

MPEP Basics

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### What's A Patent?

Patents protect the physical design of new and useful inventions. They provide the most extensive form of intellectual property protection, from the machine or process invented to modification of machines or processes that demonstrate the principal invention. In the United States, there are three kinds of patents: utility patents, design patents, and plant patents (which are not covered in this introduction because they are not covered on the patent bar exam). Utility patents protect an invention's functional aspects; design patents are used to protect an invention's ornamental features. Design patents are frequently applied in inventions for consumer products. For design and utility patents, the requirements and remedies for patent infringement are the same. Plant patents cover plants that can be reproduced asexually, through the use of grafts and cuttings such as flowers. A patent must include a legal description that defines the claim for the invention. To help define the scope of the invention, a patent often includes a set of claims of varied scope, from a broad description to a narrow description of the invention. A patent is effective for a limited number of years; during this time, the patent holder may exclude others from making, selling, using or importing the invention claimed in the patent. Generally, if filed before June 8, 1995, the utility patent expires 20 years after the patent's filing date, or 17 years from the patent's issue date; however the duration depends on many factors, and may be greater or less than the "20-year" rule of thumb. In contrast, a design patent is valid for 14 years from the issuance of the patent. Patents are granted by governmental authorities, such as the United States Patent & Trademark Office (USPTO), and are only enforceable in the country that issued them. In the United States trained Patent Examiners evaluate the scope and content of the patent claims. The claims in a patent are assessed through a negotiation process that includes the applicant, the Patent Examiner and, usually, a patent attorney. A patent is usually granted based on the applicant's claim, and can be deemed unenforceable if it is later proven to be false or fraudulently made. A patent provides only a right to exclude others from practicing an invention (i.e., manufacture, use, sale or importation); it does not grant the patent holder the right to actually make, use, sell, or import the invention claimed in the patent. The patents of others may restrict the patent holder's ability to practice the patented invention.

## Can Anything Be Patented?

#### What's The Use?

To qualify for a patent, an invention must be useful, novel and non-obvious. The utility requirement must apply for an idea to be considered for a patent. The patent statutes propose two tests to determine if an idea has utility. First, the idea must be able to be described as a process, a machine, a manufacture or composition of matter, or an improvement. Inventions that do not adhere to this guideline (such as, mathematical expressions, natural laws, etc.) are not patentable. The only exception to this rule includes computer applications used for business or computer systems that enable a user to display or manipulate data. Inventions that have no use and inventions that cannot be used or are inoperable do not qualify. An invention that fulfills the requirements for statutory subject matter will also meet the requirements for statutory utility if the invention has a useful purpose.

#### Is It New?

In order for an invention to be patentable it must be new. If the invention was described in a printed publication anywhere in the world, or has been in public use or on sale in the United States more than one year before the date on which an application for patent is filed in this country, a patent cannot be obtained. It is irrelevant when the invention was made, or whether the printed publication or public use was by the inventor or by someone else. The inventor must apply for a patent before one year has gone by, if it was published, used, or places it on sale publicly, or the inventor will lose otherwise any right to a patent. The inventor must file on the date of public use or disclosure to maintain patent rights in most foreign countries.

#### Was I Too Obvious?

An invention is not patentable if it is obvious - "A patent may not be obtained.... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains...."

## What's In An Application?

The patent system's goal is to promote the development and utilization of technology. To this end, the invention must be made publicly available to allow its appreciation and use. While utility, novelty and non-obviousness focus on the essence of an invention, the statutory requirements of written description and enablement are consider the adequacy of the invention's description. The patent application must describe the invention, in writing, and in a way that enables one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

#### Do I Have To Describe It To You?

The written description requirement seeks to make the invention readily made available to the public, and to have the description of the invention permanently recorded. Additionally, it provides a means for proving that the applicant is the inventor of the invention being claimed. At times, an invention may not be suitable to a written description, such as biological materials whose isolation cannot be fully described in text. In response, the U.S. and foreign laws permit the deposition of such materials in certified depositories. The written description requirement for such biological materials should refer to an accession number that would permit one to obtain the materials.

### Have I Become An Enabler?

The enablement requirement establishes the patent's contract: a limited property right in exchange for a full disclosure to the public of a useable invention. The enablement requirement ensures that only inventors who developed a useable invention will receive a patent. This objective standard establishes whether the application enables those of ordinary skill in the art to reproduce the claimed invention.

## **How Do I Apply Myself To The Process?**

#### Did I Do That?

Patents can only be awarded to the inventor of the invention being claimed. This restriction distinguishes the U.S. system from other patent systems that permit corporations and other business entities to be the "applicant" for the patents of their employee inventors. Inventorship is established by identifying the individual(s) who contributed to the conception of the invention being claimed in the patent application. Under U.S. law, those who only assist in the invention's reduction to practice are not inventors. Every individual who contributed to the conception of at least one claim is an inventor/co-inventor, and must be named as an inventor or co-inventor of the patent. Each inventor has a full interest in all of the claims of the patent, regardless of the number of claims that he invented. Therefore, each inventor may take advantage of the invention without any need for the consent the other inventors, and without any obligation to account to the other inventors. When multiple inventors of different companies or institutions work together on an invention, the decision as to who invented the invention inevitably determines which company or institution will own the patent, or whether it will be jointly owned. This may lead the parties involved to dispute determinations of inventorship. These ownership issues may be resolved by establishing a contractual obligation to assign rights in the invention prior to the invention's conception and reduction to practice. Unintentional errors in determining the identity of all of the inventors can be readily corrected, and do not demonstrate inequitable conduct; however, a willful decision not to include a true inventor on the application is regarded as inequitable conduct, and cannot be corrected.

## Can I Be Candid With You?

U.S. law dictates a duty of candor and good faith for patent applicants. Regardless of whether an invention is patentable, the patent may be denied if the applicant engages in inequitable conduct before the USPTO, such as a material misrepresentation with the intent to deceive the Patent Examiner. Inequitable conduct renders all of the claims of a patent unenforceable, and may affect the enforceability of the inventor's related patents. U.S. law has changed in the interpretation of inequitable conduct. Intent to deceive is a required element of inequitable conduct, and that in its absence there can be no finding of inequitable conduct. The most frequent inequitable conduct issue raised is the alleged failure to inform the Patent Examiner of information known to the applicant or others having an interest in the patent that would be of interest to a reasonable Examiner.

#### How Can I Put My Best Mode Forward?

United States law also requires the best mode known to the inventors for practicing the invention to be disclosed in the patent application. This requirement ensures that the public receives the inventor's best understanding of the invention in exchange for granting the patent. The "best mode" is not required to be objectively better than other modes, just what the applicant perceives as the "best mode".

## Was I Diligent Enough In My Pursuit?

Inventors must diligently pursue the patenting of their inventions. An inventor's right to a patent may be lost if he abandons the invention and the same invention is later developed by other inventors who pursue patent protection with greater diligence.

## Who Done It?

The invention disclosure is the first step in the patenting process. The inventors should include in the disclosure information relating to the funding of the project, the names of all participants, and the existence of any contractual obligations to assign the invention. The disclosure should be sent to the patent counsel (and, for companies and institutions, to the relevant patent administrators). The date of invention and the details of the respective contributions of the inventors are not usually relevant. However, in some cases, the inventors may need to prove that the conception for the invention occurred prior to a referenced publication date; the inventors may also need to prove that they were the first to invent. Therefore, the conception and development of the

invention should be documented. The documents should be dated and witnessed, especially if the documents are authored by the inventor. Early in the process, information should be gathered so that it is neither lost nor destroyed.

#### How Do I Put This?

A patent application must be written such that the technical description of the invention enables other researchers to reproduce it, and must clearly convey in non-technical language why it is a patentable, and why it has economic value so that judges, jurors, business people, licensees, etc. will be able to understand the invention and appreciate it. If an invention is in its early stage at the time of filing, its commercial value may not yet be apparent. Then, the patent application should be written to allow for the possibility for the invention to further develop and change to fit future requirements. This is frequently necessary for the commercial success of institutional inventions since the commercial value will be determined not by the institution, but by prospective licensees. U.S. law relating to the written description requirement requires that an invention's description should be written well enough to enable others to reproduce it. A patent application should also be filed as quickly as possible because unlike the U.S., many countries do not have a one year grace period, and any foreign rights may be lost by any prior publication. Additionally, any publication of the invention whose authors differ from those named as inventors on the patent application qualifies as prior art irrespective of the 1-year grace period. Newspaper reports, abstracts of meetings, etc. may all be considered as prior art, and are frequently cited against patent applications.

### What's The Bottom Line?

There are three types of applications available for patent protection: Provisional, International or Patent Cooperation Treaty ("PCT"), and Utility. Each has its advantages and disadvantages. In all cases, the right of priority permits an applicant, who has filed a patent application in one country, to defer filing in other countries for up to one year. Therefore, an invention published or disclosed after the filing date of the initial application may not be used as prior art against later filed applications within the "priority year." The right of priority is strictly adhered to, an application filed even a day late is has no right of priority. Moreover, the priority year only applies from the first filed application describing the claimed invention. However, this right of priority does not apply to design patent applications. This right of priority is distinct from a domestic right of priority granted to applicants of multiple related U.S. applications. U.S. law allows a subsequent U.S. patent application disclosed in a prior U.S. application to apply the filing date of a previous application. This U.S. domestic right of priority is not limited to a single year. A U.S. application filed long after the filing of the earlier application may be entitled to claim priority as long as the following requirements are met. To qualify, the latter application must contain a specific reference to the preceding application, and must be filed before the patent filing or abandonment of the initial patent application. The initial application is required to disclose the invention being claimed in the later application, and do so in such a way as to enable the reproduction of the invention in the later application.

### How Provisional Is Write Application?

Provisional patent applications are not examined, and do not issue as patents; they serve as placeholder applications for utility application or a PCT application at the close of their one year pendency. After one year of its filing, a provisional application lapses irrevocably. Multiple provisional applications may be filed during the one year pendency; however, the subsequent application must be filed within one year of the initial application. The right of priority provided by the Paris Convention applies to provisional applications. Provisional applications provide two advantages. First, they can be filed relatively quickly and inexpensively since the only specified filing requirements for form and content is the cover page. Second, they serve as a basis for a claim of priority, and "shift" the term of the ensuing patent by delaying the patent grant by a year (the period of the pendency of the provisional application) and extending the expiration of the utility patent by a year. A provisional application may be converted to a non-provisional utility application after filing a request; but then, the term of the utility application will then run from the filing date of the provisional application. To circumvent this, a non-provisional utility application must be filed in lieu of the provisional application. Two key problems to provisional applications are the potential failure to notice the deadline for the irrevocable lapse and that the provisional applications may be closely examined during the filing of the subsequent utility application, in the course of licensing negotiations, or during the course of enforcement actions. If the provisional application does not fully describe the subsequent claimed invention in an enabling manner, it may not qualify for right of priority, and may convince the Patent Examiner to conclude that the invention claimed in the utility application is unpatentable in light of superseding prior art. If a patent's claim of priority is not in effect due to a non-enabled provisional application, reviewing courts may conclude that the patent is invalid. To minimize the risk of a loss of a right of priority, multiple provisional applications may be filed; an initial application may be filed to address an urgent need such as imminent disclosure followed by another provisional application after the practical nature of the invention is apparent. As a precaution, a provisional application should be filed prior to meeting with potential licensees, partners, etc. to document the scope of invention owned prior to such a meeting. Since provisional applications are not published, they provide applicants with one year to decide whether to pursue patent protection for an invention or keep it as a trade secret.

# How Should We Cooperate Under This Treaty?

The Patent Cooperation Treaty (PCT) facilitates the filing of a patent application in multiple countries. The United States and most developed and developing countries are signatories to the PCT. The PCT enables applicants to file a single patent application that has the legal effect of a

patent application in every PCT signatory country. Like the provisional application, the PCT also serves as a placeholder application, preserving an applicant's right to file subsequent national utility applications in selected countries. To file a PCT application, a request form must be completed and filed along with a copy of the application in a PCT Receiving Office, such as the USPTO; this act is the legal equivalent of filing the application in the patent office of each PCT signatory country. Since the application is filed with the PTO, it is not necessary in the U.S. to secure a foreign filing license from the PTO to foreign file the application. Once the PCT is filed, the applicant has some time to translate the application into the foreign language of the selected signatory countries for the patent filing and to complete the actual filing in those countries. The period of time varies depending upon the country involved; most countries provide 30 months while others only 20. The periods are calculated from the filing date of the initial application when the priority date is established under the Paris Convention. The application's date of publication is approximately 18-months after its priority date. The PCT system includes constraints for conducting preliminary search and examination of the application, and amending the application. If an applicant selects the USPTO as the searching authority, the examination will be conducted by a U.S. Patent Examiner, and will appear as an initial action. The information obtained in the examination may aid the applicant in determining the impending difficulty during the national phase prosecution of the application. Advantage of the PCT system for foreign institutions or corporations is the one year grace period which applies from the date of the PCT filing. For institutional applicants, the PCT system preserves at minimal cost, the institution's options regarding foreign filing and provides time for the institution to secure a licensee. Also, the published PCT applications are available on databases, and can reach a large number of possible licensees. Although PCT applications are only placeholder applications, they are useful in their worldwide publication, postponement of translation and filing fees, and their aid in assessing the patentability of an invention.

# Why Wasn't That Utility Provided For In The Application?

The non-provisional utility patent application is the only U.S. patent application that is examined and qualifies for the issuance of a utility patent. Applicants must submit a Declaration to the USPTO stating that they are the original/joint inventors of the invention claimed in the application. This Declaration may need to be amended if changes to the claimed invention are made during prosecution of the application and alter the composition of the invention. Applicants should also submit an assignment to the USPTO if there is a duty of assignment. U.S. law requires utility applications to be published prior to their issuance (about 18 months from their earliest priority date). Publication is inevitable unless the applicant notifies the USPTO at the time of the filing of the U.S. application that the invention will not be included in a patent application filed in a foreign country. Therefore, U.S. applicants seeking only domestic patent protection have the option to keep their invention a trade secret if it is deemed unpatentable. Since the notification may be withdrawn at any time, an applicant's decision to forego foreign patent protection may be reconsidered after the U.S. filing date. An application that was foreign filed will be considered abandoned if contrary notification was provided to the USPTO, unless the USPTO is informed within 45 days of the filing date of the foreign application. To aid the Examiner's determination of the invention's patentability, an information disclosure statement that includes all prior art known to the applicants, those working with the applicants, and their respective attorneys, should be presented to the Examiner's attention. Since the U.S. patent system is a claim based system, the non-provisional utility patent application focuses on the claims of the application. The claims of the application will determine the scope of the Examiner's search, the boundaries of the prosecution negotiation, the timing and difficulty of prosecution, the scope of patent protection, and ultimately the value of the invention.

### **How Can I Prosecute That Patent?**

The start of the prosecution process is the submission of the application, inventor's declaration, to the USPTO. Assignment documents, information disclosure statements (citing relevant prior art to the Patent Examiner), and Sequence Listings (in the case of biotechnology inventions) must be filed with or soon after the filing of the application. Usually it takes several months elapse before the Patent Examiner reviews the application. The Examiner will then respond in writing with an "Office Action" that will account for the factual and legal reasons for any apparent flaws in the application. The Office Action will "reject" any claims that do not meet the statutory requirements. The present examination system operates on quotas whereby examiners have to review and "dispose" a certain number of applications each year; quotas vary according to seniority and the complexity of the technology examined. As a result, the Examiner often has very limited time to read and consider each invention; and the Examiner's comments may be inaccurate, or may disregard contradictory evidence. The applicant (or the attorney or patent agent) must explain the invention to the Examiner and account for any misinterpretations. The application should be processed as though it will be litigated. Applicants may represent themselves before the Patent Examiner, but a registered patent attorney or agent is preferable. During the negotiation process, the Office Action and the applicants' response provide an opportunity to modify the claims or limit them in scope in response to the Examiner's concerns. Since Examiners have great discretion in determining patentability the process varies according to the invention and the examiner. When responding to Office Actions, always make sure that the Examiner considers the most critical aspect of the invention. Always assist the Examiner in the process; failing to correct inaccurate descriptions or to provide the Patent Examiner with fully accurate arguments can undermine (or eliminate) the licensing value of a patent, and can lose the Examiner's confidence in the patentability of other, unrelated, applications submitted by the applicant. The Patent Examiner will review the rebuttal arguments submitted. Highly technical arguments may be advanced to address the Examiner's rejections. The Examiner may withdraw the rejections, and certify the application for issuance. This is usually not the case; instead the Examiner will issue a second, often final rejection. Finality in an Office Action halts the process and the opportunity to know the scope of issues that may come up in the future.

## Which Should I Choose - Refiling, RCE or Appeal?

In response to the "final" rejection, the applicant submits new or revised arguments to support patentability, or amends and limits the application's claims. If successful, the case will proceed to issuance; otherwise, the Patent Examiner will indicate that the second response did not address all the issues and the rejections will be upheld. Applicants can then proceed in one of three ways: 1. File a new application with an augmented disclosure; 2. File a Request for Continued Examination (RCE); or 3. Appeal the Patent Examiner's rejection to the PTO's Board of Patent Appeals and Interferences. In the United States, applicants have the right to refile their applications and continue the process to address an Examiner's rejections. A "continuation" application is a refiled application that has the same content as the previous application; a "continuation-in-part" application is refiled application that has some of the same content as the previous application. 35U.S.C. § 120 states that continuation and continuation-in-part applications can reflect the filing date of the initial filed applications. The filing a continuation-in-part application may overcome arguments raised by an Examiner, but the new information in the application would not permit the benefit of the original filing date of the initial application. A continuation enables applicants to respond to concerns and limits the impact of any errors made by the PTO or the applicant; but, it also increases the likelihood of "submarine" patents. These are patents issued many years after their filing date and often emerge unexpectedly as businesses assumed that a specific technology had not been patented. If the claims can be altered to substantiate a patentable and commercially viable invention, an RCE should be filed. It is usually the preferred approach when the issues are technical, with respect to the process or the technical analysis of referenced documents, or when the Examiner did not consider any amendments made in the second response; the RCE essentially withdraws the finality of the rejection and requires the Examiner to review the amendments already submitted. An RCE is also appropriate for resolving any inadvertent mistakes that made during the preliminary prosecution. When warranted, an

Appeal to the PTO's Board of Patent Appeals and Interferences is needed to address legal issues regarding the Patent Examiner's use of the patent statutes and case law, to dispute PTO policies, or to defend the claim's scope described in the application, but denied by the Examiner. For the Appeal, an Appeal Brief must be submitted and voluntary, oral arguments before the members of the PTO's Board of Patent Appeals and Interferences must be presented. Since there is "backlog" of Appeals, it may be preferable to refile a case and request allowance of the application with the Patent Examiner.

## How Do I Take My Appeal to the Courts?

When an application's rejection is affirmed by the PTO's Board of Patent Appeals and Interferences, the applicant may appeal the decision to the Court of Appeals for the Federal Circuit, or to U.S. District Court for the District of Columbia; appealing to the Federal Circuit is usually preferable. The application papers and arguments presented before the Patent Examiner and the Board of Patent Appeals & Interferences is used as evidence. During the Appeal, the court is briefed on the issues and oral arguments are made. If the evidentiary record needs to be augmented, than appealing to the U.S. District Court for the District of Columbia is a better alternative. These appeals involve de novo reviews, and can be both more expensive and more time consuming than appealing to the Federal Circuit.

### Is It Over Yet?

Generally, allowance of the application ceases continued prosecution in the PTO. On occasion, concerns of conflicting claims of invention, uncited prior art, or errors in the invention's description and errors in the patent will warrant further prosecution.

### Won't Someone Interfere In My Proceeding?

An Interference Proceeding resolves disputes over priority of invention and patentability. An administrative law judge presides over inter parties administrative trial and settles conflicting claims of inventorship and patentability alleged by a third party. In the United States, the first to invent an invention is entitled to the patent; therefore, a party who filed late may obtain a patent over the party who initially filed if the second party proves an earlier date of invention, or shows an earlier date of conception as well as considerate effort in reducing the invention to practice. When it is brought to the attention of the PTO that two or more patent applications, usually filed within one year of each other, claim the same patentable invention, all parties are notified that an Interference Proceeding might be declared. At this time, each party gathers the evidence that documents the invention's conception and reduction to practice and develops a strategy for the potential Interference. Once the Interference is declared, the proceeding begins; and the parties are locked into positions that later cannot be changed. The rules permit short, fixed deadlines (1-2 months) for action once the Interference is declared. Most Interference Proceedings are won or lost due to actions taken in the motions stage when compliance with Interference rules are determined and each party must persuade the Interference Examiner to take action in support of the party's strategy. During this stage, each party must respond to the other party's arguments. At Interference Proceedings, rarely is there a discovery stage when document productions and depositions are required. Next is the settlement stage when the parties come to an agreement on a resolution. If the Interference Proceeding does not resolve the dispute or terminates, an administrative law trial begins. Subsequently, the case may be appealed to the Court of Appeals for the Federal Circuit or to U.S. District Court for the District of Columbia.

## Doctor Can I Get A Reexamination?

The reexamination process resolves patentability concerns brought up by prior art patents or printed publications. A reexamination proceeding revalidates patentability or revokes the patent's claims. Currently, the law allows for either ex parte, or inter partes, reexamination. Ex parte reexamination can be initiated at the request of any person (including the patentee). Once instituted, no one else but the patentee can submit declaration and file rebuttal arguments. Issues involving public use, sales, prior invention, inequitable conduct, etc. cannot be brought up in an ex parte reexamination proceeding. Inter partes reexaminations are permissible on patents whose applications were filed after November 29, 1999. The third party may appeal any decision favorable to the patentee to the Board of Patent Appeals and Interferences, but thereafter cannot appeal the Board's decision. If the third party requestor fails to establish the invalidity of a claim, the requestor is estopped from later contesting any fact determined in the reexamination or alleging any reexamined claim as invalid.

### Can Someone Please Reissue This Thing?

In accordance with to 35 U.S.C. § 251, a Reissue Proceeding may take place when a patent is, through unintentional error, wholly or partly not functional or valid because the specification was flawed, or because the inventors claimed more or less than they were entitled to. An assertion of error is required to support a Reissue Proceeding. A Reissue Proceeding is inappropriate if the patentee did not claim a specific feature of the invention. A broadening Reissue Proceeding is only permitted if requested within two years of the patent's issue date, and is permitted if the patentee has inadvertently claimed less than entitled to, and now petitions for more extensive claims than originally issued,. A narrowing Reissue Proceeding has no deadline restrictions. 35 U.S.C. § 252 states that third parties who practice an invention protected by a claim of the Reissued patent that was not disclosed in the originally issued patent have intervening rights and are permitted to practice the invention even if the practice infringes one of the Reissued claims. The Reissue procedure is useful to improve claims of foreign priority or claims of priority on an

earlier filed utility application. Reissue cannot be used to improve claims of priority to a provisional application for applications filed after November 29, 2000. The public is allowed access to Reissue applications.

# Will You Certify This Correction?

A certificate of correction is appropriate for making small corrections in the issued patent. 35 U.S.C. § 254 allows for any mistakes made by the PTO in printing the application as a patent to be corrected. 35 U.S.C. § 255 permits the correction of errors that are clerical or typographical in nature, or errors of minor character made by the applicant. The correction cannot include the introduction of new information, or revise the scope. The corrected error must be apparent in view of the patent and its patent office file history. A Federal Court can instruct that a claim be interpreted as if it was corrected by a certificate of correction.

## **How Can I Litigate This Thing?**

# What's There To Infringe?

A patent infringement is either literal or by equivalency. To infringe on a patent in the U.S., a third party's actions must affect each and every aspect of at least one patent claim. Direct infringement is when a party makes, uses, sells, offers to sell, or imports an item or process protected by at least one patent claim. To "induce" infringement means to endorse direct infringement. "Contributing" to infringement means selling, offering to sell, or importing a component of a patented product with the knowledge that it will be used for infringement. If the conduct does not include even one aspect of a claim, it does not infringe that claim, and cannot be prosecuted; the converse is also false. Conduct that includes a feature not present in the claim does not elude infringement. To prove infringement, there must be a preponderance of the evidence that shows the accused infringer's action infringes the patent. To prove a patent is invalid, an accused infringer must prove the invalidity by clear and convincing evidence. To establish infringement, the proper scope and meaning of the claims has to first be defined; then the infringing conduct is assessed to establish if it represents the claimed invention. This assessment is referred to as a Markman determination. The Markman determination is a question of law (rather than fact), and is presided by the trial judge and not jurors. Since the Markman determination is a question of law, it can be appealed to the Court of Appeals for the Federal Circuit, which has exclusive jurisdiction over patent infringement appeals. The Markman determination is often dispositive of infringement. The Federal Circuit usually declines to accept interlocutory appeals; these are appeals made prior to the conclusion of a trial. In effect, a full trial is needed to determine if the trial judge's Markman determination is correct; if not, the litigants can pursue a second trial.

# Why Did You Take My Infringement Literally?

Literal infringement is when the language of a claim is replicated in the work of a third party. The absence of just one facet negates literal infringement.

### Are Some Doctrines More Equivalents Than Others?

Under the Doctrine of Equivalents, a party that does not infringe a claim literally may still be liable for infringement if its product/process is not substantially different from the patented product/process. The scope and content of the prior art, and by the prosecution history of the patent limit the application of the Doctrine. The application of the equivalency standard is challenging, and counters the public's right to access the language of a claim with the patentee's right to have protection for the invention from de minimis variation. Amendments are often filed in patent claims without sufficient details to clarify if the amendment was filed to surmount prior art: in effect, it establishes a prosecution history estoppel that limits the application of the Doctrine of Equivalents., The amendment may also be filed for reasons other than patentability; this would not create prosecution history estoppel. Because this creates unpredictability as to claim scope. the Court of Appeals for the Federal Circuit ruled that the Doctrine of Equivalents to the amended claim element does not apply if the amendment narrows the scope of a claim. However, the United States Supreme Court rejected the extent of the Federal Circuit's approach and ruled that any amendment can create an estoppel that may limit the application of the Doctrine of Equivalents, but the doctrine's limitation should be assessed on a case by case basis. According to the Supreme Court, unless there is a stated purpose for an amendment, it is fair to assume that the amendment was made for purposes of patentability. If the patentee cannot explain the reason for the amendment, a prosecution history estoppel applies to bar application of the Doctrine of Equivalents.

# How Can We Remedy This Situation?

Injunction, Injunction, What's Your Function?

As a property right, is the patent establishes exclusive use. In effect, the equitable remedy of injunction is the preferred remedy for patent infringement. A patent injunction is a court order that forces an infringer to cease the patent infringement. As a prospective remedy, it prevents future harm to the patentee by restoring the patentee's exclusive use of the patented invention. A "Preliminary Injunction" is awarded before the determination of infringement; a "Permanent Injunction" is awarded after. As a remedy, permanent Injunctions are preferable, but often not applied in cases involving public welfare.

## Jerry, Can You Show Me the "Kwan"?

Damages mean the financial compensation to the patent holder for the infringement. Usually damages are retrospective in that they compensate the patent holder for past infringement; but if there is an injunction, damages may be prospective. Damages are usually assessed from the initial date of infringement or from the patent's issue date, whichever is later. U.S. law provides patent holders with "Provisional Rights" that entitles them to collect royalty from infringers during the period between the publication date of the non-provisional utility application (or the PCT application) and the issue date of the ensuing patent as long as: 1. the infringer was made aware of the published application; and 2. the claims of the patent are identical to the claims of the published application. The royalty will be at least as high as the "Reasonable Royalty" that the Patentee and the infringer would have negotiated if there was a negotiation, but it cannot be so exorbitant that it consumes all of the infringer's profit. The following factors are used establishing the royalty assessment:

- 1. Royalties paid by others who have licensed the patent;
- 2. Royalties paid by the infringer to license other patents comparable to the patent-in-suit;
- 3. Nature and scope of the proposed license;
- 4. Licensor's established policy to license or not license his patent;
- 5. Commercial relationship between the parties;
- Effect that the licensee's sales would have on sales of derivative or convoyed products / services:
- 7. Duration of the patent and the term of the license;
- 8. Established commercial success and profitability of the patented product;
- Advantages of the patent compared to other prior products or processes used for similar purposes;
- 10. Nature of the patented invention and the benefits derived to those who have used it;
- 11. Extent to which the infringer has used the patented invention, and the value of that use;
- 12. Portion of the profit or standard selling price in the industry for use of inventions;
- 13. Portion of the profit attributed to the invention:
- 14. Experts opinion testimony; and
- 15. Royalty that the parties would have reached if they negotiated for a license.

If a patentee can establish that an infringer had no reasonable basis to think that the patented invention can be freely used, that the patent was invalid or that the infringer's product did not infringe, the patentee may be entitled to trebled damages for "Willful Infringement." Moreover, if a patentee can demonstrate that a loss of sales of derivative or associated items or services in addition to losing sales of a patented item, the patentee may also receive damages for the "convoyed sales." Each sale of the infringer may also come at the expense of a lost sale by the patentee. If the patentee can prove that loss of sales due to sales made by the infringer, the patentee is entitled to recover its "Lost Profits" as damages, and may exceed the total revenue of the infringer. To qualify for a lost profits award, a patentee has to show that if it were not for the infringers' actions, it would have earned the lost sales.

### Am I Defenseless?

#### Is It Unenforceable or Invalid?

The accused infringer often argues in patent infringement suits that the patent in suit is invalid or unenforceable, and therefore its infringement should not incur liability to the patentee. To establish invalidity, one of the statutory requirements for a patent must not be satisfied; this is proven claim by claim. To establish unenforceability, which affects every claim of the patent, the applicant's conduct before the USPTO must not have been equitable. These affirmative defenses must demonstrate clear and convincing evidence.

# Are You Watching That For "Research Purposes"?

U.S. law recognizes the experimental purposes doctrine as a defense to an assertion of infringement; but this doctrine is limited to research performed solely for intellectual purposes, and without any intent or effort to commercialize the invention. However, research that is "solely for uses reasonably related to the development and submission of information under a Federal law which regulates the manufacture, use, or sale of drugs" is an exception 35 U.S.C. 271(e)(1); this has provoked a great deal of litigation, and has not been fully settled.

#### Did I Use De' Minimis?

A de minimis use exception states that accidental, occasional or de minimis use of a patented invention is not actionable; this is relatively consistent with the Georgia-Pacific factors. Small amount of damages or no royalty might be reasonable if the infringement is accidental, occasional or de minimis use. Once infringement is determined, any suitable metric may be used to measure of the damages.