PROTECTION OF INTELLECTUAL PROPERTY AND PAN-AFRICANISM: IS AFRICA READY FOR A COMMON INTELLECTUAL PROPERTY FRAMEWORK?

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INTRODUCTION:

From the classical school of thought, the concept of ***creativity***, its preservation and protection can be seen as a necessary part of the intrinsic values of the society. Alexander Bickel propounded that intellectual property law "is more than just another opinion not because the value it does embody tend from time to time to reflect those of a majority or plurality but because it is the value of values. Law is the principal institution through which a society can assert it values".[1] The differences in the forms and creativity between the indigenous societies and industrial societies explain the differences in the legal method of protection but that does not translate to the dearth of creative genius to protect in the indigenous societies that now constitute the developing countries which are today on the receiving end and are still battling with the burden of the imposition of western globalised intellectual property right system.[2]

The above assertion may be the underlying findings of the studies carried out by Albert G.Z. Hu and I.P.L. Png in the discourse on Patent Rights and Economic Growth in which the authors discovered through evidence from Cross-Country Panels of manufacturing industries[3] that where there is strong patent regime, there is progressive and vigorous innovation.

Intellectual property (also variously referred to in this paper as IP) as a phenomenon has continued to fascinate the modern day professional, inventors and all facets of economic activities. Anywhere one turns and anything one touches, reflects and bears Intellectual Property mark. The position is more pronounced in the commercial sector where a reward of productivity is germane.

It can be said that IP is the bedrock of commerce; hence it can equally be argued that IP promotes commercial activities which among other variables leads to economic development.

In this paper, I will examine the current IP situation in Africa, whether Africa as a continent has a common IP frame work; the roles, if any, a strong IP system can play in economic development of the continent.

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[1] Alexander Bickel, "The morality of consent " quoted in According to Intellectual Property: A pro-development vision of the law and the Nigerian Intellectual property law policy reform in the knowledge era, Adebambo Adewopo *(*Inaugural Lecture: Nigerian Institute of Advanced Legal Studies, 2012)

[2] Adebambo Adewopo. "According to Intellectual Property: A pro-development vision of the law and the Nigerian Intellectual Property Law Policy reform in the knowledge era," *Inaugural lecture; Nigerian Institute of Advanced Legal* Studies 2012.

[3] Albert Hu and I.P.L. Png, "Patent Rights and Economic Growth: Evidence from Cross-Country Panels of Manufacturing Industries" https://pdfs.semanticscholar.org/d947/7e2630c94811f396c23e0b4e1dc785365179.pdf NUS Business School, National University of Singapore (accessed Mar 10 2018).

Suffice to say here that the attitude of political leaders in Africa to IP matters depends on the understanding of the roles of a strong IP system in economic development. It is my belief that once the leaders understand how IP exploitation can help economic growth, encouraging and supporting a common IP framework in the continent (as it is done in the European Union) will not be a difficult task.

DEFINITION OF TERMS

Pan-Africanism: Pan-Africanism is the idea that peoples of African descent have common interests and should be unified. Historically, Pan-Africanism has often taken the shape of a political or cultural movement[4].

Intellectual property (***IP***): refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images and designs used in commerce. IP is divided into two categories: industrial property, which includes inventions (patents), trademarks, industrial designs, and geographic indications of source; and copyright, which includes literary and artistic work such as novels, poems and plays, films musical works, artistic works such as drawings, paintings, photographs and sculptures, and architectural design. [5] From the nature of the rights aforementioned, these rights are exclusive in nature and personal.

Economic development: generally refers to the sustained, concrete actions of policymakers and communities that promote the standard of living and economic health of a specific area. Such actions includes development of human capital, critical infrastructure, environmental sustainability, social inclusion, health, safety, literacy, and other initiatives. Economic development is a deliberate policy intervention endeavor aimed at the economic and social well-being of people.

INTELLECTUAL PROPERTY AND PAN-AFRICANISM

Very few policy matters inspire much passion as the international discussion on IP. While the United States leads the college of countries that advocate IP protection, African countries and many other developing countries downplay the necessity of strong IP protection. Often times in this respect, the developing countries see the desires of the developed countries as a form of re-colonization and exploitation.[6]

[4] https://www.britannica.com/topic/Pan-Africanism. Accessed February 26,2018

[5] World Intellectual Property Organization, at http://www.wipo.int/about-ip/en/ (accessed February 26, 2018)

[6] Nathan Associates Inc. "Intellectual Property and Developing Countries; Briefing Paper," December 2003, http://www.dec.org/pdf_docs/PNACW418.pdf (accessed on December 12, 2017)

As African countries became sovereign, they made laws and established institutional frameworks for the socio-economic development of their countries. This gradually led to the adoption and domestication of International Agreements and Protocols.[7] With specific reference to IP, many African countries signed on to the Paris Protocol of 1883 for industrial property, the Berne Protocol of 1886 on Copyright, the Madrid Protocol of 1891 for the International Registration of Marks and many other IP related multi-national agreements that provide a common understanding on the protection of IP.

As the need for a regional platform for the registration and protection of IP became necessary, African countries evolved into 2 blocks along linguistic tendencies; The ARIPO and the OAPI .

ARIPO

The African Regional Intellectual Property Organization (ARIPO) is an inter-governmental organization (IGO) that facilitates cooperation among member states in the field of intellectual property with the objective of mobilizing financial and human resources and promoting technological, economic, social, scientific and industrial development.[8]

ARIPO's history dates back to the early 1970s when a regional seminar on patents and copyrights for English-speaking African countries was held in Nairobi, Kenya. The seminar recommended the establishment of a regional industrial property organization. In 1973, the United Nations Economic Commission for Africa (UNECA) and the World Intellectual Property Organization (WIPO) responded to a request from these English-speaking countries for assistance in rationalizing their resources on industrial property issues and establishing a regional organization. Following a number of meetings at UNECA's headquarters in Addis Ababa and at WIPO in Geneva, a draft Agreement for the Establishment of the Industrial Property Organization for English-speaking African Countries (ESARIPO) was prepared.

ARIPO was established primarily to mobilize member countries' resources on industrial property and avoid duplication of financial and human resources. Thus, the preamble of the Lusaka Agreement clearly states that member states are "aware of the advantages to be gained by them from the effective and continuous exchange of information and harmonization and coordination of their industrial property laws and activities." The member states also recognized that "the establishment of an African regional industrial property organization for study, promotion, and cooperation in the field of an industrial property would be better."[9]

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[7] Nkomo Marumo, "Regional Integration in the area of Intellectual Property: A case for Southern Africa Development Community involvement," *Law Democracy Dev Vol 18 Cape Town*, 2014 http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2077-49072014000100016 (accessed June 10, 2018)

[8] African Regional Intellectual Property Organization, http://www.aripo.org/about-aripo (accessed 04,April, 2018)

[9] Ibid.

In determining their objectives, the founding countries of the organization took into account the fact that, at that time, most countries concerned had "dependent industrial property laws", which did not provide for original granting or registration in the countries concerned, but could only extend to them the effects of industrial property rights obtained in a foreign country (in most cases, the United Kingdom). Such effects were normally governed by the laws of the foreign country[10].

The objectives of the Organization, enshrined in Article III of the Lusaka Agreement, demonstrate that cooperation in the field of industrial property is aimed at technological advancement for the economic and industrial development of the member states. This cooperation is reflected in the objectives of the Organization, which are:[11]
(a) to promote the harmonization and development of industrial property laws and related matters suited to the needs of its members and the region as a whole;
(b) to promote the establishment of a close relationship between its members in the field of industrial property;
c) to establish common services or bodies that are necessary or desirable for the coordination, harmonization and development of industrial property activities affecting its members;
d) to establish training schemes for personnel in the administration of industrial property law;
(e) to organize conferences, seminars and other meetings on industrial property issues;
f) to promote the exchange of ideas and experiences, research and studies related to industrial property issues;
(g) to promote and develop a common view and approach of its members on industrial property issues;
h) to assist its members, as appropriate, in the acquisition and development of industrial property technology;
i) to do all other things that may be desirable for the attainment of these goals. It is clear from the above objectives that the common thread that crosses them is the idea of cooperation. The concept of cooperation plays an important role in the functions of the Organization.[12]

The membership of ARIPO is open to all African States members of the United Nations Economic Commission for Africa or the African Union. Currently, there are 19 States that are part of the Lusaka Agreement and, therefore, members of ARIPO. These are Botswana, Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Sierra Leone, Liberia, Rwanda, Sao Tome and Principe, Somalia, Sudan, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.[13]

The aspirations of the Lusaka Agreement since its signature have been put into practical implementation by additional treaties, each focusing on a specific subject of intellectual property.

[10] Ibid.
[11] Ibid.
[12] Ibid
[13] Ibid.

These treaties are:
(a) the Harare Protocol on Patents and Industrial Designs,
b) the Banjul Protocol on Trademarks,
c) the Swakopmund Protocol on Protection of Traditional Knowledge and Expressions of Folklore; and
d) Arusha Protocol for the Protection of New Varieties of Plants.[14]

By and large, the establishment of ARIPO provided an opportunity for English speaking African countries to share ideas on the protection of IP and also provide a platform for English speaking African countries as a pressure group at global IP fora.

Although, by its name ARIPO is supposed to consist of African countries, in reality, it consists only of English speaking sub-Saharan African countries. Somehow South Africa and Nigeria, the 2 biggest economies in Africa, are not members.[15]

Note that ARIPO appears to be a regional body only in name, its members are scattered all over Africa along language basis instead of geographical affinity.[16] The inherent advantage of regionalism geographical affinity which would have been enjoyed under the extant IP protocols especially those covering Traditional Knowledge and Biodiversity is lost.

Other criticisms of the organization include the fact that applications for IP rights filed under any of the 3 protocols are not conclusive but are made subject to the local IP laws of contracting states. Thus a contracting state may refuse to register an ARIPO application on the basis that the application is in conflict with provisions of its local laws.[17] Thus one of the cardinal reasons for establishing ARIPO 'to avoid duplication of financial and human resources" has not been fulfilled.

OAPI

OAPI is a French acronym for Organisation Africaine de la Propriete Intelectuelle (African Intellectual Property Office) This organization was established under the Bangui Agreement and Article 22 (2) of the Agreement made membership of the organization open to African countries who are signatories to major IP Agreement such as the Protocols establishing WIPO, the Paris Convention, and the Berne Convention.[18]

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[14] Ibid.
[15] Otieno-Odek James*, Intellectual Property In the context of Developing Countries: QUEST For National Innovation System*
[16] Nkomo, *Regional Integration in the area of Intellectual Property: A case for Southern Africa Development Community involvement.*
[17] Harare Protocol, S.3.
[18] Organisation Africaine de la Propriété Intellectuelle, http://www.oapi.int/ (accessed Dec 11, 2017).

The objectives of OAPI are similar to that of ARIPO however, in terms of avoiding duplication of financial and human resources, OAPI appears to be achieving this objective more. IP applications filed under the Bangui Agreement have effect as if they are filed in the registries of each of the contracting states. Similar criticisms as those for ARIPO equally apply here. Even though by its name it is supposed to consist of African countries who are signatories to major IP Agreements as aforementioned, it consists only of French-speaking sub-Saharan African countries.

Even though OAPI is founded as a regional body, its members are scattered all over Africa along language divide instead of geographical and economic basis, therefore, the inherent advantage of regionalism which would have been enjoyed under the extant protocols is equally lost here.

Both ARIPO and OAPI would have achieved and recorded more success if the protocols are signed and implemented by countries which are located within the same geographical region. For example, Economic Commission of West African States (ECOWAS) and South African Development Commission (SADC). The countries in these organizations share common borders and their cultures, though not exactly the same are somehow similar and compatible due to interactions which pre-dates colonial times. Under this regional, though economic organizations, IP Protocols on TK, Biodiversity, and folklore can easily be implemented because the owners of such IP rights and the objects of such rights are within the same geographical area.

The need for Africa to have a common IP framework and to have a united single organization for the purpose was accentuated during the HIV/AIDS pandemic in the 1990s.The pharmaceutical companies with their acquired patents over essential drugs were a barrier to effective treatment of the pandemic.[19] There was the need to ensure availability of cheap medicine to combat the ravaging HIV/AIDS among other diseases in Africa.

Be that as it may, the new narrative among the various countries in Africa is that the continent has a lot of potentials in Traditional Knowledge (TK)[20] and biodiversity and that these potentials are being exploited by the developed countries to the detriment of the indigenous African communities who ordinarily should have IP rights over them. The African IP interests are proposing that Traditional Knowledge is protected under the extant IP regimes so that the local African communities in whose domain these knowledge are indigenous are able to enjoy and exploit IP rights embedded in them. The developed countries would rather have these Traditional Knowledge and Biodiversity potentials protected otherwise.

Ironically, the local African communities who are the custodians of these Traditional Knowledge and Biodiversity have no technical know-how to translate and develop the knowledge into

[19] Nathan Associates, *Intellectual Property and Developing Countries; Briefing Paper*.
[20] Knowledge that is peculiar to a people.

globally marketable commodities whereas the developed countries who have the technical know-how do not have much of these biodiversities within their geographical boundaries. It is this situation that has given birth to the new phenomenon called "Biopiracy" which is the commercial exploitation or monopolization of biological or genetic material, such as medicinal plant extracts, usually without compensating the indigenous peoples or countries from which the material or relevant knowledge is obtained.

The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) is saddled with the responsibility of reconciling the opposing interests on this issue of protection of Traditional Knowledge and Biodiversity. In the meantime, and happily so, some African countries such as Kenya and South Africa have amended their IP Laws to accommodate and protect Traditional Knowledge and Biodiversity from unauthorized exploitation.

Pan African Intellectual Property Organisation (PAIPO).

PAIPO was established as a specialized agency of the African Union (AU). It is responsible for IP and other emerging issues related to IP in Africa. At the twenty-third ordinary session of the Assembly of the African Union held on 26-27 June 2014 in Malabo, Equatorial Guinea, the Assembly considered the report and the recommendations of the Extra-Ordinary Session of the African Ministerial Conference on Science and Technology (AMCOST V) held from 16-18 April 2014 in Brazzaville, Republic of Congo on the Creation of PAIPO and requested the Commission to submit it to the specialized technical committee on justice and legal affairs for consideration and appropriate recommendations.

It recognizes ARIPO and OAPI as building blocks for the creation of a single Pan African Intellectual Property Organization and welcomes their support in the implementation of the Heads of States and Governments' decisions on PAIPO and invites the member states, WIPO as well as development organizations and partners to lend support for the implementation of the decision.

The PAIPO Statute was finally adopted by the 26th Ordinary Session of the AU Assembly at Addis Ababa, Ethiopia on the 3oth day of January 2016. As at January, 2018, only 3 countries out of the 55 AU member states have signed the PAIPO Statute[21]

There is a deluge of criticism of PAIPO. Firstly, according to Professor Ncube "although the draft statute has been long in the making, this has not been through an open or participatory process. There has been no public consultation on the continent nor have the civil society, academics, and public interest advocates been afforded an opportunity to engage with the proposal or participate in the crafting of the statute. Secondly, the AU has not provided detailed

[21] Sierra Leone (2016), Ghana (2017) & Comoros (2018).

information about its deliberations and decisions pertaining to the establishment of PAIPO. It is ironic that African states have been chastising WIPO for not being transparent enough when the same can be said of them with regard to the establishment of PAIPO".[22]

Also, in the words of Sadulla Karjiker, "…the lack of consultation and transparency in the process leading up to the production (and potential adoption) of the Draft Statute is something that should be condemned. Intellectual property has become a highly politicized issue, and it is imperative that there be an inclusive and transparent process when initiatives of this nature are embarked upon".

He said further that "my principal concern at this point in time is of a more pragmatic nature. One has to question the wisdom of trying to establish an African centralized registration system. Would the resources which are to be spent in such an endeavor not be better utilized in ensuring that the intellectual property registries and laws of the various African states are improved in order for them to participate in existing international registration systems such as the Madrid Agreement and Protocol, administered by WIPO, for trademarks? There is no cogent argument for proliferating registration systems, and for focusing on, comparatively, parochial initiatives in an era of ever-expanding cross-border trade".[23]

Sara Moyo also has this to say: "I do not see how Member States of the AU, African IP agents, and other stakeholders can be expected to make a rational decision on the benefits of establishing a new continental IP body within the AU, and especially a continental registration Office, if the constitutive Protocol for such registration Office and the implementing regulations have not been formulated. In my view, Article 20 of the draft Statute appears problematic as some Members of the AU do not provide for automatic ratification or accession to a convention or treaty or agreement, or automatic recognition of the legal status of an international body, without approval by the national Parliaments of Member States".

Moyo further stated that "Apart from the fact that the draft Statute does not define what such industrial property titles will be called (African patent, PAIPO trademark, etc.), the establishment of a supranational registration Office would appear to be a costly duplication of the registration function of current national and regional IP Offices"[24]

Brook Baker on his part opined that "The proposal to establish PAIPO is a misinformed and misguided effort by a small subset of policy makers at the AU that undermines other policy

[22] Prof. Caroline Ncube, Associate Professor at the University of Cape Town, Faculty of Law.
[23] Sadulla Karjiker, Member of the IP Unit at Stellenbosch University, Faculty of Law.

[24] Sara Moyo, former President, Zimbabwe Institute of Patent and Trademark Agents (ZIPTA)

initiatives at the AU and by Member States that seek to: (1) minimize the impact of patent monopolies on access to medicines and other public goods technologies, (2) minimize the impact of copyright monopolies on access to educational and cultural resources, (3) preserve the livelihoods and agricultural vitality of small-scale farmers that still make up the bulk of the Africa economy, and (4) retain policy space for other more creative mechanisms that promote both knowledge creation and cultural expression while preserving affordable access to the same".

He further submitted that "This wrongheaded proposal must be stopped. A normative agency like UNAIDS and UNDP and WHO must immediately engage AU stakeholders and issue statements cautioning against adoption of the imbalanced PAIPO proposal in its current form. Other AU bodies must demand a review of the proposed legislation and determine its consistency or inconsistency with other AU policy objectives in the IP, health, education, and development arena. African civil society organizations and their allies must insist that the proposal is euthanized and that policy space be preserved for innovation and access measures that better meet human development needs." [25]

The above pertinent criticisms notwithstanding, my opinion is that the PAIPO project is a laudable one which, when implemented will establish a one-stop-shop for IP administration and enforcement thus saving individual African nation the heavy burden of providing and funding IP infrastructure and enforcement facilities. It will indeed be beneficial to African countries to emulate the European Patent Office (EPO) which is one of the organs of the European Union. EPO is saddled with the responsibility of granting Unitary Patents in Europe.

Unitary Patents – or "European patents with unitary effect" – are European patents granted by the EPO under the rules and procedures of the European Patent Convention (EPC), to which, at the patent proprietor's request, unitary effect is given for the territory of up to 26 Member States participating in the Unitary Patent system and having ratified the Unitary Patent Convention Agreement.

Unitary Patents provide protection in the 26 EU Member States participating in the Unitary Patent system.[26]

[25] Prof. Brook K. Baker, Honorary Research Fellow, University of KwaZulu Natal, Durban, S. Africa.

[26] www.epo.org accessed 2nd May,2018

The tasks entrusted to the EPO by the 26 Member States participating in the Unitary Patent system Under EU Regulation No 1257/2012 on the Unitary Patent system include:

- receiving and examining requests for unitary effect
- registering unitary effect
- publishing translations during the transitional period
- setting up and maintaining a new "Register for Unitary Patent protection" containing entries on transfer, licensing, lapse, limitation or revocation of Unitary Patents
- collecting annual renewal fees for Unitary Patents
- distributing a share of the annual renewal fees to the participating Member States
- administering a compensation scheme to support certain applicants, in particular SMEs, universities and public research organizations having their residence or principal place of business in an EU Member State, with a lump sum of EUR 500 to cover their translation costs if their European patent application leading to the Unitary Patent was filed in an official EU language other than English, French or German.

The EPO model is working and there is absolutely no reason why PAIPO should not work once the political will on the part of African political leader is there. The political will is often nipped at the bud when opposition to such initiative argue that Intellectual Property Rights(IPRs) in their present form do not serve the interests of developing countries in view of their little technological innovation capacities.[27] They refer African leaders to WIPO statistics and query the reason Africa should spend their lean resources to maintain and protect a system in which they have little or no interest to protect. The WIPO statistics, below, show that most countries in Africa are not on the list of the countries that file Patent applications under the Patent Cooperation Treaty (PCT)

[27] Patricia Kameri-Mbote, Intellectual Property Protection in Africa: An Assessment of the Status of Laws, Research and Policy Analysis on Intellectual Property Rights in Kenya. Accessed on 11th June,2018 through www.ielrc.org/content/w0502.pdf

Overview of IP filing activity

Table 1

Ranking of Total (Resident and Abroad) IP Filing Activity by Origin, 2016

Origin	Patents	Marks	Design	Origin	Patents	Marks	Design
China	1	1	1	Bulgaria	58	43	36
U.S	2	2	4	Morocco	71	47	19
Germany	5	4	2	Philippines	51	44	45
Japan	3	3	7	Colombia	49	37	66
Rep of korea	4	8	3	Chile	47	30	78
France	6	5	8	Greece (e)	44	73	39
U.K	7	7	11	Pakistan	68	35	56
Italy	11	11	5	Slovakia	57	51	54
Switzerland	8	13	9	Indonesia	112	24	28
India	12	6	14	Belarus	41	88	59
Turkey	23	10	6	Cyprus	63	54	58
Iran (Islamic Republic of)	16	12	12	Liechtenstein (d)	42	76	57
Russian Federation	10	9	23	Slovenia (d, e, f)	53	72	50
Netherlands	9	19	16	Kazakhstan	40	57	84
Spain	22	15	10	Bangladesh	86	59	37
Sweden	14	26	13	Serbia	66	64	53
Australia	21	16	20	Croatia	72	67	45
Canada	13	18	27	United Arab Emirates (a,f)	52	52	81
Austria	17	25	18	Uzbekistan	60	68	62
Brazil	24	14	22	Sri- Larika	64	65	69
Poland (f)	26	20	17	Malta (f)	56	70	73
Ukraine	33	23	15	Estonia	67	78	65
Belgium	18	29	33	Latvia	72	79	60
Denmark	20	36	25	Peru	84	45	83
Mexico	34	37	34	Lithuania	77	69	70
China. Hong Kong SAR	36	27	26	Mongolia	96	62	64
Finland (c)	19	38	32	Sudan	65	100	63
Portugal	38	33	24	Barbados	61	103	65
Singapore	25	31	40	Kenya (b)	78	71	84

Czech Republic	35	32	30		Monaco	76	75	82
Viet Nam	50	22	29		Azerbaijan	55	82	104
Israel	15	56	31		Republic of Moldova	10	80	61
Thailand (d)	54	28	21		Panama	99	60	89
Argentina	45	21	42		Cote d'ivoire (d,e,f)	68	112	72
South Africa	30	40	38		Ecuador	113	58	87
Luxembourg	31	34	44		Ghana	93	110	55
Norway	27	46	43		Jordan	88	81	89
New Zealand	32	39	48		Cameroon	48	116	95
Malaysia	37	41	49		Iceland	74	93	92
Hungary	39	49	41		Georgia	95	86	79
Egypt (c)	46	50	35		Armenia	80	85	97
Romania	43	42	47		Syrian Arab Republic (a,c,e)	75	120	67
Ireland (e)	28	53	52		Tunisia	70	117	75
Saudi Arabia (b)	29	55	51		Jamaica	109	87	74
China Macao SAR	100	96	77		Bosnia and Herzegovina	107	104	80
Dominican Republic	119	61	93		Uruguay (a,b,c)	101	74	120
Costa Rica	110	63	102		Mauritius (f)	97	90	111
Algeria (b,i)	93	48	142		Cuba	85	91	126
Qatar (e, f)	67	105	94		Bahamas (f)	102	98	104
Senegal (d, e, f)	69	122	107		Iraq (a,e,f)	62	125	117

Note: Ranking is based on the total numbers of applications filed by origin. Patent data refer to numbers of equivalent patent applications.

Trademark data refer to number of equivalent trademark application bases on class count- the number of classes specified in applications.

Industrial design data refers to numbers of equivalent industrial design applications based on design counts- the number of designs contained in application.

This table lists origins for which at least two types of IP filing data are available.

A. 2015 potent data
B. 2015 trademark data

C. 2015 industrial decision data
D. Data on patient applications at the national IP office are not available
E. Data on industrial design application at the national IP office are not available

Source: ***WIPO Statistic Database, September 2017***

Table 2
Ranking of resident IP filing activity by origin, 2016.

Origin	Patents	Marks	designs
China	1	1	1
Japan	3	2	6
U.S	2	3	7
Germany	5	6	2
Rep of Korea	4	9	3
France	7	4	9
Turkey	14	7	4
India	10	5	12
Iran (Islamic republic of)	9	10	10
Ital	11	13	5
U.K	8	11	11
Russian Federation	6	8	22
Spain	18	15	8
Brazil	16	12	18
Poland (f)	17	20	14
Netherland	12	21	19
Switzerland	13	24	16
Ukraine	26	23	13
Thailand	-	25	17
Australia	25	17	23
Indonesia	-	22	24
Sweden	15	30	25
Mexico	30	14	28
Austria	19	33	21

Origin	Patents	Marks	Designs
Canada	20	16	43
Belgium	22	32	31
Portugal	39	27	20
Viet Nam	45	19	26
Denmark	21	44	27
Argentina	38	18	38
South Africa	24	35	39
Czech Republic	36	34	30
Finland (c)	23	46	35
Egypt (c)	37	45	29
Morocco	56	42	15
Romania	35	36	42
Malaysia	32	39	44
China. Hong Kong SAR	58	28	33
Norway	27	47	47
Singapore	28	50	46
New Zealand	33	40	53
Hungary	41	48	40
Philippines	51	37	41
Bulgaria	55	41	34
Israel	31	69	37
Pakistan	59	29	49
Saudi Arabia (D)	29	57	51
Colombia	46	31	61

HOW DO INTELLECTUAL PROPERTY RIGHTS (IPRs) OPERATE?

It may be necessary at this juncture to note that different IPRs operate differently.

First, the **letters patent** provides the right to prevent, (generally for 20 years), the unauthorized making, selling, importing or using of product or technology that is specified in the 'patent claim' and that must demonstrate novelty and industrial utility.[28] Thus patent establishes a protected or exclusive market advantage in return for "revealing technical knowledge."[29] By this definition for an invention to enjoy protection, it must be new and capable of industrial application.

Trademark registration protects rights to sell goods and services under identified names, symbol or combination of the two. The names or symbols must be distinctive to avoid confusing consumers. If trademarks are not protected, rival firms could pass off their lower quality goods as those produced by recognized organization or entities. Trademarks, in addition to the definition above, have been extended to brand smell and shapes of articles.

Literary and artistic creation and computer software are protected by **Copyright** which provides an exclusive right for a limited period to copy and sell particular expressions of ideas after they are fixed in a medium of expression.

An important element of IP system is its enforcement i.e. punishing infringement and disciplining enterprises that try to extend their rights beyond approved borders by acting in an anti-competitive manner.

A theme which connects all areas of IP is ***enforcement***. IPRs cannot succeed in their core economic function of encouraging innovation if rights are disregarded, unenforceable or too expensive to enforce. Ineffective regimes are worse than no rights at all. They appear to offer certainty and support for reliable business models, but in practice, send misleading signals. Widespread disregard for the law erodes the certainty that underpins consumer and investor confidence. In the most serious case, it destroys the social solidarity which enables the law-abiding majority to unite against a criminal minority. These are strong reasons for supporting effective enforcement of IPRs.

ECONOMIC OBJECTIVES OF IPRs

There are 2 main economic objectives of intellectual property protection. The first is to promote investments in knowledge creation and business innovation by establishing exclusive rights to use and sell newly developed technologies, goods, and services. Without this protection,

[28] www.wipo.org accessed 2nd May,2018

[29] Keith E. Maskus, "Intellectual Property Rights and Economic Development", St. Francis College, February 6, 2000, https://www.coursehero.com/file/5862782/cwrurev/ (accessed Jan 20, 2018).

economically valuable discoveries or information could be used without compensation by market rivals. The second objective is to promote spread of new knowledge by encouraging rights holders to place their discoveries in the market. The two objectives interrelate in such a way that the innovator through the exclusive rights granted, recoups his investment while a weak or non-existent legal framework for such rights provides no opportunity for return on investment.[30]

IMPACTS OF IPRs ON ECONOMIC DEVELOPMENT

The impact of IPRs on economic development could be positive and negative. IPRs play a significant role in encouraging innovation, product development, and technical change. Inadequate IPRs could retard technological growth.

Maskus and McDaniel[31] found out in their study of the Japanese patent system that the protection offered the local innovators enabled the Japanese innovators to do more which in turn provided the platform for the Japanese technology to develop and become a global leader in technology. More jobs were created and this had a positive effect on the economy.

Studies in Lebanon[32] suggest that innovation through product development and entry of new firms is motivated in part by trademark protections in Lebanon. Firms in the clothing subsectors of the economy claimed to have a strong interest in designing apparel of high quality and style aimed at the Middle Eastern market but are being frustrated by trademark infringements. This is equally so in the food sector where legitimate forum suffered from rivals passing-off goods under their trademarks. This local product's development and the establishment of new firms have been frustrated by trademarks infringement targeted largely at domestic enterprises.[33] This situation is a replica of what is happening in Nigeria where imitation of locally produced goods is predominant especially in the manufacturing industry and literary/artistic subsectors of the economy.

IPRs could stimulate acquisition and dissemination of new information when patent claims are published, allowing a rival firm to use the information in them to develop further inventions. Knowledge formation is cumulative and as new invention builds on past practices, the process of technical change could accelerate.[34] Patent and trademarks also afford firms greater certainty that they face limited threats of uncompensated appropriation. This certainty could induce them

[30] Edwin Mansfield.1998.Intellectual Property Rights,Technological Change, and Economic Growth. In Intellectual Property Rights and Capital Formation in the Next Decade,5-6.Edited by Charles E. Walker and Mark A. Bloomfield. American Council for Capital Formation Center for Policy Research. Lanham, Maryland:University Press.

[31] Keith Maskus and Christine Mcdaniels "Impacts of the Japanese Patent System on productivity Growth," (Japan and the World Economy, Vol. 11, 1999) 557-574.

[32] Keith Maskus, "Intellectual Property Rights in Lebanon," International Trade Division, World Bank, (1997b).

[33] Keith Maskus, *Intellectual Property Rights in Lebanon.*

[34] Suzanne Scotchmer, "Standing on the Shoulders of Giants: Cumulative Research and Patent Law, (Journal of Economics Perspectives, Vol.4, 29-42) 1991

to trade and license their technologies and products more readily, enhancing their diffusion into the economy.

In a survey of 100 U.S. companies in six manufacturing industries to evaluate the importance of intellectual property protection in determining their investment decisions. The percentage of companies indicating that IP protection has a major influence on their foreign direct investment decisions depended on the industry and type of investment under consideration, but for all sectors and all types of investment a considerable number of companies reported that IP protection was a factor in their decisions about where to invest. Moreover, the importance of IP protection was greater for high-technology industries and for investments with the greatest potential to transfer technology.[35]

In creating and enforcing IP laws, either unilaterally or through TRIPS, developing African countries, hope to attract greater and inflows of technology. There are three independent ways through which technology is transferred to the international marketplace. Such ways include International Trade in Goods (ITG), Foreign Direct Investment (FDI) and Contractual Licensing (CL) of technologies and trademarks to unaffiliated firms, this may, in turn, lead to more economic activities thus creating more jobs in the economy.[36]

The above postulation is not absolute. IPRs have varying importance in different sectors with respect to encouraging FDI. Investment in low technology goods and services should depend relatively less on the strength of IPRs and relatively more on input costs and market opportunities. Inventors with products or technologies that are costly to initiate would pay little attention to local IPRs system to deter imitation. Firms considering local Research and Development (R&D) facility would pay particular attention to local patent and trade secret protection.[37]

In countries where the IPRs and its enforcement are weak such as in many African countries, the following may be the outflow; isolation from modern technologies and forced to develop technological knowledge from their own resources, a difficult and costly task. Secondly, such countries would obtain fewer spillovers, benefits and demonstration effect of new technologies available to such countries would be outdated. Finally, such countries would experience both limited incentives for domestic innovation and relatively few inward technology transfers.[38]

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[35] Edwin Mansfield. 1991. Intellectual Property Protection, Foreign Direct Investment, and Technology Transfer. IFC Discussion Paper No. 19. World Bank. http://www.ifc.org/economics/pubs/dp19/dp19.doc.

[36]Edwin Mansfield, "Intellectual Property Protection, Foreign Direct Investment and Technology Transfer", International Finance Corporation, Discussion Paper ; no. IFD 19*IFC working paper series. Washington, D.C. : The World Bankk. http://www.ifc.org/economics/pubs/dp19/dp19.doc (accessed Mar. 12, 2018)

[37] Ibid

[38]Nathan Associates Inc., Intellectual Property and Developing Countries. http://www.dec.org/pnacw418.accessed on 3rd May,2018

IPRs can have its negative impact on economic development, while strong IPRs bears potential for enhancing growth and development in the proper circumstances, it might also raise difficult economic and social costs. Indeed, developing African countries could experience net welfare losses in the short run because many of the costs of protection could emerge earlier than the dynamic benefits. This situation explains why it is often difficult to organize interests in favor of reform in developing economies.[39]

In most developing economies, the introduction of stronger IPR and enforcement usually lead to job loss as those who are engaged in the manufacturing and sale of fake and imitation goods lose their jobs.

A second major concern is a potential for IPRs to support monopoly pricing. However, the extent to which such price increases would emerge depends on the competitiveness of the local market and the elasticity of demand for the particular product.

Furthermore, another fundamental concern about IPRs is that their exploitation could result in diminished access to technological information. This is a result of the exclusive nature of IPRs. This is probably the reason why developing economies are reluctant at strengthening their IPR regimes.

Finally, one of the largest costs of implementing an effective IPR regime is the administrative cost in terms of funding and technical personnel. For a developing economy which may not have indigenous right holders to protect, the funding may be put to better use while technical administrative personnel could be put to a more productive sector of the economy. However in Nigeria and most African countries, at the patents Registry, there is no technical staff in the strict sense of it. Due to inadequate technical know-how, formal examination rather than a technical examination of patent claims are carried out.

EVIDENCE ON THE OVERALL IMPACT OF IPRS ON ECONOMIC DEVELOPMENT, EMPIRICAL STUDIES

There are two studies based on empirical analysis. One study by Gould and Aruban[40] revealed no strong direct effect of patents on economic development but that there was a significant positive impact when patents have interacted with a measure of openness to trade. This means that liberalization in combination with stronger IPRs increases economic development.

[39] Ibid

[40] David Grould and William Gruban 1996 "The Role of Intellectual Property Rights in Economic Growth," Journal of Development Economics Vol. 48, issue 2, 323-350, (1996) 323-350.

Ginante and Park[41] also conducted a study on how IPRs impact on economic development and investment. They too found no direct correlation between patent strength and economic development but there was a strong and positive impact of the patent on physical investment and Research and Development spending which in turn raised economic performance.

The adoption of stronger IPRs in developing economies is often defended by claims that it will attract a significant new inward flow of technology, a blossoming of local innovation and cultural industries and a faster closing of the technology gap between themselves and developed countries.

As the above studies have shown, it is clear that improved IPRs alone is not likely to produce economic development. Rather improved IPRs regime in an open economy, strengthening of human capital and skill acquisition, a strong degree of competition in domestic market could generate more international economic activities and greater indigenous innovation, job creation which will invariably lead to economic development.

AFRICA, INTELLECTUAL PROPERTY REGIME AND ECONOMIC DEVELOPMENT

A number of African Governments have improved their national IP regimes over time. Kenya, for example, established a National Innovation Agency in 2013 to facilitate science, technology and innovation, help local institutions file patent applications and take legal action if IP rights are infringed. Nigeria too has a comprehensive IP regime covering Copyright, Patent and Trademarks Rights. The Copyright Act protects works in literary, musical, artistic, cinematography, sound recordings and broadcast when they are original and has been fixed in a medium of expression.[42] The Act also provides that in respect of literary or musical or artistic works other than photographs, copyright in the work will expire seventy years after the end of the year in which the author dies. However, in the case of Government or a body corporate, copyright in the literary, musical or artistic work will expire seventy years after the end of the year the work was first published.[43] Some of the rights made exclusive to the right holder include;

(i) Reproduction of the work in any material form;[44]
(ii) Publication of the work [45]
(iii) Performance of the work in public
(iv) Production , reproduction , performance or publication of any translation of the work;

[41] Juan Ginarte and Walter Park, "Intellectual Property Rights and Economic Growth", Wiley Online Library, July 1997, Vol. 15, Issue 3, (1997) https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1465-7287.1997.tb00477.x (accessed on 9 May 2018).
[42] Laws of the Federation of Nigeria 2004, Copyright Act, S.1.(Similar provision is in the Copyright Laws of most African countries)
[43] Copyright Act, First Schedule.
[44] See e.g Masterpiece Investment Ltd. v. Worldwide Business Media Ltd. & Anor (1997) FHCL. 496 and C. B. S Inc. & Ors. v.Intermagnetic Co. Ltd & Anor (1987) FHCL 150
[45] Adenuga v. Illesanmi Press (1991) 5 N. W. L. R 82

(v) Making of any cinematograph film or a record in respect of the work;
(vi) Distribution to the public, for commercial purpose, of copies of the work, by way of rental, lease, hire, loan, or similar arrangement.

I have taken the pains to detail out the above provisions in view of the fact that Nigerian Citizens enjoy more rights under Copyright than any other area of intellectual property.

The Trademarks Act, makes extensive provisions for the effect of registration and non-registration, [46] the validity of registration, [47] the registration procedure and duration of registration, [48] assignment and transmission of trademarks, [49] the removal of trademarks, [50] rectification and correction of register, certification trademarks, [51] international arrangement, [52] power and duties of the registrar [53] and legal proceedings on trademarks. [54] The Patents and Design Act on the other hand provides for the granting of patents [55] and registering of designs. [56] It, among others, makes provisions for patentability of an invention, [57] the right to a patent [58] procedure for application, [59] examination as to formality and grant of patent, [60] duration, surrender, and nullity of a patent, [61] compulsory and contractual licenses, [62] assignments and transfer of rights, [63] infringement of right, [64] legal proceedings [65] and foreign priority. [66]

PROBLEMS OF IP REGIME IN AFRICA

African countries have comprehensive array of laws that deal with the registration and protection of IPRs. However, the infrastructure that are required and enforcement of these rights constitute a huge problem for right holders.

[46] Nigerian Trademarks Act, Section 3
[47] Nigerian Trademarks Act, Section 14
[48] Nigerian Trademarks Act, Section 23.
[49] Nigerian Trademarks Act, Section 26.
[50] Nigerian Trademarks Act, Section 31.
[51] Nigerian Trademarks Act, Section 38.
[52] Nigerian Trademarks Act, Section 43.
[53] Nigerian Trademarks Act, Section 44.1 & 2.
[54] Nigerian Trademarks Act, Section 1 & 2.
[55] Nigerian Patents and Designs Act, Section 5.
[56] Nigerian Patents and Designs Act, Section 13.
[57] Nigerian Patents and Designs Act, Section 1.
[58] Nigerian Patents and Designs Act, Section 2.
[59] Nigerian Patents and Designs Act, Section 3.
[60] Nigerian Patents and Designs Act, Section 4.
[61] Nigerian Patents and Designs Act, Section 7.
[62] Nigerian Patents and Designs Act, Section 37.
[63] Nigerian Patents and Designs Act, Section 24.
[64] Nigerian Patents and Designs Act, Section 25.
[65] Nigerian Patents and Designs Act, Section 26.
[66] Nigerian Patents and Designs Act, Section 27. In respect of Designs, the Act provides for the nature and registration of Industrial Designs and the effect of registration (Section 29).

An effective IP system consists of the administrative and enforcement arms. The administrative arm is made up of registries and other government offices that regulate IP matters. These registries and offices are not well equipped with modern technologies. The technical staff that are required for issues that are technical in nature are not available.

I recommend that these registries and offices be run with qualified technical personnel with modern instruments of technology. Furthermore, the various African governments should avail themselves of technical assistance being offered by WIPO in order to enhance the capacity of administrative arm of the IP system in their respective countries.
Apart from the administrative arm, the IP system requires an efficient enforcement arm which consists of the judiciary and the police. This will ensure that cases of infringement are promptly discovered, investigated and punished. As I had mentioned earlier in this paper, a weak IP enforcement is worse than no enforcement at all.

CONCLUSION AND RECOMMENDATIONS

It is trite that most African countries are mono product economies. This statement is confirmed by Punam Chuhan-Pole, Lead Economist for the World Bank stated in the World Bank report[67] for 2016.

In Nigeria, Angola, and Libya, it is a well known fact that over 80% of the national revenues of these countries comes from oil. Other sectors of the economy, especially biotechnology, are not developed. Biotechnology is a potential area of revenue for African countries that, when properly harness, will improve the economy significantly. Africa is rich in biodiversity.

Rather than allow and follow the developed economies dictate the area of concentration of intellectual property system, we should concentrate on our area of strength in intellectual property which is Biotechnic and Biodiversity. The crisis of protection in the current world discourse on the protection of Traditional Knowledge (TK) against the background of the increasing potential economic use of the resources that constitute this type of knowledge, developed or perfected by rich chemical companies of the developed economies as a localized protection, if any maybe largely powerless against global exploitation.

In the area of administration of IPRs, funding, infrastructure and technical know-how have been identified as problems. I suggest that the Patent and Trademarks Registries in African countries can charge fees adequate enough to enable them to administer IPRs; after all majority of the rights holders are foreigners who will readily pay for such service. In order to overcome infrastructural problems, computers, and other electronic devices be deployed to the Registry so

[67] https://eaglepacks.wordpress.com/2016/10/01/mono-economy-countries-are-vulnerable-world-bank. Accessed 20 May,2018

that transactions can be done electronically which will make the transactions move faster. In order to overcome technical manpower problems, the Registry staff be trained periodically while the technical staff is employed to attend to patent matters or the Registry by availing itself of patent cooperation treaty. The Trademarks and patent Acts respectively should be amended to reflect current realities.

It may be of interest to note that while the developed economies benefit from strong patent protection, developing economies rarely benefit in terms of stimulating local innovations as they mainly use the imported finished product rather than innovate or produce. An impotent patent system assists local inventive activities in the early stages of technological ability. It is against this background that I view the TRIPS regime for enforcing strong patent to virtually all facets of technology as counter-productive to many developing economies that are still at the infant stage of their growth. Perhaps this among others is the reason Africa has not put in place a strong common IP framework to regulate IP ownership and enforcement of rights.

Intellectual Property Rights by itself cannot lead to economic development but when the Intellectual Property Rights administration and enforcement are strong, this will encourage innovations which in turn will lead to job creation, wealth and further innovation. This among other parameters such as macroeconomic stability, market openness, policies for improving the economy, technological infrastructure and the acquisition of human capital mentioned earlier are what will lead to economic development in Africa.

There is no doubt that Africa does not have a common IP framework even though virtually all the countries in the continent are signatories to international protocols which regulate IP. It is hoped that the recent move of ARIPO and OAPI and the AU initiative on PAIPO will eventually culminate in a Pan-African IP organization thus establishing a common Pan-African framework on IP. A good understanding, on the part of African leaders, of the workings of IPR and its supportive role in economic development will encourage them to support the evolvement of a common African IP frame work in PAIPO.

Thank you.