

The Patent System and its Role for the Promotion of Innovation in the United Republic of Tanzania

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Dar es Salaam – September 4, 2014

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# Promotion of Innovation: Example of agriculture tools: Manual



### Cont'd: Mechanical







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- Innovation is the <u>engine</u> that drives the economy of a country; a major generator of employments (therefore it should be <u>encouraged</u> by the national IP Policy)
- Innovation is the space between a technical **problem** and a **solution** in <u>a society</u> (therefore one cannot solve agricultural problems in a country of millions of people by using technical <u>manual</u> tools)
- Innovation is built upon a prior technical solution which it develops or transforms, and this solution is generally found in a patent document (therefore, patent is a UNIQUE source of TECHNICAL information NEVER found anywhere else)



## The Patent System

- Has two functions:
  - Protection: Protection of inventions is territorial (by country or region) and time-limited (max. 20 years)
  - Disclosure/Publication: Publication of technical information is global (not bound by territory nor time)
    - Anyone can use patent information published ANYWHERE in the world to <u>promote</u> <u>innovation</u> in his country (technical information contained in a patent is crucial to promote innovation and socio-economic development)

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# Role of Patent/Technical Information: Promote Innovation

- Patents are often the unique source of technical information (according to WIPO and the European Patent Office, more than 80% of technical knowledge can only be found in patent documents)
- More than 80 million patent documents have been published today of which 85% (65 million) are no longer in force according to EPO
- Nearly 2 million patents are filed every year and made available publicly after 18 months,
- All kind of users in URT find in patent information a tremendous mine gold in order to promote innovation in their activities and, ultimately, file in their turn patents of their own (and so goes the promotion of innovation)

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### Cont'd: Promote Innovation

- More than 80 million patens (inventions/innovations) are generally classified as follows:
  - SECTION A HUMAN NECESSITIES (agriculture, foodstuffs, pharmaceuticals, cosmetics, tobacco, etc.)
  - SECTION B PERFORMING OPERATIONS; TRANSPORTING (vehicles, boats, airplanes, roads, houses, machine tools, grinding, polishing, hand tools, hand cutting tools, etc.)
  - SECTION C CHEMISTRY; METALLURGY (treatment of water, waste water, glass, mineral or slag wool, cements, concrete, artificial stone, ceramics, refractories, fertilizers, petroleum, gas, sugar industries, etc.)
  - SECTION D TEXTILES; PAPER (natural or artificial threads, spinning, weaving, ropes, paper-making, treatment of textile, lace-making, knitting, sewing, etc.)
  - SECTION E FIXED CONSTRUCTIONS (building, construction of roads, railways or bridges, hydraulic engineering, foundations, soil-shifting, water supply, locks, keys, window or door, etc.)
  - SECTION F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
  - SECTION G PHYSICS
  - SECTION H ELECTRICITY



# Avoid Duplicating R&D Efforts and Spending

- To date, up to 30% of all expenditure in R&D is wasted every year on trying to invent existing inventions (the wasted amount is 20 billion euros according to EPO)
- Patent information as a street banner which aims to keep all kinds of researchers from walking down a "technical" road that has already been traveled (researchers will then be kept from "reinventing the wheel")
- Since most companies disclose their R&D results in patents, scrutinizing the latter therefore is an efficient way to avoid duplicating R&D work and spending (this requires a good strategy on R&D)

# Provide Business Opportunities and Business Intelligence

- Since patent information describes products/processes and provides contact details of inventor, company, country of origin and date of filing, it enables SMEs, SMIs and industries to monitor the innovation strategies of competitors at a very early stage (in this regard, they can either follow the same "business road" if the business is economically fruitful or take a different road)
- Companies can also identify new markets, and therefore locate suppliers as well as materials needed
- Companies can also find new business partners notably for licensing, technology transfer, mergers and acquisitions



## Cont'd: Business Opportunities

Example: A US company, Boston Sepracor, used patent information on the famous antidepressant *Prozac* owned by the pharmaceutical company Eli Lilly, and came up with an improved version of the product, obtained a patent on it, and sold the latter back to Eli Lilly for 90 million U\$ and got also some royalties. In sum, Sepracor has focused its work in improving blockbuster drugs by cleaning out unwanted molecules. After obtaining a patent, Sepracor usually sells its improved version back to the drug company that developed the original, and this gives the original company both a better product and the ability to develop its business, therefore staving off pesky generic competition for many more years

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## Cont'd: Business Opportunities

Another example for a business opportunity offered by patent information is the industry of generics in all fields of technology. In the pharmaceutical field, for instance, industry of generics has enabled countries like India and Brazil to supply medicines in the world market, thus contributing to the reduction of the price of goods in the field (to date, India possesses more than 20 000 pharmaceutical laboratories and supply 67% of the generics in the world market. It is obvious that this country reaps benefits thanks to patent information)



## **Avoid Infringing Others' Patents**

- If an invention is protected in URT, patent information keeps Tanzanian companies from infringing the owner's rights (patent gives a monopoly to dominate a protected market, and this generates a "life and death" struggle between competitors)
- In many cases, *infringement* had cost companies not just their money but also their very life (the case between Kodak and Polaroid in 1976, and the one between Paragon and Procter & Gamble in 1999 illustrate that R&D can be a two-edged sword for a company *if not well managed*; that is why competitors continually scrutinize each other's patents (especially claims) in order to find *any information which can invalidate patents of their competitors*.

## Cont'd: Example of Infringement

- The long-standing lawsuit between Apple and Samsung who have been battling since 2011 before courts in nine countries outside the US, including the UK, Australia and Germany
- In 2012, an American judge (in California) ruled that Samsung infringed Apple's patents, and had to pay Apple 1.05 billion U\$ (a year later, the amount was reduced to 930 million U\$ in a damage retrial); Samsung had to modify its patent claims for a new filing, not to sell its products manufactured with Apple's technology, and withdraw its products which were already in the protected markets
- Today, the two competitors have settled their patent's lawsuits *outside* the United States (without burying for ever their legal hatchet)

## Strengthen/Develop IP Policy

- Each country, like URT, has public policy objectives including developmental and technological objectives to reach. In this regard, patent information can help the government of URT make an analysis of filing trends in a field, and use this analysis to modify or to improve its national IP strategy (therefore, patent landscape reports produced by WIPO are of great use for that purpose)
- By identifying filing trends, Governments will discover at the same time famous inventions, leading enterprises and inventors and, therefore, will find out the geographical distribution of best products and processes for their technological, economic and social development



# Promotion of Innovation in Tanzania: Example in the Coffee Field

#### PRODUCTION ANNUELLE DE CAFÉ 2010 EN MILLIERS DE SACS







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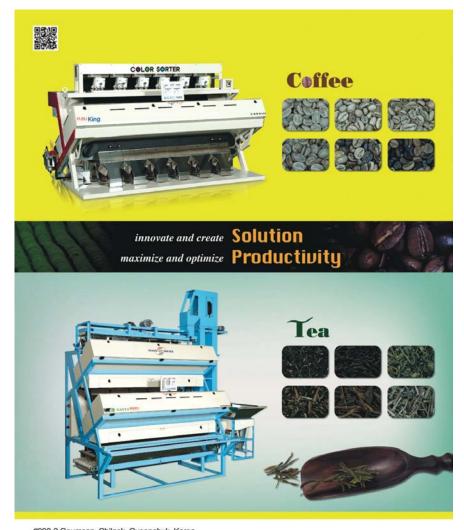
### Interesting Facts About Coffee

- Coffee is the world's second most popular drink after water (it is consumed at the rate of 1.4 billion cups per day
- Coffee is the second most traded product in the world after oil (it is worth 100 billion U\$ per year worldwide of which 39 billion to the producing countries)
- A coffee tree has a lifespan of about 50 to 70 years
- Americans are the world's leading coffee consumer (450 million cups per day or more than 150 billion cups a year; an estimated four out of five Americans start their day with a coffee)
- Besides Americans, the French and the Germans are the two largest drinkers. These three countries drink approximately 65% of the total coffee consumed in the world
- In the United States, September 29 is celebrated as National Coffee Day. In Costa Rica, it's September 12, in Japan, it's October 1, in Ireland, it is September 19
- Therefore, coffee offers a tremendous business opportunity for a producing country like URT



### Patent/Technical Information on Coffee

- In the coffee field, Tanzanians will find in the PATENTSCOPE 5,737 technical information (patent documents) dealing with coffee in general, 815 on coffee machines, 48 on coffee brewing, 38 on coffee milling, 31 on coffee flavor, 24 on coffee roasting, 5 on coffee processing
- Tanzanians can learn from these solutions to maximize and optimize their productions (they can innovate and therefore file patents)



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### Example in the Tea Field

#### PRODUCTION ANNUELLE DE THÉ 2009 EN MILLIERS DE TONNES







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### Interesting Facts About Tea

- Tea is the most widely consumed beverage in the world next to coffee and water
- For instance, in 2011 in the United States, over 160 million Americans were drinking tea per day, and over 65 billion servings of tea the same year. About 85% of tea consumed was Black Tea, 14% was Green Tea, and the remaining amount was oolong and the White tea
- Tea is worth over 40 billion U\$ per year
- China is the world's largest tea consumer country (FAO Report 2010), but many other countries are cited among which United Arab Emirates, Ireland, Mauritania, Turkey, United Kingdom, Morocco, Kuwait, Russia, Iran, and many more Eurpean countries
- Tremendous business opportunity for URT



### Patent/Technical Information on Tea

- In the tea field, Tanzanians will find in the PATENTSCOPE more than 6, 221 technical information dealing with tea in general, 38 on tea flavor, 18 on tea machines, 16 on tea brewing, 1 on tea milling, 27 on tea processing
- Tanzanians can learn from these technologies to become competitive in the world market



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# Tea & Coffee World Cup (Exhibitions & Symposiums), Vienna, Austria, March 25 – 27, 2012









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## (Cont'd: Tea & Coffee World Cup)









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The TISC in URT could select local coffee and tea producers in order to participate in the Tea & Coffee World Cup where more than 2500 visitors from over 80 countries will be exposed to their products and services. This is a networking opportunities with diverse industry associates including coffee roasters, tea packers, distributors, importers, exporters and specialty retailers. More than 85% of the attendees are decision makers. For further information, the TISC in URT could write to:

Tea & Coffee World Cup Exhibitions & Symposiums

26 Broadway, Floor 9M

New York, NY 10004

USA

Tel.: +1 212 391 2060

Fax: +1 212 827 0945

E-mail: info@tcworldcup.com

The latest event took place in Warsaw, Poland, from February 11 – 13, 2014. The next event will take place in 2016 (location to be determined)
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### Conclusion

- Innovation develops <u>over time</u> (there was a time when humanity used only manual tools and, later, passed to mechanical tools and, later, shifted to electrical/electronic/solar tools)
- In DCs and LDCs, industrial development will not come without agricultural development since industrial revolution was only the transformation of agricultural societies into industrial ones (although many still consider agriculture the model of low-tech, they are mistaken. In countries like Israel, technology was 95 percent of the secret of Israel's prodigious agricultural productivity)
- Although WIPO has put at the disposal of its poor member states (among them URT) the above-mentioned information, technical and scientific development of URT will come from NOWHERE since NOWHERE simply means: NOW and HERE (in URT)

# Thank you for your attention!

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