Chapter 10

-- International Patent Protection --

Under the current global system, a patent is only valid in the country where it is issued. Thus, a U.S. patent provides the right to exclude others from the invention only within the national boundaries and territories of the United States. A U.S. patent does not provide its owner with any rights in any other country.

Most countries in the world have a patent system and issue patents. Consequently, if one wanted to obtain global patent protection for an invention, it would be necessary to apply for and obtain a patent in every country that grants patent protection, or at least in those countries where the invention is expected to have significant economic value.

As might be imagined, obtaining patents in multiple countries can be very expensive. The entire process for obtaining a patent application in the United States can easily run in excess of $20,000. Costs for obtaining a patent in any other country may be similar, but can vary widely.

For each country where a patent will be sought, it will be necessary to hire a local patent attorney who can represent the inventor(s) or assignee. It may also be necessary to pay for a translation of the patent application into the local language. Each national patent office will charge fees for considering and issuing a patent. The fee structure varies from country to country.

In all, it may cost hundreds of thousands of dollars to obtain patents on an invention in the most economically significant countries around the world. It may cost in excess of a million dollars to approach global patent protection for an invention.

Someday in the distant future, we may have a single world patent office that grants patents that are valid around the globe. At present, however, patents are generally issued only at the national level.

There are some exceptions that demonstrate the trend toward a global patent system. For example, the European Union has a single patent office that conducts examination of patent applications and issues a patent that is valid throughout the European Union. There are other examples of regional patents that can be obtained to cover a number of countries. But, for the most part, a patent is only good in the country that issued it.

-- Patent Cooperation Treaty --

One of the principal problems with the current system is the difficulty in forecasting the value of an invention before it is significantly commercialized. Obviously, if the invention will be very valuable on a global scale, it may be worth the investment to obtain patents on the invention around the world. If the invention is of more limited value, it may only be worth the investment to patent the invention in the inventor's home country and perhaps a few other key countries where the invention will be produced or used. The problem is knowing at the outset what the eventual value of the invention will be.

For example, an invention may initially be very hard to promote and may not be well received by its target market. Suppose, however, that the invention subsequently catches on or proves its worth and becomes very popular and valuable on a global scale. If the decision is made whether or not to seek international patent protection for the invention during the early times when the invention is not successful and not making money, it may be easy to decide not to invest in an international patent portfolio covering the invention. This decision would be regretted, however, in the scenario in which the invention subsequently becomes very popular and valuable.

Alternatively, an invention that is initially thought to be very marketable with a bright future may prove to be an irredeemable dud on the market. Or, a valuable invention may be quickly and unexpectedly replaced by another, better solution and rendered obsolete. In these, and similar circumstances, a decision to invest hundreds of thousands or millions of dollars in an international patent portfolio may be a waste of money.

The solution to this quandary is the Patent Cooperation Treaty or PCT. Over a hundred and fifty countries are now members of the PCT with more joining regularly. Most any industrialized country that would be of particular interest economically when commercializing an invention is likely to be a member of the PCT.

Under the PCT, an inventor or invention owner can file a single "international" patent application. This application does not ever mature into a patent, but can be the basis for filing a patent application in any of the member countries that adhere to the PCT.

In the United States, the PCT scenario most typically goes like this: The inventor discovers the invention and files a patent application with the United States. The inventor then has one year to decide whether to file an international patent application under the PCT. This year provides some time in which the inventor or subsequent assignee can begin to investigate the commercial potential of the invention before making further investment.

Let's assume that within one year of filing the U.S. application, the inventor or assignee decides that it will likely be worth patenting the invention in one or more other

countries. If the inventor or assignee knows at that point where patent protection will be desired and is convinced that the patent warrants the investment, patent applications can be filed in those target countries. This scenario does not involve the PCT.

When patent applications are filed in those known target countries, the applications will likely claim priority from the earlier filed U.S. application. Under another patent treaty, the Paris Convention, an application filed in most any country in the world can claim priority from an earlier U.S. patent application. This means simply that the application in the foreign country will be treated as having been filed at the same time the earlier U.S. patent application was filed. In countries that award a patent to the first party to file an application on an invention, this priority right may be very valuable.

Note that this system under the Paris Convention also works for inventors in other countries. For example, an inventor in Japan could begin by filing a Japanese patent application and, within one year, file a U.S. application that claims priority from the earlier Japanese application. The U.S. Patent Office will then treat the U.S. application as if it had been filed in the U.S. at the time the earlier Japanese application was filed in Japan.

Returning to our PCT scenario, let's assume that as the one-year anniversary of the filing of the U.S. application approaches, the inventor or assignee is not sure in which foreign countries a patent may be worth having. Perhaps the inventor or assignee is not sure if any foreign patents should be sought at all. In these circumstances, the inventor or assignee can file an international patent application under the PCT. Note that a PCT application can be filed by the owner of the rights to the invention without the cooperation of the inventor(s).

For an American inventor, the PCT application can be filed with the U.S. Patent Office, which is an authorized Receiving Office for PCT applications made by American inventors. The PCT application can claim priority from the earlier filed U.S. application if the PCT application is filed within one year of the earlier U.S. application.

As noted, the PCT application never matures into a patent. Rather, filing a PCT application allows the inventor or assignee to delay the pursuit of foreign patents for up to 30 months from the date the earliest application from which priority is claimed was filed. For example, if, as in our scenario, a U.S. application is filed first and then a PCT application is filed. Further decisions about seeking foreign patents can be delayed for 30 months from the filing date of the original U.S. application.

It is possible, however, that no original U.S. application was filed. The inventor or assignee may decide to file a PCT application before filing a U.S. application. In such a case, the PCT application provides an international "claim" to the invention for up to 30 months from the date the PCT application itself was filed.

Before the 30-month deadline, the applicant can file a corresponding patent application in any of the countries that are members of the PCT and were designated as

countries of interest when the PCT application was filed. This application in a target foreign country is referred to as a "national stage" application.

The national stage application can claim priority to both the PCT application and the earlier predicate U.S. application, if any. Thus, the national stage application will be treated in the country where it is filed as if it had been filed in that country on the date the predicate PCT or earlier U.S. application was filed.

If more than one year passed between the filing of an original U.S. application and the PCT application, the PCT application cannot claim priority back to the filing date of the U.S. application. Thus, it is important to note the one-year anniversary of any patent application filed in the U.S.

Filing a PCT application costs several thousands of dollars. However, this is much less expensive, as we have seen, than pursuing patent applications around the globe. The purpose of the PCT system is to allow the inventor or invention owner a significant amount of time in which to explore the commercial potential of the invention and in which countries the invention will have value or need patent protection.

The inventor or invention owner can work to develop the market for an invention over the 30-month period provided by the PCT while knowing that the PCT application stakes a claim to the invention on an international basis. If the invention proves to be valuable, or at least valuable in a particular group of foreign countries, the PCT applicant can file patent applications around the world or in those selected countries based on the PCT application, and any earlier predicate application, and have that application treated as if it has been filed in the target foreign country all along.

Consequently, the PCT provides an invaluable mechanism to allow the owners of inventions to delay making decisions about a global patent portfolio until there has been some time to commercialize the invention. A great deal more can be known about the future value of an invention after 30 months of commercialization as opposed to the time when a patent application is first filed. Most major corporations and produces of intellectual property make extensive use of the PCT system.

The PCT is administered by the World Intellectual Property Organization (WIPO). WIPO is headquartered in Geneva, Switzerland.

-- Absolute Novelty --

It is important to note here a key difference between U.S. patent law and the patent laws of most other countries.

As discussed in previous chapters, U.S. patent law affords inventors a one-year grace period in which to file a patent application after the invention has been disclosed to the public. For example, if an inventor starts selling the invention or presents the

invention in a published paper or article, or if the inventor presents the invention at a trade show or conference, a one-year grace period starts in which the inventor can still file a U.S. patent application on that invention. The public disclosure cannot prevent the inventor from receiving a patent on the invention if the application is filed within this one-year grace period.

Almost all other countries in the world do not provide such a grace period. The general rule around the globe is called absolute novelty. Under absolute novelty, any public disclosure anywhere in the world will bar an applicant from seeking and obtaining a patent.

For example, suppose an inventor presents an invention as a conference or tradeshow such that the invention is now known publicly and is not longer kept confidential. Within the following year, the inventor files a patent application on the invention in the United States. This application is subsequently issued as a valid U.S. patent.

Within one year of filing the U.S. application, the inventor files a PCT application and, later, files applications based on the PCT and U.S, applications in a number of foreign countries. Almost without exception, those applications in foreign countries will be rejected because of the presentation of the invention at the conference or tradeshow that predates the filing of any priority patent application.

Consequently, even though the United States grants a one-year grace period between public disclosure of an invention and the filing of a patent application, no invention should be disclosed publicly prior to the filing of a U.S. or PCT patent application if there is any interest in obtaining patent rights to the invention outside the United States. A disclosure of an invention that is public and not in confidence may destroy any possibility of obtaining foreign patent rights under the principle of absolute novelty.