Europäisches Patentamt
European Patent Office
Office européen des brevets

Learning path for patent administrators

The PCT system:
EPAC – entry level

Version: April 2026



Introduction

This publication, "The PCT system, EPAC – entry level", is part of the "Learning path for patent administrators" series is edited and published by the European Patent Academy. The series is intended for patent administrators who are taking part in training and certifications organised by the European Patent Office (EPO). It is also freely available to the public for independent learning.

Topics covered include: general aspects of the patent system; the European patent system and the European patent granting procedure; the International Patent System (PCT) and the PCT procedure; European and international publications; filing a European patent application and filing an international application; the formalities during the European and during the international search; the formalities during the European examination and during the international preliminary examination; the formalities during the appeal procedure after refusal (EPC), during the opposition procedure (EPC); national validation (EPC); entry into national/regional phases and entry into the European phase (PCT).

Each chapter focuses on one topic at entry, intermediate or advanced level, as appropriate. The series will be revised annually to ensure it remains up to date.

Disclaimer

This publication is for training and information purposes only. Although it has been prepared with great care, it cannot be guaranteed that the information it contains is accurate and up to date; nor is it meant to be a comprehensive study or a source of legal advice. The EPO is not liable for any losses, damages, costs, third-party liabilities or expenses arising from any error in data or other information provided in this publication.

The opinions expressed in this publication are not necessarily those of the EPO.

This publication may be used and reproduced for non-commercial purposes, provided that the EPO and the contributors are appropriately acknowledged. Reproduction for commercial purposes is not permitted.

All references to natural persons are to be understood as applying to all genders.

Contents

1.	Learning objectives	4
2.	Abbreviations	4
3.	The Patent Cooperation Treaty (PCT): an overview	4
4.	The PCT route	6
5.	The advantages of the PCT system	6
6.	The PCT system, a step by step summary	7
7.	The World Intellectual Property Organisation (WIPO)	8
8.	The role of the International bureau (IB)	8
9.	Relevant sources of information (PCT)	8
10.	Beyond the course	9

1. Learning objectives

Participants in this course will learn about:

- PCT contracting states
- PCT terminology
- the characteristics of the PCT system
- the advantages of the PCT system
- the stages that a PCT application goes through
- the role of the IB

2. Abbreviations

DO	designated Office
EO	elected Office
EPO	European Patent Office
IA	international application
IB	International Bureau of WIPO
IFD	international filing date
IPEA	International Preliminary Examining Authority
IPER	international preliminary examination report
IPRP1	international preliminary report on patentability, converted WO/ISA
IPRP2	international preliminary report on patentability, converted IPER
ISA	International Searching Authority
ISR	international search report
PCT	Patent Cooperation Treaty
RO	receiving Office
SEQL	sequence listing
SISA	Authority specified for supplementary international search
SISR	supplementary international search report
WIPO	World Intellectual Property Organization
WO/ISA	written opinion of the International Searching Authority

3. The Patent Cooperation Treaty (PCT): an overview

The PCT is a multilateral treaty, originally signed on 19 June 1970 by 36 states. It entered into force in 1978. The PCT assists applicants in seeking patent protection internationally for their inventions, helps patent offices with their patent granting decisions, and facilitates public access to a wealth of technical information relating to those inventions. (Source: WIPO website)

The PCT procedure includes:

- Filing: you file an international application with a national or regional patent Office or WIPO, complying with the PCT formality requirements, in one language, and you pay one set of fees.

- International Search: an International Searching Authority (ISA)identifies prior art by searching published patent documents and non-patent literature which may have an influence on whether an invention is patentable, and issues a search report as well as a written opinion on the invention's patentability, comparing the state of the art with the invention.

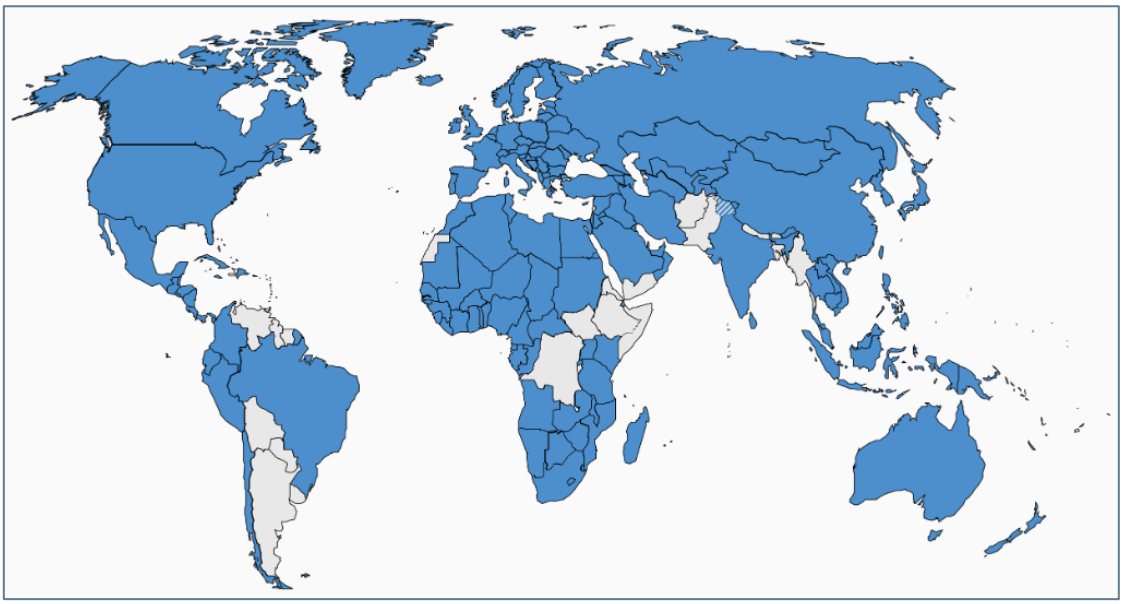
- International Publication: as soon as possible after the expiration of 18 months from the earliest priority date or even earlier at the applicant's request, international applications are published by the International Bureau of WIPO (IB), thus disclosing the invention to the world.

- Supplementary International Search (SIS) (optional): following a corresponding request filed by the applicant, an ISA that has declared itself competent for SISes,carries out another international search, also based on the IA as filed. This search may identify documents which may not have been found by the first ISA because of the diversity of prior art in different languages and different technical fields. It is possible to file multiple SIS requests simultaneously, either with different SISAs or, in case of the ISA finding lack of unity of invention during international search, on different inventions.

- International Preliminary Examination (IPE) (optional): following the filing of a so-called demand for IPE, a competent International Preliminary Examining Authority (IPEA), which is, basically an ISA taking the next step after international search, carries out an examination ideally on a version of the IA that has been amended in the light of the findings of the ISA. ISA and IPEA may be different authorities, depending on the individual IA. The IPEA will start with a top-up search of the IA. At the end of this procedure, a written opinion on the patentability of the IA is issued.

National/regional phase: after the end of the so-called international phase, 30 months from the earliest priority date, applicants may enter the national/regional phase in patent offices of their choice, in order to obtain a patent in the countries or regions chosen. This means that , following the PCT procedure does not result in the grant of a patent in itself.
PCT applications entering the regional phase before the EPO are called Euro-PCT applications. Applications filed without taking the PCT route are called EP-Direct applications.

As of 7 October 2024, the PCT has 158 contracting states, the latest accession being that of Uruguay with the PCT entering into force for that country on 7 January 2025.



Source: WIPO (https://www.wipo.int/pct/en/pct_contracting_states.html)

Legal references:
Art. 1 PCT; Art. 62 PCT

4. The PCT route

Using the PCT route, i.e. filing an international application under the PCT, applicants can request protection for an invention in one or more PCT Contracting States. The patent offices of those states are called designated Offices (DOs).

Four regional patents can be obtained via the PCT route:

- African Regional Intellectual Property Organization (ARIPO)
- Eurasian Patent Organization (EAPO)
- European Patent Organisation (EPO)
- African Intellectual Property Organization (OAPI)

Only one patent application, the international application (IA), is filed.

The IA has effect in multiple states or regions and is an alternative to filing several separate national and/or regional patent applications.

Therefore, even if the procedure under the PCT is not concluded by a grant of patent, it simplifies obtaining a patent for those states or regions.

5. The advantages of the PCT system

A formalities check is carried out during the international phase, so that the IA meets the formal requirements and can be processed by the DOs.

The international search is carried out during the international phase, so that the applicant can make an informed decision about pursuing the IA.

A big advantage of the PCT system is that applicants do not have to deal with the multitude of offices in the contracting states, but will, usually during the international phase, have contact with up to four authorities, while everything around the IA is communicated and effective in all contracting states. For example, filing amended claims under Art. 19 PCT with one office, namely the IB, means that more than 150 patent offices will receive the amended claims at the end of the international phase.

The PCT system offers fee savings for applicants, as fees are only paid for one application.

Still under the PCT, applicants may opt for international preliminary examination and supplementary international search(es) to obtain further information about the patentability of their invention. The final decision to grant, or not, a patent, is however not taken during the PCT phase. To this end, applicants must enter the national (ore the regional) phase at the end of the PCT phase.

National/regional processing takes place at least 30 months from priority for the vast majority of DOs. The time limit is often even later. It is earlier for only two DOs: national processing starts at 20 months from priority for Luxembourg and at 21 months for Tanzania. However, the two states can be covered by designating the EPO or ARIPO, respectively: applicants can benefit form the longer deadlines proposed by the EPO and the ARIPO, if wanted.

Legal references:
Art. 19 PCT

6. The PCT system, a step by step summary

Step	Event	When?
1	Filing of an IA with an RO	0 – 12 M
2	Formal check, record copy transmitted to IB	13 M
3	Fee check, search copy transmitted to ISA	13 M
4	International search report and written opinion	16 M
5	International publication	18 M
6	Optional: international preliminary examination	22 M
7	Optional: supplementary international search	22 M
8	International preliminary report on patentability	28 M
9	Supplementary international search report	28 M
10	Transmittal of IA to DOs	30 M

(In months after the date of filing)

7. The World Intellectual Property Organization (WIPO)

The World Intellectual Property Organization (WIPO) is a specialised agency of the United Nations (UN) and was established in 1967 by the signing of the WIPO Convention. It began operations in 1970 and has 194 member states. WIPO's mission is to "help governments, businesses and society realize the benefits of IP."

Among others, WIPO administrates various industrial property treaties including:

- The Patent Cooperation Treaty (patents)
- The Madrid Agreement and its Protocol (trademarks)
- The Hague Agreement (designs)
- The Lisbon Agreement (geographical indications)

Under the PCT, WIPO assumes the role of International Bureau (IB).

8. The role of the International Bureau (IB)

- The PCT contracting states constitute a Union. The International Bureau (IB) carries out the corresponding administrative tasks and serves as secretariat of the various organs of the Union.
- The IB also acts as receiving Office (RO) under the PCT. It also takes over from ROs that are not competent to receive an IA. In addition, some contracting states delegate their RO activities to the IB.
- The IB is responsible for the international publication of the IA. The WIPO publication platform is called PATENTSCOPE.
- The IB provides online services for applicants and other offices acting as authorities under the PCT.
- The IB monitors the activities of the various offices under the PCT in order to safeguard compliance with the PCT. Any irregularity is reported to the office in question so that it can be remedied.
- The IB deals with withdrawals of IAs, designations/elections of states and/or priority claims.
- The IB records changes to the bibliographic data of IAs.
- The IB provides a hub for the transfer of search copies of IAs to various ISAs.
- The IB is also responsible for:
  - managing and communicating changes to the PCT
  - communicating documents including third-party observations to DOs/EOs and other parties
  - providing advice on implementing the PCT in national legislation
  - organising the PCT Assembly

Legal references:
Art. 55 PCT
Rule 19.4 PCT; Rule 90*bis* PCT; Rule 92*bis* PCT

9. Relevant sources of information (PCT)

- PCT Treaty and Regulations
- PCT Time Limit Calculator
- ePCT (WIPO IP Portal) and PATENTSCOPE

- WIPO Digital Access Service (DAS)
- Guidelines for Authorities and Offices
- WIPO Lex

10. Beyond the course

You can deepen what you have learned during this course with the following further reading:

- PCT Applicant's Guide - international phase

European Patent Academy
European Patent Office
Munich
Germany
© EPO 2026

Responsible for the content
European Patent Academy
academy@epo.org