A Practical Guide on Patenting

ONC Lawyers
柯伍陳律師事務所

The Value of

Integrity
Collaboration
Excellence
Solutions

ONC Lawyers
柯伍陳律師事務所

solutions • not complications

This publication is intended to be an outline of the law and procedures on this subject for the purpose of general reference only and cannot be relied upon as legal advice in any particular case. If any advice or assistance is needed, please contact this firm on (852) 2810 1212 or email us at ip@onc.hk.

ONC Lawyers
April 2017

Highly Recommended Law Firm

Leading Firm

Primerus Member

Table of contents

Introduction 3
- What is a patent? 3
- What are the characteristics of a patent? 4

Patent application basics 5
- How to get a patent? 5
- What is a patentable subject matter? 6
- What is “A” publication? 8
- What is patentability examination? 8

The specification 10
- Claims 10
- Description 11

Patenting internationally 12
- Multiple simultaneous filing approach 14
- Convention filing approach 15
- PCT approach 18
- Mixed approaches 20

About us 22

Contact us 23

Introduction

What is a patent?

A patent is a legal title which confers a set of exclusionary legal rights of a definitive scope to the owner. The definitive scope of the exclusionary rights is defined in writing by way of a set of claims. As the scope of protection of a patent is defined by claims, one of the main characteristics of a good patent is that the scope of claims is commensurate with the technological contribution made to the state-of-the-art as innovations.

Historically, patents were granted by governments to owners of knowhow and innovation as an incentive to encourage the owners to disclose technological innovations and related knowhow to the public in order to drive advancement of applied science and technology, thereby enhancing competitiveness of a state.

Traditionally, patent owners have made use of the exclusionary rights conferred by patents to gain competitive edges in the direct markets or to gain revenues in non-direct markets through licensing.

As a result of the traditional industrialized nations moving their manufacturing bases to developing countries in the last century, patents also gradually developed as a currency of the knowledge-based economy, and have been recognized as a benchmark of technological innovation capability of a company or institution.

More recently, there is a trend of using patents as a means of monetization.

A unique characteristic of patents is that no patent on an invention will be granted unless a patent application on that invention is filed and the patentability criteria are met. In general, an invention which is made available to the public will be free for public use unless there is a patent covering the invention.

For an invention which is available to the public, the difference between having a patent and having no patent on the invention is that the patent owner in the former case has a degree of control over the exploitation of the invention for a specified time while the invention in the latter case is entirely in the public domain.

What are the characteristics of a patent?

In general, a patent has the following characteristics:

- A patent confers a limited scope of exclusionary rights
- The exclusionary rights have a limited duration
- The exclusionary rights are territorial
- A patent is a personal property
- The specification of a patent is in writing and published by the relevant authority
- The specification comprises claims and description of the invention
- The scope of protection is defined by the claims
- No two patents have the same scope
- The claims must meet patentability criteria

Patent application basics

How to get a patent?

An applicant who owns a patentable invention and is desirous to get a patent must file a patent application to start the patenting process. A patent application is usually filed with the patent office or intellectual property office and the patent application must include a patent specification in writing. Typically, a patent specification must include a detailed enabling description of the invention and a set of claims defining the scope of protection.

In most industrialized territories, a patent application will be examined by the patent office, and a patent will be granted if the patent office is satisfied that the subject matter as defined by the claims meets patentability requirements. A patentable subject matter is often referred to as a patentable invention in patenting terms.

A typical patenting process as depicted in Fig. 1 below includes the following major steps:

- Identifying and defining a patentable invention
- Drafting the patent specification
- Filing the patent application
- Publication of the patent application
- Examination on the patentability of the patent application
- Granting of a patent or refusal of the patent application

What is a patentable subject matter?

The crux of a patent is a patentable invention. However, not all inventions are patentable. Only inventions which fulfil all patentability requirements are patentable, and patentability requirements are set by the patent laws of a territory. While the granting of patents is a matter of territorial authority, it is almost universal that an invention is patentable, if it:

- is new,
- involves an inventive step,
- is susceptible of industrial application, and
- is not an excluded subject matter.

A subject matter which fulfils all patentability requirements is commonly referred to as a “patentable invention” and the above patentability criteria are enshrined in the TRIPs (Trade Related Aspects of Intellectual Property) Agreement, which has been entered into by most, if not all, WTO (World Trade Organization) member states.

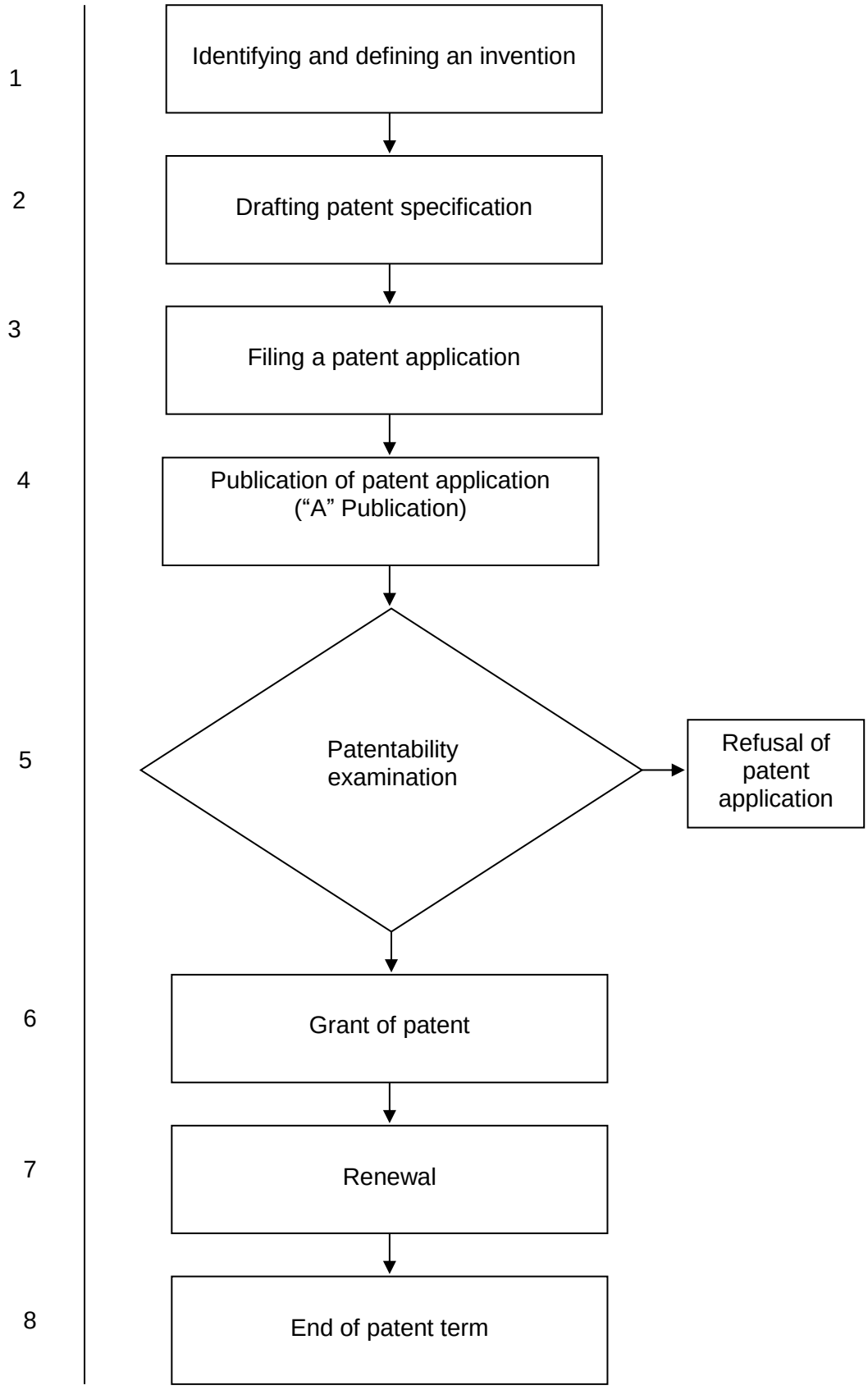


Fig. 1 Basic Patenting Flow

What is “A” publication?

A copy of the patent specification will be published by the relevant authority shortly after the expiry of 18 months from the application date (or priority date) and given a publication number with an “A” suffix, regardless of whether the patent application has any prospect of grant. Such a procedural publication is usually referred to as an “A” publication.

What is patentability examination?

A patent application will be substantively examined, usually by a patent office, to determine whether all patentability requirements are met, and therefore whether a patent should be granted. Such an examination is commonly referred to as “substantive examination”, and claims are the subject matter of examination.

A typical round of substantive examination is depicted in the dotted box below and includes the following steps:

- An examiner examining claims pending in a patent application,
- The examiner issuing an examination report (also known as an “Office Action”) regarding patentability or otherwise of pending claims, and
- The applicant filing a response to the Office Action.

Substantive Examination

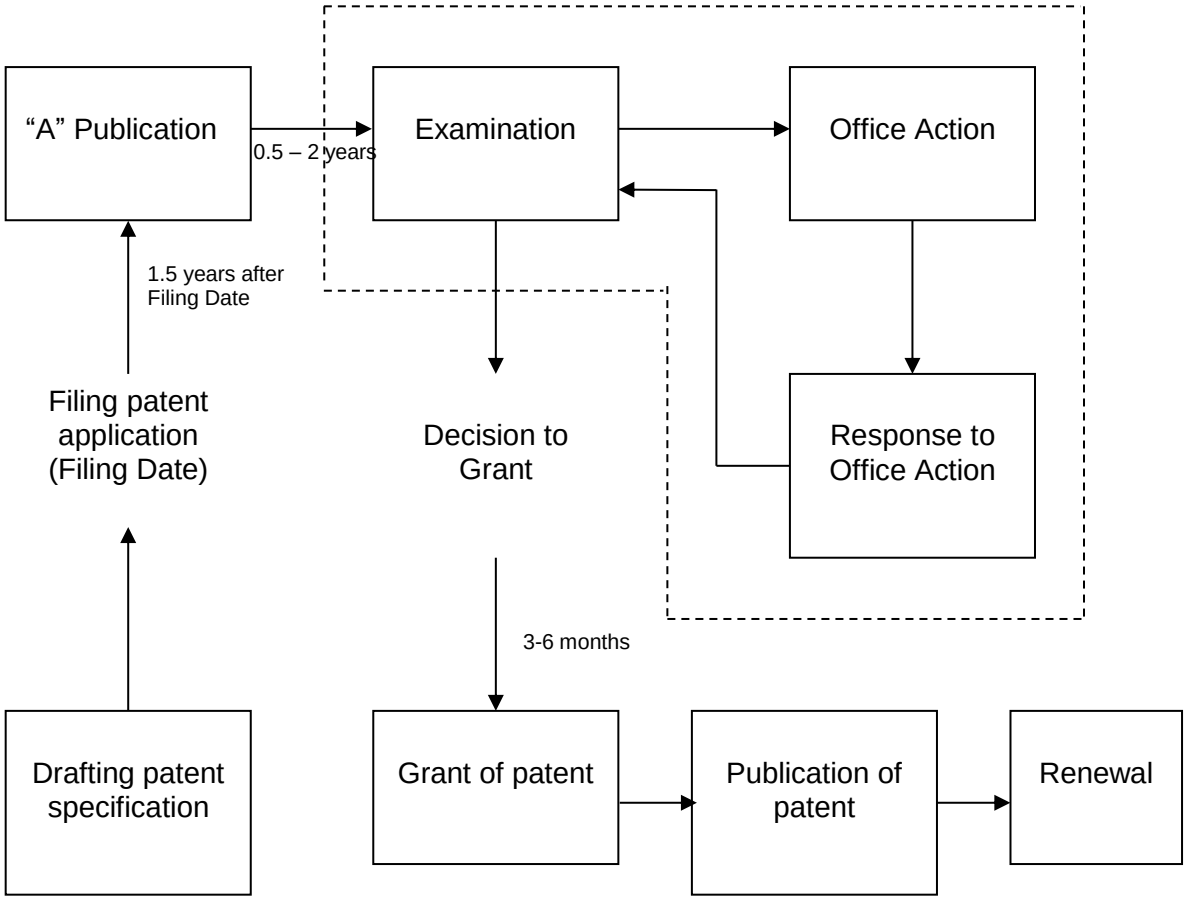


Fig. 2 Patenting Flow and Substantive Examination

The examiner will then examine the response to the Office Action filed. If the Examiner is satisfied that the application fulfils all patentability requirements after examining the response, the examiner will issue a notice to allow the application, and a patent will be granted after payment of an issue fee and completion of all formalities. Otherwise, the substantive examination procedure will repeat and a patent application will be rejected if no patentable invention could be agreed upon.

The specification

A patent is defined and characterized entirely by a document which is known as a “patent specification”.

A typical patent specification is usually divided into the following sections:

1. Field of the Invention
2. Background of the Invention
3. Summary of the Invention
4. Brief description of Figures
5. Detailed Description of Embodiments
6. Claims

A patent specification comprises (i) claims and (ii) invention description at the minimum regardless of jurisdictions.

Claims

“Claims” are the core of a patent. The rest of the patent specification is purposely built around the claims to support and strengthen the claims, like giving muscle to a skeleton, because claims will be the target of attack during patent litigations.

In general, claims of a patent:-

- provide a concise definition of a patentable invention, and
- define the scope of exclusionary right, which is commensurate with the scope of invention made.

Description

The “description” of a patent generally serves the following main purposes:-

- to provide a description and help readers understand the invention claimed,
- to provide meaning to the terms of a claim when ambiguity or uncertainty arises, and
- to provide teaching to enable persons-skilled-in-the-art (“PSA”) to practise or redo the invention as claimed.

Patenting internationally

A patent is territorial. The territorial nature of patents means that a patent is only effective in the territory of grant, and is no more than a technical publication outside that territory. In order to obtain patent protection in territories of economic interest, it would be necessary to have patents granted in those territories. Otherwise, a valuable innovation would simply fall into the public domain in the unpatented territories.

When deciding in which territories to file patent applications with an aim of subsequent monetization, the main criterion is usually in which territories the patent will be of most commercial value, thereby justifying the costs and effort of patenting and subsequent enforcement.

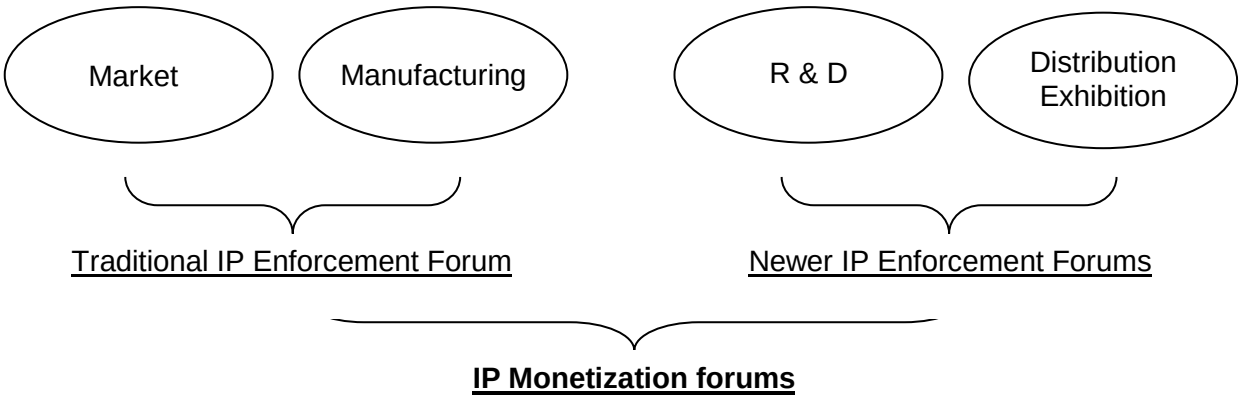


Fig. 3 Market Value Perspectives

Generally speaking, the intermediate and ultimate markets as well as the places of manufacturing of patented products or processes are the key territories of most commercial value.

While patents are granted by individual territorial authorities, it is not always necessary to file applications with the individual authorities immediately after an invention has been made. In fact, there are various alternative approaches to obtain patents internationally according to the needs and resources of a patent applicant.

Examples of the more common patenting approaches are as follows:

- Multiple simultaneous filing approach
- Convention filling approach
- PCT filing approach

Multiple simultaneous filing approach

Under this approach, separate patent applications are filed in the various target territories after a patent specification has been prepared but before an invention is disclosed to the public.

This approach, as depicted in Fig. 4 below, is seldom used nowadays for patenting internationally because:

- substantial patenting costs will have to be incurred before a product is market-tested, and
- patenting costs will be wasted if significant modifications are found to be necessary after filing, since most territories prohibit making changes to a patent application after filing, if the changes introduce new matter.

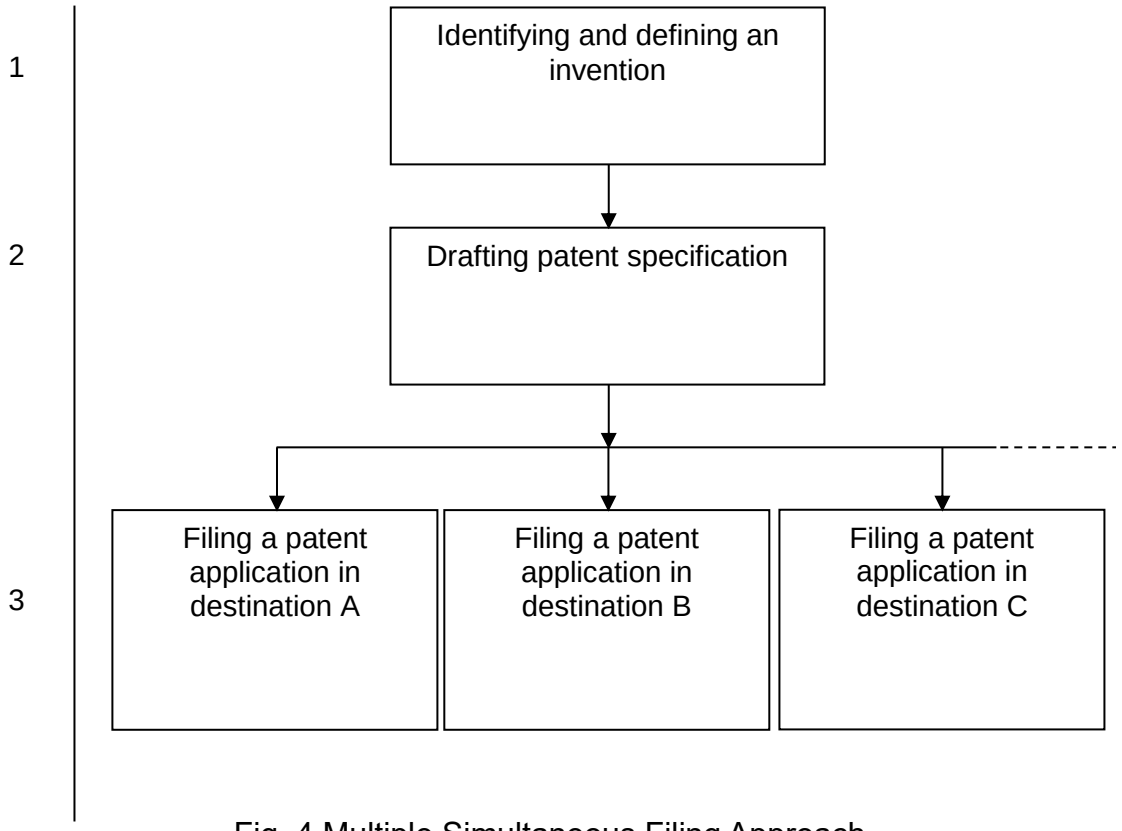


Fig. 4 Multiple Simultaneous Filing Approach

Convention filing approach

In the Convention filing approach, as depicted in Fig. 5 below, a single patent application is filed first to establish a "right of priority". Such a first patent application on an invention is often referred to as a "Priority Application". Subsequent patent applications are filed in the same or other territories within one year of the date of filing of the "Priority Application" to enjoy the right of priority established by the Priority Application to be explained below. The date of filing of the first application is often referred to as the "Priority Date".

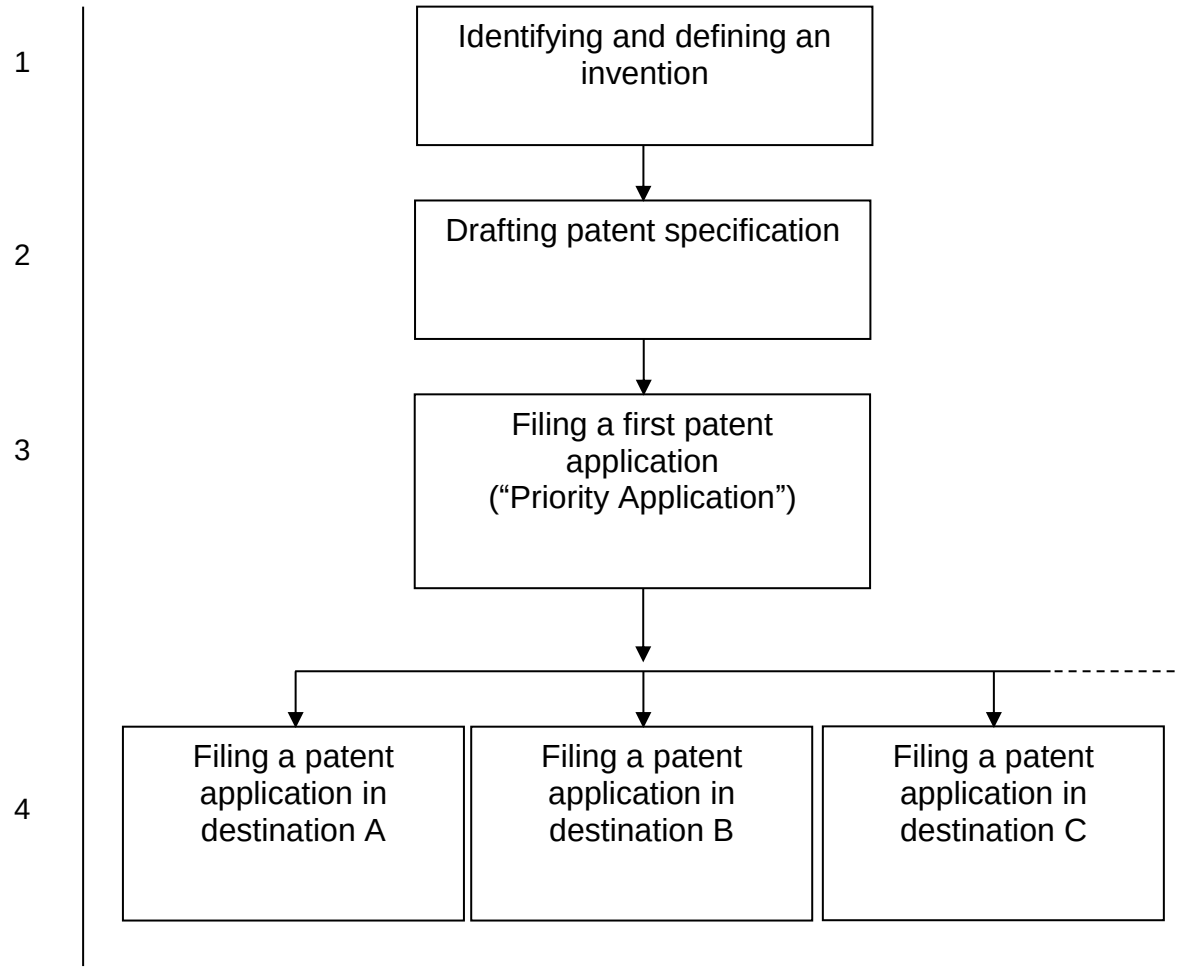


Fig. 5 Convention Filing Approach

This Convention filing approach, which derived its name from the Paris Convention, is a frequently used patenting approach because:

- Only the costs of a single patent application are incurred before an invention has been market-tested,
- The patent specification could be improved before filing patent applications in other territories and after the invention has been market-tested, so that modifications or improvements in the invention made with the priority term could be included in subsequent patent applications, and
- There is virtually no delay in the grant of patents, because patent offices around the world often process patent applications with reference to the Priority Date.

The process flow of a Convention patent application is substantially identical to that of a non-Convention patent application except that most formalities are calculated with reference to the Priority Date, as shown in Fig.6 below:

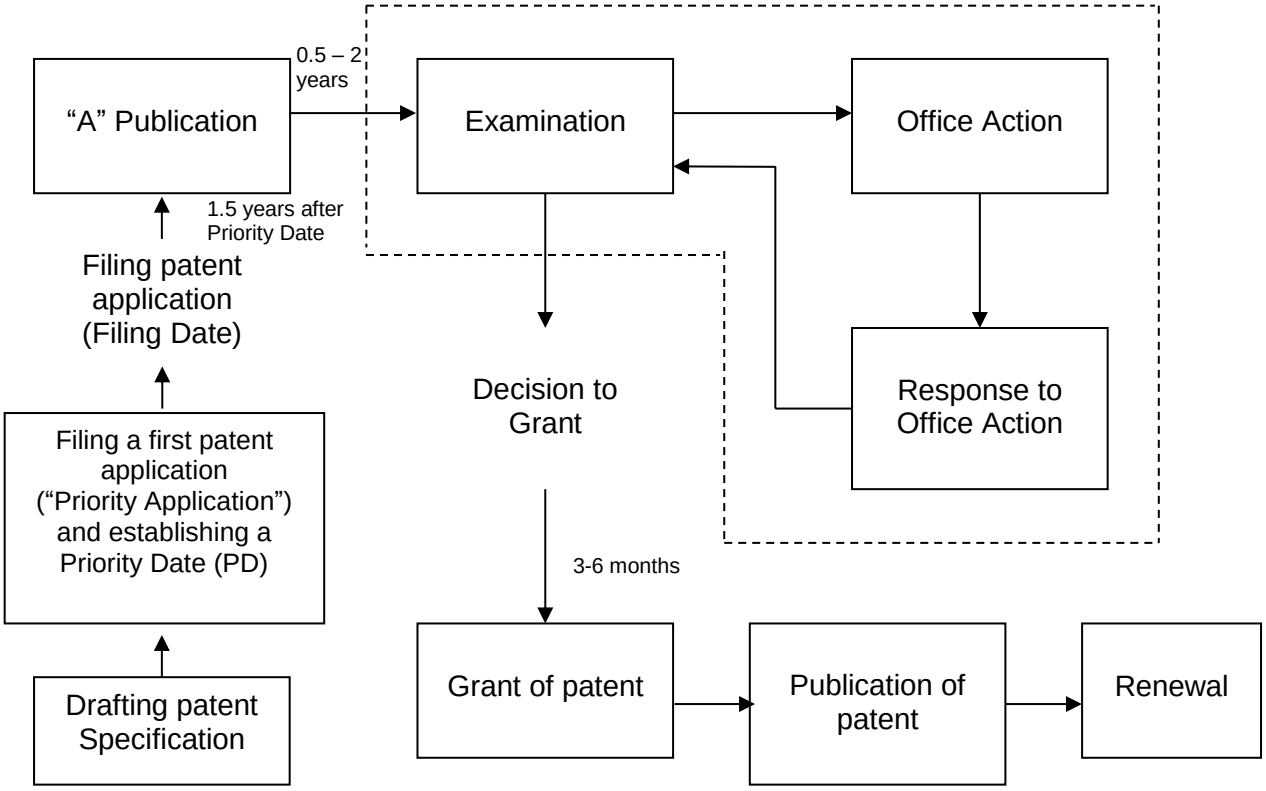


Fig. 6 Patenting Flow and Substantive Examination (with priority)

PCT approach

The PCT approach, which derived its name from the "Patent Cooperation Treaty", is a very cost effective approach for patenting internationally because:

- A PCT application covers over 150 territories,
- Only the costs of a single PCT patent application are incurred during the international phase of a PCT application, the international phase of a PCT application extends the Convention priority period to 30 months, and
- Patentability and search opinions will be issued by PCT authority very early in the international phase. Such opinions give a patent applicant the opportunity to consider the prospects of successful patenting before deciding whether to incur costs for making national phase entry applications.

A typical patenting process under the PCT approach is depicted in Fig. 7 below:

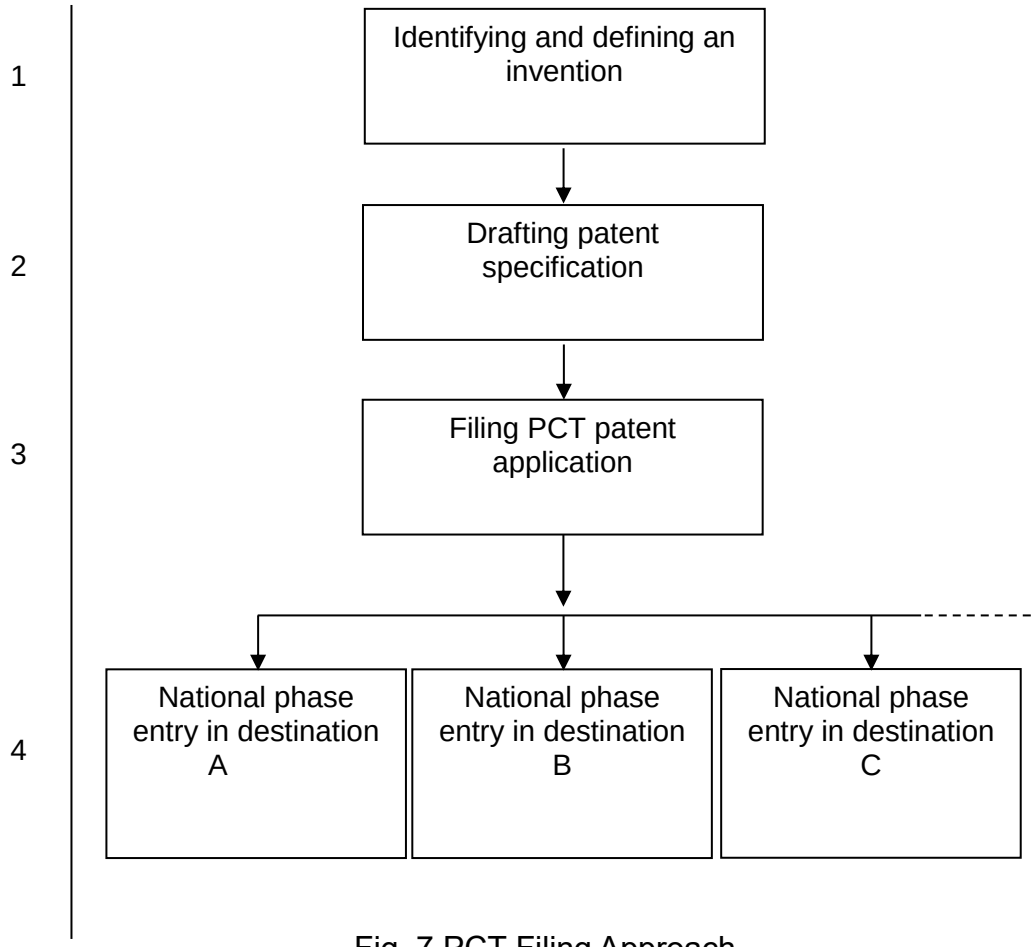


Fig. 7 PCT Filing Approach

Mixed approaches

While the basic patenting approaches above provide very useful choices to users of the patent system, the approaches are used in combination in practice to achieve the objectives of users.

For example, where patents in both PCT and non-PCT member states are required, the multiple simultaneous filing approach could be used in combination with the PCT approach as shown in Fig. 8 below:

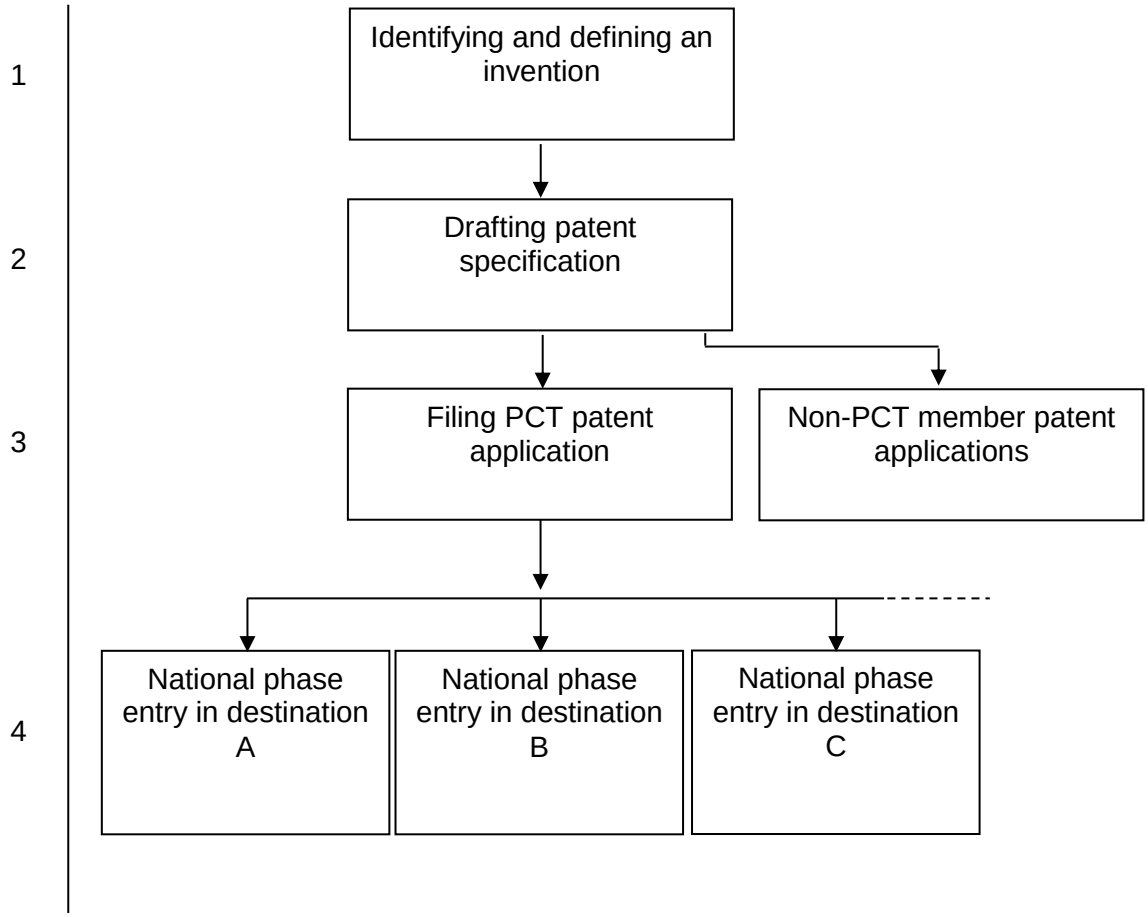


Fig. 8 Mixed Approach (No Priority)

On the other hand, the Convention filing approach could be used in combination with the PCT approach for better cost effectiveness as shown in the mixed approach in Fig. 9 below.

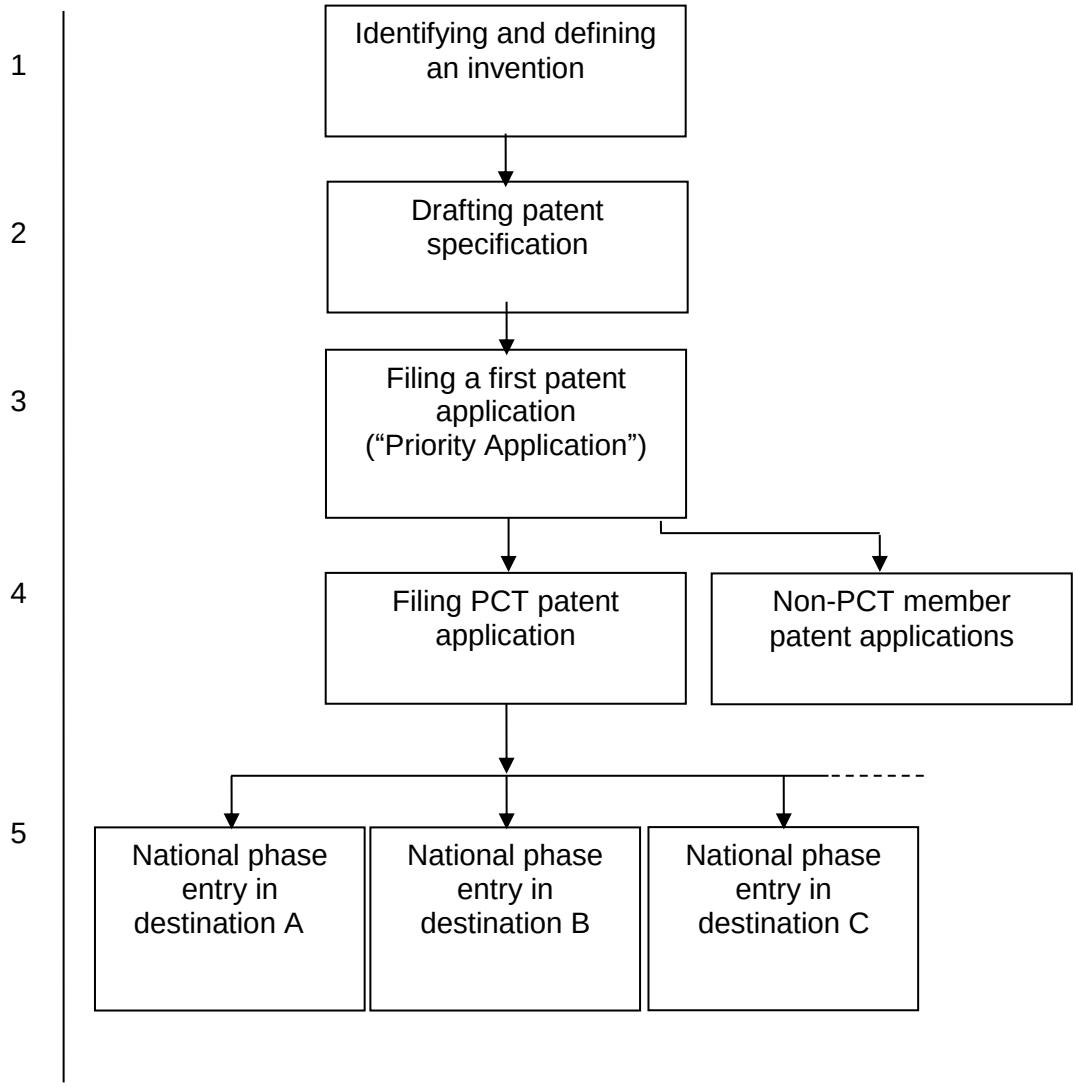


Fig. 9 Mixed Approach (With Priority)

About us

ONC Lawyers is a professional and dynamic legal practice based in Hong Kong. We have been growing continuously since our establishment in 1992, and have now become one of the largest local law firms with more than 40 lawyers and a total staff of over 130.

We offer a full range of legal services to both corporate and individual clients, including:

- Arbitration
- Asset Management & Funds
- Banking & Finance
- Capital Markets
- China Practice
- Commercial Crime
- Competition
- Construction
- Corporate Finance
- Corporate & M&A
- Employment, Privacy & Discrimination
- Family & Matrimonial
- Family Office & Private Clients
- Insolvency & Restructuring
- Insurance & Personal Injury
- Intellectual Property
- Litigation & Dispute Resolution
- Private Equity & Venture Capital
- Real Estate
- Regulatory & Compliance
- Shipping & Logistics
- Tax Advisory
- Technology
- Wills, Probate & Trust

Contact us

For enquiries, please contact members of our Intellectual Property Department:

Ludwig Ng | Senior Partner

Direct line: (852) 2107 0315

Email: ludwig.ng@onc.hk

Lawrence Yeung | Partner

Direct line: (852) 2107 0392

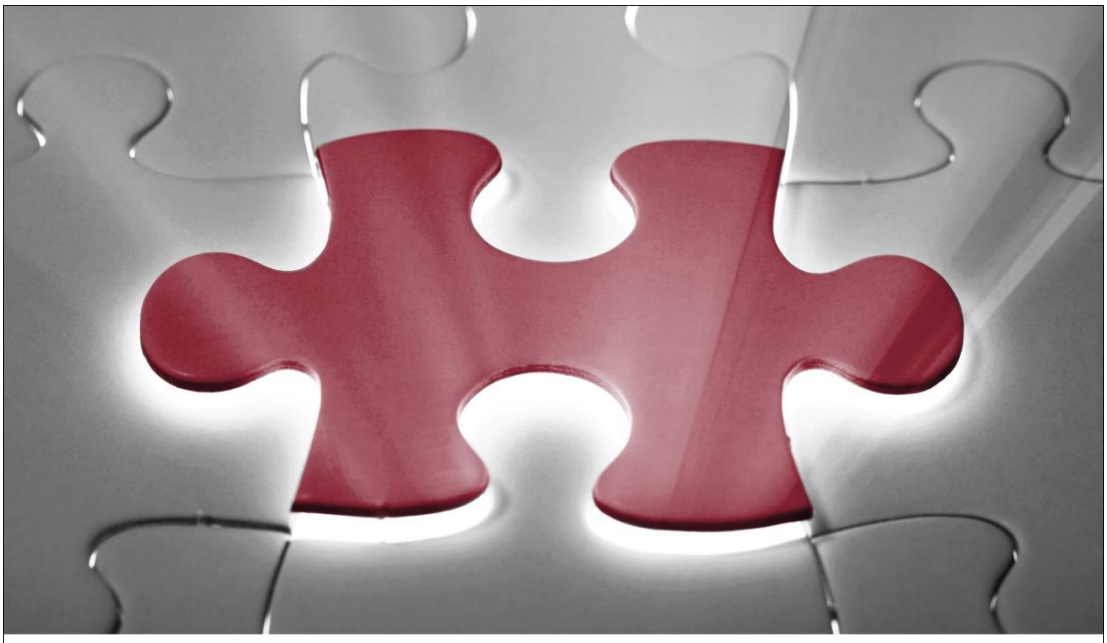
Email: lawrence.yeung@onc.hk

Felix Tin | Consultant

Email: felix.tin@onc.hk

Vivien Lee | Associate

Email: vivien.lee@onc.hk



The Simplicity of Solutions

ONC Lawyers
柯伍陳律師事務所

solutions • not complications

19th Floor, Three Exchange Square,
8 Connaught Place, Central, Hong Kong
香港中環康樂廣場8號交易廣場第三期19樓

Main 電話 (852) 2810 1212
Fax 傳真 (852) 2804 6311
E-mail 電郵 onc@onc.hk

www.onc.hk