Topic 13: The Role of ARIPO Protocols in Fostering Innovation and Business in Africa

McLean Sibanda, PhD
Founder and CEO, Megethos Legacy Catalyst (Pty) Ltd

Workshop on the Promotion of ARIPO Protocols

organised by The African Regional Intellectual Property Organization (ARIPO)
in Collaboration with:
The Intellectual Property Rights & Innovation in Africa (AfriPI), and
The Ministry of Foreign Affairs, Regional Integration and International Trade, Mauritius, and
The Industrial Property Office of Mauritius (IPOM)

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Introduction

World's 60 Most Innovative Economies
South Korea, Singapore and Switzerland lead the index in 2021

Introduction

R&D investment

Introduction
R&D investment, Patents and GDP Growth

Exhibit 2
Rising Share of R&D Investment in Korea’s GDP

Source: CEIC, Morgan Stanley Research


https://www.lexology.com/library/detail.aspx?g=cd8c2659-cebe-438c-805c-86e1f79b06be
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Introduction

Context to ARIPO Protocols

- IP protocols provide a roadmap for IP protection
- Different forms of IP require different protocols
- Define:
  - Context for protection
  - Subject matter
  - Scope of protection
  - Process for obtaining rights
  - Other key
Patents and Industrial Designs (adopted 1982, pre-WTO / TRIPS era)

- Strengthen co-operation between the States in respect of protection and exploitation of patents, utility models and industrial designs
- Provide quality IP services for the social, economic and technological development of Member States

Patents - for an invention in all fields of technology, subject to novelty, inventiveness, industrial application

... subject to provisions of the applicable national law on compulsory licences, forfeiture or the use of patented inventions in the public interest
Harare Protocol
State of Patenting using Harare Protocol

- Growth until 2019
- Decline in 2020 – linked to Covid pandemic; Recovery in 2021
- Numbers still lower than South Africa annual filings
- Increase R&D investment and level of industrialisation in member states
- Increased awareness - workshops with academic & research institutions, MSMEs, incubators, start-up organisations, VCs
Harare Protocol
Utility Models

▪ “utility model” - any form, configuration or disposition of elements of some appliance, working tools and implements as articles of everyday use, electrical and electronic circuitry, instrument, handicraft, mechanism or other object or any part thereof

▪ ... capable of contributing some benefit or new effect or saving in time, energy and labour or allowing a better or different functioning, use, processing or manufacture of the subject matter or that gives utility advantages, environmental benefit, and includes micro-organism or other self-replicable material, products of genetic resources, herbal as well as nutritional formulations which give new effects

▪ Stimulates frugal innovation
▪ Access to the IP system at reasonable cost
▪ Aligned with the informal nature of businesses in Africa

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Harare Protocol
Utility Models

- Poor utilisation of utility model system
- Increase awareness - Workshops with academic and research institutions, SMEs
- Utility models competitions
- Registration incentive to get innovators to make use of utility models
- Utility models guide
Harare Protocol
Industrial Designs

- Stagnant growth
- Lost cousins of patents
- Final embodiment of commercial product
- Awareness of design registrations - academic and research institutions, SMEs, incubators, VCs / funding organisations, start-up organisations
- National and Regional Design Competition

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Banjul Protocol
Overview

- Registration and administration of marks
- Includes colours, shapes, etc.
- Distinguish
- Identify
- Guarantee
- Advertise
- Critical for trading under the AfCFTA
Banjul Protocol
State of registration of marks

- Increase in marks being registered year on year
- Increase in classes registered
- Workshops with MSMEs, business chambers, etc.
- Registration campaigns
- Use of social medial and mainstream media to increase awareness
Swakopmund Protocol
Overview

- ... intrinsic value of traditional knowledge, traditional cultures and folklore, including their social, cultural, spiritual, economic, intellectual, scientific, ecological, agricultural, medical, technological, commercial and educational value;

- ... equitable balance between the rights and interests of those who develop, preserve and maintain traditional knowledge and expressions of folklore, and those who use and benefit from such knowledge and expressions of folklore.
Arusha Protocol
Overview

- ... protection of new varieties of plants
- encouraging development of new varieties of plants for the benefit of the society
- Climate change impact
Kampala Protocol
Overview

▪ ... voluntary registration and notification of copyright and related rights

▪ ... creatives benefit from their works and are commercially incentivised through copyright to create more and explore new markets

▪ Provision for registration of change in ownership of a copyright or related right
Patents / Trademarks / Copyright
An Example – Skincare and Beauty - JO’M Cosmetics (est. 2005)

- Herbal or natural cosmetic range
- Trademark – JO’M
- South African Patent no. ZA201305629 entitled “Hair Care Product”
- South African provisional patent application no. 2015/06208 entitled “Natural hair relaxer”
  - a hair relaxing composition for relaxing human hair
  - a kit for making the hair relaxing composition
  - a method of relaxing human hair with the hair care product in accordance with invention
Trademarks / Trade secrets
I-Slices founded by Kerryne Krause

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Chance meeting with a manufacturer led to licensing of a unique technology from CSIR (South Africa) Research Polymers Department

Engineered polymer technology for delivering ingredients into the skin for the application originally for burns and wounds

Application to cosmetics was unique

Negotiated an exclusive license for the technology

10 years R&D scaling up technology from laboratory scale

http://www.lionessesafrica.com/blog/2015/7/31/the-startup-story-of-kerryne-krause-neufeldt
https://www.eyeslices.com/za/about-us
Trademarks / Trade secrets
Unique Processing Ltd (Rwanda)

- Rwanda serial entrepreneur, Valentine Uwanyirigra
- Process chilli to make **Urwiza Chili Sauce**
- Marketed and sold in different supermarkets, shops, hotels, restaurants and boutiques around Kigali.
- Urwiza being sold to individual clients across continent, USA, Canada, European
- **IP:** trademarks applications at RDB for Unique Processing LOGO, Urwiza
Prof. De Wet Swanepoel – Lead Inventor and audiologist came up with idea as part of research at University of Pretoria

Start-up HearZA established and licenced the IP from the university

Further development and commercialisation

Pivoted business to other uses; new IP (copyright, trademarks, know-how, etc.)

https://www.hearxgroup.com/

Prof. Keolebogile Shirley Motaung - Founder & CEO of Global Health Biotech (GHB)

- Manufactures natural anti-inflammatory ointment/cream named La-Africa Soother (LAS) from medicinal plants

https://www.globalhealthbiotech.co.za/
Patents / Trademarks
An Example – Anti-inflammatory ointment from plants

Consortium of
1. University of Johannesburg
2. University of Pretoria &
3. University of Port Elizabeth

Patent Portfolio
Exclusive licence
(territorially restricted)

IP
1. Prov. patent applications
2. PCT Applications

Assigned
PTIP

- Inventorship
- Ownership – inventor had been working on invention for many years – multiple universities – multiple funding sources – different countries
- Ownership – within consortium
- Royalty payments to the Innovation Fund

Johanna Solar Technology and IFE are awarded the contract to build an ultra modern thin film solar module plant in China

Thin film solar - UI

Republic of South Africa
PATENTS ACT, 1995
PROVINCIAL SPECIFICATION
(Section 61A) – Amendment A1

R15m

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Patents / Trademarks
An Example – Eyeborn, orbital implant

Eyeborn – Restored Quality of Life for the Visually Impaired

by
W B du Preez¹, P W Richter¹, D Hope¹ and C Kotze²

1: CSIR Materials Science & Manufacturing, e-mail: wdupreez@csir.co.za, Tel: 012 841 4955
2: Cerdak (Pty) Ltd, Mtunzini, Kwa-Zulu Natal

Abstract

Eyeborn® is an innovative hydroxyapatite orbital implant used to replace the eyeball of a patient who has lost an eye. A prosthetic eye cap is fitted in front of the Eyeborn® implant, restoring the patient’s appearance and improving his quality of life. The product was developed with funding from the South African Innovation Fund.

Fig. 5: A patient before (a) and after (b) having received an Eyeborn® implant
Case Studies

Commercialisation – Eyeborn Orbital Implant

**IP:** Patents, design registration, trademark
Patents / Trademarks / Utility Model / Plant Breeders

An Example – Cassava Processing

- Problems in cassava flour processing
- PCT Patent application WO2012003225A1 – a process for producing a low cyanide, high fibre cassava with less than about 10 mg HCN equivalents/kg
- Process for making the flour
- Flour with low cyanide levels
- New Plant Varieties – drought resistance / fast growing, etc.
Patents / Utility Models
An Example – Skincare and Beauty (Moringa)

• Miracle tree
• Products: tea, oil,
• China patent **CN104586707A** (Fresh moringa oleifera leaf liquid skin care product and preparation method thereof)
• Preparation method of fresh leaf of Moringa liquid skin care
• Product
Patents

An Example – Moringa Skincare liquid – What is patented?

A preparation method:
• Clean fresh leaf of Moringa
• Juice extractor in ratio of 1:1 ~ 3 fresh Moringa and water; and then filter juice
• Refrigerate juice 5-10 °C, leave standstill for < 3hrs
• Juice can be divided into two-layer, and upper strata is milk yellow liquid, and lower floor is green liquid
• Bottle upper strata yellow liquid, sealing, sterilizing obtain natural fresh leaf of Moringa facial treatment milk;
Concluding Remarks

- IP is about business - to protect or not to protect is a business decision
- Multiple forms of IP possible in any business
- IP is like insurance: in case of success, and to position a business for success
- ARIPO protocols provide an enabling environment, predictability and certainty
- IP Offices have to be catalyst for identification, protection and use of IP to drive business growth
“We shall accumulate machinery and establish steel works, iron foundries and factories; We shall link the various states of our continent with communications; We shall astound the world with our hydroelectric power; we shall drain marshes and swamps, clear infested areas, feed the undernourished, and rid our people of parasites and disease.

It is within the possibility of science and technology to make even the Sahara bloom into a vast field with verdant vegetation for agricultural and industrial developments.”

– President Kwame Nkrumah - at the foundation summit of the Organization of African Unity, Addis Ababa, 24 May 1963
Thank You

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www.sibandalegacy.africa

Tel/WhatsApp: +27833780230
mclean@sibandalegacy.africa

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