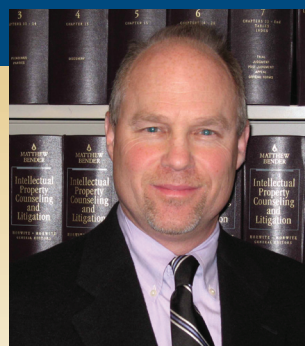




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Truth or Myth: Does an International Patent Exist?

Almost every inventor has asked, “Can I get an international patent?” The simple answer is, **no**.

Let’s be clear, there is no such thing as an international patent. However, an inventor can file an “international patent application” that essentially takes the place of the many individual foreign patent applications required to obtain overseas protection. But like Cinderella discovered with her pumpkin coach, an international patent application only lasts for a finite period of time. If certain actions are not taken by the inventor (in this case, a little bit more than just kissing the prince), the application will lapse and the opportunity to obtain patent protection abroad will vanish.

The International Patent Application

What is an international patent application? It is akin to the Common Application used by every graduating high school senior who applies to college, which a student completes one application and checks boxes for the corresponding schools to which they would like the application sent. In the case of the international patent application, this is like filing of a Patent Cooperation Treaty (PCT) Application.

The international patent application really came into being with the ratification of the Patent Cooperation Treaty in 1970. The Treaty went into effect on January 24, 1970, with 18 Contracting States, and was subsequently amended in 1974, 1984 and 2002. The Treaty provided a unified procedure for filing

Exhibit 1: Contracting States of the International Patent Cooperation Union

AE United Arab Emirates	CU Cuba	IL Israel	MK The former Yugoslav Republic of Macedonia (EP) ⁶	SG Singapore
AG Antigua and Barbuda	CY Cyprus (EP) ³	IN India	ML Mali (OA) ³	SI Slovenia (EP) ³
AL Albania (EP) ^{1,2}	CZ Czech Republic (EP)	IS Iceland (EP)	MN Mongolia	SK Slovakia (EP)
AM Armenia (EA)	DE Germany (EP)	IT Italy (EP) ³	MR Mauritania (OA) ³	SL Sierra Leone (AP)
AO Angola	DK Denmark (EP)	JP Japan	MT Malta (EP) ⁵	SM San Marino (EP) ²
AT Austria (EP)	DM Dominica	KE Kenya (AP)	MW Malawi (AP)	SN Senegal (OA) ³
AU Australia	DO Dominican Republic	KG Kyrgyzstan (EA)	MX Mexico	ST Sao Tome and Principe
AZ Azerbaijan (EA)	DZ Algeria	KM Comoros	MY Malaysia	SV El Salvador
BA Bosnia and Herzegovina ²	EC Ecuador	KN Saints Kitts and Nevis	MZ Mozambique (AP)	SY Syrian Arab Republic
BB Barbados	EE Estonia (EP)	KP Democratic People’s Republic of Korea	NA Namibia (AP)	SZ Swaziland (AP) ³
BE Belgium (EP) ³	EG Egypt	KR Republic of Korea	NE Niger (OA) ³	TD Chad (OA) ³
BF Burkina Faso (OA) ³	ES Spain (EP)	KZ Kazakhstan (EA)	NG Nigeria	TG Togo (OA) ³
BG Bulgaria (EP)	FI Finland (EP)	LA Lao People’s Democratic Republic	NI Nicaragua	TH Thailand
BH Bahrain	FR France (EP) ³	LC Saint Lucia	NL Netherlands (EP) ³	TJ Tajikistan (EA)
BJ Benin (OA) ³	GA Gabon (OA) ³	LI Liechtenstien (EP)	NO Norway (EP) ⁴	TM Turkmenistan (EA)
BR Brazil	GB United Kingdom (EP)	LK Sri Lanka	NZ New Zealand	TN Tunisia
BW Botswana (AP)	GD Grenada	LR Liberia (AP) ⁵	OM Oman	TR Turkey (EP)
BY Belarus	GE Georgia	LS Lesotho (AP)	PE Peru	TT Trinidad and Tobago
BZ Belize	GH Ghana (AP)	LT Lithuania (EP)	PG Papua New Guinea	TZ United Republic of Tanzania (AP)
CA Canada	GM Gambia (AP)	LU Luxembourg (EP)	PH Philippines	UA Ukraine
CF Central African Republic (OA) ³	GN Guinea (OA) ³	LV Latvia (EP) ³	PL Poland (EP)	UG Uganda (AP)
CG Congo (OA) ³	GQ Equatorial Guinea (OA) ³	LY Libyan Arab Jamahiriya	PT Portugal (EP)	US United States of America
CH Switzerland (EP)	GR Greece (EP) ³	MA Morocco	RO Romania (EP)	UZ Uzbekistan
CI Cote d’Ivoire (OA) ³	GT Guatemala	MC Monaco (EP) ³	RS Serbia ²	VC Saint Vincent and the Grenadines
CL Chile	GW Guinea-Bissau (OA) ³	MD Republic of Moldova (EA)	RU Russian Federation (EA)	VN Viet Nam
CM Cameroon (OA) ³	HN Honduras	ME Montenegro ²	SC Seychelles	ZA South Africa
CN China	HR Croatia (EP) ⁴	MG Madagascar	SD Sudan (AP)	ZM Zambia (AP)
CO Colombia	HU Hungary (EP)		SE Sweden (EP)	ZW Zimbabwe (AP)
CR Costa Rica	ID Indonesia			
	IE Ireland (EP) ³			

1 Only international applications filed on or after 1 May 2010 include the designation of this State for a European patent.
 2 Extension of European patent possible; in the case of Albania, only for international applications filed before 1 May 2010.
 3 May only be designated for a regional patent (the “national route” via the PCT has been closed).
 4 Only international applications filed on or after 1 January 2008 include the designation of this State for a European patent.
 5 Only international applications filed on or after 24 March 2010 include the designation of this State for an ARIPO patent.
 6 Only international applications filed on or after 1 January 2009 include the designation of this State for a European patent.
 7 Only international applications filed on or after 1 July 2009 include the designation of this State for a European patent.

Source: World Intellectual Property Organization, www.wipo.int.

patent applications in each of the Contracting States. It was and continues to be administered by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations that is headquartered in Geneva, Switzerland.

Contracting States, which are partners to the PCT, constitute the International Patent Cooperation Union. Most of the world's nations are members, including all major industrialized countries. Two notable exceptions to the list of Contracting States are Argentina and Taiwan. As of December 1, 2009, 142 countries were members of the union. A listing of all of the Contracting States is provided in Exhibit 1.

The PCT System allows the inventor to file a single patent application (PCT Application) in a single language. This PCT Application can lead to the granting of a patent in any of the Contracting States. Following the filing of a PCT Application, WIPO will perform a series of reviews and searches as to the claims being asserted, thus usually avoiding the need to repeat such steps in each elected country in which a patent is desired. These formalized search and review steps will be discussed in more detail below. It is key to remember that the PCT system does *not* examine the PCT Application fully and does *not* grant any patents. However, the PCT system does provide the applicant with critical information to assess his prospects of getting a patent granted in each country before significant filing costs are incurred.

There are many advantages for the applicant to filing the PCT Application. It allows patents to be obtained in many different countries, while deferring significant costs of the numerous individual country application filings. Also, by filing a PCT application within 12 months of the first application (this may be either a provisional application or non-provisional application) or priority date, the applicant can extend the filing date for separate national patent applications by a whopping 18 months. This extra time is important, as it allows the applicant to refine and improve the invention; perform additional market research to determine the countries in which the invention is commercially viable; make necessary changes to the application before filing the regional and/or individual national applications; perform further tests on the invention and raise investment capital for future commercial exploitation or even find a potential licensee of the technology.

There are some disadvantages to filing a PCT Application vs. individual foreign patent applications. These include potentially higher overall costs and longer time periods for individual patents to be granted.

The International Phase

The PCT Application has two phases: International and National/Regional. The first step in the International Phase is the filing of the PCT Application with a suitable patent or receiving office. The applicant needs to be aware that certain international application formalities have to be satisfied at the time of filing. First, the application can only be filed in one language, although translations may be deemed necessary for the search and publi-

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cation process to be performed by the receiving office, because the language of the filed application or the chosen International Search Authority requires it. The second formality that must be met is that at least one of the applicants must be a citizen or resident of a Contracting State to the PCT. For most Contracting States, it is a requirement that at least one of the applicants of the PCT Application be a citizen or resident of the receiving office country where the PCT Application is ultimately filed. If this is not the case, then no international filing date is accorded the application. Not having an international filing date could have serious downstream consequences for the applicant, with regards to the priority of the application when compared to possible prior art in each of the filed countries. An applicant from any Contracting State may also file a PCT Application at the WIPO headquarters. At the time of filing the PCT Application, all Contracting States are automatically designated for entry at the National Stage phase.

The PCT system does not examine the PCT Application fully and does not grant any patents. However, the PCT system does provide the applicant with critical information to assess his prospects of getting a patent granted in each country before significant filing costs are incurred.

The International Phase: Chapter I

As discussed above, the International Phase commences with filing of the PCT Application. After the filing, the International Phase is broken down into Chapter I and, possibly, Chapter II. Chapter I includes the preparation of an International Search Report (ISR) by the International Searching Authority (ISA) that has been designated by the applicant at the time of the filing of the PCT Application. (The ISA is generally different than the receiving office, because not all receiving offices are equipped to perform the searching duties that are the responsibility of the ISA.) For a U.S. application, the applicant has only four countries from which to choose as the ISA: the United States Patent and Trademark Office (USPTO), European Patent Office (EPO), Korean Intellectual Property Office and the IP Australian Office. In conjunction with the ISR, the ISA will also produce a written Opinion regarding patentability of the disclosed invention described in the PCT Application. It is important to understand that the core patentability requirements are slightly different for the PCT Application when compared to the U.S. The three review standards used are novelty or newness (same as the U.S.), inventive step (similar to non-obviousness in the U.S.) and industrial applicability (similar to utility in the U.S.). Usually, the ISR and Opinion are sent to the applicant about nine months after filing the PCT Application (if the PCT Application is the first filing) or 16 months after the priority date (if the PCT Application was proceeded by a provisional application or national non-provisional application).

The ISR and Opinion provide the applicant with important information for making the decision whether it is worthwhile to move forward and spend the money to enter the national phase. The Chapter I phase does allow for the optional filing of amended claims in response to the ISR and for the applicant to provide informal comments directed to the patentability Opinion.

The International Phase: Chapter II

In the event the applicant wants to challenge the initial findings of the patentability opinion authored by the ISA, they may file a Chapter II demand. As noted above under Chapter I, an examination of the PCT Application is performed by the ISA **without** interaction between the examiners and the applicant. However, if a Chapter II demand is made in response to the Chapter I ISR and Opinion, the examination is performed **with** interaction between the applicant and the examiner. Chapter II demands are rarely made when the initial ISR and Opinion are favorable for patentability. The main reason for making such a demand is to address one or more of the objections discussed in the negative patentability opinion and, thereby, attempt to obtain a more “positive” International Preliminary Report on Patentability (IPRP). Why would an applicant want to try for a more “positive” IPRP? Because many of the National Patent Offices and Regional Patent Offices rely on the opinions stated in the IPRP to decide whether or not to grant a patent in that particular country or region. A Chapter II demand does cost money (usually handling and preliminary examination fees), and must be done within 22 months from the PCT Application priority date and three months from the issuance of the ISR and Opinion. The applicant should be warned that filing a Chapter II demand and interacting with the examiner do not always result in turning a negative ISR and Opinion into a positive IPRP, so caution should be used before incurring this additional expense.

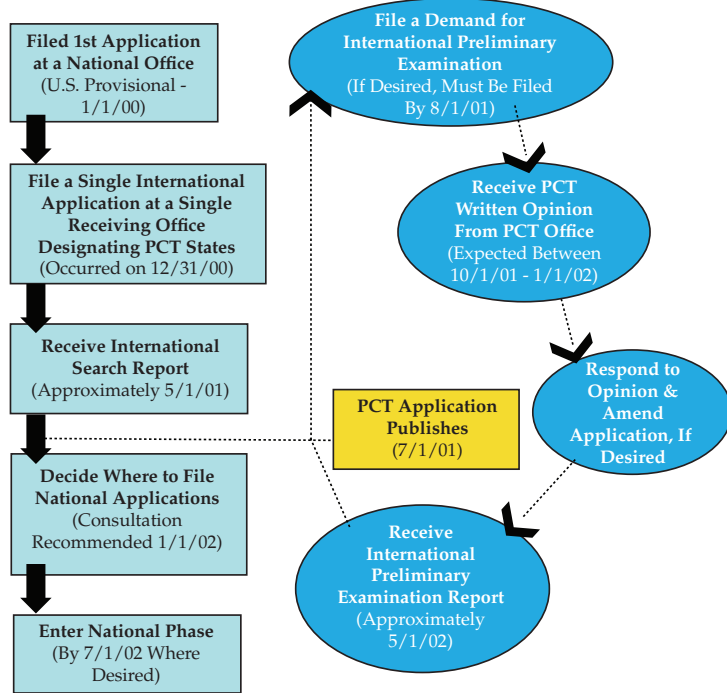
In the event a Chapter II demand is never made, the ISR and Opinion are later reissued without change as the IPRP/Chapter I. The IPRP under Chapter I or Chapter II is a non-binding opinion on whether the PCT Application meets core patentability requirements (novelty, inventive step and industrial application). The IPRP gives an applicant a good indication of whether they will be able to obtain a patent and the possible scope of the granted claims. As discussed above, many countries (except for the U.S., of course) will use the IPRP (Chapter I or II) as a base point for further examination during the Nation/Regional Phase.

The last part of the Chapter I phase is publication. Every Thursday, WIPO publishes pending PCT Applications. This occurs approximately 18 months after the priority date. Possibly, the ISR and Opinion will also be published with the PCT Application. However, if this does not occur, the ISR will be published separately. In the event an applicant amended the claims in response to the ISR and Opinion, the amended claims will also publish. Any published claims, whether amended or not, will serve as the basis for provisional protection of the invention. Publication of the PCT Application can only be stopped by withdrawing the PCT Application, no later than three weeks before the expected publication date.

The International Phase of the PCT Application can be confusing to follow. A simple graph of PCT Application stages and time periods is provided in Exhibit 2.

Exhibit 2: PCT Strategic Timeline for Application

[John Smith / ACME Company]
 PCT Strategic Timeline for Application: [99/999,999]



The National/Regional Phase

As emphasized above, the PCT Application itself will never become an international patent. What must happen is that at the conclusion of the International Phase, the PCT Application must then enter into the National/Regional Phase in those countries and geographic regions where one seeks patent protection.

The deadline for entering the National/Regional Phase varies between countries. Typically, it's 30 months from the filing date of the PCT Application or from the earliest priority date of the as-filed application. If the applicant wants to enter the U.S. after filing a PCT Application, he must do so at the 30-month deadline. However, any Contracting State may fix time limits that expire later than 30 months. For example, the European Region enforces a 31-month deadline. In the event an applicant fails to enter the National/Regional Phase by the applicable time deadline, the PCT Application will lapse and no patents will issue from the application.

It is best for the applicant to choose well in advance of the 30-month deadline those countries or regions into which they would like to proceed. There is no penalty for entering the National/Regional Phase before the deadline. When deciding into which countries/regions an applicant would want to file, the overriding strategy should be to seek protection where the applicant's company, its licensees and/or competitors are

doing business. If multiple countries fit these criteria, then the applicant should prioritize these countries to determine where the invention will be manufactured. The applicant should also ascertain the competitors' home countries. Further, the applicant should evaluate what countries will represent his major markets. Finally, the applicant should evaluate into which countries the invention will be exported.

Once the PCT Application has entered into the individual countries or regions, the now-converted national applications will be treated as if the PCT Application had been originally filed in that country, so all local rules and regulations will apply.

Some have taken a slightly different approach in that they recommend basing national stage entry on the type of invention or product that the applicant will be selling or producing. Examples are summarized as follows.

- For complex machines, the applicant may want to limit filings to industrialized countries only
- For a sub-component or a particular material, broad filings should occur in all major countries
- For high tech products, limit filings to industrialized countries and sourcing countries
- For high demand consumer products, file the application broadly in major market countries
- For pharmaceutical/chemical products, the application should be broadly filed, especially in countries in which it can be easily produced
- For labor-intensive product inventions, the application should only be filed in low cost manufacturing countries

After National/Regional Phase Entry

As one would expect, filing requirements differ for each country and region. For example, to enter Japan, a Japanese language translation of the PCT Application must be filed within two months of entry.

Once the PCT Application has entered into the individual countries or regions, the now-converted national applications will be treated as if the PCT Application had been originally filed in that country, so all local rules and regulations will apply. Therefore it is critical, upon making the decision to enter the National/Regional Phase, to retain a foreign attorney or agent in that particular jurisdiction to handle all future transactions with that country's patent office.

As discussed above, many countries will conduct a supplemental search of the prior art before examining the now national application. For the U.S. and the European Patent Office (EPO), which administers the European Region, such searches are done routinely. Here is a cost savings tip for applicants who know that

they will be electing to enter the European Region at the National Stage: when filing your PCT Application, choose the EPO as the ISA, because it is almost a certainty that the same EPO Examiner who wrote the IPRP for the PCT Application will also be reviewing the now-European patent application. If the IPRP was positive, it should be clear sailing to obtain a European Patent, with little further searching and examination.

Unfortunately, if the applicant has chosen to enter the U.S. through the PCT System, the USPTO pays little attention to what happened at the International Phase (i.e., the IPRP) and will perform a totally new search and examination.

The Regional Phase: Europe

As discussed above, the critical decision point of every PCT Application come at 30 months when the National/Regional Phase selection takes place. In addition to individual countries, WIPO has designated four Regions in which a regional patent can be granted. Once a regional patent is granted, the applicant can then later choose in which country she would like to validate the patent. Regional Patents can be obtained for the ARIPO Region (Africa), the Eurasian Region (Eastern Europe), the European Patent (37 countries in Europe) and the OAPI Region (Africa).

For U.S. applicants, the European Region is by far the most popular selection. When the applicant elects to enter to the European Region, she is trying to get a European Patent (EP) granted. Taking this route is more cost efficient than if one were to file in all of the individual European countries. The ability to obtain an EP is longstanding and a result of the signing of the European Patent Convention that took place in 1973. It is important for the applicant to understand that the granting of an EP does not necessarily mean that a patent has been granted in every member of the European Union, but rather may now be validated in every member country of the European Patent Convention. The EP will give the owner the same rights as a national patent in each of these countries.

After the EPO agrees that your invention is patentable, an EP will issue. You are then required to decide into which country you would like to validate and file translations in French and German, if required. Depending on the country and whether they have signed the London Agreement, additional translations of the specifications and claims may be necessary.

Following grant of the EP, each country in which the patent has been validated will start to charge renewal fees, and the applicant will also be required to adhere to individual countries' requirements to maintain the standing of each of the national issued patents. Typically, annuity or maintenance fees in foreign counties are charged on an annual basis rather than the three time intervals used by the U.S.

PCT Filing Strategy

When an inventor/applicant sits down with his patent attorney, they must discuss if and when a PCT Application should be filed. Usually, four filing scenarios are presented. Each present benefits and drawbacks.

- #1: File a U.S. Non-Provisional Application, then file a PCT Application after 12 months
- Benefit: may get ISR and Opinion before the U.S. case is prosecuted
 - Drawback: significant upfront cost for completing U.S. preparation and prosecution
- #2: File a U.S. Provisional Application, then file a PCT Application after 12 months and enter the U.S. via the PCT National Phase route
- Benefits: lower upfront costs, may get search results before big investments are necessary
 - Drawback: may delay prosecution in U.S.
- #3: File a U.S. Provisional Application, then at 12 months file both a U.S. non-provisional application and PCT Application
- Benefits: limited upfront costs, may get search results before U.S. case is prosecuted
 - Drawbacks: more expenses incurred sooner, must invest in U.S. filing without the benefit of the ISR
- #4: File a PCT Application and enter the U.S. at the National Stage Phase
- Benefits: cheapest way to start filing process, can get ISR before any real investment is needed
 - Drawbacks: will lose one year on the term of all patents, a delay will likely be incurred for getting any U.S. patents issued

With knowledge of these pros and cons and also of the applicant's business and licensing strategy, all of these filing strategies should be investigated to determine which one best fits the needs of the applicant.

Conclusion

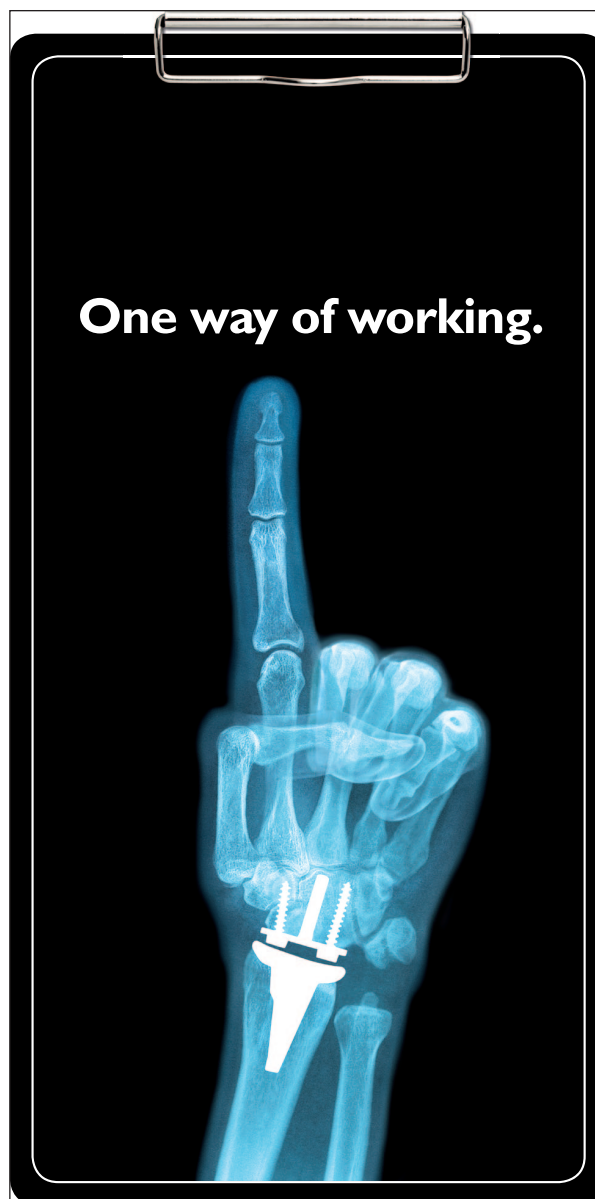
Although an International Patent does not exist, an international patent application does in the PCT Application. Depending on the applicant's invention, business strategy, capital standing and commercial position, use of this type of patent application can be a very powerful weapon against the competition.

The PCT Application is an excellent tool to gain both domestic and worldwide protection of one's invention, while providing the applicant with flexibility in determining how best to move forward with protecting and exploiting their invention.

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