



Advanced Seminar on the Patent Cooperation Treaty

Updates and Recent Developments

Ms. Hanna Kang
Legal Officer
PCT Legal and User Relations Division

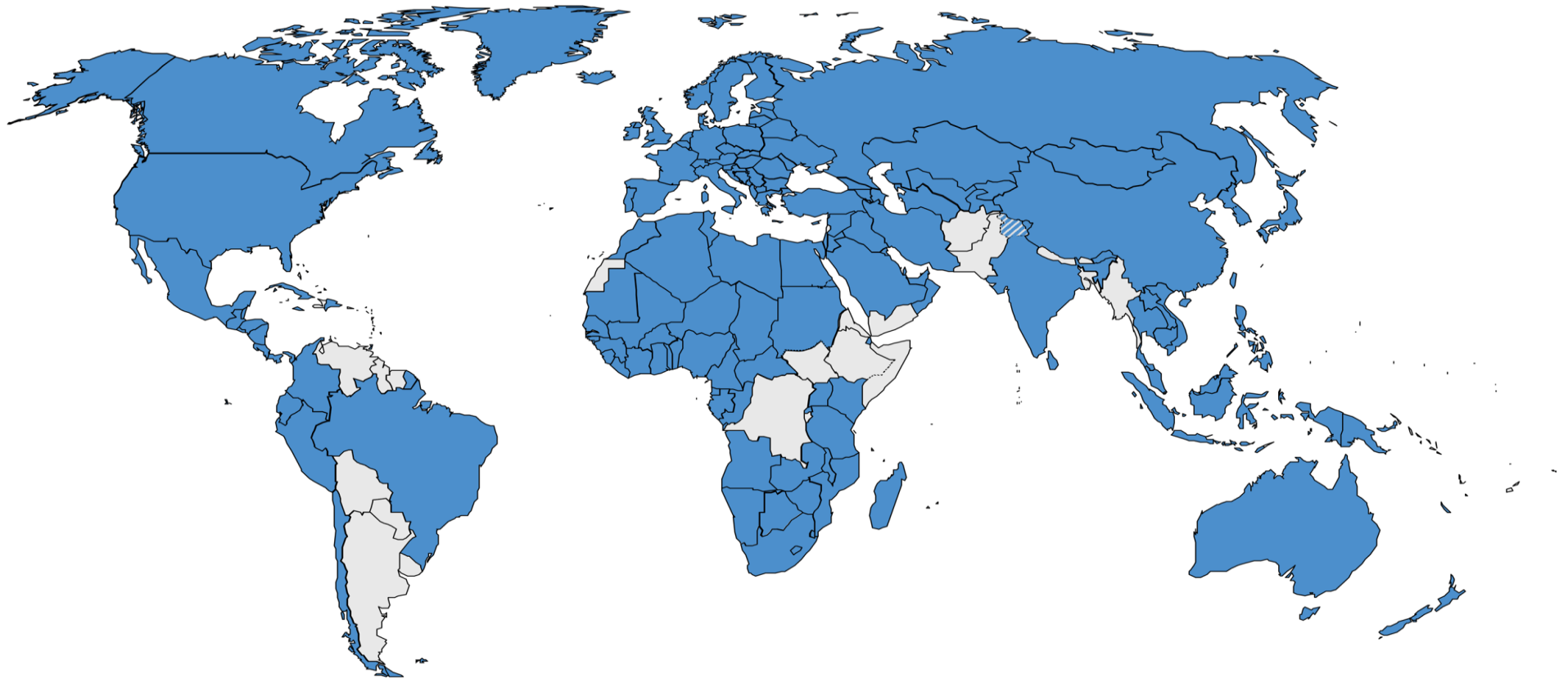


Geneva
November 9-10, 2023

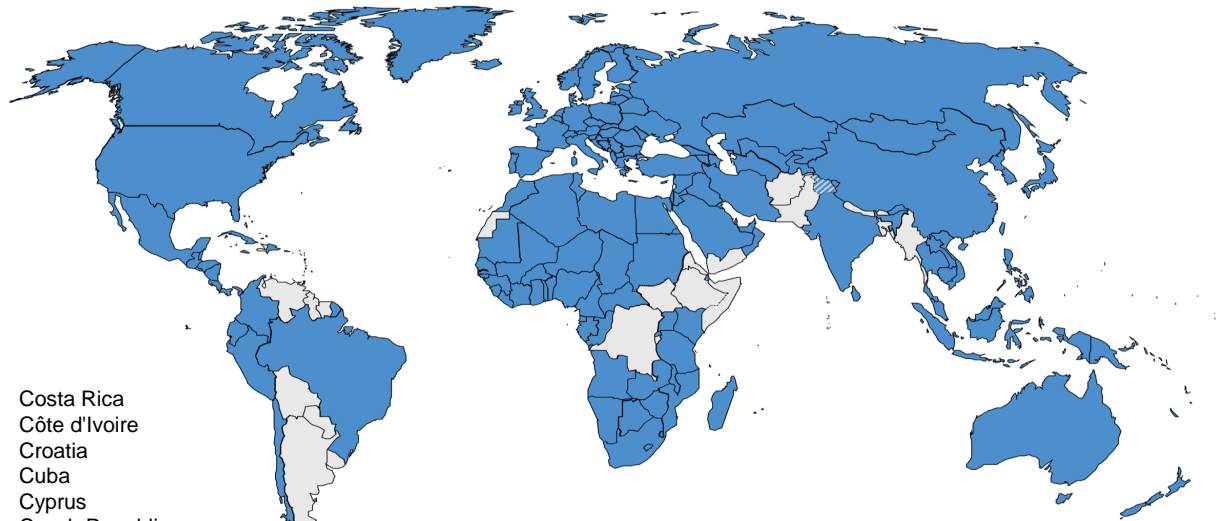


PCT Contracting States and Statistics

PCT Coverage Today



157 Contracting States



Albania
Algeria
Angola
Antigua and Barbuda
Armenia
Australia
Austria
Azerbaijan
Bahrain
Barbados
Belarus
Belgium
Belize
Benin
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Cambodia
Cameroon
Canada
Cabo Verde (6 Jul 2022)
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo

Costa Rica
Côte d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic
Democratic People's
 Republic of Korea
Denmark
Djibouti
Dominica
Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Estonia
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guatemala
Guinea

Guinea-Bissau
Honduras
Hungary
Iceland
India
Indonesia
Iran (Islamic Republic of)
Iraq (30 Apr 2022)
Ireland
Israel
Italy
Jamaica (10 Feb 2022)
Japan
Jordan
Kazakhstan
Kenya
Kuwait
Kyrgyzstan
Lao People's Dem Rep.
Latvia
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Madagascar

Malawi
Malaysia
Mali
Malta
Mauritania
Mauritius (15 Mar 2023)
Mexico
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Namibia
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Oman
Panama
Papua New Guinea
Peru
Philippines

Poland
Portugal
Qatar
Republic of Korea
Republic of Moldova
Romania
Rwanda
Russian Federation
Saint Lucia
Saint Vincent and
 the Grenadines
Samoa
San Marino
Sao Tomé e Príncipe
Saudi Arabia
Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sudan
Swaziland

St. Kitts and Nevis
Sweden
Switzerland
Syrian Arab Republic
Tajikistan
Thailand
The former Yugoslav
 Republic of Macedonia
Togo
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Uganda
Ukraine
United Arab Emirates
United Kingdom
United Republic of Tanzania
United States of America
Uzbekistan
Viet Nam
Zambia
Zimbabwe

WIPO | PCT
The International
Patent System

Countries not yet PCT Contracting States (36)

Afghanistan

Andorra

Argentina

Bahamas

Bangladesh

Bhutan

Bolivia

Burundi

Democratic Republic of Congo

Eritrea

Ethiopia

Fiji

Guyana

Haiti

Kiribati

Lebanon

Maldives

Marshall Islands

Micronesia

Myanmar

Nauru

Nepal

Pakistan

Palau

Paraguay

Solomon Islands

Somalia

South Sudan

Suriname

Timor-Leste

Tonga

Tuvalu

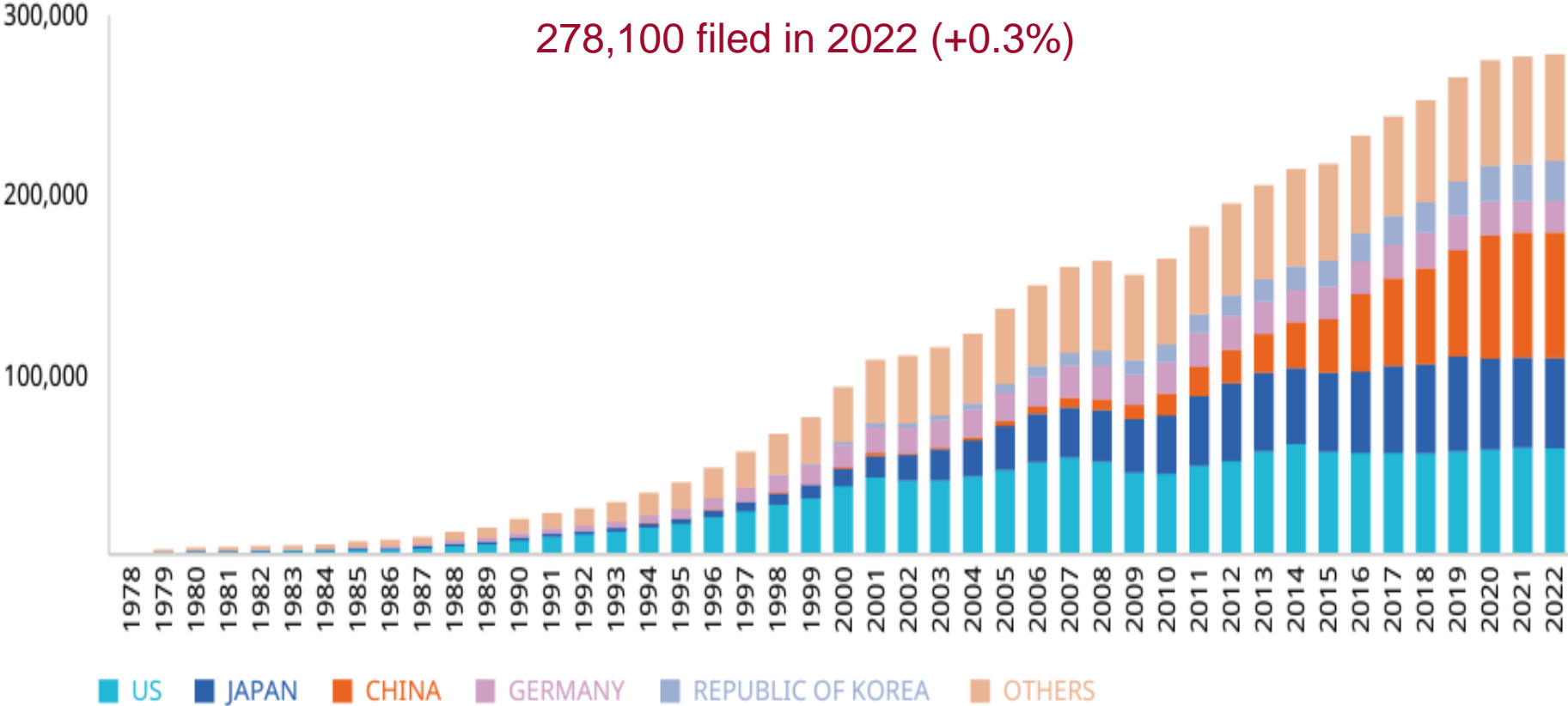
Uruguay

Vanuatu

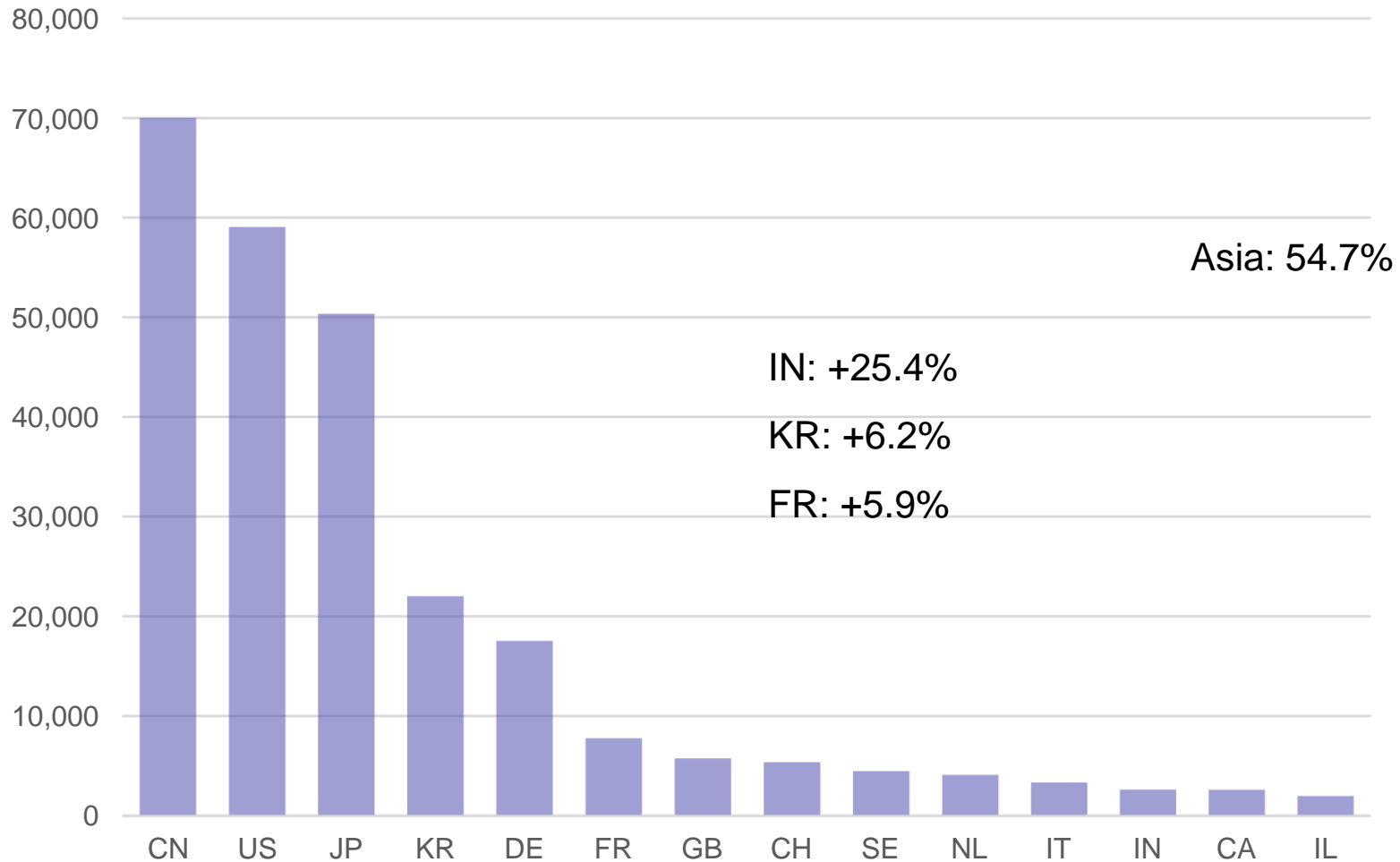
Venezuela

Yemen

Growth in PCT applications 1978-2022



International applications in 2022 by country of origin

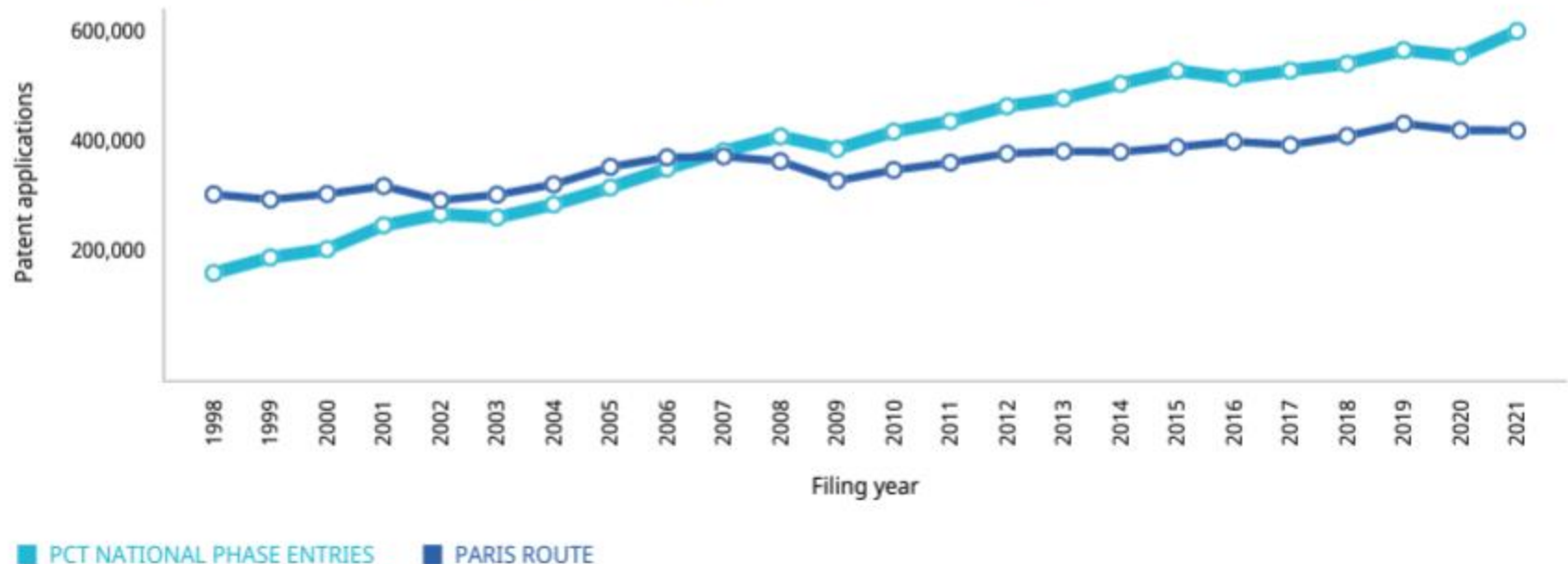


- 25% originating in China, 21% in US, 18% in Japan
- 64% from the top 3 countries, 79% from top 5 countries, 92% of filings from top 15 countries

Paris route vs. PCT route

PCT route surpassed Paris Route in 2007 and PCT national entry accounted for nearly 59% of non-resident patent applications filed in 2021

S11. Trend in non-resident patent applications by filing route, 1998–2021



Source: WIPO Statistics Database, March 2023.

Top PCT applicants in 2022

1. Huawei Technologies—CN (7,689)
2. Samsung—KR (4,387)
3. Qualcomm—US (3,855)
4. Mitsubishi Electric—JP (2,320)
5. Ericsson—SE (2,158)
6. Guang Dong Oppo Mobile Telecom—CN (1,963)
7. Nippon Telegraph & Telephone—JP (1,884)
8. BOE Technology Group—CN (1,884)
9. LG Electronics—KR (1,793)
10. Panasonic—JP (1,776)
11. Vivo Mobile Communications—CN (1,515)
12. Sony—JP (1,513)
13. ZTE—CN (1,479)
14. NEC —JP (1,428)
15. Robert Bosch Corp —DE (1,290)

*() of published
PCT applications*

Top PCT University applicants in 2022

1. University of California (US)
2. Zhejiang University (CN)
3. Suzhou University (CN)
4. Stanford University(US)
5. University of Texas (US)
6. Tsinghua University (CN)
7. Massachusetts Institute of Technology (US)
8. Johns Hopkins University (US)
9. Seoul National University (KR)
10. Hanyang University (KR)
11. Yonsei University (KR)
12. Korea University (KR)
13. National University of Singapore (SG)
14. Jiangnan Universtity (CN)
15. Jiangsu University (CN)



Amendments to the PCT Regulations as from 1 July 2022

WIPO Standard ST.26

New requirement for presenting nucleotide and amino acid sequences

Why the new standard?

- Compliance with international sequence database standards
- Reflect advances in biotechnology
 - E.g., branched sequences, D-amino acids and nucleotide analogs
- Structured data allows automated validations and facilitates data exchange
- Harmonize practices across all patent offices

ST.25 versus ST.26

ST.25	ST.26
ASCII .txt with numeric identifiers	XML with elements and attributes
Not required to include: <ul style="list-style-type: none">- D-amino acids- Linear portions of branched sequences- Nucleotide analogs	Must include: <ul style="list-style-type: none">- D-amino acids- Linear portions of branched sequences- Nucleotide analogs
Annotation of sequences: <ul style="list-style-type: none">- Feature keys only	Annotation of sequences: <ul style="list-style-type: none">- Feature keys and qualifiers
Permitted to include sequences: <ul style="list-style-type: none">- < 10 specifically defined nucleotides- < 4 specifically defined amino acids	Prohibited sequences: <ul style="list-style-type: none">- < 10 specifically defined nucleotides- < 4 specifically defined amino acids

ST.26 Sequence Listing

```
▼<SequenceData sequenceIDNumber="5">
  ▼<INSDSeq>
    <INSDSeq_length>12</INSDSeq_length>
    <INSDSeq_moltype>DNA</INSDSeq_moltype>
    <INSDSeq_division>PAT</INSDSeq_division>
    ▼<INSDSeq_feature-table>
      ▼<INSDFeature>
        <INSDFeature_key>source</INSDFeature_key>
        <INSDFeature_location>1..12</INSDFeature_location>
        ▼<INSDFeature_qual>
          ▼<INSDQualifier>
            <INSDQualifier_name>organism</INSDQualifier_name>
            <INSDQualifier_value>synthetic construct</INSDQualifier_value>
          </INSDQualifier>
          ▼<INSDQualifier>
            <INSDQualifier_name>mol_type</INSDQualifier_name>
            <INSDQualifier_value>other DNA</INSDQualifier_value>
          </INSDQualifier>
        </INSDFeature_qual>
      </INSDFeature>
      ▼<INSDFeature>
        <INSDFeature_key>misc_feature</INSDFeature_key>
        <INSDFeature_location>12</INSDFeature_location>
        ▼<INSDFeature_qual>
          ▼<INSDQualifier>
            <INSDQualifier_name>note</INSDQualifier_name>
            <INSDQualifier_value>cytosine attached to a C3 spacer, which is joined to another nucleic acid</INSDQualifier_value>
          </INSDQualifier>
        </INSDFeature_qual>
      </INSDFeature>
    </INSDSeq_feature-table>
    <INSDSeq_sequence>atgcatgcatgc</INSDSeq_sequence>
  </INSDSeq>
</SequenceData>
```

[Submit observation](#) [PermaLink](#)

1 Sequence Listing Information

1-1	File Name	SARS-COV-2-Ab-ZJU.xml
1-2	DTD Version	V1_3
1-3	Software Name	WIPO Sequence
1-4	Software Version	2.1.0
1-5	Production Date	2022-07-18

2 General Information

2-1	Current application: IP Office	
2-2	Current application: Application number	
2-3	Current application: Filing date	
2-4	Current application: Applicant file reference	P2022040Z
2-5	Earliest priority application: IP Office	CN
2-6	Earliest priority application: Application number	202110888463.6
2-7	Earliest priority application: Filing date	2021-08-03
2-8zh	Applicant name	浙江大学医学院附属第一医院
2-8en	Applicant name: Name Latin	The First Affiliated Hospital, Zhejiang University School of Medicine
2-9	Inventor name	
2-9en	Inventor name: Name Latin	
2-10zh	Invention title	人源化广谱高中和活性抗新型冠状病毒单克隆抗体及应用
2-11	Sequence Total Quantity	16

3-1 Sequences

3-1-1	Sequence Number [ID]	1
3-1-2	Molecule Type	AA
3-1-3	Length	125
3-1-4-1	Features Location/Qualifiers	source 1..125 mol_type=protein organism=Homo sapiens

3-1-5

Residues

QMQLVQSGPE VKKPGTIVKV SCKASGFTFT NSAMQWVRQA RGQRLEWVGV IIVASGNANS
ARRFPHDRVTI TSDMSTSTAY LELSSLRSED TAVYYCALNH CSNTTCLDGF DIWGQGTWVS
VSSAS

60

120

125

3-2 Sequences

3-2-1	Sequence Number [ID]	2
3-2-2	Molecule Type	DNA



ST.26 applicability

- ST.26 applies to all patent applications having a *filing date* on or after 1 July 2022.
 - NOT based on the priority date!

**See ST.26, Annex VII recommendations for transforming ST.25 sequence listing*

- ST.25 continues to apply to applications filed on or before June 30, 2022



Sequence listing filed on international filing date

- Considered as *sequence listing part of the description* if filed in the correct format (XML)
 - Application filed electronically
 - Separate XML file containing sequence listing
 - Application filed on paper
 - sequence listing in XML on physical media
- RO only required to confirm the correct file type (XML)
- If filed in ST.25, cannot simply replace with ST.26
 - Applicant may only add the content as sheets of the description

Non-compliant file type submissions

- RO informs the applicant that the sequence listing must be filed in XML under ST.26
- Invites the applicant to confirm addition of the content as sheets of the main part of the description
 - May require additional fee (sheets in excess of 30)
- If no confirmation/payment, the submission will not be part of the international application

Sequence listing language requirements (Rule 12)

- Only applies to the language-dependent free text
- Each RO determines the language(s) it accepts
 - May be different from the language of the main body of the application
 - RO/IB accepts any language
- RO may permit more than one language
 - English + another
- Transmittal to RO/IB under Rule 19.4

Subsequently furnished sequence listing

- Sequence listing part of the description (Rule 5.2(a))
 - Incorporation by reference
 - To complete (Rule 20.5(a)(i)) or correct (Rule 20.5*bis*(a)(i)) the international application
 - → Results in a change in international filing date
- Furnished for search purposes only (Rule 13*ter*)?

Sequence listing for search purposes (Rule 13*ter*.1) (1)

- International Authorities may invite the applicant to furnish a standard-compliant sequence listing
 - ❑ in a language accepted by the ISA
 - ❑ with a statement that it does not go beyond the original disclosure
 - ❑ late furnishing fee
- If the applicant fails to furnish a standard-compliant sequence listing, the ISA is only required to search to the extent a meaningful search can be done without the sequence listing

Sequence listing for search purposes (Rule 13*ter*.1) (2)

- A sequence listing furnished for search (Rule 13*ter*) does not form part of the international application
- The ISA forwards any Rule 13*ter* sequence listing to the International Bureau, to be made available on PATENTSCOPE

National phase requirements (Rules 13*ter*.3 and 49.5(a-*bis*))

- No DO/EO may require a sequence listing other than one complying with WIPO Standard ST.26
- Offices may require translation of the free text contained in the sequence listing:
 - into a language the Office accepts for the free text contained in the sequence listing
 - may also require translation into English if required by database providers

WIPO Sequence Software

- WIPO Sequence (for users)

- Free desktop tool developed by WIPO to support authoring, validation, and generation of ST.26 compliant sequence listings

- <https://www.wipo.int/standards/zh/sequence/index.html>

- Subscribe for updates

- Remember to always validate the sequence listing before filing!

ST.26 Training & Resources

- [WIPO Standard ST.26](#)
- [WIPO Sequence software download](#)
- Training webinars
 - [WIPO ST.26: Introduction](#)
 - [WIPO ST.26: Advanced](#)
 - [WIPO Sequence](#)
- [WIPO Standard ST.26 FAQs](#)
- [WIPO Sequence and ST.26 Knowledge Base](#)

PCT Rule changes as of 1 July 2022

- Amendment of PCT Rule 82*quater*
 - “Epidemic” added as one of the emergencies listed
 - Allowing Offices to waive the requirement to provide evidence in excusing delays under Rule 82*quater*.1
 - Authorization for Offices to establish a period of extension for time limits in the case of *general disruptions*
- Amended Rule applies to time limits fixed in the Regulations that expire on or after July 1, 2022



Latest Discussions

PCT Assembly July 2023 (1)

■ Mixed-Language International Applications (PCT/WG/16/8 & PCT/A/55/2, Annex I)

- Contains more than one language in description and/or claims, and all languages are accepted by RO
 - Otherwise, transmittal to RO/IB under Rule 19.4
 - “as appropriate”: RO has discretion to exclude cases of single word in another language or translations/transliterations offered by the applicant of technical terms
 - Special regime already applicable to language of text matter in drawings and abstract (Rule 26.3*ter*)
-
- *Approved amendments to Rules 26 and 29*
 - *Entry into force: 1 July 2024*

PCT Assembly July 2023 (2)

■ PCT Minimum Documentation (PCT/WG/16/6 and 7 & PCT/A/55/2, Annex II)

□ Multi-year project by task force of ISAs to:

□ create an up-to-date inventory of the patent literature and NPL parts of the PCT minimum documentation

□ recommend criteria and standards for including national patent collections

□ propose bibliographic and text components of patent data that should be present in patent collections

➤ *Approved proposed amendments to Rules 34, 35 and 63*

➤ *Entry into force: 1 January 2026*

■ New ISA: Appointment of Saudi Authority for Intellectual Property (SAIP) as the 25th ISA/IPEA

New format of the PCT Applicant's Guide

■ eGUIDE: html based PCT Applicant's Guide is available

Old (PDF)

New (html)

PCT Applicant's Guide – International Phase – Annex B1

B1	Information on Contracting States
AE	UNITED ARAB EMIRATES
General information	
Name of Office:	International Center for Patent Registration (United Arab Emirates)
Location and mailing address:	P.O. Box 3625, Sheikh Khalifa Bin Saeed Arab Emirates P.O. Box 901, Liwa Tower , Abu Dhabi, United Arab Emirates
Telephone:	Dubai: (971-4) 14 15 81, 14 15 60 Abu Dhabi: (971-2) 613 14 02
Facsimile machine:	Dubai: (971-4) 385 10 77, 358 13 13 Abu Dhabi: (971-2) 626 36 34
E-mail:	icpr@economy.ae
Internet:	www.economy.gov.ae
Does the Office accept the filing	

AE - UNITED ARAB EMIRATES

INTERNATIONAL CENTER FOR PATENT REGISTRATION, MINISTRY OF ECONOMY (UNITED ARAB EMIRATES)

Valid from **27 October 2022**

▼ USEFUL INFORMATION

The PCT Applicant's Guide is updated almost every week with information received by the International Bureau. In case of question, please contact the Office or the International Bureau (pct_guide@wipo.int).

List of abbreviations used in this document:

Office: International Center for Patent Registration, Ministry of Economy (United Arab Emirates)

IPL: Federal Law No. 31 of 2006 Pertaining to the Industrial Regulation and Protection of Patents, Industrial D

List of currencies used in this document:

AED: UAE Dirham

List of related countries and Offices used in this document:

IB: [International Bureau of WIPO](#)

Refer to [List of WIPO Standards, Recommendations and Guidelines](#) (formerly Annex K. List of country names and two-letter code of intergovernmental organizations (and their Offices) in documents relating to international applications under the PCT. The list is as set out in the [List of Contracting States](#) (formerly Annex A).

Processing in Full Text Format

■ Move to DOCX filing, XML processing

- <https://pct.wipo.int/DocConverter/pages/templateFiles.xhtml> (DOCX templates)
- <https://pct.wipo.int/DocConverter/pages/home.xhtml> (DOCX file converter)

□ How do we get this right?

PCT Information and Training

- 29 video segments on WIPO's Youtube channel and WIPO's PCT page about individual PCT topics
- PCT Distance learning course content available in the 10 PCT publication languages, and a 2nd detailed PCT DL course under preparation
- PCT Webinars
 - free updates on developments in PCT procedures, and PCT strategies—previous webinars are archived and freely available
 - upon request also for companies or law firms, for example, for focused training on how to use ePCT
- In-person PCT Seminars and training sessions: see PCT seminar calendar (<http://www.wipo.int/pct/en/seminar/seminar.pdf>)
- Monthly Newsletter (<http://www.wipo.int/pct/en/newslett/>)
- Extensive information resources on PCT website (<http://www.wipo.int/pct/en/>)
- If you'd like to discuss PCT training, contact us!

PCT Resources/Information

- For general questions about the PCT, contact the PCT Information Service at:

Telephone: (+41-22) 338 83 38

Email: pct.infoline@wipo.int

- Contact the speaker:

Email: hanna.kang@wipo.int

Thank you!

