable to their mother countries. A classic example is given of the United States of America and how over time, it has been shifting goals on IP.

The Treaty lays the foundation of patents within EAC. The Treaty has provisions for harmonization patents. When in this research harmonization is recommended, the foundation is the Treaty itself which is a reflection of the commitment by Member States to co-operate and ensure that harmonization is realized.

The chapter also demonstrates the efforts being made by some of the member states to review their patent laws to align them with the requirements of TRIPS. In commercializing patents, the idea is to empower the market of over 150,000,000 population for EAC. Where harmonization has taken place like in the EU, the core purpose is to strengthen their domestic market and empower their inventors.

Some examples have also been given where in the pharmaceutical sector some policies are being discussed to harmonize laws within member states. In Chapter 4, the possible economic benefits of harmonized patents have been identified. At the same time, the study has paid attention to the useful role ICT can play in the administration of patents. Where else in the EU, the harmonization of patents has taken root, the situation is different in the EAC where patents are protected within the political boundaries of each member state as a consequence of the principle of territoriality inherent in patents. There are however marked efforts being employed in the direction of harmonization in the EAC.

In considering harmonization of patents, the argument is to do so within permitted guidelines in TRIPS. This is to keep off the possible wrath of the international community.

Chapter 5 deals with the summary of findings, conclusion and recommendations on harmonization of patent laws and policies for the EAC. These recommendations are accompanied with brief explanation emanating from the findings in the earlier four chapters.

5.2 Recommendations

In Chapter 2 of this research, it was pointed out that the integration process of the East Africa Community is underway. In the field of patents, there are certain specific and general steps the member states have to take. The idea of making these efforts is to integrate patents as part of the political economy for the region. With this in mind, the research sets out the desired recommendations to guide the region and individual member states in making the integration process a worthy undertaking.

5.2.1 Establish a harmonized patent legal regime

In Africa the drive has been to create a regional agency that will improve the existing legal framework for dealing with patents by providing uniformity and consistency in the dissemination of information about protected works, the articulation of African claims to folklore, and the institution of infringement actions over the use of folklore including distributing compensation in connection with the use of folklore.²⁵⁷ Africa is not a pioneer in this. A good example has already been set by some of the developed nations such as the USA and EU member states. The nations forming the EU were part of the active participants in the formulation of the Paris Convention in the 19th century.

As has been shown in this research, this was the first step towards harmonization of patents internationally. The United States of America began to move away towards creating regional trade blocs to achieve what they thought was lost through the Paris Convention. This is when they introduced in the US a *sui generis* protection for data bases both in the USA, the EU and

internationally through WIPO. In this regard, there is justification in suggesting to the EAC to explore and implement a policy change towards the creation of a *sui generis* patent legal regime applicable throughout EAC. On its part the EU has been constantly reviewing its patent laws towards having a full harmonization of patents. This is to ensure a one stop shop for patent search, registration and exploitation throughout the EU.

The region comprised of the EU has a developed market with a population of more than 600,000,000 people. Until recently the EAC members have been using the patent laws of England, a member of the EU. If this region, the mother of patent laws to the EAC member states at independence has embraced harmonization of patents, and the USA a great nation has developed a *sui generis* system of data protection, there is no reason why EAC cannot reasonably develop a *sui generis* patent system to address historical challenges inherent in the international instruments.

There are arguments which have been advanced by some scholars about the exposure of the developing world and more so Africa in this field. The African countries are reputed to have immense wealth in traditional knowledge and traditional medicine. These two categories have not found accommodation within the conventional IPR protection. Moni Wekesa²⁵⁸ argues that for the effective protection of TK to be realized in Kenya, the country has to come up with a *sui generis* mode of protection of TK.

This recommendation can equally be extended to the EAC while considering the possibility of a harmonized patent regime. Professor Patricia Kameri-Mbote²⁵⁹ on the other hand argues for certain grey areas in Kenya to be looked into if one were to consider successfully addressing the issue of patent protection with special reference to the African continent. The challenges facing the existing patent framework can be addressed through a homemade approach with the EAC interests at hand.

²⁵⁸ See Moni Wekesa (2006) "What Is *Sui Generis* System Of Intellectual Property Protection," The African Technology Policy Studies Network, at <www.atpsnet.org/Files/technopolICY-brief-series-13.pdf>. (accessed on 26/6/2014).

²⁵⁹ Patricia Kameri-Mbote (2009) "Monsanto vs. Schmeiser: Implications for Land Rights of Farmers in Kenya; Intellectual Property Rights In Kenya," in Chapter 5 of Moni Wekesa and Ben Sihanya (eds) *op. cit.*

The main goal of the implementation of the Treaty is the ultimate attainment of a political federation. This political federation envisages a certain element of surrender of certain virtues of member states' sovereignty. Once achieved, the region will be one unified bloc with no interstate boundaries. Here, it is assumed that territoriality of the member states against one another will become a non-issue.

A region which cedes her own municipal jurisdiction and to a certain extent merge politically to create a political federation may easily be receptive to the idea of a uniform judicial and legal system.²⁶⁰ The launch of a uniform manual for fighting counterfeit and piracy is in circulation for implementation and enforcement to each partner state of the EAC. The proposed formation of a political federation if realized would usher in a burden on each member state to initiate processes for fundamental changes in the existing municipal laws. This would come with massive revision of laws so as to attain legal harmonization.

Professor Ben Sihanya argues that the scope of a patent should reflect the relevant technology and need not be uniform across the fields of innovation or across countries but agrees that there could be harmony²⁶¹. In this research, we are recommending harmonization of patent policies and laws and not uniformity.

Lessons can be learnt from what existed prior to the collapse of the first EAC in 1977. The EAC region had certain common laws, institutions and infrastructure. Of great relevance in this was the East Africa Court of Appeal. The laws developed by this court were uniform for the region. The court created precedents which are still relevant for the region. These precedents helped the region to develop a uniform jurisprudence in certain areas which are still good law and applicable.

²⁶⁰ In the area of compacting illicit trade in Kenya on 25/3/2015 a manual was launched at Malaba Town whose aim is to compact illicit trade in Kenya as a part of a region wide campaign initiative by the EAC council of minister. Along this EAC partner states had until November 2015 to either enact anti-counterfeit laws or if they already exist to harmonize them so as deal with counterfeiting and piracy. Further each member state was required to establish national enforcement institutions empowered with the full legal mandate to attend to the challenges caused by counterfeits, piracy and other intellectual property rights violation. *Daily Nation*, Kenya, Wednesday March 25, 2015.

²⁶¹ Ben Sihanya (2016) *Intellectual Property and Innovation Law in Kenya and Africa: Transferring Technology for Sustainable Development*, *op.cit* at p 120.

Patents are chief components of trade and industry. As the EAC embraces the concept of free movement of goods and services under the Treaty, rigid patent laws may pose a big hindrance to the business community. It would be expected that just like in other sectors, the patent legal regime should be harmonized.

Institutional review is under consideration by the EAC Secretariat. The concept of institutional review carries along the element of reform. As institutions are reviewed, so are the policies and laws governing the operations of those institutions. It is the proposition in this work that the institutions governing the administration of patents should be included in this reform agenda. The approach should be in line with the EC model under EPO. The actual operations of such a model within the context of the EAC is outside the scope of this research and is a basis for further research.

Finally, each of the EAC member states should have an IP policy and each of these policies should be harmonized.

5.2.2 Law Reform on domestic patent laws for East African member states

The EAC should reform their domestic patent laws to introduce uniform legislative measures to strengthen IP rights protection to better combat counterfeiting and piracy at the borders of member states. This should be done to supplement the efforts displayed in the EAC counterfeit Bill and other pending bills.

Secondly, legal reform of patent laws should ensure that the resultant regional legislation on patents expressly provides for a system where the patent regime strikes a balance between encouraging investments in the development, sale and distribution of new innovative brands while ensuring EAC members have access to affordable but quality products.

Thirdly such a regime should adopt legal and institutional approaches for controlling counterfeiting that do not obstruct access to generic medicines or lessen social welfare.

The fourth factor here is to develop a comprehensive regional legislation to regulate the exploitation and protection of traditional medicine, traditional knowledge and folklore with the

ultimate objective of ensuring that the benefits accruable to EAC indigenous communities and medicine men are guaranteed.

While supporting the idea of reforming patent procedures, ownership rights and obligations in Kenya and Africa, Sihanya came up with three reforms namely. The first reform relates to rights and obligations. To him these should be carefully balanced in the appropriate statutory and constitutional clauses. The second reform deals with patent procedures, patent prosecution and administration. These should be not too complex, accessible geographically. There is need to decentralize and appropriate procedures for scale up of lower level innovations and lastly, optimally linkage of offices to research organizations, universities, industry, patent attorneys and other stakeholders.²⁶²

5.2.3 Further Research on EPO operations

There is need to have further research on the actual operations of EPO. A lot of research has been undertaken by the EC to come up with the current set up. The information availed here is not sufficient due to certain limitations on available data. A specific research on the actual and detailed operations of the EPO system is recommended. The outcome of such a research can avail enough data to guide EAC in making key decisions. Unlike a general research this one will be concentrating on the administrative and operational set up of EPO.

5.2.4 Research and Development

The EAC should set up a committee to review international best practices with special reference to the EAC region and develop an evidence data base useful for demonstrating why there should be a policy change in patent laws. Such research if undertaken may be a useful help in determining how the EAC business community can benefit as investors in patents. The data generated in research can also assist in showing objectively how a sound region based patent policy can contribute to the performance of the EAC economy. The R&D should be spearheaded from a central financial pool into which each Member State contributes. This can have huge benefits and avoid duplication of activities by having a common research and development.

²⁶² *ibid.*

5.2.5 Further Research on the suitable location of the proposed joint electronic registry

The data collected from a small number of Kenyan lawyers and results showed in this research that, Arusha was not a preferred location for the electronic joint registry. The research should be extended to more lawyers and other stakeholders both in Kenya and from the other Member States. There are other key stakeholders like government agencies of the Member States dealing with patents, NGOs, and even Universities both public and private whose views need to be collected and evaluated.

A committee under the EAC Secretariat should be set up to develop and roll out a proposal on the modalities, the possible set up and operations of a joint IP electronic registry at Arusha in line with that of the EPO. A survey done in the United Kingdom came to the conclusion that effective enforcement requires education, effective markets, an appropriate enforcement regime and a modern legal framework.²⁶³

The model of EPO has come as a result of extremely intensive research and market trials. The EU can be said to be one of the homes of advanced IP practice. A committee to focus on the route the EU has taken in the evolution of harmonization of patents laws and practice would be a step in the right direction. The region will stand to benefit immensely as a consequence of data likely to be gathered by the committee.

5.3 Conclusion on Harmonization of Patent Laws and Policies in the East Africa Community

The clock of integration towards the proposed political federation for EAC is ticking away. Borders have been opened for both human and goods. As a consequence, businesses are slowly becoming regional albeit some teething problems²⁶⁴ to cross municipal borders.

²⁶³ The United Kingdom Government response to the Hargreaves review of Intellectual Property and Growth. UK business invests more in intangible assets than in physical ones and nearly have of that intangible investment approximately £65 billion in 2008 was in IP. Its wider impacts on society in terms of culture, education and basic human rights such as freedom of expression are no less important. <<https://www.gov.uk/government/.../11-1199-government> (accessed on 4/3/2015).

²⁶⁴ As at the time of this research, there is a stalemate between Kenya and Tanzania. Kenya does not allow Tanzania Taxis/tour vans carrying tourists to enter her main international airports. Tanzania has also taken a similar position. There are however regular assurances from the two governments that the issue is being resolved. Another example is on legal practice. Tanzania has consistently resisted allowing Kenyan lawyers to practice in her territory. Kenya on the other hand has in principle opened her borders to all EAC lawyers to practice law in Kenya but on certain

The research has managed to capture the history of patents in EAC and the existing link with the west. It has been shown that the west exported to the EAC laws which may not necessarily be useful to the EAC member states. With passage of time though, the region has been reviewing her municipal patent laws and to some extent coming up with policies to align them with the requirements of TRIPS. There are also some limited steps taken towards achieving harmonization of patents in certain areas. The current patent laws have challenges for the region. To escape from some of these historical challenges, there is need to reconsider the existing laws and policies in the EAC.

The route to harmonization of patents is not an isolated phenomenon. Other regions have undertaken such an exercise and it is bearing fruits. A good example has been given of EU which has come up with a model under EPO. EU is still working on reforms to her patent laws to make them more responsive to the needs of her inventors and market.

The EAC Treaty has laid the necessary foundation for harmonizing patent laws. Member States are called upon to work together to ensure that among other things, their municipal legislations are harmonized. It is this foundation from the EAC Treaty which has seen commendable steps being taken to harmonize patent laws to a certain extent.

The process of harmonization of patents is also seen in the context of political economy. As states lobby for reforms within the patent regime at international meetings, this is rarely devoid of economic politics. The states aim at initiating such changes as are useful to protect and promote their domestic interests. The benefits associated with these patent reforms have been highlighted on.

Finally, there are the recommendations set out in this chapter. The totality of these recommendations is to enable EAC to benefit from the proposed new system of administration

conditions. Finally, Southern Sudan was in early 2016 admitted as the 6th member of the EAC at a time when that nation is struggling to remain as a nation. This is due to power struggles and civil strife.

and exploitation of patents. As EAC considers enlarging her market reach through the integration process under the EAC Treaty, patents should be at the centre of the market drive.

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