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Webinar: Asking questions

[Image of a webinar interface with a question entry field highlighted: "Enter a question for staff"]
Webinar: Asking questions
Webinar: Asking questions
Creating methods and systems for leveraging intangible assets
Pilot Cities to test and socialize the Guides

WIPO Missions (2018-2019)

WIPO Mission Cities
- New Delhi
- Casablanca
- Nairobi
- Pretoria
- Buenos Aires
- Bogota
- Kuala Lumpur
- Manila
Exemplary Missions in Asia, Africa and Latin America

- New Delhi, Dec 2018
- Nairobi, Mar 2019
- Bogota, May 2019
- Buenos Aires, May 2019
- Kuala Lumpur, June 2019
- Manila, June 2019
Introduction to the Guide on the Use of Inventions in the Public Domain
# Purpose of the Guide

The guide’s purpose is to…

<p>| | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>Help TISC staff who assist entrepreneurs and SMEs in developing regions and LDCs to access and use public domain knowledge and technology</td>
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<tr>
<td>Introduce patent documents and non-patent literature (NPL) as reliable sources of information on inventions</td>
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<td>Explore how subject matter disclosed in patent documents impart detailed invention information</td>
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<td>Introduce key steps in product development and marketing processes that utilize external and internal resources and capabilities such as patent documents</td>
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<td>Present relevant case examples from recent research and practice.</td>
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The Patent system added the fuel of interest to the fire of genius

Abraham Lincoln
DC Inventors & Innovators *USING* information in the Public Domain

William Gwata, Zimbabwe

Fatima Zahra, Morocco

Drs. Tabaoda and Siacor, Philippines

Anthony Mutua and team, Kenya
This guide supports TISC and eTISC services...

- Access to patent and non-patent databases
- Increase awareness on IP and contribute to economic growth in the country
- Provide quality services on patent search and analysis
- Support to inventors in patent filing and IP commercialization
- Training on access to and use of patent information
### The Guide in a Nutshell

The Guide addresses the questions like…

<table>
<thead>
<tr>
<th>Who</th>
<th>TISC staff in developing and least developed countries (LDCs) who can assist clients with inventive ideas</th>
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<tbody>
<tr>
<td>When</td>
<td>The guide can be used when a client comes with a new idea for a product/service and wants to commercialize it. Guide on identifying inventions in the public domain is the prerequisite guide for this.</td>
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<tr>
<td>Where</td>
<td>To be used in TISCs, institutions, firms and companies</td>
</tr>
<tr>
<td>How</td>
<td>To be used to explore public domain knowledge for improvement of invention of new products/services</td>
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Scope of the Guide

Public domain and patents

Public domain knowledge as inventions disclosed in patent documents

Using public domain knowledge in the product development process
## Limitations of the Guide

- **NOT** a formal introduction to the product development process
- **NOT** to be used as a legal guide in any way
- **NOT** a comprehensive guide on public domain

**Aware** of the lack of access to resources discussed in the Guide in many regions in the world
Module I: Defining the Public Domain and its Relationship with Patents
Top 10 Patent Offices with Active Patents in 2018

Based on the data provided in World Intellectual Property Indicators 2019. WIPO.
Public Domain in Developing Countries and LDCs

| Developed countries are leading applicants of patents. | Patents need economic reason to be filed in developing and LDCs. In practice few patents from developed countries are filed in LDCs. Hence most inventions from developed countries are part of public domain in LDCs. | Freedom to Operate (FTO search) is important regardless. |

Patent knowledge in most cases could be part of public domain in developing and Least Developed Countries (LDCs).
Module II

Finding Opportunities to Leverage Inventions and Public Domain Knowledge
Useful Elements in a PCT Patent Document

- Patent Classification
- International Application no. & Filing Date
- Priority Date: May 7, 1998
- Names & Addresses of:
  - Applicant
  - Inventor
  - Agents (patent attorney)
- Title of Invention
- Patent no. and Date of Issue

Patent Classification

International Application no. & Filing Date

Priority Date: May 7, 1998

Names & Addresses of:
- Applicant
- Inventor
- Agents (patent attorney)

Title of Invention

Patent no. and Date of Issue


European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BI, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
Example of Patent Information in Use

(12) United States Patent
Mauldin et al.

(20) Patent No.: US 9,715,525 B2
(45) Date of Patent: Jul. 25, 2017

(54) ACTIVE SCREEN PROTECTION FOR ELECTRONIC DEVICE

(71) Applicant: Apple Inc., Cupertino, CA (US)

(72) Inventors: Tyson B. Mauldin, Saarvada, CA (US); Stephen R. Lynch, Napa, CA (US); Ravi M. Patel, San Jose, CA (US); Rosary A., Sanford, CA (US)

(73) Assignee: Apple Inc., Cupertino, CA (US)

(52) Prior Publication Data

(51) Int. Cl.
G09F 5/08 (2006.01)
G09F 5/06 (2006.01)
G09F 3/13 (2006.01)
H04M 1/22 (2006.01)
H04M 1/42 (2006.01)

(56) Field of Classification Search
CPC: G09F 5/08 (2013.01); G09F 3/00; G09F 5/06 (2013.01); G09F 3/13; H04M 1/22; H04M 1/42; H04M 1/48; H04M 1/50
USPC: 640,867 A; 640,867 B; 640,867 C
See application file for comprehensive search history.

(57) ABSTRACT
An electronic device includes one or more sensors, multiple sensors proximate movable between a retracted position and an extended position where they extend above the screen to create a gap, and one or more sensors. When the sensor detects a drop event, the sensor moves away from the retracted to extended position, functioning as a shock absorber and protecting the screen from impacting with a surface that the electronic device contacts. In some implementations, the sensors can include one or more sensors, proximate movable between a retracted position and an extended position, where they extend above the screen to create a gap, and one or more sensors. Such tabs may be formed of various materials and/or rigid materials such as plastic, plastic film, polyethylene terephthalate or other polymers, metal, thin film metal, combinations thereof, and/or other such materials.

20 Claims, 4 Drawings
And...Frenzel Filed his Utility Model in Germany

Cited Patent Literature
-US 9715257 B2
-US 7050182 B1

Photos: Philip Frenzel Facebook
So you are all set to begin... what’s next?

New Product Development Process
Module III

Integrating Public Domain Knowledge into Product Development Processes
New Product Development Process

- Idea
- Screen
- Design
- Development
- Test
- Launch
- Post-Launch

CONCEPTS → PROJECTS → PROTOTYPES → PRODUCTS → IMPROVEMENTS → Time
## Tools Discussed in the Guide

- Balanced Scorecard
- Porter’s Value Chain Analysis
- Business Model Canvas
- SWOT Analysis
- The 5 Ps of Marketing
- TRIZ Methodology
- Product Manager in NPD
- Technology Risk Management
Technology Trends & Market Data
Identify Technology Trends and Market Segments

- Market Opportunities: who will buy your product/service?

- Market Data: what information do you have of the market you want to enter in?

- Reviewing what technologies are already in the market

- Finding if there are available technologies you can exploit to identify market opportunities

- Patent intelligence based on patent database searches, patent statistics and reports
Market Opportunities Example: Gwatamatic

- An automated sadza maker by William Gwata
- Sadza – staple meal in Africa but too labor intensive
- Gwata pursued domestic buyers for his sadza maker
- Gwata finally realized the market opportunity for his invention – for commercial use
Existing Technology to Develop New Product Example: BIODOME

- BIODOME by Fatima Zahra of Morocco
- An alternate composter that harnessed renewable biogas
- Ms. Zahra studied existing composters in the market
- Target customers who could use a composter and biogas as a source of fuel
Patent Intelligence
Patent Intelligence: Supplement your invention with information available in patent databases
Ask questions like…

What technology of interest is free-to-use?
What is the scope of patent search?
Do the target markets for your client’s product/service also limits your client’s use of certain technology?
So...is it too early to shape your IP strategy?
IP Strategy is Necessary from Early Stage in NPD

Make sure your invention is protected against infringement

Determine what kind of IP protection would be the best
- Patent protection
- Trademark filing

Seek an expert to draft your IP strategy
- Lack of resources often discourage legal help but may prove worthwhile in the long run
Business Model Canvas
Business Model Canvas Example: Hatua Charger

- Pressure based mobile phone charger
- Device installed inside a shoe’s inner sole
- Walking motion exerts pressure on the piezoelectric crystal

Photo: Anthony Mutua
### Example of Business Model Canvas

#### Key Partners
- Innovation lab at TUM
- Kenyan Patent Office for patent research on existing technology
- Investors
- Shoemakers
- Piezoelectric crystal chip and other parts suppliers

#### Key Activities
- Assemble parts to be put in shoes
- Retrofit shoes with the chargers
- Provide solutions/feedback to complaints/suggestions

#### Value Proposition
- Alternative solution to lack of electricity for charging phones
- No change in the original design of the shoes after retrofitting
- Low maintenance after retrofitting the shoes
- Quick turnaround for installing the phone chargers
- Low costs to the business
- Affordable pricing model for customers

#### Customer Relationships
- Cost effective
- Ease of use
- Safe to use

#### Customer Segments
- People-on-the-go who walk frequently
- People who live in areas where electricity is unreliable or unavailable
- Moderate to frequent users of mobile phones

#### Key Resources
- Research partners at TUM
- Investors
- Skilled workers in assembly
- Shoemakers with technical know-how

#### Channels
- Servicing:
  - Licensed outlets for retrofitting
  - Accessible retrofitting locations for customers
- Marketing
- Social media channels
- Word-of-mouth

#### Cost Structure
- Cost of labor to assemble the chargers and to retrofit them in the shoes
- Cost of training staff and partner shoemakers
- Technical support for defective chargers
- Initial costs of the charger parts
- Research & Development (R&D)
- Marketing and sales cost

#### Revenue Streams
- Paid partnerships with shoemakers selling retrofitted shoes
- Revenue model: Price of retrofitted shoes paid by customers
- Future licensing fees from the patented technology

Source: www.businessideageneration.com
IP Strategy Example
Dr. Evelyn B. Taboada, professor of chemical engineering at University of San Carlos discovered an innovative use for mango waste.

In 2008, she was asked by mango processing companies to find solution to mango waste. Half of mangoes processed were wastes filling up landfills and polluting environment.

Research team led by her came up with additional uses of mango skin and kernels in making mango flour, butter and tea.

In 2012, start-up GEMS was founded.
GEMS Notable Insights:

GEMS exclusively licensed the process technology developed by Dr. Taboada and her team

Products such as:

- **Mango flour**: rich in vitamins, minerals, dietary fibers, polyphenols (antioxidants), probiotics
- **Mango pectin**: used as thickener, gelling agent in jams etc.
- **Mango polyphenol**: used as additives
- **Mango tea**: rich in nutrients of mango
- **Mango butter**: food stuff, nutraceuticals, cosmetics, pharmaceuticals
- **Feed mix**: used as a nutritious feed for livestock and pets
- **Seed, husks, briquettes**: alternative sources of fuels with high heating value
“The Patent system added the fuel of interest to the fire of genius”

Abraham Lincoln
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- Porter’s Value Chain Analysis
- Business Model Canvas
- SWOT Analysis
- The 5 Ps of Marketing
- TRIZ Methodology
- Product Manager in NPD
- Technology Risk Management
Thank You

Questions?

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komal.bajracharya@kellogg.northwestern.edu
Question & Answer session

… please wait a moment while we review your questions…
What’s next?

- Ask the Expert session on eTISC
  - Dates: July 9 to 23, 2020
  - Link: [https://etisc.wipo.int/ask-the-expert](https://etisc.wipo.int/ask-the-expert)

- Webinar on the Guide on Identifying Inventions in the Public Domain
  - Date: July 16, 2020 @3PM CEST

- Guides: [https://www.wipo.int/tisc/en/](https://www.wipo.int/tisc/en/)