Standardizing Digital Communication in the IP World: WIPO Standards and collaboration for IP ecosystem
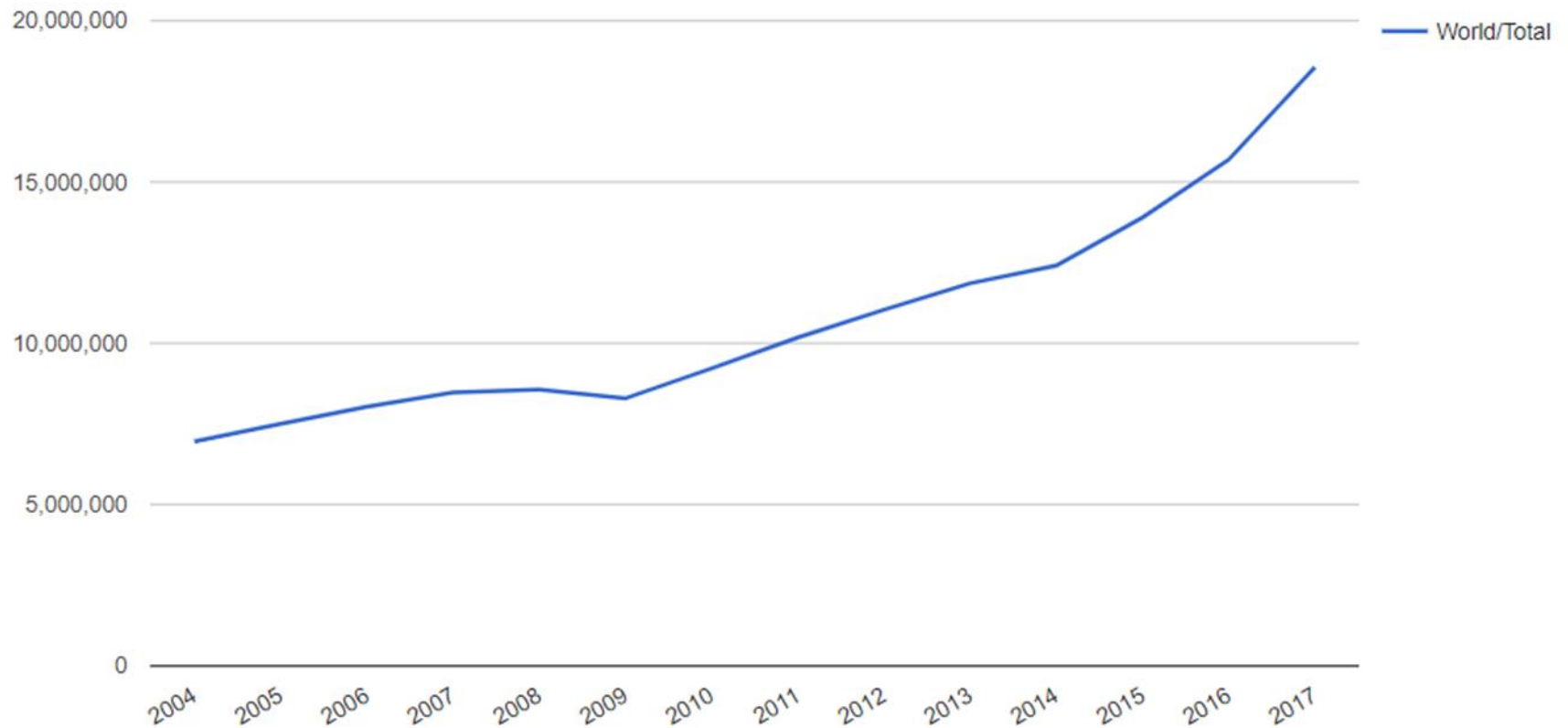
Young-Woo YUN, Head of WIPO Standards Section

Overview

- Evolution of IP Ecosystem

- Impact and Implication of evolution

- WIPO Standards

- Standardization Activities

- Possible Collaboration for interoperable IP ecosystem

Evolution of IP Ecosystem

■ Total IP applications around the world increased

Evolution of IP Ecosystem (con't)

- IP becomes more important in digital economy

- Lifecycle of technology shorter

- Digitalization of massive data processing

- Personalized data and prompt service

- Machine to Machine (M2M) communications

- Disruptive technologies, e.g., AI and Blockchain, available

Evolution Impact and Implication

- Digitized IP data in structued text format required

- IP data quality at source ensured

- IP digital objects connected and reused

- Interoperability enhanced

- Stanardization essential

- Collaboration indispensible

- Development and use of common tools and services

WIPO Standards

- [WIPO Standards](#) provide a single, common framework for working with the information contained within IP data and documents

- By using WIPO Standards, IP offices around the globe can work in a more efficient, harmonious, and timely fashion

- WIPO Standards greatly simplify both international cooperation among Offices as well as helping public users of IP information to better access and make use of that information in their applications

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Scope of WIPO Standards

- Semantic and Syntax Standards on IP data and documentation
- All IP domains: patent, trademarsk, industrial designs
    - Geographical indications and Copyright in 2020
- Entire IP administration: filing, processiong, publication/dissemination and post grant/registration; and exchange
    - IP management data to be improved
- Stakeholders and users: IP offices, Applicants, IP Industry and IP professionals (IP attorneys to be considered)

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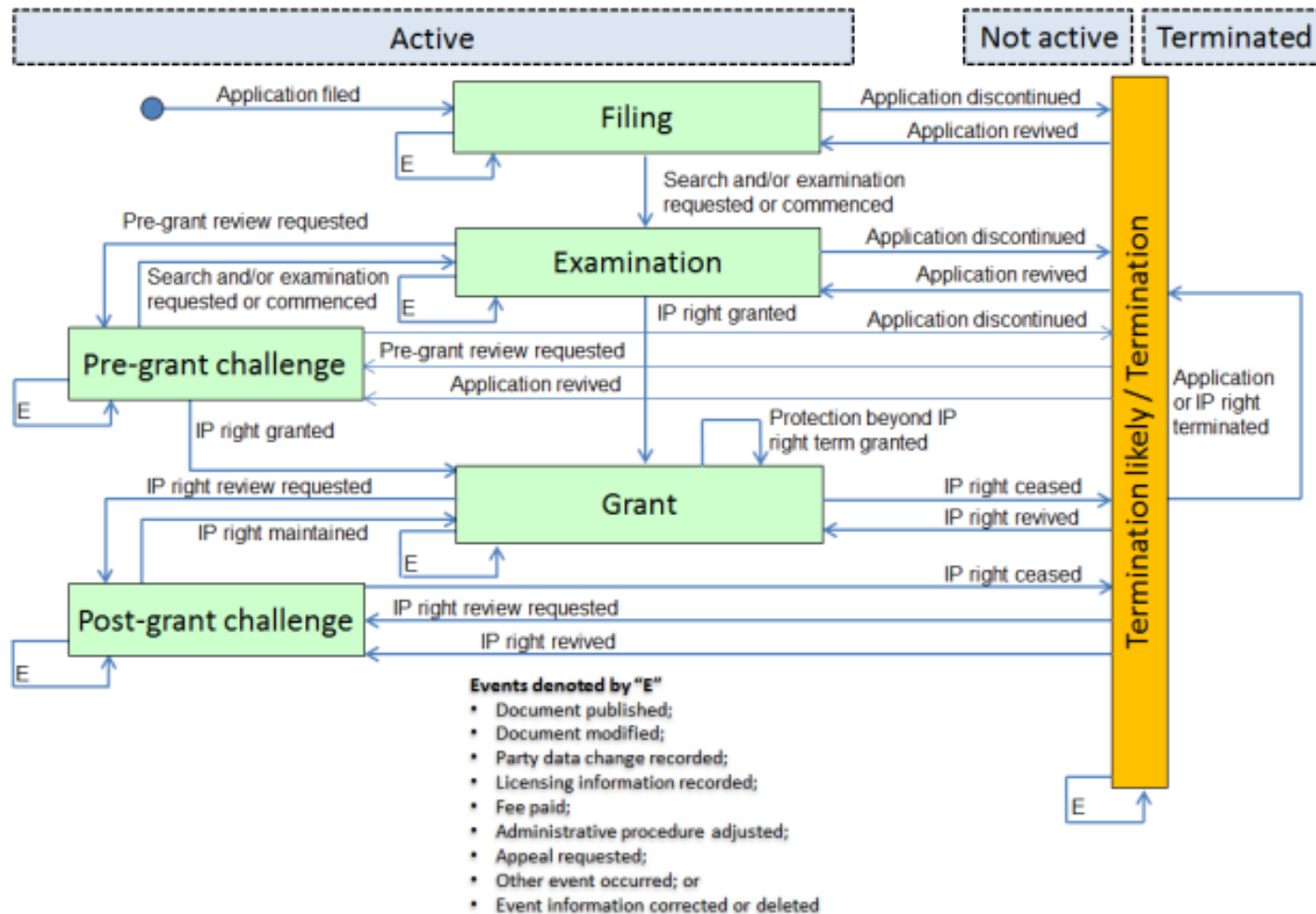ORGANIZATION

Recent focus and trend

- Legal status information

- Further standardized IP digital objects

- Streamlined data flow in national and international process

- Development of common tools

- Implication of distruptive technologies

- More active participations by IP industry and IP professionals

WIPO ST.27 – Patent Legal Status

- For the exchange of patent legal status data
  - to facilitate access to legal status data by IP information users, other Offices, IP data providers, the general public and other interested parties.
- Legal status data should be
  - reliable / accurate / in time / accessible
  - **standardized, comprehensive and understandable**
- The standardization project was initiated by patent information user groups
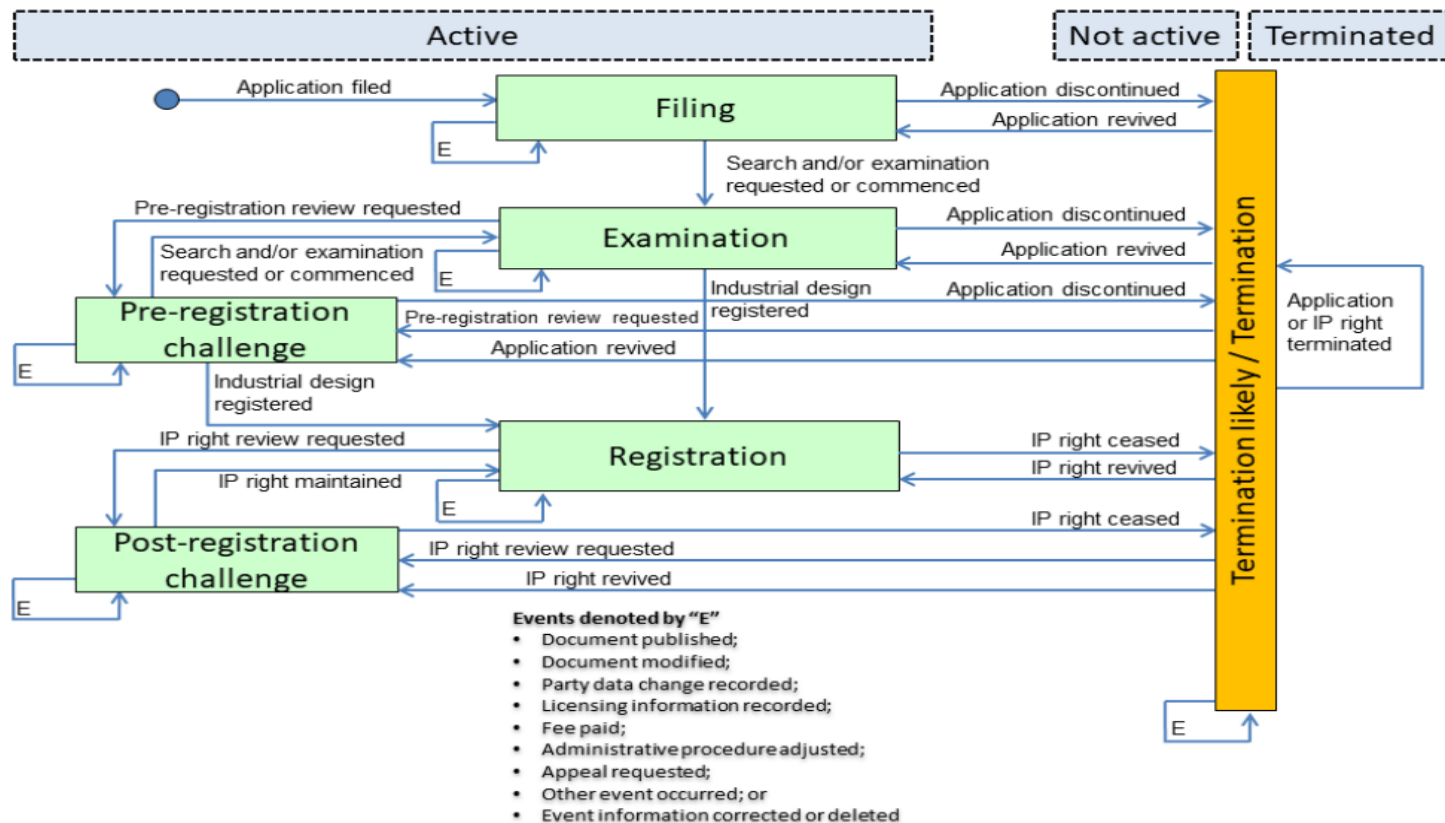
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WIPO ST.27 – Patent Legal Status

■ 6 stages, 3 states, 21 Categories and Key/detailed events
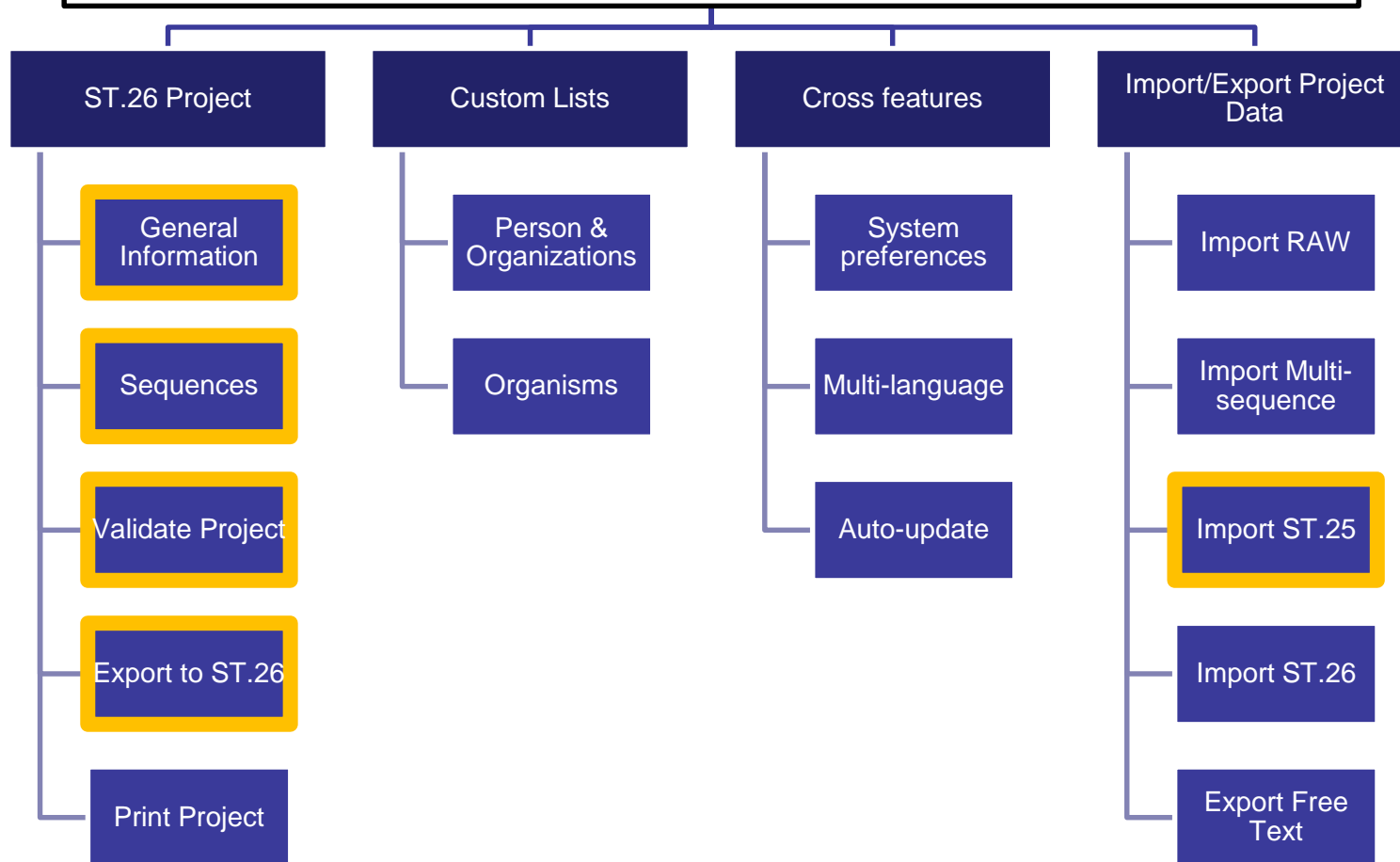
WIPO ST.87- Design Legal Status

■ 6 stages, 3 states, 20 Categories and Key/detailed events

WIPO ST.26 – Sequence Listing

- Presentation of nucleotide and amino acid sequence listings using XML

- From 1 Jan 2022, **all** IP Offices must implement WIPO ST.26 at national and international level

- IP Offices will also need to support applicants in their transition from ST.25

- WIPO is developing a common **WIPO Sequence tool** for applicants and IP offices around the worldwide

  - IP offices and end users participating in testing

  - The tool will be deployed in the 2nd half of 2019

WIPO Sequence tool: Main Funtions

ST.26 Project
- General Information
- Sequences
- Validate Project
- Export to ST.26
- Print Project

Custom Lists
- Person & Organizations
- Organisms

Cross features
- System preferences
- Multi-language
- Auto-update

Import/Export Project Data
- Import RAW
- Import Multi-sequence
- Import ST.25
- Import ST.26
- Export Free Text

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WIPO ST.37- Authority File

- "Recommendation for an authority file of published patent documents"
  - to allow all interested parties to assess the completeness of the available patent documentation from the IP office that generated the authority file
  - Standard defines <u>data elements</u> to constitute an authority file of patent documents, as well as its <u>structure</u> and <u>format</u>.
- WIPO Authority File Portal (currently 20 IP offices): <u>https://www.wipo.int/standards/en/authority_file.html</u>

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WIPO ST.96 – XML for IP

- XML resources to be uese for for filing, publication, processing, and exchange of information for Patent, Trademark, Industrial desings

- New IP domains: Geographical Indications (Gis) and Copyright orphan works to be added

- IP offices are collaborating for interoperable implementation of WIPO ST.96

- Plan to establish e-forum to support Developers to implement ST.96

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Who develops WIPO Standards?

- The Committee on WIPO Standards (CWS) is the collaborative international forum for discussing and reaching agreement on WIPO Standards, including their revision and development.

- 17 Task Forces (Expert Groups) are active under the CWS to enhance WIPO Standards and other materials, where IP offices and user groups nominate their experts.
  - Legal Status Task Force
  - Blockchain Task Force
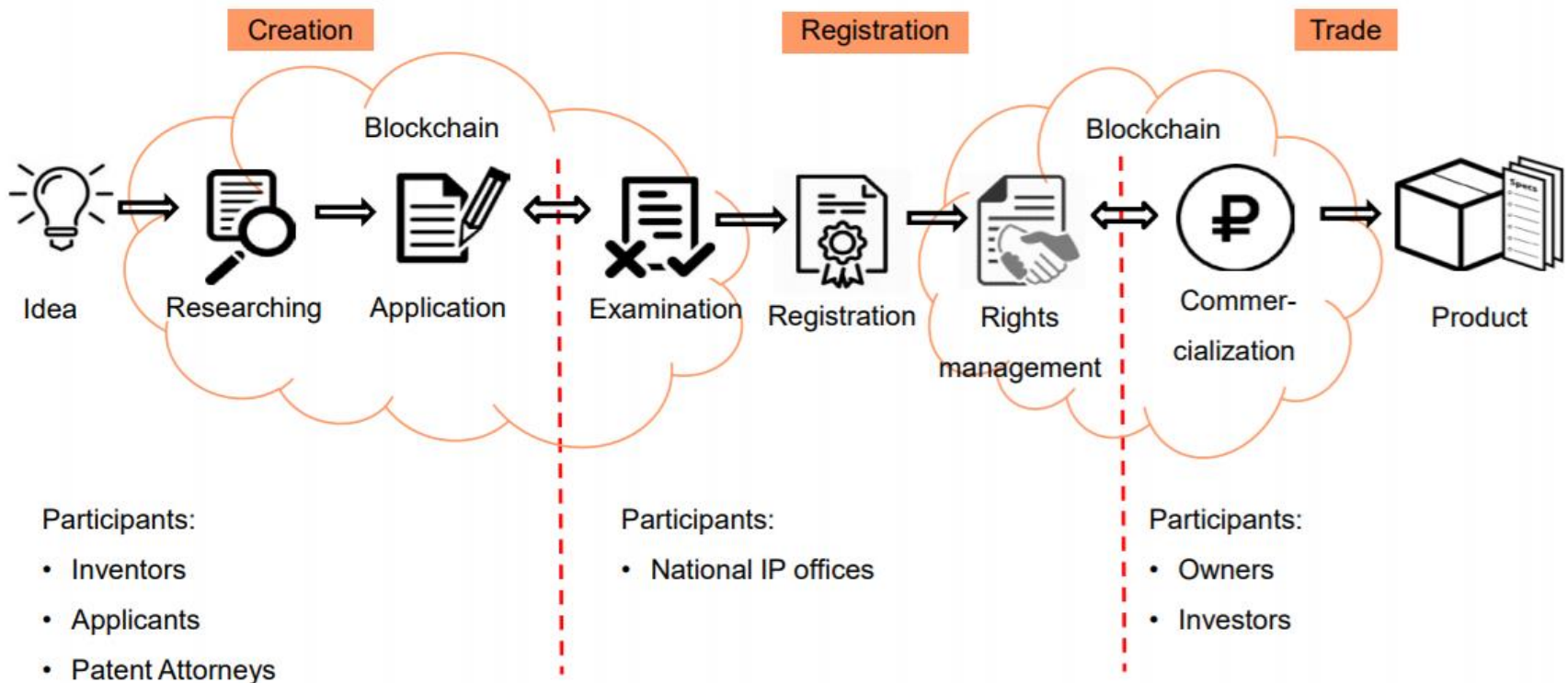 - XML4IP Task force
  - PAPI Task Force
  - …

CWS Task Force Activities

- Impact of disruptive technologies on IP administration and IP data in view of harmonization and collaboration

- Potential applications of Blockchain for IP ecosystem

- Name standardization

- Digital Transformation

- 3D objects and 3D images

- XML for GIs and Copyright orphan works

- Web API standard for M2M communication

- Trademark legal status data and Multimedia marks

- Others

Example: Blockchain for IP ecosystem

- **WIPO Standards Workshop on Blockchain**
  - Explore how to leverage the technology for IP and identify business cases in IP that could potentially benefit from blockchain technology
- The outcomes of the workshop reported to the CWS/7

- Plan to prepare white papers on the potential applications of Blockchain technology to IP ecosystem and recommendations for its use in IP space

Example: potential Blockchain use case

Creation

Blockchain

Idea → Researching → Application ⟺ Examination → Registration → Rights management ⟺ Commercialization → Product

Registration

Trade

Blockchain

Participants:
- Inventors
- Applicants
- Patent Attorneys

Participants:
- National IP offices

Participants:
- Owners
- Investors

Consideration for standardization

- Entire IP ecosystem
  - IP administration and prosecution
  - IP value chain and supply chain process
- Active Participation and Coordination
  - Various stakeholders and users: IP offices, applicants, IP attorneys, IP professionals, IP service providers, systerm developers…
- Disruptive technologies
- Semantic and Syntatic standards for interoperability

Possible Collaboration

- Partnership for IP ecosystem
    - Identify challenges in relation to IP value chain, including interoperability and data connectivity
    - Frequent communications
- More active participation by IP industry and IP professionals in WIPO Standardization
    - Surveys on practices, e.g., use of 3D object survey
    - CWS TFs discussion
    - Meetings and workshops
- Establish e-forum for discussion

Questions and Discussions

■ Thank you for your attention and collaboration!