国家知识产权局
China National Intellectual Property Administration

CNIPA Digital Transformation Strategies and Practice

CONG Shan, September 2024

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PART ONE

ICT Strategies and Targets

1

01 ICT Strategies and Targets in CNIPA

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Strenthen the construction of the intellectual property informationalized and intelligent infrastructure,strenthen the application of AI and big data and other information technologies in the field of IP examination and protection, and promote the integrated development of online and offline intellectual property protection.

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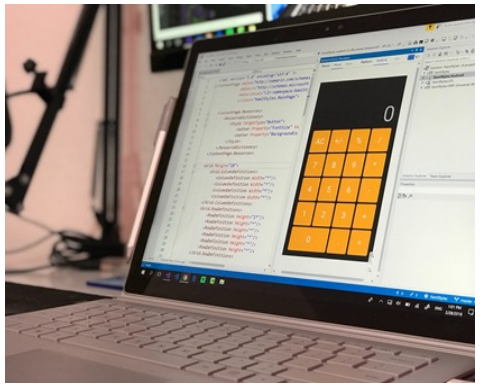
Better ICT Infrastructure for Better IP Environment



Support the examiners

Serve the general public

Facilitate the applicants

01 ICT Strategies and Targets in CNIPA

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Infrastructure

Built a new, safe and controllable infrastructure platform with leading technology, optimize the infrastructure architecture and layout, improve compatibility, ensure smooth business under multiple office modes.

Data

Improve data protection, make the data governance more standardized, collaborative and efficient, continue completing and expanding data resources.

Applications

Make the system more suitable and friendly for the needs of users, and provide stronger supports for intelligent patent examination.

Administration

Make the project management more scientific and precise, operation services more people-oriented, ICT infrastructure and business more integrated.

01 ICT Strategies and Targets in CNIPA

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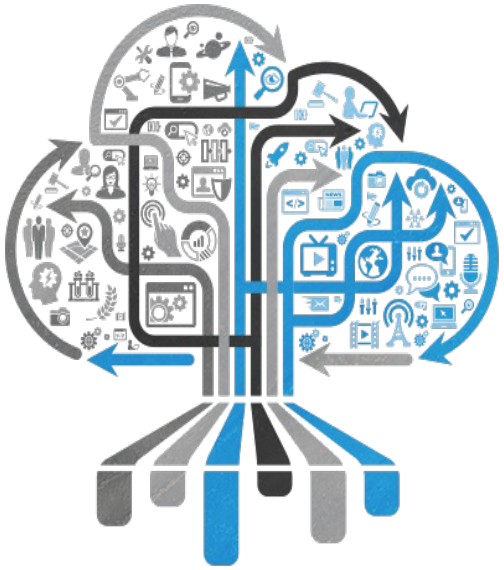

- In January 2023, China Patent Intelligent Examination and Sea rch System (i system) was fully launched, marking that the IT development of CNIPA has experienced electronization, digita lization and formally entered the era of intelligence.

01 ICT Strategies and Targets in CNIPA

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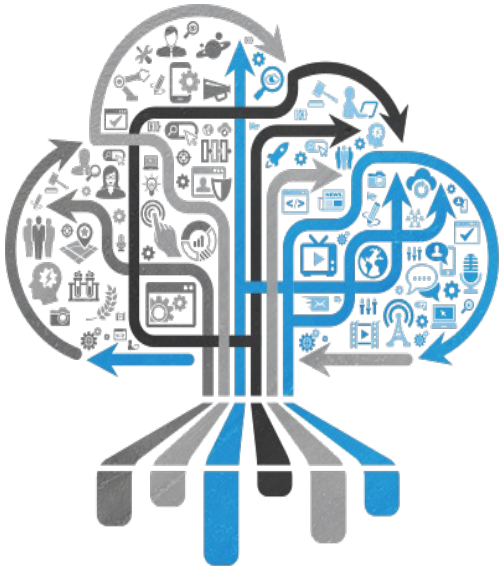

- It has realized core functions such as intelligent search, online tra nslation, drawing recognition, automatic identification of defects in applification, etc., and has comprehensively improved the quality a nd efficiency of the patent examination.

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PART TWO

Digital Transformation History of PCT in CNIPA

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02 Digital Transformation History of PCT in CNIPA

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- According to [WIPO PCT Yearly Review 2023], Since 2019, China has been the most active filer of PCT applications.
- In 2023, 69,000 PCT applications were filed by Cnina.
- Among the top five origins, China has witnessed the most rapid total a verage annual growth (+23.4%) since 2003.

WIPO IP Statistics Data Center

Back | Modify search

Source: WIPO statistics database. Last updated: December 2023

Intellectual property right : PCT
Year range : 1995 - 2024

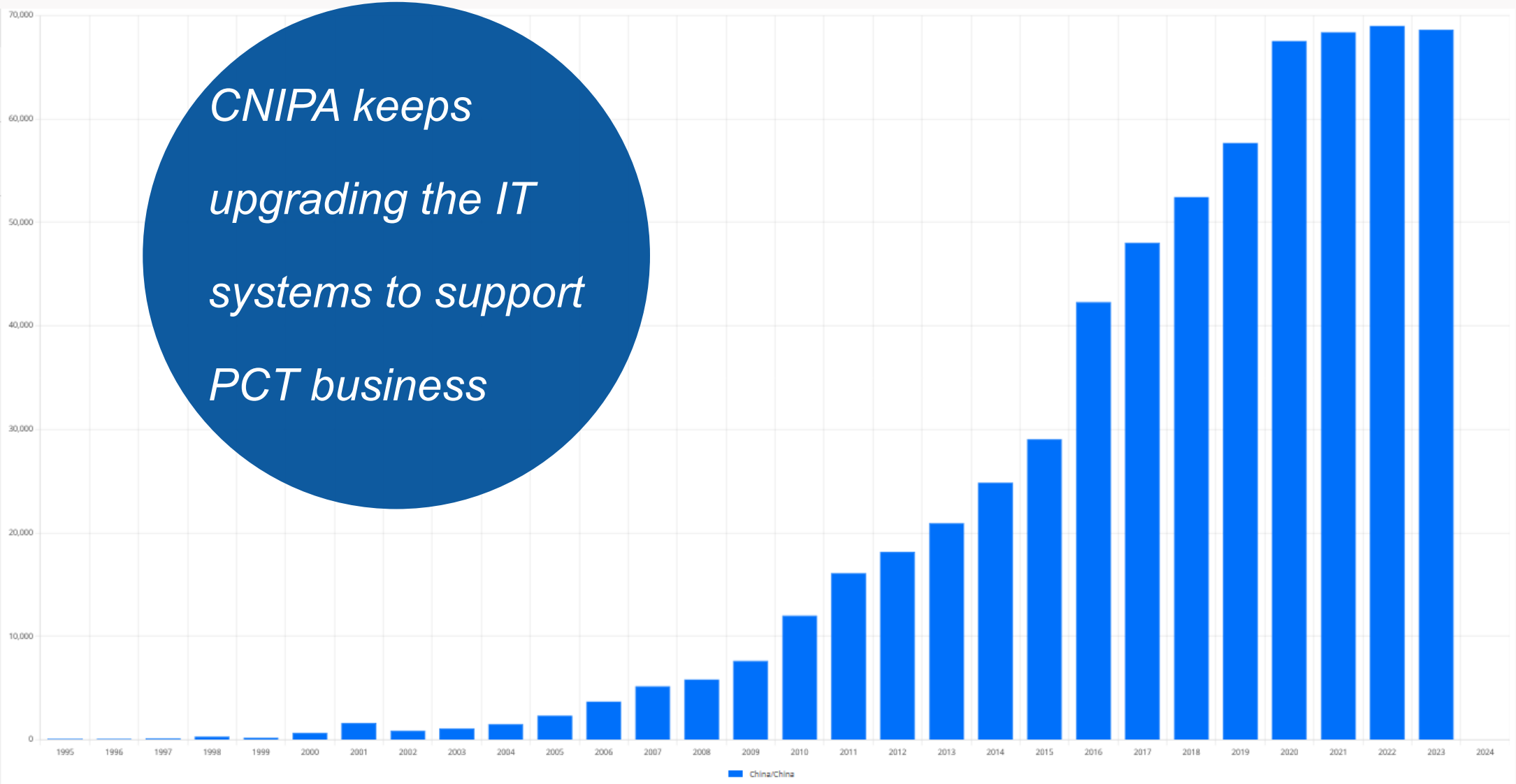
Reporting type : Yearly statistics
Indicator : 1 - PCT applications by filing date

Table | Line chart | **Bar chart** | Stacked chart | Pie chart | Download CSV

← Filters

- Receiving Office (RO)
  - All
  - China
- Origin
  - All
  - China

CNIPA keeps upgrading the IT systems to support PCT business



02 Digital Transformation History in CNIPA: PCT

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1

China joined the PCT in 1994

2

In 2007, CNIPA launched the e-PCT system, realizing full electronization and networking for PCT international phase.

3

In 2014, CNIPA established the CE-PCT system, which has improved the coding and digitization level of PCT international application processing.

4

In January 2023, with the full launch of the i-system, CNIPA has realized full text examination and processing in the whole process of the PCT international stage, and has also realized automatic exchange of all documents and data in the international stage with the IB through machine-to-machine interface.

02 Digital Transformation History in CNIPA: PCT

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Cooperation with IB

PCT Legal

While building the i-system, we reached a consen sus with the IB to promote the examination and int ernational publication of the based on coded text. In October 2021, IB amended Article 705 ter of th e PCT Administrative Instructions, clarifying that t he authorities may conduct a examination on the basis of the application documents formed after th e format conversion of the receiving office.

PCT publication

In October 2023,The IB launched a pilot XML rendering arrangement in order to better display whe re modifications have been made in the publication o f international applications filed in (or converted to) XML format. CNIPA's acceptance of corrections or a mendments to the application are processed in the f orm of "paragraph replacement", taking the place of t raditional "page"based amendment，which is a mile stone in PCT system.

PART THREE

CNIPA PCT Digital Practice

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03 CNIPA PCT Digital Practice: M2M

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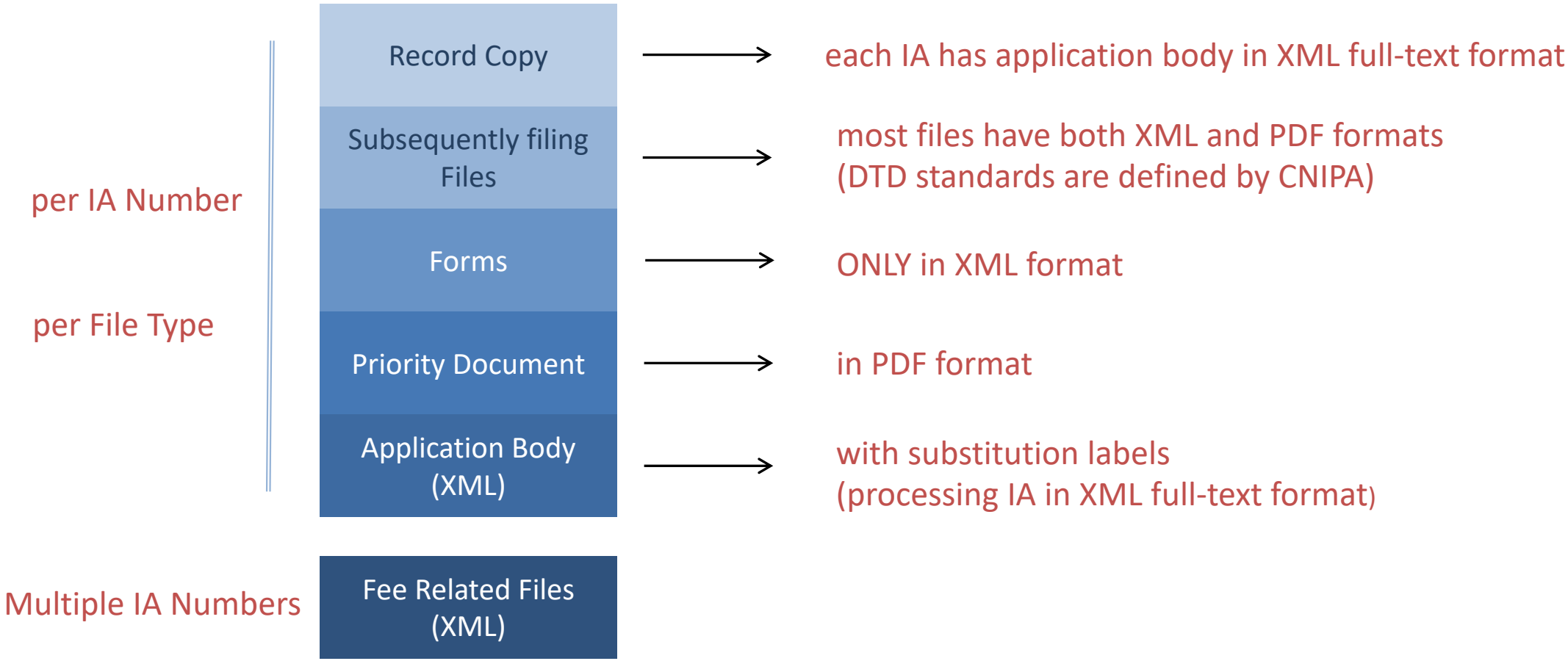
➢M2M:CNIPA transmits data to IB



03 CNIPA PCT Digital Practice: M2M

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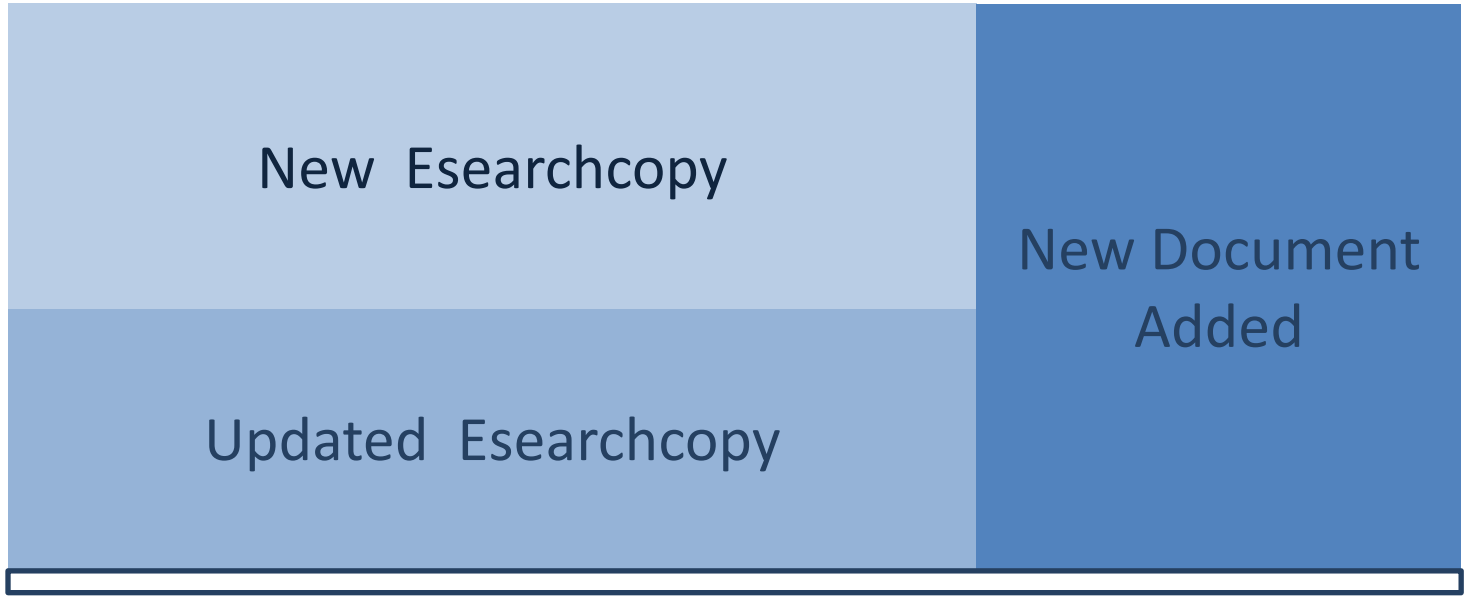
➢M2M: CNIPA receives data from IB



03 CNIPA PCT Digital Practice : M2M

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M2M improve data accuracy and delivery efficiency

- achieving rapid response
- Improving the timeliness of PCT business processing

- Implementing real-time data verification
- improving the efficiency of data processing

- information synchronization
- improving the review accuracy and applicants' experience

03 CNIPA PCT Digital Practice: The Digitalization of PCT Subsequently filed documents

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With the launch of the i system, CNIPA h as realized the method of form filling by it em in the PCT electronic filing system, w hich is convenient for the applicants to s ubmit the **Subsequently filed docume nts** of the PCT international application.

This method clarifies the detailed fields that need t o be filled in for each type of Subsequently filed file, and can carry out data verification, thus avoiding er rors and omissions to a great extent, reducing the possibility of correction.

The Subsequently fils is saved as PDF file, and it i s saved as XML data format for intelligent rule-ass isted exa-mination . It helps improve the quality of applications and improve the quality and efficienc y of PCT examination.

03 CNIPA PCT Digital Practice: The digitalization of PCT intermediate documents

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CNIPA DTDs for PCT intermediate Documents

In order to support the system to generate XML data from the fields of PCT S ubsequently filed documents filled in by the applicants, CNIPA has developed and established a set of **Xml data specification DTDS** for those PCT Subseq uently filed documents. Currently there are more than 30 types of PCT interm ediate documents that CNIPA has formulated XML DTDs.

03 CNIPA PCT Digital Practice: The digitalization of PCT intermediate documents

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Advantages of DTDs for PCT intermediate Documents

To further promote the digital transformation of the PCT business, improve the quality of applications and examination efficiency

To make the application modification replacement coded text be directly used as the basis of PCT examination.

1 Greatly improve the accuracy and completeness of the submission of the intermediate documents, and the XML data can be directly used and auto-verified by the system, and the automatic examination or automatic update of the data can be realized in the follow-up examination process.

THANKS

September 2024 , Congshan, GENEVA