1. Why does an international patent strategy matter?

Patent rights are territorial. They are only enforceable where they are granted. Thus, a company must separately pursue protection of patent rights in other countries in which they desire to have protection. The process for seeking protection, however, requires careful planning and execution, because of timing and cost considerations. Hence, setting a strategy helps keep clear goals and pursuits in sight throughout the process.

2. A patent issued by the U.S. Patent and Trademark Office (USPTO) cannot be enforced in other countries?

Correct; a U.S. patent cannot be enforced in other countries. A U.S. patent is enforceable only within the U.S. Likewise a patent issued in another country is not enforceable in the U.S. For example, a U.S. patent provides no protection against infringing activities that take place in Great Britain or Japan, or even in neighboring countries of Canada or Mexico. Likewise, a patent issued from a patent office in Great Britain, Japan, Canada or Mexico affords no protection against infringing activities that take place in the U.S.

3. How are inventions protected outside the U.S.?

In order to protect an invention outside the U.S., a company must apply for and be granted patent protection within each particular country of interest.

4. Is it expensive to pursue patent protection outside the U.S.?

It can get quite expensive to pursue patent protection outside the U.S. Although pursuing patent protection outside the U.S. may not require drafting a new application if it is based on a corresponding U.S. application filed within one year, the overall filing and prosecution (examination process) can get to be quite expensive over time. The expenses arise from filing fees and annuity fees, which are annual fees to maintain the patent application or issued patent in a particular country.

In addition, some countries may require that business be conducted in the official language of their country, rather than in English. This will require factoring in translation costs for correspondences to and from the local patent office. Moreover, most patent offices around the world require that only locally licensed practitioners interface with the local patent office. This will require factoring in costs and fees for retaining local counsel.

5. What should a company consider when deciding whether to pursue patent protection outside the U.S.?

A starting point to determine whether to pursue patent protection outside the U.S. is to determine if an application is eligible for protection outside the U.S. There are two factors to consider at this stage. The first is whether the subject matter of the patent application was not publicly disclosed prior to the U.S. filing. Most countries around the world have a requirement of “absolute novelty.” Unlike the U.S., which provides a one-year grace period in which to file an application after it has been publicly disclosed, these other countries prohibit patent protection for inventions publicly disclosed prior to filing.

The second factor to consider often relates to the first factor described above. A public disclosure made after a U.S. filing may not preclude patent protection outside the U.S. if the filing date of the U.S. application is recognized in the country in which patent protection is sought. To obtain recognition of the U.S. filing date, the application should be filed under a treaty between the U.S. and another country that recognizes the U.S. application filing date, i.e., the priority date. This treaty that governs recognition of a filing date from one country within another country is the Paris Convention Treaty.
Between these two factors described, the first factor (public disclosure) is the primary factor in determining whether to obtain patent protection outside the U.S. As for the second condition, most industrialized nations in which protection is sought are signatories of this Treaty or a bi-lateral treaty between the U.S. and a particular country.

6. From a strategy perspective, what factors should a company consider?

In deciding whether to obtain patent protection outside the U.S., a company must consider a number of strategy related factors. As a preliminary matter, it is important to understand that pursuing international patent protection takes time. From a timing perspective, protection in some instances may not be achieved until 48 to 84 months after the initial U.S. filing. Hence, a company should evaluate the longevity of the technology sought to be protected and consider whether it has a life-span that can roughly correspond to a time period in which patent protection is finally secured.

Next, applications filed outside the U.S. will eventually be published in the U.S. and abroad. The result of such publication is forfeiture of possible trade secret protection for the subject matter disclosed in the published application and no enforceable patent rights to date. If, however, the company affirmatively elects to only file in the U.S., it has the option of maintaining the secrecy of that subject matter until the application issues as a patent. Hence, a company should first decide if publication of the invention before any patent is granted is an acceptable consequence of filing the foreign application.

Continuing on, the company must evaluate in which countries patent protection would likely provide value. Example inquiries for this evaluation include: (1) what countries will products embodying the invention likely be manufactured or sold?; (2) in what countries will other companies likely manufacture or sell competing products?; (3) in what countries will enforcement of patent rights be cost effective and practical? Note that a company’s situation may vary by country. For example, for semiconductor technology, generally foreign patent protection is sought in Germany, Japan, Korea, or Taiwan. For software technology, protection is generally sought in European countries such as Germany and Great Britain, as well as Australia and Canada. Emerging markets for patent protection now include the BRIC countries (Brazil, Russia, India, and China) along with Israel, although China and India are seeing the most activity.

Once particular countries are considered for patent protection, the company must evaluate the costs of filing for protection in each country. As previously noted, costs can be significant depending on factors such as filing fees in the selected countries and translations necessary in countries that do not conduct business in English. Moreover, companies should keep in mind that there may be additional fees to consider after a patent issues that correspond to maintaining the patent on an annual basis.

The factors above provide a starting framework for performing a cost benefit analysis to determine what and where patent filings are justified. The decisions coming from such analysis may often lead to pursuing protection internationally only for key products and/or technologies.

7. To pursue patent protection outside the U.S., what options are available?

Once it is determined that patent protection outside the U.S. is desirable, there are three options primarily considered to pursue this path. The first option is to timely file a patent application directly in the patent office of each country where patent protection is desired. The second option is to file a patent application in a regional patent office. The third option is to file a patent application under the Patent Cooperation Treaty (PCT), to which the U.S. and most other industrialized countries are members.

7a. What considerations should be evaluated with respect to the first option?

The first option is to pursue and file a patent application directly in the patent office of a selected country. In evaluating this option, a company should consider three factors: (1) certainty with respect to which countries patent protection is desired; (2) a
willingness to forgo the option to seek protection in other countries at a later date; and (3) a willingness to pay the associated filing fees and language translation costs, where necessary. Average costs for directly filing an application in a national patent office range from about $2,000 to $12,000 per country (For ease of discussion, the cost estimates provided herein assume the filing is based on an earlier filed U.S. application).

The wide range is due to filing fees, attorney fees, and translation costs where necessary. It is important to note these estimates do not include periodic costs to maintain the application and subsequent patent. These fees can range from a few hundred to several thousand dollars. For example, maintenance fees in Japan typically range from several hundred dollars in the first year of a patent term to several thousand dollars in the last year of the patent term. For those seeking protection in Taiwan, it is noted that this first option is the only option available for protection.

7b. What considerations should be evaluated with respect to the second option?

The second option is to file a patent application in a regional patent office. Regional patent offices exist in Europe, parts of Africa, and parts of Eurasia. Regional patent offices offer economies of scale of examining the application within a single authoritative agency and thereafter formalizing protection in the member countries of the regional patent office. The most well known regional patent office is the European Patent Office (EPO). The EPO presently includes 34 European countries, including Finland, France, Germany, Great Britain, Italy, Sweden, and Spain.

Filing in the EPO allows the company to submit one application designating any of the member countries of the European Patent Convention instead of filing a separate application in each of the desired national patent offices. The EPO conducts an examination of the application, which can take several years, and “grants” the patent. Thereafter, the company must “perfect” that grant in the specific member countries of the EPO in which they seek protection. Perfecting the patent grant usually entails paying administrative fees and translating the patent into the appropriate national language. Some countries only require translation of the claims, while others require translation of the entire patent.

From a strategy perspective, if the company is: (1) only interested in European countries; and (2) intends to file in three or more of those countries, then the company should generally file an EPO application designating those countries, rather than filing individual national applications. This allows the company to avoid multiple examination fees, and to defer payment of translation costs until the patent is granted. The cost of pursuing and obtaining an EPO patent grant and perfecting it in three countries typically runs about $10,000-$30,000, depending upon the selected countries, the application length, and the duration and extent of the prosecution. Again, as previously noted, these costs are exclusive of fees necessary for maintaining the patent application and patent on a periodic basis.

7c. What considerations should be evaluated with respect to the third option?

The third option is to file a patent application under the Patent Cooperation Treaty (PCT). Generally, all of the major industrialized countries are members of the PCT. However, a notable exception to PCT membership is Taiwan. Hence, patent protection in Taiwan only can be pursued through a direct national filing and not a PCT filing.

The primary advantages of a PCT application include delay having to make a decision on where to foreign file a patent application and defer payment of regional or national filing and translation fees. Generally, a company should consider filing a PCT application when any one of the following apply: (1) the company wants to preserve its patent rights in various countries or regions around the world, which are members of the PCT, while assessing the commercial potential of those markets and deferring costs of national or regional patent filings; (2) the company is uncertain of the countries in which patent protection is desired; (3) the company wants to assess the results of the U.S. prosecution before filing in other countries; and/or (4) the company wants to assess the commercial viability of the invention in the U.S. before filing in several countries.
The initial cost of filing a PCT application usually ranges from about $2,000-$6,000. This cost is a function of how many pages an application is, how many inventions are claimed, and which patent office first reviews the application.

7c(1). What rights does a PCT application provide?
The PCT patent application is not an enforceable patent application. No patent issues from the PCT patent application. Rather, the PCT application serves as an administrative mechanism to prepare a patent application to enter the national phase of member countries within which the applicant elects to pursue patent protection. In addition, it provides some insights as to the possible patentability of an invention as claimed in a patent application, as further described below?

7c(2). What does the PCT application process involve?
The PCT process is broken into an “international” phase and a “national” phase. The international phase includes two sub-phases, referred to as “Chapter I” and “Chapter II.” Chapter I is required, and includes an international preliminary search for prior art. Here, prior art includes public documents that are in existence prior to the priority date of the present application and that appear to disclose in whole or in part the invention of the application. The search is carried out by an international search authority (ISA). For applications from U.S. nationals, the ISA is typically, the U.S. Patent & Trademark (USPTO), the European Patent Office (EPO), and the Korean Intellectual Property Office (KIPO). The search is typically carried out within three to nine months of filing the PCT application, and a resulting search report is provided to the company.

The ISA establishes a written opinion based on the search report. The opinion is a preliminary non-binding opinion as to the patentability of the claimed invention. If no Chapter II “demand” is filed, the written opinion is converted into an “international preliminary report on patentability” (IPRP-Ch.1), which has the same content as the ISA’s written opinion. A company may respond to the written opinion, but without a filed demand, the company can only informally comment on the opinion.

If, on the other hand, a demand is filed, then Chapter II commences, where the “international patent examination authority” (IPEA) generally uses the ISA’s written opinion as its initial opinion. Unlike Chapter I, the company can amend the application and formally argue against the written opinion. The IPEA may respond with further written opinions, at its discretion. The IPEA then issues a final “international preliminary report on patentability” (IPRP-Ch.2). This report is also a non-binding opinion as to the patentability of the claimed invention. Filing an optional Chapter II demand allows the company to formally argue the merits of the PCT application before the IPEA. This may be desirable in order to obtain a favorable IPRP, which may facilitate smooth prosecution at the various national patent offices that show deference to the IPRP.

A caveat here is that a few remaining countries still require a demand to be filed in order for the company to defer entry into the national phase. With no timely demand filed, the national phase for these few countries must be entered about 10 months sooner than other countries. Otherwise, the PCT application will go abandoned. However, this requirement for a Chapter II demand is not applicable to most major member PCT countries in which companies typically pursue protection.

The next phase in a PCT application is the national phase, which is 20 or 30 months from the earliest priority date for most countries. At this time the company must file the application in each region or country where protection is desired, as previously described. Each national patent office may use the PCT search results and/or conduct further searching. A binding examination is then conducted by that patent office, which may or may not provide results similar to the non-binding IPRP, depending on the various patentability requirements of that country and additional prior art that is found.

7c(3). Which ISA should I select?
There are a few factors to consider when deciding which ISA to select. First, if the U.S. application does not yet have a foreign filing license, the USPTO should be selected to avoid possible export control issues. One strategy some companies pursue is
simultaneously filing a U.S. patent application and a corresponding PCT application, in which they designate the USPTO as the ISA. Often, the examiner that is assigned to carry out the PCT search is also assigned to examine the U.S. application. Thus, if the PCT search report is favorable, then the examiner may be inclined to grant an early allowance of the U.S. application. Note, however, that this strategy is by no means a sure bet, and a less than favorable PCT search report can just as likely result in an early rejection of all claims. In any event, such strategy may jump start an early prosecution of the corresponding U.S. application, which would otherwise not be examined for two to three years.

Next, the subject matter of the patent application may help dictate where an application is searched. For example, the European Patent Office may not be designated as an ISA for patent applications having claims in certain biotechnology areas or in business method technologies. On the other hand, for technology such as semiconductors, the KIPO may be beneficial due to its access to a large number of Korean as well as Japanese documents in this field. Costwise, the least expensive search authority at the present is the KIPO, followed by the USPTO and the EPO. However, because U.S. patent regulations require submission of all information material to patentability to the examiner of a corresponding U.S. patent application, the costs of selecting the KIPO could increase if a disproportionate number of non-English prior art documents are uncovered.

8. Other factors to consider / conclusion?

It is not unusual for a company to have only a couple to few applications filed outside the U.S. relative to their overall portfolio size. Often the application pursued outside the U.S. is on a key technology aspect that will be foundational for the company for sometime to come. Furthermore, the route taken to pursue patent protection often is the PCT route in order to help defer costs in the short term and to see what the Search Authority uncovers as prior art. Thereafter, armed with this additional information, additional decisions can be made with respect to pending U.S. applications and well as continued pursuit of international patent protection.