

<sup>1</sup>TECHNICAL PAPER ON:  
**THE WIPO DEVELOPMENT AGENDA: MAXIMISING ON THE PATENT  
SYSTEM**

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ARTICLE IN:

**RESPONSE TO KIPI MANAGING DIRECTOR'S 2008 INVITATION TO KIPI  
STAFF TO AUTHOR TECHNICAL ARTICLES FOR PUBLICATION BY KIPI**

WITH OBJECTIVE OF:

**“AWARENESS CREATION AND DISSEMINATION OF INDUSTRIAL  
PROPERTY KNOWLEDGE” AS PART OF FULFILLING KIPI'S “MANDATE  
TO PROMOTE INVENTIVENESS AND INNOVATION IN KENYA**

AND:

**FURTHER STIMULATION OF DEBATE AND GENERAL POLICY-ORIENTED  
RESEARCH THAT MIGHT CONTRIBUTE TOWARDS THE  
IMPLEMENTATION OF THE WIPO DEVELOPMENT AGENDA FROM THE  
PATENT PERSPECTIVE**

TRIGGERED IN 2008 BY:  
**THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT  
(UNCTAD)**

AND:  
**THE INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE  
DEVELOPMENT (ICTSD)**

UNDER:  
**THE UNCTAD-ICTSD PROJECT ON INTELLECTUAL PROPERTY RIGHTS  
(IPRS) AND SUSTAINABLE DEVELOPMENT**

**4<sup>th</sup> February 2009**

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# The WIPO Development Agenda: Maximising on the Patent System

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<sup>2</sup> See Disclaimer at end of Section I: Introduction

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## List of Abbreviations

|         |   |
|---------|---|
| ACP:    | African, Caribbean and Pacific (Countries)                                |
| ARIPO:  | African Regional Industrial Property Organisation                         |
| CDIP    | WIPO Committee for Development and Intellectual Property                  |
| CDP     | United Nations Committee for Development Policy                           |
| COMESA  | Common Market for Eastern and Southern Africa                             |
| EAC     | East Africa Community   |
| EPC:    | European Patent Convention  |
| EPO:    | European Patent Office  |
| EU:     | European Union  |
| FDI     | Foreign Direct Investment   |
| GNI     | Gross National Income   |
| GPO:    | German Patent Office  |
| ICTSD   | International Centre for Trade and Sustainable Development                |
| IP:     | Intellectual Property   |
| IP*:    | Industrial Property   |
| IPC:    | International Patent Classification                                       |
| IP*Rs:  | Industrial Property Rights  |
| IPRs:   | Intellectual Property Rights  |
| JPO:    | Japanese Patent Office  |
| KIPI:   | Kenya Industrial Property Institute.                                      |
| KIPPA:  | Kenya Intellectual Property Professionals Association                     |
| LDC:    | Least-Developed Country   |
| NGO     | Non-Governmental Organisation   |
| OAPI:   | African Industrial Intellectual Organisation                              |
| PCT:    | Patent Co-operation Treaty  |
| R&D     | Research and Development  |
| SMART   | Specific, Measurable, Achievable, Realistic and Time-bound                |
| SME     | Small and Medium Enterprise   |
| SWOT    | Strengths, Weaknesses, Opportunities and Threats                          |
| TRIPS:  | Agreement on Trade-Related aspects of Intellectual Property Rights (1994) |
| TTO     | Technology Transfer Offices   |
| UNCTAD  | United Nations Conference on Trade and Development                        |
| UNDP:   | United Nations Development Programme                                      |
| US(A):  | United States (of America)  |
| USD     | United States Dollar(s)   |
| USPTO:  | United States Patents and Trademarks Office                               |
| WHA:    | World Health Assembly   |
| WHO:    | World Health Organisation   |
| WIPO:   | World Intellectual Property Organisation                                  |
| WIPO-DA | WIPO Development Agenda   |
| WTO:    | World Trade Organisation  |

# Section I

## Introduction

### *Interfacing Intellectual Property and Development*

Intellectual Property (IP)<sup>4</sup> although being an intangible product of human creation has attributes<sup>5</sup> of tangible property<sup>6</sup> and confers exclusive commercial rights<sup>7</sup> to the owner<sup>8</sup> of the property over the rest of the world, save for the sovereign<sup>9</sup>, for the exploitation and dominion of the property. Although the society may not fully “appreciate” the role of intellectual property mainly because, due to its intangibility or arcane and complex legal nature<sup>10</sup>, does not conform to the layman’s conception of property, intellectual property has revolutionised the society economically and socially<sup>11</sup>”.

I stand to be challenged, without fear of contradiction, to state that daily an average person witnesses thousands of IP, creations of human mind, born or embodied in infrastructure, goods and services, protected or otherwise. From waking up (housing, bed, beddings), cleaning (soap, water delivery), dressing (garments, shoes, cosmetics), feeding (food, its delivery, cutlery), transport (vehicles, their delivery and ways), reading and entertainment (literary and artistic works), marketing, working (environment, tools), etc.

Generally, IP impacts on all areas of development: land use, science and technology, art and music, international and regional relations, social science, business and profession, modern culture<sup>12</sup>, etc. Thus IP directly relates to the

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<sup>4</sup> Intellectual property is so called because it arises from the human intellect, an idea that can only be protected upon expression. It is divided into three aspects: Plant Breeder Rights (**PBRs**), Copyright and Neighbouring Rights (**CNRs**) and Industrial Property Rights (**IPRs**).

<sup>5</sup> It is owned by a person (whether natural or legal), is granted and administered by an arm of a State(s) with the state reserving the right of eminent domain, can be sold (assigned), leased (licensed), developed (exploited), mortgaged and is usually enforceable in law

<sup>6</sup> Includes fixed property like house, land etc. as well as movable property like a car or watch, shirt, etc.

<sup>7</sup> This exclusive commercial rights are commonly referred to as Intellectual Property Rights

<sup>8</sup> Most intellectual property systems require that the owner of the property is the creator or one (assignee) who has been assigned, in writing, the property by the creator. The assignee may also conclude further assignment contracts.

<sup>9</sup> In the precincts of the advantage or practical right of the sovereign called "eminent domain" the sovereign may take the property of a private citizen on public interest. This applies to all countries although some of them have legal provisions that such take-over for public use must be associated with just compensation.

<sup>10</sup> See ICTSD and UNCTAD, 2003 Page 3. Other related factors include constraints in resources and limited access to research material, facilities and prototyping possibilities, deficiency in technical and managerial skills, disorganized markets (Idris, 2002, P. 37), lack of public awareness and related education, etc

<sup>11</sup> See details in Kayton, 1989, P.1-3 and Idris, 2002

<sup>12</sup> Definition of development at <http://en.wikipedia.org/wiki/Development>

three criteria used<sup>13</sup> in the determination of development levels of countries by the United Nations: Gross National Income (GNI)<sup>14</sup>, human assets (nutrition, health, school enrolment and literacy) and economic vulnerability (natural shocks, trade shocks, exposure to shocks, economic smallness and economic remoteness)<sup>15</sup>. Indeed in this knowledge driven economy<sup>16</sup> a well balanced and utilised IP system potentially play an important role in the technological, industrial, cultural, social and economic development<sup>17</sup> of many nations of the world<sup>18</sup>. Intellectual property (is) a cornerstone of modern economic policy of nations, a catalyst for development and an acknowledged powerful development tool<sup>19</sup>.

### ***The Practice before Adoption of the WIPO Development Agenda***

Despite IP being a powerful development tool<sup>20</sup>, its utilisation has been a preserve of the developed countries<sup>21</sup> and has not been fully used to the optimal advantage of developing countries. In essence, the disparities of IP assets between the developed and developing countries are as wide as the gaps in other forms of wealth<sup>22</sup>.

This notwithstanding, there have been significant efforts to globalise IP as evidenced by significant changes in the international regulatory system aimed at strengthening IP protection<sup>23</sup> and the pressure being exerted on developing countries to implement such system<sup>24</sup> including through free-trade agreements and unilateral pressure<sup>25</sup>. Indeed Developing Countries are increasingly facing

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<sup>13</sup> By the United Nations Committee for Development Policy (CDP) in the 2006 review of the list of LDCs (UNCTAD, 2007, 5<sup>th</sup> Front Page)

<sup>14</sup> IP influence knowledge intensive industries that increasingly contribute to the GNI (Idris, 2002, P. 34)

<sup>15</sup> See details in UNCTAD, 2007, 5<sup>th</sup> Front Page: 'What are the Least Developed Countries?'

<sup>16</sup> See UNCTAD, 2007, P. 123; USPTO, 2008 ; Carlos Gutierrez (2006), Idris, 2002, P. 115, Garrison, 2006, P. Vii

<sup>17</sup> See details in Idris, 2002. "Intellectual Property could be called the Cinderella of the new Economy" (Idris, 2002, P. 24). "Economic growth is driven by two main sources: the supply factors of production, namely physical capital and labor (or human capital), and technology ... IP significantly influence the appreciation in value and accumulation in quantity of human capital, and the rate and direction of technological change" (Idris, 2002, P. 33)

<sup>18</sup> With over USD 290 million in export earning from biotechnology, Foreign exchange revenue from sales of just Menengitis B Vaccine owned by Cuba's Finlay Institute and licenced to SmithKline Beecham (an Anglo-American firm) has helped Cuba repay its debts to Argentina, Brazil and Colombia (Idris, 2002, P. 117).

<sup>19</sup> See WIPO, 2005: WO/GA/32/13 Page 30 Paragraph 125; USPTO, 2008 , Carlos Gutierrez (2005), Condoleezza Rice (2005), Susan Schwab (2006), Alberto Gonzalez (2006) and Rob Portman (2005)

<sup>20</sup> Although empirical evidence of the role of IP in growth remains limited and inconclusive with conflicting views persisting on the impacts of IP on development prospects (Garrison, 2006 P. Vii)

<sup>21</sup> For example, developed countries own 97% of the world's patents<sup>21</sup> and more than 95% of patent applications in developing countries are filed by foreigners (Idris, 2007, P. 37)

<sup>22</sup> See details in Idris, 2003, P. 1, and Misati, 2008, Box 4.0

<sup>23</sup> USPTO, 2008 , President George W. Bush (2006)

<sup>24</sup> See ICTSD and UNCTAD, 2003 Page 3-4

<sup>25</sup> See Malpani, 2008, P. 6

the prospect of enhanced non-trade barriers through a heightening of international IP standards and enforcement and a proliferation of IP fora<sup>26</sup>. resulting to a divide between developing countries<sup>27</sup> and developed countries. Supported by various experts, the former advance various theories against the IP system while the latter do so in favour of a stronger IP system<sup>28</sup>.

Consequently, the developing countries<sup>29</sup> have called for a more careful analysis of IP system including policy goals, interests, and conditions thereof and emphasised on the need for policy space commensurate with that developed countries relied upon to serve their national development goals<sup>30</sup>. The clear underlying philosophy is that IP protection should be enacted in accordance with the level of development of different countries and that protection of private interests should be balanced with that of the larger public interest<sup>31</sup> to strengthen technological progress and to ensure that the poor have better access to new technologies and products<sup>32</sup>. In that context there is need for reform of the current IP regime to yield and promote a better-balanced international system adapted to the requirements of developing countries emphasizing on the transfer of technology and access to knowledge and information, crucial to developing countries in stimulating innovation and creativity<sup>33</sup>.

This call has not only been reflected in several international multilateral fora<sup>34</sup> but also in bilateral and pluralateral (regional) arrangements including ACP-EU<sup>35</sup>, UNDP<sup>36</sup>, WTO<sup>37</sup>, WHO<sup>38</sup>, and WIPO<sup>39</sup>.

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<sup>26</sup> With the WHO, World Customs Organisation and several other international bodies now jumping into the fray (Joseph, 2008)

<sup>27</sup> Including LDCs

<sup>28</sup> See various quotes of both sides in Misati, 2008, Tables 1.1 and 1.2

<sup>29</sup> Including the Least-Developed Countries (LDCs)

<sup>30</sup> See ICTSD and UNCTAD, 2003 Page 5. “Historically evidence confirms that several of today’s developed countries readily exploited the absence of agreed international standards in the past, adapting their level of protection according to national needs” and “benefited from the freedom to choose from a variety of possible national systems.

<sup>31</sup> See UNCTAD/LDC/2007, Page 100 and Idris, 2002, Page 45-46.

<sup>32</sup> The statement of the Secretary-General of the United Nations, Mr. Ban Ki-moon ([www.un.org/ecosoc](http://www.un.org/ecosoc))

<sup>33</sup> See UNCTAD/LDC/2007, Page 100

<sup>34</sup> See WIPO, 2004 WO/GA/31/15 Page 68

<sup>35</sup> IP constitute a whole chapter in the Economic Partnerships Agreements (EPAs) being negotiated between the African Caribbean and Pacific (ACP) countries and the European Union (EU). Although EU is not very keen on new development offers, some negotiating blocks have insisted that if there is no development, then there is no EPAS.

<sup>36</sup> The Millennium Development Goals (<http://www.undp.org/mdg/basics.shtml>)

have featured consistently in IP and development matters under various UN specialized bodies

<sup>37</sup> The Doha Development Agenda (DDA) set on 14<sup>th</sup> November 2001 by the 4<sup>th</sup> Ministerial Conference, the top decision making organ of WTO, also addresses issues of IP and development especially in Paragraphs 17-19. The Conference also adopted a separate Declaration on the TRIPS Agreement and Public Health. See details in WTO, 2002

<sup>38</sup> After about three years of volatile negotiations, on 24<sup>th</sup> May 2008 WHO adopted a Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property. Element 5 strategises and action plans on Application and Management of IP to Contribute to Innovation and Promote Public Health and

## ***The WIPO Development Agenda (WIPO-DA)***

In pursuit of this philosophy, in 2004, Argentina and Brazil initiated at WIPO a proposal for the Establishment of a Development Agenda for WIPO<sup>40</sup> that was appreciably embraced by a group of other developing countries – Friends of Development<sup>41</sup> – and many others<sup>42</sup> including intergovernmental and non-governmental organizations. This proposal was prompted by, among others, the recognition of global knowledge asymmetries and the need for greater integration of a development dimension into global IP policymaking<sup>43</sup>. Upon four years of intensive consultations, discussions and negotiations under various WIPO structures<sup>44</sup>, in 2007, the WIPO-DA was adopted.

The WIPO-DA aims to ensure that development considerations form an integral part of WIPO's work and as such, it is a cross-cutting issue which touches upon all sectors of WIPO. It is currently organized into a 6-clustered 45 recommendations, 19 of which are for immediate implementation under the Committee for Development and Intellectual Property<sup>45</sup>.

### ***Aim of this Paper***

This paper aims at discussing the role of the patent system in development and how it can be maximised towards the implementation of the WIPO-DA. It is response to KIPi's 2008 policy on staff to author technical articles for publication by KIPi and is triggered by the UNCTAD-ICTSD Project on Intellectual Property

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thus development. Several other elements also address issues of IP and development. For details see WHO, 2008

<sup>39</sup> The mission of WIPO is “to promote the protection of IP rights worldwide, and to help extend the reach of the benefits of the international IP system to all its Member States” (Idris, 2002, Page 5)

<sup>40</sup> See WIPO, 2004 WO/GA/31/11

<sup>41</sup> Argentina, Bolivia, Brazil, Cuba, Dominican Republic, Ecuador, Egypt, Iran (Islamic Republic of), Kenya, Peru, Sierra Leone, South Africa, United Republic of Tanzania and Venezuela. See WIPO, 2005 IIM/3/3, Par. 117

<sup>42</sup> See among others WIPO, 2004 WO/GA/31/15 Pages 33-68; WIPO, 2005 WO/GA/32/13 Pages 21-40; WIPO, 2006 WO/GA/33/2 Rev. Pages 6-31; WIPO, 2007 A/43/16 Pages 135-160; WIPO, 2005 IIM/1/6; WIPO, 2005 IIM/2/10; WIPO, 2005 IIM/3/3; etc.

<sup>43</sup> See UNCTAD, 2007, P. 100

<sup>44</sup> Since September 1998 development issues under WIPO were considered under its Permanent Committee on Cooperation for Development Related to Intellectual Property (PCIPD) (WIPO, 1988 WO/CF/16/2, P. 2-3). In 2004 PCIPD was coagulated with the Inter-Sessional Inter-Governmental Meetings (IIM) to consider proposals on the WIPO Development Agenda (WIPO, 2004 WO/GA/31/15, P. 68). After three PCIPD/IIM meetings, in 2005 the Provisional Committee on Proposals Related to a WIPO Development Agenda (PCDA) was constituted to take forward the IIM process by accelerating to completion the discussions on proposals relating thereto, and in the interim, and without prejudice to the provision of technical assistance, the PCIPD was ceased to exist (WIPO, 2005 WO/GA/32/13, P. 40). The PCDA held four meetings in 2006 and 2007 after which 45 Recommendations on the WIPO Development Agenda were adopted and the Committee on Development and Intellectual Property (CDIP) was established to, among others, oversee their implementation (WIPO, 2007 A/43/16, P. 152).

<sup>45</sup> See <http://www.wipo.int/ip-development/en/agenda/>

Rights and Sustainable Development<sup>46</sup> upon commissioning of the author to prepare a Policy Brief on The Research Exemption in Patent Law<sup>47</sup>. It might not be exhaustive, but aims at examining the WIPO-DA vis-à-vis patents in a creative manner with a view to:

1. Identify concrete recommendations and specific activities to foster the Implementation;
2. Stimulate further the debate and generate policy-oriented research, which would contribute towards the Implementation; and
3. Create awareness and disseminate Industrial Property Knowledge as part of fulfilling KIPi's mandate of promoting inventiveness and innovation in Kenya

### ***Disclaimer***

Although the author is an employee of the Kenya Industrial Property Institute, the views expressed herein do not necessarily reflect those of the Institute.

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<sup>46</sup> See <http://www.unctad.org/Templates/Page.asp?intItemID=3443&lang=1>

<sup>47</sup> Available at (...). It is one of the Policy Briefs commissioned under UNCTAD-ICTSD Project to stimulate further the debate and generate policy-oriented research, which would contribute towards the implementation of the WIPO-DA recommendations. It aims at examining the issue in a creative manner with a view to identifying concrete recommendations and specific activities to foster the implementation of Recommendations 17 of the WIPO-DA



# Section II

## Patent Law and System

### *Rationale for Patent Law*

Let us consider a patent as an official document issued by a sovereign power to an inventor conferring, in writing, exclusive rights<sup>48</sup> to the inventor over the invention for a limited time<sup>49</sup>. In other words, a patent as an intensely practical, really life legal instrument with which an inventor or corporation can protect the investment in time, money, effort and other resources expended in order to create a new contribution to technology and that patent law, as a specialised field of endeavour and as a special form of the law that protects property without which the doctrine of "survival for the fittest" would reign<sup>50</sup>, is the legal system designed to provide government sanctioned remedies and means to protect the inventor's rights in his or her new contribution to society and is peculiarly effective in any society where private property is recognised<sup>51</sup>.

From Section I, we can deduce that patentable inventions have revolutionised the society economically and therefore a society that provides no legal shelter for its inventors is likely to have a weak economy<sup>52</sup>. That legally, patents as aspects of IP have attributes of personal property in that its owner has exclusive rights over the rest of the world, save for the sovereign, for its exploitation and dominion. This property system permits organisations to plan rationally and effectively in order to carry out business activities relative to new technology in an orderly way<sup>53</sup>.

On the other hand, the "public interest" (including "public domain") attribute of patents facilitates access to, and use of the "personal property" attribute to further

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<sup>48</sup> These rights usually include for *Product Patent*: making, importing, offering for sale, selling, using or stocking the product for such purposes. In some regimes e.g. US, such rights also extend to components and materials of the product thereof. *Process Patented*: using the process or doing acts above for product got directly by the process. See details in Misati, 2008, P.17, Table 3.1.

<sup>49</sup> Butterfield, 2003, P. 1192; Idris, 2002, P. 18 and Gifis, 1984

<sup>50</sup> "... if the creator of new technology does not have the financial, production, distribution, merchandising and related powers of another organization, then the most powerful organization will reap the profit of the added value, just as the strongest ape in the jungle will get the bananas to the exclusion of his weaker competitors" (Kayton, 1989, P. 1-3).

Similarly, the "powerful and mighty" will continue to unfairly exploit the "weak(er)" and would continue to acquire unmerited ownership to IPRs. Besides, large corporations and individuals will resort to trade secrets and thus deny the rest the technology vital for the society

<sup>51</sup> See Kayton, 1989, P. 1-2. Kayton is a George Mason University Foundation Professor of Intellectual Property Law.

<sup>52</sup> See Idris, 2002, P. 81

<sup>53</sup> The organisations treat the expenses of the invention, innovation and patenting as a cost of doing business, which is transferred directly to the product and service costs paid by the consumers who are thus immediate and direct beneficiaries of the invention or innovation. For details see Kayton, 1989, P. 1-2.

development interests without infringing on the exclusive rights. Normally, public interest is safeguarded through conditions (e.g. obligations), limitations, exclusions, exemptions or flexibilities incorporated in patent law.

For example, patent laws provide for three conditions of patentability<sup>54</sup>: newness (novelty)<sup>55</sup>, industrial applicability and inventive step<sup>56</sup>. Patent rights enforcement<sup>57</sup> is territorial<sup>58</sup> while patent granting procedure, although territorial, has universal effect<sup>59</sup>. A territory can reflect national, regional or international jurisdiction<sup>60</sup>.

## ***Purpose of Patent System***

Millions of patents have been granted worldwide for one main reason: to encourage an inventor to disclose his invention to the public and thereby promote the progress of science and the useful arts<sup>61</sup>. Some experts look at this arrangement as a bargain or contract between a government and an inventor where the inventor discloses<sup>62</sup> the invention and the government in return provides the monopoly for a period of time<sup>63</sup>. Typically the purpose of the patent system is three fold<sup>64</sup>:

1. to promote creativity and inventiveness by offering exclusive ownership rights and a reasonable period for covering R&D costs for the invention;

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<sup>54</sup> See KIPI, 2001, §22; JPO, 2007, Art. 29; USPTO, 2007, §101-103; WIPO, 1997, Art. 27(1); EPO, 2007, Art. 52(1) and IPOI, 2008, § 25

<sup>55</sup> Patent laws provide that an invention is new if it is not anticipated by prior art. Written and oral disclosures, use, exhibition or other non-written means, wherever they occur anywhere in the world, constitute prior art and thus destroys novelty of the invention.

<sup>56</sup> In substantiating the inventive step patent laws provide that an invention is conceived to involve an inventive step if it is not obvious to a person skilled in the art (KIPI, 2001, §24; JPO, 2007, Art. 29(2); USPTO, 2007, §103(a); EPO, 2007, Art. 56 and IPOI, 2008, § 25).

<sup>57</sup> Civil remedies usually include injunction relief, damages/compensation claim, seizure or forfeiture or destruction of infringing goods while criminal penalties usually include fine, imprisonment or both especially for wilful infringement. See details at Misati, 2008, P. 18, Table 3.1

<sup>58</sup> Patent rights are limited to and valid in only the territory of the country or jurisdiction that issued the patent (Idris 2002, P. 80).

<sup>59</sup> A patent once granted in one territory to a particular applicant cannot be granted to another applicant in neither the same nor different territory since it will lack novelty, that is determined world-wide, and the inventive step

<sup>60</sup> International and regional arrangements on patents currently in place include PCT, EPC, ARIPO, OAPI, etc. Although patents granted under the said arrangements have international effect, the member states reserve the right to contest the grant at national level.

<sup>61</sup> See Brink, Gipple and Hughesdon, 1959

<sup>62</sup> The disclosure involves a description of the invention that must be clear and sufficient enough such that a man skilled in the "art" can carry it out

<sup>63</sup> See Tamara, 1987, P. 22 and Idris, 2002, P. 81

<sup>64</sup> Purposes one and two thereof being patent-owner financial benefits that are usually achieved in three levels: recouping R&D costs for the invention (usually capital, time, equipment and labour), making profit from the unit sales of products incorporating the invention and getting royalties and fees from licensing or assignments of the invention (technology transfer) (Idris, 2002, P. 37, 78-79).

2. To promote investment and commercialisation of new inventions through limited<sup>65</sup> exclusive rights in exploiting the invention; and
3. To diffuse knowledge and information through publication of patent applications and grants for the benefit of other R&D institutions and society as a whole

### ***Functions and Role of Patent System***

Significant functions and roles of the patent system include<sup>66</sup>:

1. Stimulates R&D at universities and research centres;
2. Promotes technology transfer and FDI;
3. Serves as a catalyst of new technologies and new businesses;
4. Empowers businesses, especially SMEs, with regard to IP asset accumulation, management, and use;
5. Guarantees Moral and Economic Rights;
6. Yield patents that act as Technological and Industrial Development Indicators;
7. Provides Elements for Assessing Economic Dynamics;
8. Acts as Indicators of Innovative Capacity of company and country; and
9. Provides patents Elements for Monitoring Domestic and Foreign Competition

In conclusion, the role played by the patent system is threefold – legal, economic and technological aspects<sup>67</sup>. The technological aspect is very relevant to this paper and is briefly discussed in Section III.

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<sup>65</sup>Common exceptions to patent rights are discussed in Section III below

<sup>66</sup> See details in Misati, 2008, P. 16-24

<sup>67</sup> Making the patent system as a right of property a weapon that is both offensive and defensive - its publication, as a counterpart to the monopoly it affords, constitutes a privileged element of scientific and technical information

## Section III

### Patent Law vis-à-vis Research and Development

#### *Patent Law Verses Public Interest in R&D*

Patents have some unique characteristics with clear advantages over other sources of information that make them eminently useful sources of technological and thus scientific (R&D) information<sup>68</sup>. In Section II, it has already been established that the patent system contract is about monopoly verses disclosure. Consequently conventional patent law requires disclosure as a condition of patentability - that the disclosure, besides involving a description of the invention that must be clear and sufficient enough, should also present the best method of achieving the invention- with two main objectives:

1. To enable a person “skilled in the art”<sup>69</sup> to carry out the invention<sup>70</sup>; and
2. To facilitate and inspire further research activities around the invention, improve on it and yield new inventions based on the already existing one<sup>71</sup>.

#### *Patent Law and System as Tool for R&D*

The second objective is the most relevant to this paper. Indeed, pre-existing inventions form research tools for further R&D activities and Information disclosed in patents contributes to the scientific and technical knowledge upon which a nation is built. It is estimated that there are over 30 million patents in the world today - with an average of 1 million new patent documents being filed and published yearly<sup>72</sup> - and 80-90% of the technical knowledge is stored in the archives of patent offices all over the world. However, use of this information is largely limited to the patent granting procedure, while it's potential for industry, research and public information have not been fully exploited.

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<sup>68</sup> See details in Misati, 1999, Pages 8, 11 & 15

<sup>69</sup> “This is an hypothetical person whose education or occupational credentials would make him or her competent in the field of invention. For example an electrical engineer would be a person with ordinary skill with respect to integrated circuits, whereas a prosthetics engineer would be a person with ordinary skill in the art of designing knee braces” (Elias, 267).

<sup>70</sup> KIPI, 2001, §34; JPO, 2007, Art. 35-36; USPTO, 2007, §112; EPO, 2007,83 , WIPO, 1997, Art. 29(1); IPOI, 2008, 64(h) and Idris, 2002, P. 81

<sup>71</sup> “The patent system promotes technological and business competition because patent holders and their competit(ors) race to improve inventions and create new ones ... (and thus) the patent system serves as the framework to keep the wheel of invention turning” (Idris, 2002, P. 82).

<sup>72</sup> See Idris, 2002, P. 86

It is in public domain that the patent system generates competitive innovations by enabling competitors to carry further research and development based on the already protected inventions<sup>73</sup>, that innovation builds on the knowledge and findings of previous researchers including adaptation of existing technologies to local conditions<sup>74</sup> and most innovation occurs incrementally by building on preceding technologies or existing knowledge to create new goods<sup>75</sup>. Experts estimate that about 30% of all expenditure incurred on developing new technical processes and products could be saved if information contained in patent documents were known and used. For example, EPO estimates that the European industry loses USD 20 billion every year due to lack of patent information, which results in duplication of effort such as re-inventing existing inventions, resolving problems that have already been solved, and developing products that are already in the market<sup>76</sup>.

The following are some basic facts that make disclosure in patent law and the uniqueness of patents in general powerful tools for research and development<sup>77</sup>. Patents:

- (a) Are **public documents**<sup>78</sup> and thus are readily available for use by any interested party;
- (b) **Disclose complete**<sup>79</sup>, **unique, state-of-the-art, technological information** on new inventions **earlier**<sup>80</sup> than other documentary sources of technological information;
- (c) Have a fairly **uniform composition and presentation**<sup>81</sup> thus generally easily read;
- (d) Of same family<sup>82</sup> are available in a number of **different languages** offering the user familiar language choice;
- (e) Are **classified**<sup>83</sup> according to the fields of technology of the invention thereby facilitating user-friendly retrieval of **highly concentrated and technically advanced** information in any branch of technology of interest; and

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<sup>73</sup> See Idris, 2002, P. 80

<sup>74</sup> Malpani et al., 2008, P. 21 & 27

<sup>75</sup> Okediji, 2006, P. x

<sup>76</sup> See Idris, 2002, P. 88

<sup>77</sup> See details in Misati, 2008, Pages 22-24

<sup>78</sup> Since they must be published usually 18 months after the filing date

<sup>79</sup> That is sufficient for practical utility to industry.

<sup>80</sup> In obeying the principle of first to file gets the patent

<sup>81</sup> Facilitated especially by bibliographic data (including names and addresses), description, claims and drawings that also facilitates technology transfer.

<sup>82</sup> Patent documents published in different countries but relating to the same invention

<sup>83</sup> usually International Patent Classification symbols (IPC).

- (f) Bear a **date** for purposes validity allowing patents no longer valid to be exploited without the consent of the patentee.

### **Patent Law: Facilitating R&D**

In order to optimise the role played by patents in R&D, the patent system is designed to strike the proper balance between the inventor's (private) interest and the public interest, safeguarding the latter through several ways including limitations to exercise of patent rights<sup>84</sup> and prevention of abuse and anti-competitive practices thereof. As regards R&D, besides **patent law providing expressly for the exclusion of research activities** from acts of patent infringement, I consider the following provisions of patent law as further designs to facilitate R&D. Patent rights<sup>85</sup>:

- (i) Do not extend to acts done for research<sup>86</sup>;
- (ii) Do not extend to products temporally present in the territory of jurisdiction of the patent right;
- (iii) Do not extend to acts done solely for uses reasonably relating to the development and submission of information required under law in the territory of jurisdiction of the patent rights;
- (iv) Are territorial<sup>87</sup>;
- (v) Are subjected to "prior user" exemption<sup>88</sup>;
- (vi) Are subjected to annual maintenance or renewal fee otherwise they lapse<sup>89</sup>; and
- (vii) Are exhausted by the first sale of the patented product<sup>90</sup>;

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<sup>84</sup> Although the freedom of countries to adopt exceptions to patent rights in accordance with their policy needs, was taken away by the TRIPS Agreement that evolved the exceptions by introducing substantive provisions to regulate them (Garrison, 2006, P. 2)

<sup>85</sup> See details in Misati, 2008, P. 26, T. 3.3. Garrison, 2006, P. 18, T.1 summarises other policy issues addressed by various exception.

<sup>86</sup> scientific or otherwise

<sup>87</sup> limited to and valid in only the territory of the country or jurisdiction that issued the patent and thus the invention can be exploited in the rest of the countries and jurisdictions (Idris, 2002, P. 79 - 80)

<sup>88</sup> Do not extent to activities existing before the filing or priority date of the patent.

<sup>89</sup> Actually the average effective life of a patent before abandonment is five years and only 37% of patents are maintained until the end of their (twenty-year) term (Idris, 2002, P. 92)

<sup>90</sup> exhaustion of patent rights that facilitates parallel importation

## Section IV

# Implementation of Recommendations of the WIPO-DA

### *Interpreting Recommendations of WIPO-DA*

This section aims at discussing the implementation of the Recommendations of the WIPO-DA from the perspective of the Patents System. In order to make some progress, it is important for us to be guided by the following facts:

1. That the Patent System vis-à-vis the Recommendations of the WIPO-DA, is anchored in the wider IP system;
2. That, as already established in the previous sections, a good patent system provides technological tools and information for further R&D activities;
3. That R&D is can be an expensive undertaking<sup>91</sup> depending on the field of technology - e.g. the estimated cost of developing and launching a new drug by the pharmaceutical industry's is USD 801 million<sup>92</sup> with 70% going to clinical trials<sup>93</sup> while that by Product Development Partnerships (PDPs) is USD 177 million<sup>94</sup>.
4. That a good IP system facilitates development including attraction of FDI necessary for R&D activities.

Two issues then become at the fore of the foreseen implementation:

- (a) Need for good patent system to play its important role in development;  
and
- (b) Need for capacity to exploit the availed patent system.

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<sup>91</sup> This is common knowledge although economists have not adequately dealt with issues directly related to economics and intellectual property (Idris, 2002 P. 38-39) and have found it notoriously hard to measure the costs and benefits of IPRs, particularly at different stages of development (UCTAD, 2007 P. (viii) – (ix) or or Misati, 2008, P. 28, Box 4.0

<sup>92</sup> Idris, 2002, P. 116 and Malpani, 2008 P. 13

<sup>93</sup> Idris, 2002, P. 119. Although Malpani et al., 2008, P. 25 estimates this largest single cost of drug development at 60%, he is fast to indicate that clinical trials conducted in India (developing country) is up to 60% less expensive than in the USA (developed country).

<sup>94</sup> Malpani, 2008 P. 13

## ***Analysing Recommendations of WIPO-DA***

I beg then to present hereinbelow an un-exhaustive, but creative and wide examination of circumstances relevant to the issue with the objective of:

- i. Identifying Strengths, Weaknesses, Opportunities and Threats (SWOT Analysis) of the current patent system, and IP regime in general – Table 1 below; and
- ii. Isolating activities necessary for the foreseen implementation that are Specific, Measurable, Achievable, Realistic and Time-bound (SMART) – Table 2 below.



**Table 1: SWOT Analysis<sup>95</sup>**

| Strengths   | Weaknesses  | Opportunities   | Threats  |
|---|---|---|--|
| A country's development rate is influenced by government IP (read patent) policies and patents are powerful tools for R7D | In some countries <sup>96</sup> , there are no optimal IP (read patent) Policies <sup>97</sup>  | Adoption of pro-active IP (read patent) policies commensurate with national/regional/international development policies   | The divide between Developed and Developing countries and arguments <sup>98</sup> against IP (read patent) system <sup>99</sup>  |
|   | Some countries <sup>100</sup> , are not technologically at the forefront and thus the incentives provided by IP and patents in particular, for investment in R&D are not meaningful <sup>101</sup>                              |   |  |
| Every country has intelligent persons with the capacity to invent and Innovate  | In some countries <sup>102</sup> , inventors do not optimally contribute to national development  | Positive investment of inventors for national development   | Investment in R&D is quite an expensive undertaking <sup>103</sup> - with the average cost of developing and launching a new drug estimated at USD 802 million <sup>104</sup> with 70% going to clinical trials <sup>105</sup> . |
|   | In some countries <sup>106</sup> , local innovative firms in the most dynamic sectors are mainly involved in only in the third, <i>generation stage</i> , and not <i>initiation and internalization stages</i> <sup>107</sup> , | Prioritising policies that promote research and engineering activities and that create a solid basis for indigenous technologies, as opposed to imported technologies |  |
| In many countries <sup>108</sup> , countries, there are public research facilities and academia that provide the primary  | In some countries <sup>109</sup> , researchers and academicians mainly view their work scientific academic achievements   | Establishment of frameworks encouraging those researchers and academicians to exploit knowledge for purposes  | Inherent challenges in linking the public and academic efforts with those of the commercial sector <sup>111</sup> including  |

<sup>95</sup> See also Idris, 2002, Pages 93-138

<sup>96</sup> Especially developing countries

<sup>97</sup> "Effective patent laws, adequate technology infrastructure, and adequate IP protection and enforcement all permit the patent system to work optimally" (Idris, 2002, P. 138)

<sup>98</sup> Especially by developing countries

<sup>99</sup> See details in Misati, 2008, P. 8-9, Tables 1.1 and 1.2

<sup>100</sup> Especially least developed countries

<sup>101</sup> See details in Lesser, ---

<sup>102</sup> Especially developing countries

<sup>103</sup> This is common knowledge although economists have not adequately dealt with issues directly related to economics and intellectual property (Idris, 2002 P. 38-39) and have found it notoriously hard to measure the costs and benefits of IPRs, particularly at different stages of development (UCTAD, 2007 P. (viii) – (ix) or or Misati, 2008, P. 28, Box 4.0

<sup>104</sup> See Idris, 2002, P. 116

<sup>105</sup> See Idris, 2002, P. 119

<sup>106</sup> Especially least developed countries

<sup>107</sup> See details in UCTAD, 2007 P. (viii) – (ix) or Misati, 2008, P. 28, Box 4.0

<sup>108</sup> Including developing countries

<sup>109</sup> Especially developing countries

|  |   |  |   |
|--|---|--|---|
| source of knowledge by conducting basic and applied research   | and never give it a "commercial sense"  | of technology transfer and commercial exploitation <sup>110</sup>  | encouraging joint R&D activities, and sharing of expertise." <sup>112</sup>   |
| There world has enough resources to execute R&D activities reflecting yearly increasing trend <sup>113</sup> | In some countries <sup>114</sup> , policy makers do not appreciate importance of relationship between R&D and pro-active patent policy <sup>115</sup> | Enhancing resources (including FDI) inflows, private sector involvement, and commercialization of successful products and services | The dearth and global declining of resources for R&D in commercial sectors and relative absence of FDI in the technology sector |
|  | Little effort <sup>116</sup> being made to invest in R&D relevant to developing countries <sup>117</sup> .  | Encouraging <sup>118</sup> R&D focusing on developing countries' interests   |   |

<sup>110</sup> Especially by private sector

<sup>111</sup> "It is typical for accompany to invest between 50 to 100 times more than the initial licensing fee paid to the university (or other research centre) to develop the technology" and yield products in the market place (Idris, 2002, P. 96)

<sup>112</sup> See Idris, 2002, P. 93-95

<sup>113</sup> "It is estimated that R&D investments by the global pharmaceutical industry increased from US\$ 39 billion in 1998 to US\$ 43 billion in 1999 with USA firms accounting for US\$ 24 billion ( Idris, 2002, P. 120).

<sup>114</sup> Especially developing countries

<sup>115</sup> "According to a recent survey, leading German, Japanese and US chemical and pharmaceutical companies stated that the extent to which a country protected IP rights had a major influence on their decision as to whether or not to invest in R&D facilities in that country" (See details in Mansfield, 1995)

<sup>116</sup> Especially developed countries

<sup>117</sup> For example, it is estimated that although more than USD 56 billion is spent annually on health research, less than 10(%) percent is directed toward(s) diseases that afflict 90(%) percent of the world's population and, between 1975 and 1977, 1,223 new compounds were introduced on the market, but only 11 (less than 0.9%) of these were aimed at tropical (developing country) diseases (Idris, 2002, P. 122).

R&D dedicated to combat neglected tropical (developing country) diseases attracts only US\$ 1 out of every USD 100, 000 (0.00001%) spent worldwide on biomedical research and product development and only 16% of funding for product development is partnerships (PDPs) is provided by Governments of Developed Countries, in comparison with philanthropic foundations. In 2007, German (world's 3<sup>rd</sup> largest economy) contributed only 0.12% (20.7 Million Euros) of its overall research budget to neglected diseases. Between 1975 and 1999, only 1% (approx. 14) of a total of 1393 new medicines was dedicated to the treatment of neglected disease while between 1999 and 2004, only 3 new medicines for neglected diseases emerged out of global R&D efforts. For example, the current infant (not adults) partially-effective tuberculosis (TB) vaccine was introduced in 1923 and the most recent first-line TB drug regimen was developed in the 1960s. (Malpani, 2008 P. 1&4)

<sup>118</sup> Especially developed countries

## Proposed Recommendations and Specific Activities for Implementation of WIPO-DA from the perspective of Patents

I hereby propose the following recommendations, activities, expected outputs and time frames as necessary for the implementation of Recommendation WIPO-DA from the perspective of patents.

**Table 2: Proposed Plan of Action**

**Recommendation 1: Identify and promote development policies**

| Activity   | Expected Output  | Responsible   | Time Frame <sup>119</sup> |
|--|--|---|---------------------------|
| (a) Focus on <sup>120</sup> national development goals | <ul style="list-style-type: none"> <li>➤ National Development Policies</li> <li>➤ National Growth</li> </ul>   | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul>  | 3 years                   |
| (b) Focus on regional development goals                | <ul style="list-style-type: none"> <li>➤ Regional Development Policy</li> <li>➤ Regional integration</li> <li>➤ Investor Confidence</li> <li>➤ National and regional Growth</li> </ul>                         | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul>  | 4 years                   |
| (c) Focus on international development goals           | <ul style="list-style-type: none"> <li>➤ International Development Policies</li> <li>➤ Worldwide Investor Confidence</li> <li>➤ International Development Policy Harmony</li> <li>➤ National Growth</li> </ul> | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> <li>➤ International Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul> | 5 years                   |

**Recommendation 2: Adoption of pro-active IP (read patent) policies commensurate with development policies:**

| Activity   | Expected Output   | Responsible  | Time Frame <sup>121</sup> |
|--|---|--|---------------------------|
| (d) Focus on <sup>122</sup> national IP policy national development goals            | <ul style="list-style-type: none"> <li>➤ National IP Policy</li> <li>➤ Investor Confidence</li> <li>➤ FDI national inflows</li> <li>➤ National Growth</li> </ul>  | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul>                                   | 3 years                   |
| (e) Focus on national IP policy in line with national and regional development goals | <ul style="list-style-type: none"> <li>➤ Regional IP Policy</li> <li>➤ Investor Confidence</li> <li>➤ Regional integration</li> <li>➤ FDI regional inflows</li> <li>➤ National and regional Growth</li> </ul> | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul> | 4 years                   |
| (f) Focus on international IP policy in line with                                    | <ul style="list-style-type: none"> <li>➤ International IP Policy</li> <li>➤ Worldwide Investor Confidence</li> </ul>  | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> </ul>  | 5 years                   |

<sup>119</sup> Within the indicated period from the date of adoption of these recommendations and activities.

<sup>120</sup> In this section “Focus on” includes “develop new, or strengthen already existing, and promote”

<sup>121</sup> Within the indicated period from the date of adoption of these recommendations and activities.

<sup>122</sup> In this section “Focus on” includes “develop new, or strengthen already existing, and promote”

|  |  |  |  |
|--|--|--|--|
| national, regional and international development goals | <ul style="list-style-type: none"> <li>➤ International IP Policy harmony</li> <li>➤ Worldwide development</li> <li>➤ Social welfare</li> </ul> | <ul style="list-style-type: none"> <li>➤ International Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other partners</li> </ul> |  |
|--|--|--|--|

**Recommendation 3:** Adoption of pro-active IP (read patent) legislations commensurate with development policies<sup>123</sup>

| Activity  | Expected Output  | Responsible  | Time Frame <sup>124</sup> |
|---|--|--|---------------------------|
| (g) Focus on <sup>125</sup> national IP legislations in line with national development goals            | <ul style="list-style-type: none"> <li>➤ Development-focussed National IP legislations</li> <li>➤ Investor Confidence</li> <li>➤ National Growth</li> </ul>  | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other experts</li> </ul>  | 3 years                   |
| (h) Focus on regional IP rules in line with regional development goals                                  | <ul style="list-style-type: none"> <li>➤ Development-focussed Regional IP Policy</li> <li>➤ Investor Confidence</li> <li>➤ FDI regional inflows</li> <li>➤ National and regional Growth</li> </ul>                 | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other experts</li> </ul>  | 4 years                   |
| (i) Focus on international IP rules in line with national, regional and international development goals | <ul style="list-style-type: none"> <li>➤ Development-focussed International IP Policy</li> <li>➤ Worldwide Investor Confidence</li> <li>➤ Worldwide development</li> <li>➤ National and regional Growth</li> </ul> | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Regional Organisations</li> <li>➤ International Organisations</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other experts</li> </ul> | 5 years                   |

**Recommendation 4:** Positive investment of innovators for national developments:

| Activity                                 | Expected Output   | Responsible  | Time Frame <sup>126</sup> |
|--|---|--|---------------------------|
| (j) Create public awareness in IP system | <ul style="list-style-type: none"> <li>IP conversant public</li> <li>➤ Creativity</li> <li>➤ Locally generated ideas and technology</li> <li>➤ Less dependence on Foreign Technology</li> <li>➤ Respect for IP rights</li> <li>➤ Utilization of IP information</li> <li>➤ Investor Confidence</li> <li>➤ Commercial "sense" at R&amp;D institutions,</li> </ul> | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other experts</li> <li>➤ Regional Organisations</li> <li>➤ International Organisations</li> </ul> | 1 year                    |

<sup>123</sup> This may be facilitated by, among others, embracing use of indigenous and local resources and specialise on patent tools that work with the economic landscape of the country. The flexibilities in international intellectual property agreements should hereby taken into account, especially by developing countries and LDCs

<sup>124</sup> Within the indicated period from the date of adoption of these recommendations and activities.

<sup>125</sup> In this section "Focus on" includes "develop new, or strengthen already existing, and promote"

<sup>126</sup> For non-going activities, start within the indicated period from the date of adoption of these recommendations and activities. These activities are not time limited once started

|   |   |       |        |
|---|---|-------|--------|
|   | <ul style="list-style-type: none"> <li>➤ Development</li> <li>➤ Social welfare</li> </ul>                           |       |        |
| (k) Focus on human capital in IP from early childhood                         | <ul style="list-style-type: none"> <li>IP Educated Human Capital</li> <li>➤ Ado</li> </ul>                          | ➤ Ado | 1 year |
| (l) Focus on confidence in indigenous development <sup>127</sup>              | ➤ Ado   | ➤ Ado | 1 year |
| (m) Focus on public recognition of innovators by giving awards <sup>128</sup> | <ul style="list-style-type: none"> <li>Incentives for Innovation and Motivated Innovators</li> <li>➤ Ado</li> </ul> | ➤ Ado |        |

**Recommendation 5:** Establishment of frameworks encouraging researchers and academicians to exploit knowledge for purposes of technology transfer and commercial exploitation<sup>129</sup>

| Activity  | Expected Output   | Responsible  | Time Frame <sup>130</sup> |
|---|---|--|---------------------------|
| (n) Focus on <sup>131</sup> patent offices <sup>132</sup> to facilitate their capacity to such institutions | <ul style="list-style-type: none"> <li>Patent Office capacity to provide necessary IP services to R&amp;D institutions</li> <li>➤ Enhanced technology transfer</li> <li>➤ Enhanced commercialisation of IP assets</li> <li>➤ Development</li> <li>➤ Social welfare</li> </ul> | <ul style="list-style-type: none"> <li>➤ Governments</li> <li>➤ Public and private sectors</li> <li>➤ NGOs and other experts</li> <li>➤ Regional Organisations</li> <li>➤ International Organisations</li> </ul> | 1 year                    |
| (o) Focus on public institutions and even privatise them <sup>133</sup>                                     | <ul style="list-style-type: none"> <li>Other Public institutions with capacity to provide necessary IP services to R&amp;D institutions</li> <li>➤ Ado</li> </ul>   | ➤ Ado  | 1 year                    |
| (p) Focus on private sector and NGOs  | <ul style="list-style-type: none"> <li>Private and NGO Sector with capacity to provide necessary IP services to R&amp;D institutions</li> </ul>   | ➤ Ado  | 1 year                    |

<sup>127</sup> See also Malpani et al., 2008, P. 24-27

<sup>128</sup> Including trophies, financial and tax incentives

<sup>129</sup> Especially by the private sector. See also Malpani, 2008 P. 33-34. "It is typical for accompany to invest between 50 to 100 times more than the initial licensing fee paid to the university (or other research centre) to develop the technology" and yield products in the market place (Idris, 2002, P. 96)

<sup>130</sup> Within the indicated period from the date of adoption of these recommendations and activities.

<sup>131</sup> In this section "Focus on" includes "develop new, or strengthen already existing, and promote"

<sup>132</sup> Especially national, and where appropriate regional and international

<sup>133</sup> Like the 1948 National Research Development Corporation in UK now privatized as British Technology Group since 1981. Magnetic Resonance Imaging, (MRI) technology, combining inventions developed by three universities: Nottingham, Aberdeen and Oxford, alone fetched the organization some US\$ 150 million. See details at [http://www.btgplc.com/company\\_profiles/index.html](http://www.btgplc.com/company_profiles/index.html); the 1949 Fraunhofer-Gesellschaft in Germany which by 1999 had 9,300 employees working in 47 insitutes and generating about USD 640 million in annual revenue. See details at <http://www.fhg.de>; the 1949 Weizman Institute of Science of Israel and its 1959 licensing arm: Yeda Research and Licensing Co., Ltd. That between 1995 and 1999 was granted 108 patents in USA with international licenses. See details at <http://wis-wander.weizmann.ac.il/> (Idris, 2002, Pages 102-105)

|   |  |       |        |
|---|--|-------|--------|
|   | ➤ Ado  |       |        |
| (q) Focus on consortium(s) consisting of public R&D institutions and private sector or NGOs <sup>134</sup>                    | <ul style="list-style-type: none"> <li>- Consortium(s) with capacity to provide necessary IP necessary services to R&amp;D institutions</li> <li>- Joint research and development activities</li> <li>- Sharing of expertise.</li> </ul> ➤ Ado | ➤ Ado | 1 year |
| (r) Own Technology Transfer Offices (TTOs) at R&D institutions <sup>135</sup>   | Own Technology Transfer Offices at R&D Institutions<br>➤ Ado   | ➤ Ado | 1 year |
| (s) Focus on laws that facilitate the transfer of technology <sup>136</sup> while safeguarding public interest <sup>137</sup> | Technology-Transfer-friendly National Laws<br>➤ Ado  | ➤ Ado | 1 year |

<sup>134</sup> Like the Japanese Government did in 1970's and 1980s

<sup>135</sup> Like the effects of Bayh-Dole Act of 1980 in USA, Chinese new patent law of 1999, Kenyan patent law of 2001, Technology Licencing Office Law of Japan in 1998, etc. and the 1988 Isis Innovation of Oxford University in UK; 1995 Office of Technology Transfer of Stanford University in USA.

<sup>136</sup> Like the Bayh-Dole Act of 1980 in USA, Chines new patent law of 1999, Kenyan patent law of 2001, Technology Licencing Office Law of Japan in 1998, etc.

<sup>137</sup> See So et al. 2008, Box 1.

**Recommendation 6: Adopt policies for effective IP administration (by IP offices)**

| Activity   | Expected Output  | Responsible  | Time Frame <sup>138</sup> |
|--|--|--|---------------------------|
| (t) Focus on <sup>139</sup> IP offices <sup>140</sup> to facilitate their capacity <sup>141</sup> to handle IP matters within their mandates | Compete IP Offices<br>➤ Enhanced IP administration<br>➤ Enhanced use of IP Information<br>➤ Enhanced technology transfer<br>➤ Enhanced commercialisation of IP assets<br>➤ Development<br>➤ Social welfare | ➤ Governments<br>➤ Public and private sectors<br>➤ NGOs and other experts<br>➤ Regional Organisations<br>➤ International Organisations | 1 year                    |
| (u) Focus on public institutions and even privatise them <sup>142</sup>  | Other Public institutions with capacity to provide necessary IP services to R&D institutions<br>➤ Ado  | ➤ Ado  | 1 year                    |
| (v) Focus on private sector and NGOs   | Private and NGO Sector with capacity to provide necessary IP services to R&D institutions<br>➤ Ado   | ➤ Ado  | 1 year                    |

**Recommendation 7: Implementation of WHO's Resolution WHA61.21: Global Strategy and Plan of Action (GS&PoA) on Public Health, Innovation and Intellectual Property<sup>143</sup>**

| Activity          | Expected Output | Responsible   | Time Frame    |
|-------------------|-----------------|---------------|---------------|
| (w) As per GS&PoA | As per GS&PoA   | As per GS&PoA | As per GS&PoA |

Note: I strongly believe that WHO's Resolution WHA61.21 can be a step forward for the implementation of Recommendations of the WIPO Development Agenda from a public health perspective.

<sup>138</sup> Within the indicated period from the date of adoption of these recommendations and activities.

<sup>139</sup> In this section "Focus on" includes "develop new, or strengthen already existing, and promote"

<sup>140</sup> Especially national, and where appropriate regional and international

<sup>141</sup> Such capacities may include IP system accessibility, such as electronic filing, help desks, graphical user interfaces that emphasize ease of use, and differential filing fees based on the innovator's gross revenues

<sup>142</sup> Like the 1948 National Research Development Corporation in UK now privatized as British Technology Group since 1981. Magnetic Resonance Imaging, (MRI) technology, combining inventions developed by three universities: Nottingham, Aberdeen and Oxford, alone fetched the organization some US\$ 150 million. See details at [http://www.btgplc.com/company\\_profiles/index.html](http://www.btgplc.com/company_profiles/index.html); the 1949 Fraunhofer-Gesellschaft in Germany which by 1999 had 9,300 employees working in 47 insitutes and generating about USD 640 million in annual revenue. See details at <http://www.fhg.de>; the 1949 Weizman Institute of Science of Israel and its 1959 licensing arm: Yeda Research and Licensing Co., Ltd. That between 1995 and 1999 was granted 108 patents in USA with international licenses. See details at <http://wis-wander.weizmann.ac.il/> (Idris, 2002, Pages 102-105)

<sup>143</sup> See WHO, 2008

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## Brief Background about the Author

Mr Mboi E. Misati pursued a Masters program in Intellectual Property (IP) Law and Practice from the University of Alicante, Spain in 2000 and a Bachelor of Science degree majoring in Chemistry from Kenyatta University, Kenya in 1991. He has undergone other extensive academic/professional training with a specialty in IP matters in various institutions in Kenya and abroad. He is computer literate and multilingual including three UN languages: English, French and Spanish.

He is currently the Senior Patent Examiner in-charge of the Physical/Chemical Sciences Section at the Kenya Industrial Property Institute<sup>144</sup> with over fifteen years technical knowledge and practical experience in management and administration of industrial property activities in various establishments of the Institute. He is very conversant with various national, regional and international IP systems.

Being a trained and experienced trainer including of trainers, leader, manager and negotiator with excellent communication and analytical skills, in the field of IP locally, regionally and internationally, Mr Misati has participated in over 48 forums, attended over 41 courses, presented over 45 technical papers and published over 32 articles in IP.

As the Chairman of the National Committee on the World Trade Organisation (NCWTO) Sub-Committee on TRIPS since 2001, his main role is to effectively and efficiently co-ordinate development, articulation and negotiation of Kenya's position in IP matters under EAC, COMESA, ARIPO, WTO, WIPO and WHO. This avails him the privilege of being a high-level Government advisor on IP matters and often represents the Institute and Kenya in various fora in IP matters. He was actively involvement in the negotiations and drafting of break-through decisions of WTO on TRIPS and public health under the Doha Development Agenda, and WHO's Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property.

He is a member of several national and regional technical committees including the Technical Committee for EAC Cooperation on TRIPS and Access to Medicines since March 2005. He is the interim Chairman of Kenya Intellectual Property Professionals Association (KIPPA)<sup>145</sup>.

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<sup>144</sup> KIPPI is a body corporate under the Ministry of Industrialisation and is charged with the management and administration of industrial property rights in Kenya.

<sup>145</sup> Registration process of KIPPA is ongoing

